NANCY McDONOUGH, SBN 84234
KARI E. FISHER, SBN 245447
CALIFORNIA FARM BUREAU FEDERATION
2300 River Plaza Drive
Sacramento, CA 95833
Telephone: (916) 561-5665
Facsimile: (916) 561-5691

Attorneys for Petitioners
CALIFORNIA FARM BUREAU FEDERATION;
MONTEREY COUNTY FARM BUREAU;
SAN BENITO COUNTY FARM BUREAU;
SAN LUIS OBISPO COUNTY FARM BUREAU;
SAN MATEO COUNTY FARM BUREAU;
SANTA BARBARA COUNTY FARM BUREAU;
SANTA CLARA COUNTY FARM BUREAU;
SANTA CRUZ COUNTY FARM BUREAU

BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

IN THE MATTER OF PETITION FOR REVIEW OF CALIFORNIA FARM BUREAU FEDERATION; MONTEREY COUNTY FARM BUREAU; SAN BENITO COUNTY FARM BUREAU; SAN LUIS OBISPO COUNTY FARM BUREAU; SAN MATEO COUNTY FARM BUREAU; SANTA BARBARA COUNTY FARM BUREAU; SANTA CLARA COUNTY FARM BUREAU; SANTA CRUZ COUNTY FARM BUREAU v. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, CENTRAL COAST REGION	SWRCB/OCC File: _____ **PETITION FOR REVIEW, OR ALTERNATIVELY, REQUEST FOR OWN MOTION REVIEW OF THE CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD'S ORDER NO. R3-2012-0011, R3-2012-0011-01, R3-2012-0011-02, AND R3-2012-0011-03, RESOLUTION NO. R3-2012-0012 AND FILING OF THE NOTICE OF DETERMINATION FOR THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS; PRELIMINARY POINTS AND AUTHORITIES IN SUPPORT OF PETITION** [Water Code § 13320]

In accordance with Water Code section 13320, California Farm Bureau Federation ("Farm Bureau"), Monterey County Farm Bureau; San Benito County Farm Bureau; San Luis Obispo County Farm Bureau; San Mateo County Farm Bureau; Santa Barbara County Farm Bureau; Santa Clara

County Farm Bureau; and Santa Cruz County Farm Bureau (collectively "Petitioners") hereby petition the State Water Resources Control Board ("State Board") to review the actions and inactions by the Central Coast Regional Water Quality Board ("Regional Board") in issuing Order No. R3-2012-0011, adopting a Conditional Waiver Of Waste Discharge Requirements For Discharges From Irrigated Lands, Monitoring and Reporting Programs Order Numbers R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03, and Certification, pursuant to the California Environmental Quality Act ("CEQA"), of the Final Subsequent Environmental Impact Report ("SEIR" or "Final SEIR"), CEQA Findings, and Statement of Overriding Considerations for the Adoption of Renewal of a Waiver of Waste Discharge Requirements for Discharges of Waste From Irrigated Lands in the Central Coast Region, Resolution Number R3-2012-0012 (all documents collectively referred to as "Conditional Waiver" or "2012 Conditional Waiver").

A summary of the basis for Petitioners' Petition for Review and a preliminary statement of Points and Authorities are set forth in this Petition for Review in accordance with California Code of Regulations, title 23, section 2050(a). Petitioners reserve and request the right to file supplemental points and authorities in support of the Petition for Review once the administrative record becomes available. Petitioners also reserve the right to submit additional arguments and evidence responsive to the Regional Board's or other interested parties' responses to the Petition for Review, to be filed in accordance with California Code of Regulations, title 23, section 2050.5.

The Petitioners are organizations whose members are directly affected by the 2012 Conditional Waiver. As explained below, Petitioners' members are individuals engaged in the agricultural industry within the Central Coast Region of the Regional Water Quality Control Board.

Petitioners, through its members, participated in proceedings before the Regional Board expressing concerns in opposition of the Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands as well as submitted numerous comment letters. Petitioners submit this Petition for Review in compliance with Water Code sections 13320(a) and 13330(c). Given that the adopted Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands Program directly harms Petitioners and its members, Petitioners are proper parties before the State Water Board.

I. EXHAUSTION OF ADMINISTRATIVE REMEDIES

Petitioners submit this Petition for Review in compliance with Water Code sections 13320(a)

and 13330(c). Section 13320(a) provides that an aggrieved person may petition the State Board to review any action or inaction of a Regional Board under Water Code section 13260 et seq., including actions or inactions relating to waiver of waste discharge requirements. Section 13330(c) states that "the time for filing an action or proceeding subject to Section 21167 of the Public Resources Code for a person who seeks review of the regional board's decision or order under Section 13320, ..., shall commence upon the state board's completion of that review ...." Based on this provision of the Water Code, Petitioners are required to submit a challenge to the Regional Board's actions with respect to CEQA to the State Board for review prior to filing a writ of mandate pursuant to Public Resources Code section 21167. Further, Petitioners are authorized to represent their respective members, some or all of which are subject to regulation under the Conditional Waiver and will in the future be subject to any future iteration of this regulatory program. Petitioners fully participated in the CEQA review process, including attending meetings with the Regional Board regarding the scope, breadth, and content of the environmental analysis and possible alternatives, submitting numerous letters outlining concerns with lack of compliance with CEQA and the economic analysis, and providing oral comments at all workshops and Board hearings. Throughout the process, Petitioners challenged the Regional Board's failure to comply with CEQA by, among other things, failing to prepare a new Initial Study, improper reliance on the 2004 Negative Declaration, improper identification of the "project," flawed analysis of environmental impacts to agricultural resources, inadequate and flawed economic review, and subsequent failure to draft and re-circulate a proper environmental impact report given the substantial revisions to the Project prior to certification and use for subsequent regulatory action.

In addition to participating fully in the CEQA review process, Petitioners fully participated in all public comment and review opportunities on the development of the 2012 Conditional Waiver, including attending meetings with the Regional Board regarding alternative proposals developed and submitted by agriculture, submitting numerous letters outlining legal and practical concerns with the regulatory scope of staff's draft orders, and providing oral comments at all workshops and Board hearings. Throughout the process, Petitioners challenged the Regional Board's failure to comply with the Porter-Cologne Water Quality Control Act, the Water Quality Control Plan for the Central Coast

Basin (June 8, 2011), and the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (May 20, 2004, ("Nonpoint Source Policy" or "NPS Policy"), by, among other things, using an improper standard for the basis of the entire Conditional Waiver, failing to properly analyze the economic impacts of the 2012 Conditional Waiver, improperly requiring immediate compliance with water quality standards, dictating management practices, unlawfully requiring individual surface water monitoring requirements, failing to provide an adequate nexus for the monitoring and reporting provisions, failing to properly evaluate the Ag Alternative Proposals under the Water Code and NPS Policy, and arbitrarily structuring the tiering provisions without a water quality nexus.

II. NAME, ADDRESS, TELEPHONE NUMBER AND E-MAIL ADDRESS OF PETITIONER:

All materials and documents generated in connection with this Petition for Review should be provided to Petitioners at the following address:

California Farm Bureau Federation
Kari E. Fisher
2300 River Plaza Drive
Sacramento, CA 95833
Phone: (916) 561-5665
Fax: (916) 561-5691
E-mail: kfisher@cfbf.com; photz@cfbf.com

III. THE PETITIONER PARTIES:

A. California Farm Bureau Federation

The California Farm Bureau Federation ("Farm Bureau") is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the State of California and to find solutions to the problems of the farm, the farm home and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing over 30,000 farm families and more than 74,000 agricultural, associate and collegiate members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

Farm Bureau supports responsible farming and proper use and application of pest control products, and respects the health and welfare of those throughout the State. Farm Bureau actively participates in state and federal legislative and regulatory advocacy relating to water quality, water use efficiency, and pesticide regulation, registration, labeling, and use on behalf of Farm Bureau members.

Farm Bureau's membership includes a substantial number of farmers and ranchers who grow food and fiber within the Regional Board's jurisdiction. As required by the Porter-Cologne Water Quality Control Act, many Farm Bureau members are currently regulated under the Regional Board's Conditional Wavier of Waste Discharge Requirements and are directly impacted by the new conditions and requirements contained within the Conditional Waiver. Furthermore, Farm Bureau members throughout California depend upon a healthy and vibrant ecology and economy; both of which will be harmed by the Conditional Waiver.

B. Monterey County Farm Bureau

Monterey County Farm Bureau is the private, nonprofit association of farmers and ranchers throughout Monterey County, located on the Central Coast. Founded in 1917, Monterey County Farm Bureau serves as a collective voice for farmers and ranchers and provides information, benefits and services. Monterey County Farm Bureau collaborates with other agricultural organizations to fulfill its purpose of working for the solutions to the problems of the farm, the farm home, the environment, and the rural community. Monterey County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 710 family members in Monterey County.

C. San Benito County Farm Bureau

San Benito County Farm Bureau is a non-governmental, non-profit, voluntary membership California corporation whose mission is to preserve and promote successful agriculture in San Benito County through education, leadership and service. San Benita County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 379 family members in San Benito County.

D. San Luis Obispo County Farm Bureau

San Luis Obispo County Farm Bureau is a non-governmental, non-profit, voluntary membership corporation whose purpose is to protect and promote agricultural interests throughout San Luis Obispo

County and to find solutions to the problems of the farm, the farm home and the rural community. San Luis Obispo County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 1,445 family members in San Luis Obispo County.

E. San Mateo County Farm Bureau

San Mateo County Farm Bureau is a non-governmental, non-profit, voluntary membership California corporation. San Mateo County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 845 family members in San Mateo County.

F. Santa Barbara County Farm Bureau

Santa Barbara County Farm Bureau is a non-governmental, non-profit, voluntary membership corporation who strives to meet the needs of its 1,230 dues paying members by working with elected officials, government agencies, educators, the public and the media. Santa Barbara County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 1,230 family members in Santa Barbara County.

G. Santa Clara County Farm Bureau

Santa Clara County Farm Bureau is a non-profit organization dedicated to promoting and preserving farming and ranching in the Santa Clara Valley. Santa Clara County Farm Bureau's key programs are political involvement, education and member development. One of its largest programs, the Ag Water Quality Program, was recently given the highest environmental award in the state, the Governor's Environmental Leadership Award. Santa Clara County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 1,513 family members in Santa Clara County.

H. Santa Cruz County Farm Bureau

Santa Cruz County Farm Bureau is a vital part of its community, providing an important voice for the Santa Cruz County and Pajaro Valley agriculture industry. Santa Cruz County Farm Bureau is continually involved in local land use and transportation issues as well as opportunities to provide educational support through scholarships and school programs. Santa Cruz County Farm Bureau helps insure that the agriculture industry here remains viable, and continues to generate financial security for the entire community. Its Mission Statement is to work for the solution of the problems of the farm, the farm

home and the rural community, by use of the recognized advantages of organized action, to the end that those engaged in the various branches of agriculture may have opportunity for happiness and prosperity in their chosen work. Santa Cruz County Farm Bureau is one of 53 county Farm Bureaus currently representing a combined membership of 884 family members in Santa Cruz County

IV. SPECIFIC ACTION OF THE REGIONAL BOARD WHICH THE STATE BOARD IS REQUESTED TO REVIEW:

Petitioners seek review of the actions of the Regional Board in connection with the adoption of the Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands ("Conditional Waiver Order") Order Number R3-2012-0011, in its entirety, Monitoring and Reporting Programs Order Numbers R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03,[1] and certification, pursuant to the California Environmental Quality Act ("CEQA"), of the Final Subsequent Environmental Impact Report ("SEIR" or "Final SEIR"), CEQA Findings, and Statement of Overriding Considerations for the Adoption of Renewal of a Waiver of Waste Discharge Requirements for Discharges of Waste From Irrigated Lands in the Central Coast Region Resolution Number R3-2012-0012, as discussed below. In adopting the Conditional Waiver, Monitoring and Reporting Programs ("MRPs"), CEQA Findings, overriding considerations, and certifying the SEIR, the Regional Board acted in a manner contrary to law, and acted contrary to the public policy of the State of California. A true and correct copy of the Conditional Waiver Order (attached to this Petition as Attachment 1), MRPs (attached to this Petition as Attachment 2), Final SEIR (attached to this Petition as Attachment 3), and certification of the SEIR (attached to this Petition as Attachment 4) are attached to this Petition.

More specifically, the Petitioners request that the State Board review the Regional Board's failure to proceed in a manner required by law with respect to complying with the substantive and procedural requirements under the Porter-Cologne Water Quality Control Act and CEQA, failure to adopt a program consistent with the Basin Plan and the Nonpoint Source Policy, and participation in ex parte communications and actions that prevented full public participation, prejudicially harmed Petitioners, and biased the final approval made by the Board. The specific determinations with respect

[1] The Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands Order Number R3-2012-0011 and Monitoring and Reporting Programs Order Numbers R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03 are collectively referred to as "2012 Conditional Waiver" or "Conditional Waiver" herewith.

to CEQA that the Petitioners request the State Board review include, but are not limited to, the following: the Final SEIR's failure to include an adequate project description; the Final SEIR's improper reliance on the 2004 Negative Declaration; the Final SEIR's failure to adequately address social, economic, and cumulative impacts; the Final SEIR's failure to analyze impacts; the Final SEIR's failure to support conclusions with substantial evidence; the Final SEIR's improper shift of the burden of proof from the lead agency to the public; the Final SEIR's failure to analyze the Project's impacts; the Regional Board's failure to re-circulate the Final SEIR; and, the Regional Board's failure to include an adequate economic analysis in compliance with Water Code section 13141.

V. THE DATE ON WHICH THE REGIONAL BOARD ACTED:

The Regional Board adopted Order Numbers R3-2012-0011, R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03, and Resolution No. R3-2012-0012[2] on March 15, 2012. Accordingly, this Petition is timely filed pursuant to title 23, California Code of Regulations, section 2050. Unless otherwise provided, the Petitioners contend that all actions and inactions of the Regional Board challenged herein are not supported by adequate findings or evidence in the record and/or are inconsistent with applicable law.

VI. STATEMENT OF THE REASONS THE ACTION WAS INAPPROPRIATE OR IMPROPER:

As explained in more detail in the Statement of Points and Authorities herein, the Regional Board's adoption of the 2012 Conditional Waiver and MRPs, as well as the certification and subsequent use of the SEIR constitutes a prejudicial abuse of discretion in that the Regional Board failed to proceed in a manner required by law and its decision is not supported by substantial evidence.

In enacting the Porter-Cologne Act, the Legislature laid out specific goals and objectives for the State's waters. Regional Boards must conform to all such statutory mandates, including the Legislature's objective:

> The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to *attain the highest water quality which is reasonable*, considering all demands being made and to be made on those

[2] The Regional Board certified the SEIR on March 15, 2012; however, the Regional Board did not complete a Notice of Determination for the SEIR until April 3, 2012. (See Notice of Determination, attached to this Petition as Attachment 7.)

> waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

(Wat. Code, § 13000, emphasis added.) Here, the Regional Board arbitrarily and capriciously applied its authority when crafting the 2012 Conditional Waiver as the Conditional Waiver is not reasonable and does not properly consider all economic, social, tangible, and intangible values involved. Further, the Conditional Waiver's conclusions and findings do not comply with the Basin Plan or the Nonpoint Source Policy

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report (except in certain limited circumstances). (See, e.g., Pub. Resources Code, § 21100.) CEQA is designed to inform decision makers and the public about potential, significant environmental effects of a project. (Cal. Code Regs., tit. 14, § 15002(a)(1), ("CEQA Guidelines").) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment, but also informed self-government.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.)

While the courts review an EIR using an "abuse of discretion" standard, ... 'clearly inadequate or unsupported study is entitled to no judicial deference.'" (*Berkeley Keep Jets Over the Bay v. Board of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1355 (quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391, 409, n. 12).) "A prejudicial abuse of discretion occurs 'if the failure to include relevant information precludes informed decision-making and informed public participating, thereby thwarting the statutory goals of the EIR process.'" (*Id.* at 1355.)

In general, the Regional Board failed to properly follow and comply with CEQA in that the analysis in the SEIR is superficial, relies on an inapplicable Negative Declaration prepared for a separate project which occurred 8 years prior, does not evaluate the Project as adopted, and inadequately analyzes the environmental impacts associated with the Project. Because the Regional Board failed to properly comply with CEQA, the Regional Board's actions to certify the SEIR and file a Notice of Determination constitute a prejudicial abuse of discretion. Moreover, Petitioners request

review of the Regional Board's actions with respect to certification of the SEIR, the filing of Notice of Determination that followed therewith, and the Regional Board's reliance on said environmental review to adopt the 2012 Conditional Waiver.

VII. THE MANNER IN WHICH THE PETITIONER IS AGGRIEVED:

The Petitioners and their members are aggrieved by the conditions and limitations contained in the Conditional Waiver, which are more stringent or onerous than required by or provided for under current law and establish a parallel set of requirements with which Petitioners and their members must comply. These requirements will threaten the economic survival of many agricultural lands owned or operated by Petitioners and their members in the region. The Petitioners' members will or may be required to spend limited private resources to comply with inappropriate or unlawful Conditional Waiver conditions. Alternatively, the Petitioners' members may not longer be able to maintain economically viable agricultural operations. In that case, the Petitioners' members include registered will be harmed because their services will no longer be required. Given that the resources of private landowners are limited Petitioners are aggrieved when forced to comply with requirements that are arbitrary, unnecessary, unlawful and not required by law.

Petitioners are also aggrieved by the Regional Board's failure to properly analyze the economic impacts associated with this action and failure to properly review and analyze all environmental impacts associated with the Conditional Waiver.

VIII. SPECIFIC ACTION BY THE STATE BOARD WHICH THE PETITIONER REQUESTS:

A. Based on the foregoing, the Petitioners request that the State Board modify Order Numbers R3-2012-0011, R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03 with direction for revisions, as follows:

(i) Rescind Order No. R3-2012-0011 in its entirety, including the Regional Board's incorporation of the Mitigation Monitoring and Reporting Programs into the Conditional Waiver due to process violations. (See process violations within Petition submitted on or about April 16, 2012 by Theresa A. Dunham, incorporated by reference herewith);

(ii) Rescind Order No. R3-2012-0011 in its entirety, including the Regional Board's incorporation of the Mitigation Monitoring and Reporting Programs into the Conditional Waiver due to improper reliance on an legally inadequate and flawed CEQA environmental review;

(iii) In the alternative to subsections (i) or (ii), Modify Order No. R3-2012-0011 with direction for revisions. (See specific revisions to Order No. R3-2012-0011 in its entirety made within Petition submitted on or about April 16, 2012 by Theresa A. Dunham, incorporated by reference herewith);

(iv) Rescind Resolution No. R3-2012-0012 in its entirety; and

(v) Issue an immediate stay of Order No. R3-2012-0011. (See Request for Immediate Stay submitted on or about April 16, 2012 by Theresa A. Dunham, incorporated by reference herewith incorporated by reference herewith).

IX. STATEMENT OF POINTS AND AUTHORITIES IN SUPPORT OF LEGAL ISSUES RAISED IN THE PETITION:

A Statement of Points and Authorities in support of this petition is set forth in Section 4 above. The Petitioners reserve the right to supplement this statement. Petitioners request the opportunity to file supplemental Points and Authorities in support of this Petition for Review once the administrative record becomes available. Petitioners further request and reserve the right to submit additional argument and evidence in reply to the Regional Board's or other interested parties' response to this Petition filed in accordance with title 23, section 2050.5(a) of the California Code of Regulations.

X. STATEMENT THAT THE PETITION HAS BEEN SENT TO THE REGIONAL BOARD:

In accordance with title 23, section 2050(a)(8) of the California Code of Regulations, the Petitioners mailed a true and correct copy of this petition by First Class mail on April 16, 2012, to the Regional Board at the following address:

Roger W. Briggs, Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

XI. THE SUBSTANTIVE ISSUES OR OBJECTIONS WERE RAISED BEFORE THE REGIONAL BOARD, OR THE PETITIONERS WERE UNABLE TO RAISE THESE SUBSTANTIVE ISSUES OR OBJECTIONS:

Petitioners individually and collectively raised the substantive issues and objections in this Petition before the Regional Board in written comment letters submitted on November 25, 2009, April 1, 2010, April 23, 2010, June 4, 2010, June 15, 2010, June 17, 2010, July 6, 2010, August 27, 2010, January 3, 2011, August 1, 2011, and December 22, 2011; written agricultural proposals submitted on behalf of the agricultural community on April 1, 2010 and a revised proposal on December 3, 2010; and in testimony provided to the Regional Board at the December 10, 2009 Board hearing, May 12, 2010 public workshop, July 8, 2010 public workshop, August 16, 2010 CEQA Scoping Meeting, February 3, 2011 public workshop, March 17, 2011 Board hearing, May 4, 2011 Board hearing, February 1, 2012 public workshop, and the March 14-15, 2012 Board hearings, all of which were public hearings.

Dated: April 16, 2012

CALIFORNIA FARM BUREAU FEDERATION

By: KARI E. FISHER
Attorney for California Farm Bureau Federation;
Monterey County Farm Bureau;
San Benito County Farm Bureau;
San Luis Obispo County Farm Bureau;
San Mateo County Farm Bureau;
Santa Barbara County Farm Bureau;
Santa Clara County Farm Bureau;
Santa Cruz County Farm Bureau

STATEMENT OF POINTS AND AUTHORITIES

I. INTRODUCTION

At its March 15, 2012 hearing, the Regional Board took action to adopt Order No. R3-2012-0011, a Conditional Waiver Of Waste Discharge Requirements For Discharges From Irrigated Lands, Monitoring and Reporting Programs Order Numbers R3-2012-0011-01, R3-2012-0011-02, and R3-2012-0011-03, and certified the Final SEIR, Findings, and Statement of Overriding Considerations, pursuant to the California Environmental Quality Act ("CEQA"), Resolution Number R3-2012-0012 (all documents collectively referred to as "Conditional Waiver" or "2012 Conditional Waiver").

The 2012 Conditional Waiver includes significant and prescriptive requirements that gravely impact growers and the agricultural industry in the Central Coast. Although growers and the agricultural community are supportive of maintaining quality waters throughout the region, the 2012 Conditional Waiver not only contains unlawful requirements not supported by law or substantial evidence, but put Central Coast growers at a severe disadvantage in a very competitive marketplace.

As the state agency tasked to ensure the *reasonable* regulation of the state's water quality given all the demands made upon the water, and the state agency tasked with reviewing a Regional Board's action that is contrary to the law, it is imperative that the State Board decide the issues set forth in this Petition. More specifically, Petitioners challenge whether the Regional Board acted appropriately and reasonably when it adopted the 2012 Conditional Waiver and MRPs, certified the inadequate Final SEIR, and filed the Notice of Determination associated with the Final SEIR. The Regional Board's actions cause Petitioners to be prejudiced and aggrieved now and in the future with a conditional waiver that violates the Porter-Cologne Water Quality Control Act, the Basin Plan, and the Nonpoint Source Policy, was adopted through a biased and procedurally flawed process, contains conditions and limitations which are more stringent or onerous than required by or provided for under current law, and is based upon an inadequate SEIR that fails to analyze the Project as adopted, fails to assess the environmental impacts of the Project, and relies on a Negative Declaration prepared for a different project.

Accordingly, Petitioners respectfully request that the State Board vacate the adoption of the

2012 Conditional Waiver and MRPs, remedy the 2012 Conditional Waiver to incorporate third-party groups and cure specified defects,[3] and order the Regional Board to vacate its certification of the Final SEIR, Findings, and Statement of Overriding Considerations.

II. ARGUMENT[4]

A. PROCEDURAL AND PROCESS FLAWS HAVE SUBSTANTIALLY PREJUDICED AGRICULTURAL STAKEHOLDERS

1. Petitioners' Due Process Rights Have Been Hampered By Regional Board Delays

Water Code section 13320 provides members of the public the opportunity to seek review of an action taken by the Regional Board:

> Within 30 days of any action or failure to act by a regional board under subdivision (c) of Section 13225, Article 4 (commencing with Section 13260) of Chapter 4, Chapter 5 (commencing with Section 13300), Chapter 5.5 (commencing with Section 13370), Chapter 5.9 (commencing with Section 13399.25), or Chapter 7 (commencing with Section 13500), an aggrieved person may petition the state board to review that action or failure to act.

(Wat. Code, § 13320(a).) The statute only allows 30 days for the filing of a petition. (*Ibid.*) Unfortunately, delays in the release of necessary and essential documents from the adoption of the 2012 Conditional Waiver have disadvantaged Petitioners' ability to fully review the adopted 2012 Conditional Waiver and determine all associated defects and impacts. The Regional Board adopted the 2012 Conditional Waiver on March 15, 2012. (See Order No. R3-2012-0011, attached as Attachment 1.) The final Order, Additional Findings, and associated MRPs were not released until March 27, 2012, twelve days after the hearing. (See March 27, 2012 Email from Regional Board announcing release of final order, attached as Attachment 5.) A fact sheet summarizing the requirements for each tier was not released until April 6, 2012. (See April 6, 2012 Email from Regional Board announcing release of a Frequently Asked Questions Information Document and Fact Sheet and associated Fact Sheet, attached as Attachment 6.) The Notice of Determination was not

---

[3] Petitioners incorporate by reference those points raised in the Petition submitted on or about April 16, 2012 by Theresa A. Dunham regarding specific defects to be cured.

[4] Petitioners incorporate by reference those arguments submitted on or about April 16, 2012 by Theresa A. Dunham and William Thomas regarding the illegality of individual surface water monitoring requirements, nutrient management plans, confidentiality issues with farm plans, nitrogen balance ratios, and regulation of tile drains.

released until April 3, 2012. (See Notice of Determination, attached as Attachment 7.) The Resolution certifying the Final SEIR, Findings, and Statement of Overriding Considerations was not provided to Petitioners until April 10, 2010. (See April 10, 2012 Email from Jessica Newman to Kari Fisher, attached as Attachment 8.) The transcript from March 15, 2012 was finalized on April 3, 2012 (see April 2, 2012 Email from Atkinson-Baker Transcripts to Stacy Denny, attached as Attachment 9); the transcript from March 14, 2012 was finalized and released to the public on April 13, 2012. Given the delays in obtaining necessary and essential documents in order to review the action taken by the Regional Board, Petitioners have been prejudiced.

2. Process Flaws Immediately Prior To Board Adoption Have Substantially Prejudiced Agricultural Stakeholders[5]

During the course of the hearing on March 15, 2012, last minute changes, improperly couched as revisions and new conditions drafted by the Board members themselves, were introduced and subsequently incorporated into the 2012 Conditional Waiver. (See March 15, 2012 Transcript, pp. 102-116.) A Public Records Act Request revealed that these new conditions were finalized *prior* to the close of the public comment portion of the hearing but *never released to the public* (See March 14, 2012 Draft Transcript, p. 369, ¶ 11-12, ["Michael, we are done with public comment. It's closed."]; Public Records Act Request, March 13, 2012 at 12:02 p.m. Email between Mike Johnston and Roger Briggs stating revisions were finalized, attached as Attachment 10), and were predetermined to be a part of the final order prior to review by Board members. (Public Records Act Request, March 13, 2012 at 12:02 p.m. Email between Mike Johnston and Roger Briggs, ["Mike, here it is. Changes and new language in red. There's one bullet that has yellow highlight on it. I couldn't get rid of it. It doesn't mean anything - *we'll fix it later after the meeting when this is part of the Order.*"], emphasis added, attached as Attachment 10.) Further, documents within the Public Records Act Request show that the exact language presented by Board member Johnston was actually drafted by Steve Shimeck, a member of the public, and presented to the Board staff prior to the hearing. (See Public Records Act Request, Lisa McCann phone notes regarding a conversation with Steve Shimeck on March 8, 2012 about a

[5] Petitioners herein incorporate by reference the arguments regarding process defects contained in the Petition submitted on or about April 16, 2012 by Theresa A. Dunham.

meeting with CalEPA and California Strawberry Commission, attached as Attachment 10; see also Petition submitted on or about April 16, 2012 by Theresa A. Dunham regarding same.) By using language drafted by a member of the public cloaked as language developed by Board members, the final version of the 2012 Conditional Waiver was devoid of fairness, transparency, and equity. This lack of transparency and equity was further highlighted given that this final language was finalized prior to the beginning of the two day Board hearing but not presented to the Board and the public until *minutes prior* to the final vote on the Project, a full day *after* the close of public comments. Such action was highly prejudicial to agricultural stakeholders. Given that these actions included improper ex parte communications between a member of the Board and the public, the adoption of the 2012 Conditional Waiver is null.

B. THE 2012 CONDITIONAL WAIVER FAILS TO COMPLY WITH THE REQUIREMENTS OF CEQA

The California Environmental Quality Act ("CEQA"), Pub. Resources Code, §§ 21000 et seq., was enacted to address concerns about environmental quality in the State of California. CEQA establishes processes and procedures to ensure that California agencies complete an environmental analysis and consider and disclose to the public the environmental impacts of a proposed project. (Pub. Resources Code, §§ 21000 et seq.; Cal. Code Regs., tit. 14, § 15000 et seq.) CEQA's statutory framework clearly sets forth a series of analytical steps intended to promote the fundamental goals and purposes of environmental review—information, public participation, mitigation, and governmental agency accountability. (Cal. Code Regs., tit. 14, § 15002; see also Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) CEQA's intent and purpose foster informed public participation and decision-making. (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 404 ("*Laurel Heights I*").) As the lead agency for the Project, the regulation of discharges from irrigated lands via a conditional waiver of waste discharge requirements, the Regional Board must comply with CEQA's overall objectives, which are to: 1) inform the decision-makers and public about the potential significant environmental effects of a proposed project; 2) identify ways that environmental damage may be mitigated; 3) prevent significant, avoidable damage to the environment by requiring changes in projects, through the use of alternative or

mitigation measures when feasible; and 4) disclose to the public why an agency approved a project if significant effects are involved. (Pub. Resources Code, § 21080.5(a).) As described herein, the Regional Board has failed to comply with the provisions of CEQA.

Petitioners seek a determination from the State Board that the Regional Board's approval of the Project[6] is invalid and void and that the Final Supplemental Environmental Impact Report ("SEIR" or "Final SEIR") prepared for the Project fails to satisfy the requirements of CEQA, and the CEQA Guidelines, Title 14, California Code of Regulations, section 15000 et seq.[7] As demonstrated below, the Regional Board's Final SEIR is fatally flawed and legally inadequate. The SEIR relies on an inadequate project description in that the scope of the project is not supported by substantial evidence in the administrative record. Further, the SEIR relies exclusively on the 2004 Initial Study and Negative Declaration prepared for a wholly different project.

One of the primary purposes of CEQA is to provide decision-makers and the public information about the proposed project. A cursory view of the SEIR reveals that it fails miserably as an informational document.

1. Standard Of Review Under The California Environmental Quality Act

In reviewing the SEIR for the Project, a determination must be made whether the Regional Board prejudicially abused its discretion either by failing to proceed in the manner required by law or by reaching a decision that is not supported by substantial evidence. (Pub. Resources Code, § 21168; *Laurel Heights I, supra,* 47 Cal.3d at 392.) A court will find the agency prejudicially abused its discretion where either 1) the agency failed to proceed in a manner required by law, or 2) its determination or decision is not supported by substantial evidence. (*Laurel Heights I, supra,* 47 Cal.3d at 392, fn. 5; *Stanislaus Natural Heritage Project v. County of Stanislaus* (1996) 48 Cal.App.4th 182, 192; Pub. Resources Code, § 21168.5.)

"Certification of an EIR which is legally deficient because it fails to adequately address an

---

[6] The term "project" refers to the 2012 Conditional Waiver and associated MRPs in its entirety.

[7] All future references to Guidelines are to the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) developed by the Governor's Office of Planning and Research and adopted by California's Natural Resources Agency. (Pub. Resources Code, § 21083.) "[C]ourts should afford great weight to the Guidelines except when a provision is clearly unauthorized or erroneous under CEQA. [Citation.]" (*Laurel Heights I, supra,* (1988) 47 Cal.3d 376, 391, fn. 2).)

issue constitutes a prejudicial abuse of discretion . . . ." (*Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 428.) A prejudicial abuse of discretion also occurs if the EIR omits relevant information and thus precludes informed decision-making. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 712.)

If an agency fails to proceed in the manner required by law, the inquiry ends and the decision must be set aside. The court does not apply the "substantial evidence" standard of review if the agency fails to act in accordance with the law or with CEQA. (*Schoen v. Department of Forestry & Fire Protection* (1997) 58 Cal.App.4th 556, 565.) "Conclusions of law . . . are reviewed independently." (*International Brotherhood of Electrical Workers v. Aubry* (1996) 42 Cal.App.4th 861, 868.)

Recently, the California Supreme Court sustained a CEQA challenge and in doing so addressed the abuse of discretion standard of review. In *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, the Supreme Court set forth the standard of review as follows:

> . . . an agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence. (§ 21168.5.) Judicial review of these two types of error differs significantly: While we determine de novo whether the agency has employed the correct procedures, "scrupulously enforc[ing] all legislatively mandated CEQA requirements" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564), we accord greater deference to the agency's substantive factual conclusions. In reviewing for substantial evidence, the reviewing court "may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable," for, on factual questions, our task "is not to weigh conflicting evidence and determine who has the better argument." (*Laurel Heights I, supra,* 47 Cal.3d at 393.)
>
> In evaluating an EIR for CEQA compliance, then, a reviewing court must adjust its scrutiny to the nature of the alleged defect, depending on whether the claim is predominantly one of improper procedure or a dispute over the facts. For example, where an agency failed to require an applicant to provide certain information mandated by CEQA and to include that information in its environmental analysis, we held the agency "failed to proceed in the manner prescribed by CEQA." (*Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1236; see also *Santiago County Water Dist. v. Count of Orange, supra,* 118 Cal.App.3d at p. 829 [EIR legally inadequate because of lack of water supply and facilities analysis].) In contrast, in a factual dispute over "whether adverse effects have been mitigated or could be better mitigated" (*Laurel Heights I, supra,* 47 Cal.3d at p. 393), the agency's conclusion would be reviewed only for substantial evidence. Thus, in *Laurel Heights I*, we rejected as a matter of law the agency's contention that the EIR did not need to evaluate the impacts of the project's

> foreseeable future uses because there had not yet been a formal decision on those uses (*id.* at pp. 393-399), but upheld as supported by substantial evidence the agency's finding that the project impacts described in the EIR were adequately mitigated (*id.* at pp. 407-408). (See also *California Oak, supra,* 133 Cal.App.4th at p. 1244 [absent uncertain purchase of additional water, as to which the EIR's discussion is legally inadequate, "substantial evidence of sufficient water supplies does not exist"].)

(*Id.* at 435.) The Supreme Court's analysis in *Vineyard Area Citizens* is not new law. Under *East Peninsula Education Council Inc. v. Palos Verdes Peninsula Unified School District* (1989) 210 Cal.App.3d 155, 165, challenges to agency actions based on alleged non-compliance with CEQA are reviewed by the court depending upon whether the challenge is to procedures used or to substantive decisions made. If the challenge involves procedures, it is a question of law requiring an independent determination by the reviewing court. (See also, *Laurel Heights I, supra,* 47 Cal.3d at pp. 394-396.)

The present case presents both types of CEQA challenges, the type requiring the substantial evidence standard, as well as the type in which a court is called upon to determine *de novo* whether the agency employed the correct procedures.

2. The Final SEIR Is Fundamentally Flawed And Cannot Be Relied Upon For The 2012 Conditional Waiver

a. The Final SEIR's Reliance on the 2004 Negative Declaration is Improper

An attempt to review the environmental impacts of the 2012 Conditional Waiver was included within the Final SEIR. Unfortunately, a full CEQA review and environmental analysis has been avoided due to the SEIR's improper reliance on the Negative Declaration prepared for the 2004 Agricultural Order.[8] (Resolution No. R3-2012-0012, p. 1, ¶ 2; p. 2, ¶ 7; Final SEIR, pp. 1, 2, 8.) Specifically, the SEIR states that possible impacts to agricultural lands "were previously evaluated in the Negative Declaration for the 2004 Agricultural Order and were found at that time not to be significant." (Final SEIR, p. 8.) The SEIR relies upon this analysis to conclude that the 2012 Conditional Waiver will also not have any significant impacts to agriculture. (See Final SEIR, pp. 9, 11, 15, 17.) For numerous reasons, such conclusions are improper. The 2004 Agricultural Order is a separate project from the 2012 Conditional Waiver. In addition, the conditions, restrictions, and

[8] In 2004, the Regional Board adopted Order No. R3-2004-0117, Conditional Waiver of Waste Discharger Requirements for Discharges from Irrigated Lands ("2004 Agricultural Order") along with a Negative Declaration under CEQA. (See Final SEIR, p. 1, attached as Attachment 3.)

regulations within the 2012 Conditional Waiver are different from, more extensive than, and entirely brand new from those contained in the 2004 Agricultural Order. Mere reference to and reliance upon an environmental analysis conducted at least eight years previous is not only inappropriate, it is also flawed and violates CEQA. (See *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, [reliance on a negative declaration prepared for a previous more limited airport taxiway project was a prejudicial abuse of discretion as the previous project was "a substantially different project."].)

A previous Negative Declaration can only be relied upon if the *project is the same* and the *impacts are the same*. Neither factor applies here. (Cal. Code. Regs., tit. 14, § 15063(c), "Determine, pursuant to a program EIR, tiering, or another appropriate process, which of a project's effects were adequately examined by an earlier EIR or negative declaration.") As explained *infra*, the 2012 Conditional Waiver is a separate project from the 2004 Agricultural Order. Further, given the fundamental differences between the two projects, including, but not limited to, the basic tiering structure, the associated monitoring and reporting requirements, incorporation of riparian buffers, groundwater monitoring, individual on farm surface water monitoring, well monitoring, irrigation and nutrient management plans, annual compliance form, and nitrogen balance ratios, the 2012 Conditional Waiver's project impacts and effects could not have been analyzed *or even considered* under the 2004 Agricultural Order's Negative Declaration. (See Order No. R3-2012-0011, [maintenance of riparian areas, riparian cover, or containment structures to avoid percolation (*Id.* at p. 20, ¶ 32, 37, 39); groundwater monitoring and reporting (*Id.* at p. 23, ¶ 51); Annual Compliance Form (*Id.* at p. 28, ¶ 67); photo monitoring (*Id.* at p. 28, ¶ 69), total nitrogen reporting (*Id.* at pp. 28-29, ¶ 70); individual surface water monitoring (*Id.* at p. 29, ¶ 72-73); Irrigation and Nutrient Management Plan (*Id.* at p. 29, ¶ 75); Nitrogen Balance ratio milestones (*Id.* at p. 30, ¶ 78); Water Quality Buffer Plans (*Id.* at pp. 31-32, ¶ 80-81); riparian buffers/filter strips (*Id.* at p. 31, ¶ 80)].) Thus any reliance on the 2004 Negative Declaration for determination of significant effects under the 2012 Conditional Waiver is improper and defeats the basic intent of CEQA.

Although both waivers are conditional waivers of waste discharge limited to 5 year periods of time and regulate discharges from irrigated lands, the two waivers are extremely different in scope,

regulatory focus, requirements, breadth, enforcement, intent, types and contents of monitoring, types of discharges to be regulated, reporting requirements, as well as other differences. As such, the two waivers are separate and independent "projects" under CEQA. (See *Communities For A Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 326, [where reliance on previous negative declaration was improper because the Diesel Project could not "be characterized as merely the modification of a previously analyzed project to operate refinery boilers or the continued operation of the boilers without significant expansion of use. Rather, the Diesel Project proposed adding a new refining process to the facility, requiring the installation of new equipment as well as the modification and significantly increased operation of other equipment."].)

Since the 2012 Conditional Waiver is not merely a modification of the 2004 Agricultural Order but is a new waiver program which adds new processes, conditions, requirements, and a serious expansion from the current manner of regulation, reliance on the 2004 Negative Declaration to fully determine and analyze the new environmental impacts of the 2012 Conditional Waiver is inappropriate and improper.

b. The Use of a SEIR Tiered off of the 2004 Negative Declaration and Initial Study is Improper

On March 1, 2011, the Regional Board issued a Final SEIR for the 2012 Conditional Waiver. (See Final SEIR generally; see also Resolution No. R3-2012-0012 Certifying the Final SEIR, p. 2.) The Final SEIR consists of the Draft SEIR, the Response to Comments to the Draft SEIR, and documents referenced and incorporated into the Final SEIR. (Resolution No. R3-2012-0012, p. 2.) An Addendum to the Final SEIR was released on August 10, 2011, but as described herein, the Addendum is improper.

Within the opening pages of the Final SEIR, the following summary is provided:

> In July 2004, the Board adopted an Initial Study and Negative Declaration prior to adoption of the 2004 Agricultural Order. CEQA and the CEQA Guidelines state that when a Negative Declaration has been adopted for a project, no subsequent environmental impact report (SEIR) shall be prepared for the project unless the lead agency determines that, among other reasons, changes are being proposed in the project that could involve an increase in the severity of environmental effects identified in the Negative Declaration. (Cal. Code Regs., tit 14, § 15162(a)(1).)

(Final SEIR, p. 1.) Although this is a correct statement of law, it is inapplicable here. Section 15162(a)(1) only applies when the current project is the exact same as the previous project for which an EIR or Negative Declaration has been prepared. Given that the projects here, the 2004 Agricultural Order and the 2012 Conditional Waiver, are two separate and independent projects, reliance on section 15162(a)(1) is improper. (See Section B.8 Improper Determination of a Project Under CEQA, *supra.*) Further, the fact that both projects are conditional waivers for agricultural orders does not mean they can be classified as the same project. Additionally, the fact that the same governmental approval process, a conditional waiver of waste discharge requirements, has been utilized is irrelevant to the determination of what is the "project" and its environmental impacts. (Cal. Code Regs., tit. 14, § 15378 (c); *Orinda Assn v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1172, "'[t]he term *"project" refers to the underlying activity and not the governmental approval process.*' [Citation.]" (*Natural Resources Defense Council, Inc. v. Arcata Nat. Corp.* (1976) 59 Cal.App.3d 959, 969, 131 Cal.Rptr. 172, emphasis added by the *Natural Resources* court.)

Since the 2012 Conditional Waiver is a separate CEQA project from the 2004 Agricultural Order, section 15162(a)(1) cannot be relied upon because any environmental review prepared for the 2004 Project is inapplicable. (See section B.4, The 2012 Conditional Waiver Is A Separate Project From the 2004 Conditional Waiver Under CEQA, *infra.*) Thus, a new EIR should be developed for the 2012 Conditional Waiver. (*Communities For A Better Environment v. South Coast Air Quality Management Dist., supra,* 48 Cal.4th 310, 319-20, ["If no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR. (*No Oil, Inc. v. City of Los Angeles, supra,* 13 Cal.3d at pp. 75, 88, 118 Cal.Rptr. 34, 529 P.2d 66; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505, 184 Cal.Rptr. 664.)"].) Without preparing a proper and adequate environmental document, the public has been precluded from gaining a full understanding of the environmental impacts and consequences of the 2012 Conditional Waiver as well as gaining assurance that all consequences have in fact been analyzed to the fullest extent required by law. (See *Vineyard Area Citizens for Responsible Growth, Inc., supra,* (2007) 40 Cal.4th at pp. 449–450, ["The preparation and circulation of an EIR is more than a set of

technical hurdles for agencies and developers to overcome. The EIR's function is to ensure that government officials who decide to build or approve a project do so with a full understanding of the environmental consequences and, *equally important, that the public is assured those consequences have been taken into account.* [Citation.] For the EIR to serve these goals it must present information in such a manner that the foreseeable impacts of pursuing the project can actually be understood and weighed, and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made."], emphasis added.)

First, to force preparation of an EIR, you need only make a "fair argument" that there may be a significant environmental impact, even though a contrary conclusion may be possible. (Cal. Code Regs., tit. 14, § 15064(f)(1), *Friends of B Street v. City of Hayward* (1980) 106 Cal.App.3d 988.)[9] In marginal cases, an EIR must be prepared if there is a "serious public controversy" or a "disagreement between experts." (Cal. Code Regs., tit. 14, §§ 15064(f)(1), (2).) CEQA sets a "low threshold" for preparation of an EIR. (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84, ["The existence of serious public controversy in itself indicates that preparation of an EIR is desirable.") Second, "relevant personal observations," such as those provided in written and oral testimony, are evidence. (See Letter from David Costa, Costa Family Farms (Jan. 3, 2011), attached as Attachment 13; Letter from David Costa, Costa Family Farms (March 26, 2010) regarding economics, available at <http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2012/march/ Item_4/item4_3_14_ transcript.pdf>; Letter from Benny Jefferson, Martin Jefferson and Sons (Dec. 23, 2010), regarding riparian areas, buffers, conflicts with Leafy Greens and food safety, and enforcement, available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/11.pdf>; *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 173.) Third, "CEQA places the burden of environmental investigation on government rather than the public," and if "the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record." (*Sundstrom v.*

---

[9] Courts have held that a Negative Declaration is inappropriate "if it can be fairly argued" that the project will cause significant environmental impacts. The "fairly argued" standard of review is much more stringent than the "substantial evidence" standard used to review the adequacy of an EIR, and it places a greater burden of proof on the project proponent. (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.)

County of Mendocino (1988) 202 Cal.App.3d 296, 311.) Finally, to aid in the determination of "significant," CEQA provides guidance. (See Pub. Resources Code, § 21083; Cal. Code Regs., tit. 14, § 15065; CEQA Guidelines Appendix G.)

The four prongs above are easily met here. The record is replete of evidence showing a "fair argument" that there may be significant environmental impacts. (See Letter from California Farm Bureau Federation (Jan. 3, 2011), available at < http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/2.pdf.; Letter from David Costa, Costa Family Farms (Jan. 3, 2011), attached as Attachment 13; Letter from David Costa, Costa Family Farms (March 26, 2010) regarding economics, available at <http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2012/march/ Item_4/item4_3_14_transcript.pdf>; Letter from Benny Jefferson, Martin Jefferson and Sons (Dec. 23, 2010), regarding riparian areas, buffers, conflicts with Leafy Greens and food safety, and enforcement, available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/11.pdf>.) Second, a serious public controversy exists between the regulations adopted by the Regional Board and the ideas and proposals submitted by agricultural stakeholders. (See Agriculture's Alternative Proposal (Dec. 3, 2011), available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/2.pdf>; Preliminary Ag Proposal (April 1, 2010), available at < http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/Alt1.pdf). The sheer number of public workshops, meetings, Board hearings, written comment letters submitted, and oral comments expressed further highlight the controversial nature of this Project. (See Regional Board Staff Power Point Presentation (March 14, 2012), slides 9-10; Staff Report for Regular Meeting of February 1, 2012 (Jan. 9, 2012) pp. 3, 4, 5, 8-10.) Third, the burden to prove or disprove a significant environmental impact lies with the lead agency and not the public. (See Section B.9 Improper Shift of Burden of Proof, *infra*.) Finally, the SEIR fails to properly analyze impacts to the *actual Project* approved by the Board, as it was developed after preparation of the Final SEIR. (See Section B.8 Failure to Properly Analyze the Adopted Project Under CEQA, *infra*.)

By improperly relying on antiquated environmental analyses prepared for *another project* and not conducting an independent environmental review of the *actual Project*, the 2012 Conditional

Waiver has yet to receive legally adequate environmental review pursuant to CEQA. Since the Project has already been approved notwithstanding the failure to comply with CEQA, the fundamental prongs of CEQA have been ignored. (*Chaparral Greens v. City of Chula Vista* (1996) 50 Cal.App.4th 1134, 1145, ["'Basic to environmental review is that it occur early enough in the planning stages of a project to enable environmental concerns to influence the project's program and design, yet late enough to provide meaningful information for environmental assessment. [Citation.]' (*Kings County Farm Bureau v. City of Hanford, supra,* 221 Cal.App.3d at p. 738, 270 Cal.Rptr. 650; see also CEQA Guidelines, §§ 15004, subd. (b), 15168, subd. (b)(4).)"].)

3. The Final SEIR Is A Legally Inadequate Informational Document[10]

a. The Final SEIR Contains a Legally Inadequate Project Description

"[A]n accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." CEQA requires an EIR to have an accurate and stable project description. (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199.) Under CEQA, a "project" means "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Cal. Code Regs., tit. 14, § 15378(a).) "Among other things, a project description must include a clear statement of 'the objectives sought by the proposed project,' which will help the lead agency 'develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary.'" (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654-655 quoting Cal. Code Regs., tit. 14, § 15124(b).) The description must also include "[a] general description of the project's technical, economic, and environmental characteristics, considering the principal engineering proposals if any and supporting public service facilities." (Cal. Code Regs., tit. 14, § 15124(c).) As part of the project description, an EIR is to also contain:

A statement of objectives sought by the proposed project. A clearly written statement of

---

[10] Assuming, for arguendo, a new EIR is not required, the SEIR contains numerous fatal flaws as described in the following sections herein.

objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.

The identification of the project objectives and scope is crucial to the proper consideration and analysis of the project. (Cal. Code Regs., tit. 14, § 15124(b); *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1163, overturned on other grounds.) As stated in the seminal "project description" interpretation of *County of Inyo v. City of Los Angeles*, *supra,* 71 Cal.App.3d at pp. 192-193:

> A curtailed or distorted project description may stultify the objective of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposals benefit against its environmental cost, consider mitigation measures, assess the advantages of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance.

The adequacy of an EIR's project description is closely linked to the adequacy of the impact analyses. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.3d 713, 722-723.) More specifically, the project description provides the analytical foundation for the entire EIR. (*Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592, ["'An accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.' (*McQueen v. Board of Directors, supra,* 202 Cal.App.3d at p. 1143.) A narrow view of a project could result in the fallacy of division, that is, overlooking its cumulative impact by separately focusing on isolated parts of the whole. (*Id.* at p. 1144.)"].)

It is therefore essential that the EIR has an accurate, well-conceived, stable, and finite project description. Thus, if the description is inadequate because it fails to discuss an aspect of the project or incorrectly frames the scope of the project, the environmental analysis will probably reflect the same mistake. (*Ibid.*) As demonstrated below, by framing the Project's purpose as a renewal of the 2004 Agricultural Order with some revised conditions (Final SEIR, p. 3), the Project is distorted, thus truncating both the assessment of impacts and consideration of meaningful alternatives.

4. The 2012 Conditional Waiver Is A Separate Project From The 2004 Conditional Waiver Under CEQA

a. The 2012 Conditional Wavier Deviates Significantly From the 2004 Conditional Waiver Constituting a New Project

As defined in CEQA, a "project means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." (Cal. Code Regs., tit. 14, § 15378(a).) "The term 'project' refers to the activity which is being approved." (Cal. Code Regs., tit. 14, § 15378(c).) The "description of the project" for the 2012 Conditional Waiver has undergone substantial changes between the release of the Draft SEIR and the Final SEIR. (Compare Final SEIR, pp. 5-7 to Draft SEIR, pp. 3-4.)

As stated by the Regional Board, the 2012 Conditional Waiver's purpose "of this project is to renew the 2004 Agricultural Order with revised conditions. The 2012 Agricultural Order (Order No. R3-2012-0011) renews a conditional waiver of waste discharges of waste from irrigated agricultural lands in a manner protective of water quality and consistent with the Porter-Cologne Water Quality Control Act (Wat. Code Div. 7) and associated plans and policies. The Agency determined that it is unlikely that this project will have a significant effect on the environment." (Notice of Determination, April 3, 2012, attached as Attachment 7; see also Final SEIR, pp. 3-4.)

Notwithstanding the classification of the 2012 Conditional Waiver as a mere "renewal," the Final SEIR's project description states:

> The draft 2011 Agricultural Order would establish a *new tiering structure* that would group farm operations, or dischargers, into three tiers, each tier distinguished by four criteria that indicate threat to water quality: size of farm operation, proximity to an impaired watercourse, use of chemicals of concern, and type of crops grown. Dischargers with the highest threat have the greatest amount of discharge control requirements, monitoring and reporting. Conversely, dischargers with the lowest threat have the least amount of discharger control requirements, individual monitoring and reporting.
>
> The draft 2011 Agricultural Order requires *more specific and measurable tracking and evaluation of effectiveness of practices* and *more comprehensive water quality monitoring* (e.g., individual discharges and groundwater) than the 2004 Agricultural Order to assure compliance with Water Code section 13269 and consistency with the State Water Board's Nonpoint Source Policy. The draft 2011 Agricultural Order itself and more *descriptions of the requirements and changes from the current 2004*

Agricultural Order, incorporated herein by reference, can be found in the Draft Staff Report recommending the Draft Agricultural Order.

(Final SEIR, pp. 6-7, emphasis added.)[11]

The "description of the project" for the 2004 Conditional Waiver is defined in the 2004 Initial Study and Negative Declaration as:

> The Regional Board proposes to adopt a conditional waiver of WDRs for discharges from irrigated lands, including tailwater, subsurface drainage, and stormwater runoff, and to waive the requirement to submit reports of waste discharge. Irrigated lands include nurseries and soil-floored greenhouses as well as lands planted to row crops, vineyards, tree crops, and field crops. This waiver would be in effect for five years beginning July 8, 2004.
>
> The conditions of the proposed waiver would require all owners and operators of irrigated lands in the Central Coast Region to: 1) enroll with the Regional Board by submitting a Notice of Intent, 2) complete fifteen hours of water quality education, 3) develop a farm water quality management plan that addresses, at a minimum, erosion control, irrigation management, nutrient management and pesticide management, 4)

---

[11] For comparison purposes, the Draft SEIR defines the project as:

> The proposed draft 2011 Agricultural Order groups farm operations, or dischargers, into three tiers, each tier distinguished by four criteria that indicate threat to water quality: size of farm operation, proximity to an impaired watercourse, use of chemicals of concern, and type of crops grown. Dischargers with the highest threat have the greatest amount of discharge control requirements, monitoring and reporting. Conversely, dischargers with the lowest threat have the least amount of discharger control requirements, individual monitoring and reporting. For example, the proposed draft 2011 Agricultural Order proposes the following implementation and reporting requirements:
>
> - Implement pesticide management practices to reduce toxicity in discharges so receiving waterbodies meet water quality standards;
> - Implement nutrient management practices to eliminate or minimize nutrient and salt in discharges to surface water so receiving waterbodies meet water quality standards;
> - Implement nutrient management practices to minimize fertilizer and nitrate loading to groundwater to meet nitrate loading targets ;
> - Install and properly maintain back flow prevention devices for wells or pumps that apply fertilizers, pesticides, fumigants or other chemicals through an irrigation system;
> - Implement erosion control and sediment management practices to reduce sediment in discharges so receiving water bodies meet water quality standards;
> - Protect and manage existing aquatic habitat to prevent discharge of waste to waters of the State and protect the beneficial uses of these waters;
> - Implement stormwater runoff and quality management practices.
> - Develop, implement, and annually-update Farm Water Quality Management Plans.
> - Submit an Annual Compliance Document (for higher threat dischargers) that includes individual discharge monitoring results, nitrate loading risk evaluation and, if nitrate loading risk is high, irrigation and nutrient management plan, verification of irrigation and nutrient management plan effectiveness.
> - Submit a water quality buffer plan (for higher threat dischargers), if operations contain or are adjacent to a waterbody identified on the Clean Water Act Section 303(d) List of Impaired Waterbodies as impaired for temperature or turbidity.
>
> Water Board staff developed this order to address the documented severe and widespread water quality problems in the Central Coast Region, predominately unsafe levels of nitrate in ground water used for drinking water and toxicity impairing communities of aquatic organisms. (Draft SEIR, pp. 3-4.)

> implement management practices in accordance with the farm plan, and 5) conduct individual monitoring or participate in a cooperative monitoring program.

(2004 Initial Study and Negative Declaration, attached to the Final SEIR, p. 4.) A quick read of the two project descriptions above illustrate two separate and wholly distinct programs for the regulation of discharges from irrigated lands. Although the 2004 Agricultural Order and the 2012 Conditional Waiver each describe a conditional waiver of waste discharges for irrigated lands, the similarities end there. The 2012 Conditional Waiver includes new regulatory concepts, increases the scope of regulatory coverage, has been expanded to cover all irrigated lands growing commercial crops, requires new monitoring and reporting requirements, and encompasses regulation of all discharges to surface waters and groundwater, including tile drains and storm water. Stated in the alternative, the 2004 Agricultural Order did not have a three tier system (Order No. R3-2012-0011, pp. 16-17); did not require maintenance of riparian areas, riparian cover, or containment structures to avoid percolation (*Id.* at p. 20, ¶ 32, 37, 39); did not require groundwater monitoring and reporting (*Id.* at p. 23, ¶ 51); did not require submittal of an Annual Compliance Form (*Id.* at p. 28, ¶ 67); did not require photo monitoring (*Id.* at p. 28, ¶ 69), did not require total nitrogen reporting (*Id.* at pp. 28-29, ¶ 70); did not require individual surface water monitoring (*Id.* at p. 29, ¶ 72-73); did not require an Irrigation and Nutrient Management Plan (*Id.* at p. 29, ¶ 75); did not require meeting Nitrogen Balance ratio milestones (*Id.* at p. 30, ¶ 78); did not require Water Quality Buffer Plans (*Id.* at pp. 31-32, ¶ 80-81); and did not require riparian buffers/filter strips (*Id.* at p. 31, ¶ 80). The 2004 Agricultural Order and its environmental documents did not contemplate any of the extensive requirements now prescribed in the 2012 Conditional Waiver. Given the distinct nature of each conditional waiver, the 2004 Order and the 2012 Conditional Waiver are separate projects under CEQA and require independent environmental review. Thus, reliance on the 2004 Negative Declaration is improper and the SEIR contravenes the requirements of CEQA.

b. The 2012 Conditional Waiver is a Discretionary Activity Under CEQA

The Final SEIR incorrectly concludes that the 2012 Conditional Waiver is merely a renewal of the 2004 Agricultural Order "with clarifications and new conditions" and thus, does not constitute a separate "project" to trigger CEQA. (Final SEIR, p. 8.) To the contrary, under CEQA "[t]he term

'project' refers to the *activity* which is being approved and which may be subject to several *discretionary approvals* by governmental agencies." (Cal. Code Regs., tit. 14, § 15378(c), emphasis added.)

The 2012 Conditional Waiver is a "discretionary" project apart and separate from the 2004 Agricultural Order. A project is discretionary if it requires judgment or deliberation by the public agency or body in approving or disproving it. (Cal. Code Regs., tit. 14, § 15357.) The requirements within the 2012 Conditional Waiver were entirely left to the discretion of the members of the Board. (See *Friends of Westwood, Inc. v. City of Los Angeles* (1987) 191 Cal.App.3d 259, 271-72, [project was "discretionary within the meaning of CEQA because they involved 'relatively personal decisions addressed to the sound judgment and enlightened choice of the administrator. These decisions may have great environmental significance relative to one physical site, negligible significance in another. Inevitably they evoke a strong admixture of discretion.'"].) Although Regional Board staff prepared a draft order and provided recommendations to the Regional Board, the ultimate determination of the Conditional Waiver's scope and contents was left to the Board. (See March 15, 2012 Hearing Transcript, p. 93, ["And the Board is now at the point where it can begin to deliberate." "We're at the point where it's in the Board's hands."].) In addition to being a discretionary action, the 2012 Conditional Waiver was an "activity" consisting of regulatory requirements statutorily limited to a five year period. (Wat. Code, § 13269(a)(2).) Upon approving the 2012 Conditional Waiver, the Regional Board committed itself to a definite course of action separate and apart from the terms of the 2004 Order. (Cal. Code Regs., tit. 14, § 15352.) Upon review, the 2012 Conditional Waiver constitutes a discretionary activity wholly independent from the previous regulatory program overseeing the discharges from irrigated lands, and thus, is a project under CEQA. By classifying the 2012 Conditional Waiver as simply a renewal of the 2004 Agricultural Order, the Regional Board attempts to circumvent CEQA's requirements.

5. The Regional Board Has Not Complied With The Timelines To File A Notice Of Determination

In order to foster informed decisionmaking, CEQA requires submittal of a brief notice when an agency decides to carry out a project subject to CEQA. (Cal. Code Regs., tit. 14, § 15373.)

"Whenever a local agency approves or determines to carry out a project that is subject to this division, the local agency shall file notice of the approval or the determination within five working days after the approval or determination becomes final, with the county clerk of each county in which the project will be located." (Pub. Resources Code, § 21152; see also Cal. Code Regs., tit. 14, § 15094(a).) "If the lead agency is state agency, the lead agency shall file the notice of determination with the Office of Planning and Research within five working days after approval of the project by the lead agency." (Cal. Code Regs., tit. 14, § 15094(b).)

The Regional Board approved the 2012 Conditional Waiver and certified the Final SEIR on March 15, 2012. The Notice of Determination was not released to the public until April 3, 2012, more than 14 working days after project approval. (See Notice of Determination (April 3, 2012), attached as Attachment 7; see also Email From Frances McChesney to Kari Fisher showing delay in release of NOD (March 30, 2012), attached as Attachment 11.) As of April 13, 2012, the Notice of Determination had yet to be confirmed as received by the Office of Planning and Research. (See Email From Jessica Newman to Wendy Wang (April 10, 2012), attached as Attachment 12.) By failing to file notice of the determination within five days, the Regional Board's inaction or delay in acting interferes with the intent of CEQA and an interested stakeholder's right to judicial review. (Pub. Resources Code, §§ 21108, 21167; Cal. Code Regs., tit. 14, §§ 15075, 15094.)

6. The Addendum To The Final SEIR Is An Improper Document

On August 10, 2011, the Regional Board released an "Addendum to the Subsequent Environmental Impact Report" that consisted of less than one and a half pages of text and graphics imbedded within the associated Staff Report. (See Staff Report for Regular Meeting of September 1, 2011, (August 10, 2011), p. 25-26.) As prescribed by CEQA, the use of an addendum is allowed only when certain circumstances have been met. "The lead or responsible agency shall prepare an addendum to a *previously certified* EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." (Cal. Code Regs., tit. 14, § 15164(a), emphasis added.)

Upon release of the Addendum, the Final SEIR was not a "previously certified" EIR. (See

Resolution No. R3-2012-0012 certifying the Final SEIR.) The Final SEIR was not certified until March 15, 2012, a full seven months after the release of the Addendum and a full year after the March 1, 2011 release of the Final SEIR. Pursuant to CEQA, changes in circumstances, changes in the project scope, and any new information that arose after the release of the March 1, 2011 Final SEIR should have been included in a revised and recirculated Final SEIR or supplement to an EIR.[12] (See Cal. Code Regs., tit. 14, §§ 15162, 15163, 15164.) Thus, the preparation, release, and reliance upon the August 10, 2011 Addendum is improper and the document must be deemed null and void. Additionally, the Final SEIR must be vacated since it relied upon and incorporated the improper Addendum.

7. Reliance On New Information Triggers Revision And Recirculation Of The SEIR

In addition to significantly altering the scope of the waiver, significant new information has been gathered and relied upon since the completion of the 2004 Agricultural Order and completion of the Final SEIR. Given that this significant information has influenced and/or caused substantial changes to the 2012 Conditional Waiver, which should constitute a new project under CEQA, the SEIR cannot rely upon the environmental analysis that was completed in 2004. (See *Burbank-Glendale-Pasadena Airport Authority, supra,* 233 Cal.App.3d 577.) Notwithstanding the fact that reliance on a previous project that is distinct from the project at hand is improper, substantial changes to the "project" after environmental analysis constitute "significant new information" that requires additional environmental analysis. (Cal. Code Regs., tit. 14, § 15088.5(a).)[13]

The Final SEIR relies upon substantial new information not originally included in the Draft SEIR or Final SEIR. For example, the July 6, 2011 version of Attachment A to the Draft Order

---

[12] A "subsequent EIR" and a "supplemental EIR" shall undergo the same kind of notice and public review as is given to a draft EIR under Section 15087. (Cal. Code Regs., tit. 14, §§ 15162, 15163.)

[13] CEQA Guidelines section 15088.5(a) states that "significant new information" includes:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

includes, for the first time, additional toxic and/or bioaccumulating substances required to be monitored under the project. (See Attachment A (July 6, 2011) p. 17, ¶ 68; Order No. R3-2012-0011, pp. 56-57, ¶ 68.) According to the document, the inclusion of these new monitoring requirements arose out of data obtained *after* the release of the Final SEIR.

> Many currently applied pesticides have not been tested for, and staff is only recently aware of data showing several relatively new fungicides (azoxystrobin, pyraclostrobin and boscalid) in fish tissue and sediment of lagoons in the Central Coast Region.

(*Ibid.*) The Final SEIR is silent on the inclusion of additional monitoring requirements. Additionally, the Technical Memorandum: Cost Considerations Concerning Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands is also silent on the costs associated with additional monitoring requirements. And finally, the "Addendum" is also silent.

In addition to substantial new information, the Final SEIR fails to analyze substantial changes made to the Project. (See Section B.8 The Final SEIR Fails to Properly Analyze the Adopted Project Under CEQA, *infra*.)

The implicit question when deciding whether to revise and recirculate an EIR is if the new information is "significant." (*Western Placer Citizens for an Agr. and Rural Environment v. County of Placer* (2006) 144 Cal.App.4th 890, 901; Cal. Code Regs., tit. 14, §§ 15088.5(a), 15164.) As discussed above and *infra*, the 2012 Conditional Waiver was a new Project that was never analyzed within the Final SEIR. CEQA provides guidance to situations triggering recirculation. (Cal. Code Regs., tit. 14, § 15088.5.) Of particular relevance, "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." (*Id.* at § 15088.5(b).) The addition of a new staff preferred project alternative is not a "mere" clarification or insignificant modification. Rather, the creation of such a new project alternative after finalization of the Final SEIR triggers recirculation.

The inclusion of and reliance upon new information and substantial changes prevents approval of the Final SEIR and triggers recirculation in order to allow the public the opportunity to review this significant new information. (Pub. Resources Code, § 21092.1; Cal. Code Regs., tit. 14, § 15088.5.) The information relied upon in the Addendum to the Staff Report and the July 8, 2011 Revised Draft Order was released subsequent to the commencement of public review but prior to final EIR

certification. This addition of "significant new information" triggers the issuance of a new notice and recirculation of the revised EIR to allow additional public commentary and consultation. (*Ibid.*) The EIR must be appropriately revised to reflect the new information and then subjected to the same "critical evaluation that occurs in the draft stage" so that the public and the regulated community is not denied "an opportunity to test, assess, and evaluate the data and make an informed judgment as to the validity of the conclusions drawn therefrom. (*Sutter Sensible Planning, Inc. v. Board of Supervisors* (1981) 122 Cal. App. 3d 813, 822.)

8. The Final SEIR Fails To Properly Analyze The Adopted Project Under CEQA[14]

As indicated previously, the Regional Board issued the Draft SEIR on November 19, 2010 and the Final SEIR in March 2011.[15] On August 10, 2011, the Regional Board issued an Addendum to the Subsequent Environmental Impact Report along with recommended changes to the Draft Agricultural Order and Monitoring and Reporting Program for each tier. (See Staff Report For Regular Meeting Of September 1, 2011 (Aug. 10, 2011), p. 1.) Although couched as "recommended changes to the Draft Agricultural Order and Monitoring and Reporting Program," the revisions were not merely minor changes to the Draft Order, but rather constituted staff's new preferred project alternative containing elements that were never considered previously.[16] Although the Addendum to the SEIR was released in conjunction with the substantially revised staff Agricultural Order, the Addendum did not evaluate this new preferred project alternative. (*Id.* at pp. 1, 25.) Rather, the Addendum's analysis was limited to the following:

> Since the preparation of the Final SEIR, a panel of the Central Coast Water Board held a multi-day hearing to consider the adoption of a waiver of waste discharge requirements

---

[14] Proper environmental review for the 2012 Conditional Waiver, in all of its draft iterations, was never conducted given that it was a separate project under CEQA, and thus, reliance on the 2004 Negative Declaration was improper. Notwithstanding this fact, the August 10, 2011 dramatic revisions to the 2012 Conditional Waiver triggered subsequent environmental review.

[15] As noted *supra*, the Final SEIR was issued in March 2011. The Regional Board subsequently revised the Draft Order twice on July 8, 2011 and on August 10, 2011, after the Final SEIR was released. These revisions, hereinafter collectively referenced as the August 10, 2011 staff Draft Order, were substantial changes that dramatically differed from any previous version of the draft order. Thus, the August 10, 2011 version constitutes a new staff preferred project that was not evaluated under CEQA as the Final SEIR was released prior to its development and the one and a half page Addendum to the SEIR was silent on this new "iteration."

[16] The release of the Addendum to the SEIR and revisions to the Draft Agricultural Order on August 10, 2011 occurred *after* the close of written comments (the comment period closed on August 1, 2011.) Thus, the public was prevented from submitting written comments on the Addendum to the SEIR or changes to the Order.

> for discharges of waste from irrigated lands. In response to oral and written comments to the Water Board, staff proposed revisions to the Draft Agricultural Order. Some changes and additions to the Final SEIR are necessary to reflect revisions to the Draft Agricultural Order. A new SEIR is not required because the revisions to the Draft Agricultural Order have either already been evaluated in the Final SEIR or the 2004 Negative Declaration, or the revisions do not constitute substantial changes that involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects (Cal. Code Regs. tit. 14, §§ 15164, 15162).

(*Ibid.*) Contrary to the Regional Board's assertion, the August 10, 2011 Staff Draft Order, which, once adopted, became the 2012 Conditional Waiver, includes regulatory provisions that differ significantly from those identified and contained in the 2010 Staff Draft Order that was analyzed in the SEIR. These revisions were not properly analyzed under CEQA as they were not in existence during *any* of the stages of environmental review because the Draft SEIR and Final SEIR analyzed the alternatives *in existence at that time.* Below is a partial list of new requirements that were presented in the August 10, 2011 Staff Draft Order alternative without regard to CEQA compliance.

- A new tiering criteria;
- Change in the definition of "farm or ranch";
- Change in the definition of "operation";
- Regulation at the individual farm/ranch level instead of operation level;
- Restriction of total irrigated acreage for Tier 1 from 1,000 acres to less than or equal to 50 acres;
- Restriction of total irrigated acreage for Tier 2 from 1,000 acres to 50-500 acres;
- Change in total irrigated acreage for Tier 3 from greater than 1,000 acres to greater than 500 acres;
- Inclusion of tile drains requirements including monitoring;
- New requirements for prevention of aquifer cross-contamination for groundwater wells;
- Addition of monitoring requirements in place of previous sampling requirements, thus changing the associated legal requirements;
- Inclusion of new information such as pesticide, herbicide, and fungicide data;
- Changes to the Monitoring and Reporting Requirements for Tier 1;
- Changes to the Monitoring and Reporting Requirements for Tier 2; and
- Changes to the Monitoring and Reporting Requirements for Tier 3.

Notwithstanding these additions, the Regional Board continues to maintain that the methods of compliance for the 2012 Conditional Waiver "are no different" from the 2004 Agricultural Order.

(Final SEIR, p. 10.) This statement is false. In order to comply with the 2012 Conditional Waiver, "Dischargers must comply with the terms and conditions of this Order to meet the provisions contained in Water Code Division 7 and regulations and plans and policies adopted there under." (Order No. R3-2012-0011, p. 13, ¶ 1.) Further, Dischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards." (Order No. R3-2012-0011, p. 15, ¶ 12.) The 2004 Agricultural Order did not have a tiering criteria dependent upon acreage and crops grown (Order No. R3-2012-0011, pp. 16-17); it did not require maintenance of riparian areas, riparian cover, or containment structures to avoid percolation (*Id.* at p. 20, ¶ 32, 37, 39); it did not require groundwater monitoring and reporting (*Id.* at p. 23, ¶ 51); it did not require submittal of an Annual Compliance Form (*Id.* at p. 28, ¶ 67); it did not require photo monitoring (*Id.* at p. 28, ¶ 69), it did not require total nitrogen reporting (*Id.* at pp. 28-29, ¶ 70); it did not require individual surface water monitoring (*Id.* at p. 29, ¶ 72-73); it did not require the development and implementation of an Irrigation and Nutrient Management Plan (*Id.* at p. 29, ¶ 75); it did not contain Nitrogen Balance ratio milestones (*Id.* at p. 30, ¶ 78); it did not require Water Quality Buffer Plans (*Id.* at pp. 31-32, ¶ 80-81); and it did not require riparian buffers/filter strips (*Id.* at p. 31, ¶ 80). Given the sheer number of additional requirements within the 2012 Conditional Waiver and accompanying MRPs, and that neither the 2012 Conditional Waiver nor accompanying MRPs are permissive in nature, a discharger is *not in compliance* if only doing what is required under the now expired 2004 Agricultural Order. Knowing that the manner of compliance for the 2012 Conditional Waiver is grossly different from that of the 2004 Agricultural Order, attempting to classify the 2012 Conditional Waiver as the same "project" as was adopted in 2004 improperly attempts to circumvent environmental review under CEQA.

CEQA prohibits a lead agency from avoiding a CEQA analysis by belatedly developing a staff preferred "program" that arbitrarily mixes certain elements from previously proposed alternatives along with new requirements without an analysis of the environmental effect of those combined elements. (See generally *Communities for a Better Environment. v. California Resources Agency, supra,* 103 Cal.App.4th 98, 114; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1319.)

Such an approach circumvents the intent and purpose of CEQA and violates the due process and public notice rights of landowners and agricultural operations subject to the proposed program. (*Chaparral Greens v. City of Chula Vista, supra,* 50 Cal.App.4th 1134, 1145, ["'CEQA requires an EIR to reflect a good faith effort at full disclosure. (*Kings County Farm Bureau v. City of Hanford, supra*, 221 Cal.App.3d 692, 712, 270 Cal.Rptr. 650, citing CEQA Guidelines, § 15151.)'"].) Thus, the Regional Board's action to develop a brand new alternative *after* completion of the CEQA process is unlawful. All alternatives must be fully analyzed in the EIR pursuant to CEQA for them to be viable options available to the Regional Board for adoption. CEQA is very clear in its purpose and requirements:

> "CEQA generally provides that, before a public agency carries out or approves any discretionary project - i.e., any activity that requires the exercise of agency judgment or deliberation and foreseeably may cause physical damage to the environment - the agency **must first assess the project's potential environmental effects."** (*Stockton Citizens for Sensible Planning v. City of Stockton* (2010) 48 Cal.4th 481, 498 (citations omitted), emphasis added; Pub. Resources Code, § 21061.)
>
> "'*The EIR is the heart of CEQA,' and the integrity of the process is dependent on the adequacy of the EIR." (Cherry Valley Pass Acres & Neighbors v. City of Beaumont (2010) 190 Cal. App.4th 316, 327 (citation omitted).) "'The EIR is the primary means of achieving the Legislature's considered declaration that it is the policy of this state to 'take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.'" "The EIR ... is the mechanism prescribed by CEQA to force informed decision making and to expose the decision making process to public scrutiny." (Planning & Cons. League v. Dept. of Water Res. (2000) 83 Cal.App.4th 892, 910, emphasis added.)*
>
> "'The fundamental purpose of an EIR is 'to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment.'" (*Center for Bio. Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 882 (citation omitted).) "For the EIR to serve these goals it must present information in such a manner that the foreseeable impacts of pursuing the project can actually be understood and weighed, **and the public must be given an adequate opportunity to comment on that presentation before the decision to go forward is made.**" (*Comm. for a Better Env. v. City of Richmond* (2010) 184 Cal.App.4th 70, 82 (citation omitted), emphasis added.)

Although an EIR need not consider all potential alternatives to the project and instead need only to consider a reasonable range of alternatives, *the alternative preferred and recommended by the agency must be considered and examined within the EIR.* (See Cal. Code Regs., tit. 14, § 15226.6(a).) Further, the EIR must contain sufficient information about *each alternative* to permit an evaluation of

the relative merits of the alternatives and the project. Here, the Draft SEIR analyzed the November 17, 2010 staff preferred Ag Order and briefly identified a handful of other alternatives. The Final SEIR was released just prior to the March 17, 2011 Board meeting and contained only those alternatives identified in the Draft SEIR. Only after the completion of both the Draft SEIR and Final SEIR and the close of public comments was a new alternative, the August 10, 2011 Revised Draft Order, released.

The "project" analyzed under the March 1, 2011 Final SEIR consisted of the following tiering criteria:[17]

> 14. Tier 1 – Applies to all Dischargers **who meet** all of the criteria described in (1a), (1b), and (1c), or who are certified in a sustainable agriculture program identified in (1d) that requires and verifies effective implementation of management practices that protect water quality:
>
> > 1a. Discharger does not use chlorpyrifos or diazinon, which are documented to cause toxicity in surface waters in the Central Coast Region;
> >
> > 1b. **Operation** is located more than 1000 feet from a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies (Table 1);
> >
> > 1c. If the Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A), **then the operation** total irrigated acreage is ***less than* 1000 acres**, and is *not* within 1000 feet of a public water system well that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite;
> >
> > 1d. Sustainability in Practice (SIP, certified by the Central Coast Vineyard Team) or other certified programs approved by the Executive Officer.
>
> 15. Tier 2 – Applies to all Dischargers **who do not meet** the Tier 1 or Tier 3 criteria. In general, Tier 2 Dischargers **meet** at least one of the characteristics described in (2a), (2b), or (2c):
>
> > 2a. Discharger applies chlorpyrifos or diazinon, which are documented to cause toxicity in surface waters in the Central Coast Region;
> >
> > 2b. **Operation** is located within 1000 feet of a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies (see Table 1);
> >
> > 2c. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A), and **the operation** total irrigated acreage is ***less than* 1000 acres**, and the operation is *within* 1000 feet of a public

[17] The following substantial changes provided here within are illustrative of *only a few* of the numerous changes made to the Project *after* the release of the Final SEIR.

water system well that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite;

16. Tier 3 – Applies to all Dischargers **who meet** one the following sets of criteria *(3a) or (3b)*:

3a. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A), and **operation** total irrigated acreage is ***greater than or equal* to 1000 acres**;

3b. Discharger applies chlorpyrifos **and** diazinon, and **operation** discharges irrigation or stormwater runoff to a waterbody listed for toxicity or pesticides on the 2010 List of Impaired Waterbodies (Table 1);

(Staff Report Appendix A Order No. R3-2011-0006 (March 2011), pp. 13-14, ¶¶ 13-15, emphasis added to illustrate changes between "project" reviewed within the SEIR and actual Project adopted by the Board on March 15, 2012.) The following tiering criteria are what were actually adopted on March 15, 2012:

15. Tier 1 – Applies to all Dischargers whose **individual farm/ranch** meets all of the criteria described in (1a), (1b), and (1c), or **whose individual farm/ranch** is certified in a sustainable agriculture program identified in (1d) that requires and verifies effective implementation of management practices that protect water quality:

1a. Discharger does not use chlorpyrifos or diazinon at the farm/ranch, which are documented to cause toxicity in surface waters in the Central Coast Region;

1b. **Farm/ranch** is located more than 1000 feet from a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies (Table 1);

1c. If the Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) **at the farm/ranch**, and the **farm/ranch** total irrigated acreage is ***less than* 50 acres**, and is *not* within 1000 feet of a well that is part of a public water system (**as defined by the California Health and Safety Code, section 116275**) that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite;

1d. Sustainability in Practice (SIP, certified by the Central Coast Vineyard Team or other certified programs approved by the Executive Officer.

16. Tier 2 – Applies to all Dischargers **whose individual farm/ranch** does not meet the Tier 1 or Tier 3 criteria. In general, a Tier 2 Discharger's **farm/ranch** meets at least one of the characteristics described in (2a), (2b), or (2c):

2a. Discharger applies chlorpyrifos or diazinon at **the farm/ranch**, which are documented to cause toxicity in surface waters in the Central Coast Region;

2b. **Farm/ranch** is located within 1000 feet of a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies (see Table 1);

2c. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) at **the farm/ranch**, and the **farm/ranch** total irrigated acreage is **greater or equal to 50 acres and *less than* 500 acres**, or the **farm/ranch** is *within* 1000 feet of a well that is part of a public water system (**as defined by the California Health and Safety Code, section 116275**) that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite;

17. Tier 3 – Applies to all Dischargers whose **individual farm/ranch** meets one of the following sets of criteria *(3a) or (3b)*:

3a. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) at **the farm/ranch**, and farm/ranch total irrigated acreage is ***greater than or equal* to 500 acres**;

3b. Discharger applies chlorpyrifos **or** diazinon at the farm/ranch, and the **farm/ranch** discharges irrigation or stormwater runoff to **a** waterbody listed for toxicity or pesticides on the 2010 List of Impaired Waterbodies9 (Table 1);

(Order No. R3-2012-001, pp. 16-17, ¶¶ 15-17, emphasis added to illustrate changes between "project" reviewed within the SEIR and actual preferred Project recommended by staff and adopted by the Board on March 15, 2012.) The Regional Board's waste discharge program is fundamentally founded upon the tiering structure. Compliance with the 2012 Conditional Waiver is contingent upon determining the applicable tier. As evidenced above in bold, the tiering structure *dramatically* changed after the release of the Final SEIR. Changing the acreage cap for each tier as well as substituting individual "farm/ranch" for "operation" is a fundamental shift that dramatically alters which dischargers belong in which tier (and subsequent reporting **and** monitoring). Thus, by proposing an alternative tiering structure, a new project alternative was debuted after the environmental review process was completed.

As stated previously, a new project must receive full CEQA review. Reliance on existing environmental review which was completed *prior to* the development of the August 10, 2011 Revised Draft Order directly contradicts existing case law.[18] (Pub. Resources Code, §§ 21000, et seq.; Cal.

[18]CEQA's statutory framework sets forth a series of analytical steps intended to promote the fundamental goals and purposes of environmental review—information, public participation, mitigation, and governmental agency accountability. (Cal. Code Regs., tit. 14, § 15002.) Specifically, the basic purposes of CEQA review include: informing governmental decision makers and the public about the potential significant environmental effects of proposed activities; identifying ways that environmental damage can be avoided or significantly reduced; requiring changes in projects through the use of alternatives or mitigation measures when feasible; and disclosing to the public the reasons why a project was approved if significant environmental effects are involved. (See Pub. Resources Code, §§ 21001, 21001.1, 21002, 21003, 21006, 21064.) Adopting a project without complying with the above requirements violates CEQA.

Code Regs., tit. 14, § 15000, et seq.) Without proper evaluation of what would result when those elements are combined with each other, the Final SEIR is substantively and procedurally flawed and the fundamental goals of CEQA are not met.[19]

These last minute changes to the preferred project alternative, as well as those changes made immediately prior to the adoption of the order on March 15, 2012, have deprived the public of meaningful opportunity to comment on the impacts and to suggest feasible alternatives. All alternatives must be subjected to the same "critical evaluation" that occurs in the draft environmental review stages. (*See Sutter Sensible Planning, Inc. v. Board of Supervisors* (1981) 122 Cal.App.3d 813, 822.) By failing to prepare additional environmental review and recirculate the document, the public is denied an opportunity to "test, assess, and evaluate data and make an informed judgment as to the validity of the conclusions to be drawn therefrom." (*Ibid.*; Pub. Resources Code, § 21092.1; Cal. Code Regs., tit. 14, § 15088.5.) Thus, given the significant new information, and the significant changes and additions to overall program, definitions, timeline, compliance, tiers, and monitoring, the SEIR is inadequate for it failed to adequately assess the environmental impacts of the Regional Board's preferred project and failed to recirculate the SEIR prior to certification. (See Pub. Resources Code, § 21092.1; Cal. Code Regs., tit. 14, §§ 15087, 15088.5.)

9. The SEIR Improperly Shifts The Burden Of Proof And Determination Of Significance To The Public

When conducting environmental review pursuant to CEQA, the burden of proof is on the lead agency to show that the project won't have an impact on the environment. (Cal. Code Regs., tit. 14, § 15064.) Under CEQA, if a project clearly will have an impact on the environment, its proponents, here the Regional Board, must identify those impacts and propose mitigations. (Cal. Code Regs., tit. 14, § 15002,) The burden of proof is *not* on the public to show that an environmental impact may occur. Further, the public does not bear the burden of determining which portions of a project will

[19] In the same vein, without analyzing the actual Project, it is impossible for the November 2010 Technical Memorandum: Cost Considerations Concerning Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands to analyze the true economic impact of that Project. The SEIR should have been released *after* the development of the August 10, 2011 Staff Draft Order and should have contained a full economic impact analysis of the current proposed project. The SEIR fails to do so, and therefore there is no basis on which to accurately calculate the economic impact or costs of the Project.

have a significant impact or effect on the environment. Rather, that is the fundamental duty of the lead agency. (Cal. Code Regs., tit. 14, § 15064.)

The determination of whether a project may have a significant effect on the environment is a critical step in the CEQA process, and one that requires professional knowledge and judgment, as described in California Code of Regulations, title 14, section 15064. The determination should be based on information and evidence in the record and, to the extent feasible, on scientific and factual data. (*Ibid.*) This determination is made prior to and separate from the development of mitigation measures for the project.

The CEQA Guidelines set forth the following definition for significant effect:

> "Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

(Cal. Code Regs., tit. 14, § 15382.) According to Public Resources Code section 21083 and CEQA Guidelines section 15065, if any of the following impacts would result from a proposed project, the project is considered to have a significant effect on the environment:

> The project has the potential to substantially degrade the quality of the environment...
>
> The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
>
> The project has possible environmental effects which are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of reasonably foreseeable probable future projects.
>
> The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

In determining whether a project will have a significant environmental effect, the lead agency must consider the "whole of the action," which includes all discretionary approvals by governmental agencies, ministerial actions as well as discretionary actions, and all constituent parts of a project. (Cal. Code Regs., tit. 14, §§ 15003(h), 15378.)

During opportunities to provide oral and written comments, members of the agricultural community provided testimony regarding the Conditional Waiver's impacts on agricultural resources, including economic impacts, impacts to total farmland acreage and land use, and impacts from riparian buffer requirements. (See March 14, 2012 Hearing Transcript, pp. 191-194; Letter from David Costa, Costa Family Farms (March 26, 2010) regarding economics, available at <http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2012/march/ Item_4/item4_3_14_ transcript.pdf>; Letter from Benny Jefferson, Martin Jefferson and Sons (Dec. 23, 2010), regarding riparian areas, buffers, conflicts with Leafy Greens and food safety, and enforcement, available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/11.pdf>.) By providing oral and written comments, the public provided ample information to make a "fair argument" that the proposed Project may have a significant environmental impact. (Cal. Code Regs., tit. 14, § 15064(g)(1), *Friends of B Street v. City of Hayward, supra,* 106 Cal.App.3d 988, [to force preparation of an EIR, you need only make a "fair argument" that there may be a significant environmental impact, even though a contrary conclusion may be possible].) Notwithstanding those comments raised, the SEIR stated:

> With respect to Agricultural Resources, the Final SEIR concludes that adoption of the proposed alternative could result in some economic or social changes but that there was insufficient evidence to conclude that the economic changes would result in adverse physical changes to the environment. *Commenters speculated that the economic impacts would be so large as to result in large scale termination of agriculture and that land would be sold for other uses that would result in impacts on the environment. No significant information was provided to justify that concern.* (Final SEIR, p. 2, ¶ 14, emphasis added.)
>
> The final SEIR concluded this change was appropriate because the 2011 draft Agricultural Order's requirement for riparian buffers was reduced to a very small number (smaller than the Feb. *2010* draft Agricultural Order) and no significant information was provided to suggest the impacts to agricultural resources would be anything more than "less than significant". (Final SEIR, p. 3 fn. 3.)
>
> Interested persons have submitted comments with regards to the economic pressure the draft 2011 Agricultural Order would place on them. These interested persons speculated that costs of complying with the draft 2011 Agricultural Order may be so high, that a grower would be forced to sell their land or would be forced out of business resulting in conversion of prime farmland to other non-agricultural uses. They did not provide specific evidence that this would, in fact, occur. (Final SEIR, pp. 16-17.)
>
> The other impacts described by the commenter are very speculative without the support of substantial evidence and are social and economic impacts, not physical changes in the

environment. (Final SEIR, p. 43 regarding Appendix G. Section 3. Importance and Functions of Riparian and Wetland Areas and Appendix D. Section VI. Options for Riparian and Wetland Area Protection Requirements.)

The conclusions within the SEIR and Resolution incorrectly and improperly shift the burden of identifying significant environmental impacts from the lead agency to the public in direct violation of CEQA. (Cal. Code Regs., tit. 14, § 15064.) The SEIR's conclusions also ignore relevant evidence. Public testimony, such as "relevant personal observations" are evidence. (See Letter from David Costa, Costa Family Farms (Jan. 3, 2011), attached as Attachment 13; Letter from David Costa, Costa Family Farms (March 26, 2010) regarding economics, available at <http://www.waterboards.ca.gov /centralcoast/board_info/agendas/2012/march/ Item_4/item4_3_14_transcript.pdf>; Letter from Benny Jefferson, Martin Jefferson and Sons (Dec. 23, 2010), regarding riparian areas, buffers, conflicts with Leafy Greens and food safety, and enforcement, available at <http://www.waterboards.ca.gov /centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/11.pdf>.) For example, an adjacent property owner may testify to traffic conditions based upon personal knowledge. (*Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 173.) "CEQA places the burden of environmental investigation on government rather than the public," and if "the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record." (*Sundstrom V. County of Mendocino, supra,* 202 Cal.App.3d 296, 311.) The agency may not "hide behind its own failure to gather relevant data." (*Ibid.*)

Further, a full EIR (as opposed to the supplemental EIR prepared here) must be prepared if there is a "serious public controversy" or a "disagreement between experts." (Cal. Code Regs., tit. 14, §§ 15064(f)(1), (f)(4), (g).) CEQA sets a "low threshold" for preparation of an EIR. (*No Oil, Inc. v. City of Los Angeles, supra,* 13 Cal.3d a p. 84.) By attempting to shift the burden of proof to the public and thus avoiding the issue entirely, the conclusions within the Final SEIR are improper and contrary to law.

10. Final SEIR Is Not Based On Substantial Evidence But Rather Mere Speculation

Prior to approving a project, *decision-makers* must be provided with the fullest extent of information available upon which to *base* their *decision*. This determination is based upon whether it

can be fairly argued, given the substantial evidence in light of the whole record, that a project may or may not have a significant effect on the environment. "Argument, speculation, unsubstantiated opinion or narrative, or evidence...shall not constitute substantial evidence." (Cal. Code Regs., tit. 14, § 15064(f)(5).)

The Final SEIR is not based on substantial evidence but rather mere speculation and uncertainty. The SEIR is replete with the terms "uncertainty," "speculative/speculation," "could be," and "may be." For example:

> "The Central Coast Water Board may not specify the manner of compliance so it has insufficient information to evaluate the extent to which dischargers would choose to use water conservation to comply and to evaluate potential physical changes to the environment that could result." (Final SEIR, p. 3.)
>
> "The Water Board has not received any specific evidence by commenters and has little evidence in the record to demonstrate conclusively that the draft 2011 Agricultural Order will result in significant adverse environmental effects on agricultural or biological resources." (Final SEIR, p. 10; [See Section B.9 SEIR Improperly Shifts Burden of Proof, *supra*].)
>
> "There is not sufficient information to determine the scope of any changes in environmental effects and any potential impacts are very speculative." (Final SEIR, p. 11.)
>
> "Because the Water Board cannot generally specify the manner of compliance, the SEIR concluded that it was speculative as to what methods farmers may choose to use to comply." (Final SEIR, p. 41.)

As evidenced in the small selection of examples provided above, the Final SEIR is based upon speculation and uncertainty rather than substantial evidence. "Like an EIR, an initial study or negative declaration 'must focus on impacts to the existing environment, not hypothetical situations.' (*County of Amador v. El Dorado County Water Agency, supra,* 76 Cal.App.4th at p. 955, 91 Cal.Rptr.2d 66.)" *Communities For A Better Environment v. South Coast Air Quality Management Dist., supra,* 48 Cal.4th at p. 322.) By speculating on what could happen, rather than on actualities, an improper environmental baseline and resulting conclusions have been drawn. (*Ibid.*, ["By comparing the proposed project to what *could* happen, rather than to what was actually happening, the District set the baseline not according to 'established levels of a particular use,' but by 'merely hypothetical conditions allowable' under the permits. (*San Joaquin Raptor Rescue Center v. County of Merced, supra,* 149 Cal.App.4th at p. 658, 57 Cal.Rptr.3d 663.)," emphasis original].) Mere statements of

uncertainty or deflections to avoid a proper analysis regarding impacts to agricultural resources or economic impacts do not meet CEQA burdens. Further, notwithstanding the written and oral testimony provided by agricultural stakeholders, the SEIR provides no analysis, unsupportable conclusions, and attempts to improperly shift the burden of providing the evidence to the public. (See Improper Shift in the Burden of Proof, Section B.9 discussed *supra.*) Thus, given the lack of substantial evidence to support the conclusions within the SEIR and the improper reliance on uncertainty and speculation, the Final SEIR fails to satisfy the requirements of CEQA.

11. The Final SEIR's Analysis Of Impacts Is Improper And Flawed

The Final SEIR fails to properly analyze the potential impacts associated with the Project. Specifically, the SEIR lacks proper review of impacts such as the loss of agricultural lands taken out of production due to proposed requirements and the cost of compliance, loss of agricultural lands through regulatory takings for the installation of riparian buffers, and the impacts from restrictions on the use of tile drains rendering farm land virtually unproductive and thus unusable.

Rather than conducting a thorough analysis of all potential impacts to agricultural lands, agricultural vitality, agricultural production, and agricultural resources, the SEIR briefly concludes, "[t]here is not sufficient information to determine the scope of any changes in environmental effects and any potential impacts are very speculative." (Final SEIR, p. 11; see also Final SEIR, p. 2.) Based on this statement, the SEIR surmises, "the adverse environmental impacts may be less than significant." (*Ibid.*)

CEQA's informational purposes are not satisfied by an EIR that simply ignores or assumes a solution to potential discharges to waters of the state from agricultural lands. (*Citizens Association for Sensible Development of Bishop Area v. County of Inyo*, *supra*, 172 Cal.App.3d at p. 167.) Rather, decision-makers and the public must be presented with sufficient facts to evaluate the pros and cons of a conditional waiver of waste discharge. (Cal. Code Regs., tit. 14, §§ 15002(a), 15121; *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova, supra,* 40 Cal.4th 412; *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 160 Cal.App.4th 715.)

"Mere conclusions simply provide no vehicle for judicial view." (*Citizens Assn. for Sensible Development of Bishop Area, supra,* at p. 171.) By failing to disclose all data and evidence relied

upon, the Regional Board is abusing its discretion and failing to comply with CEQA. (*Ibid.*, ["Section 1094.5, subdivision (b), states that '[abuse] of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.' The Supreme Court has elaborated that '. . . implicit in section 1094.5 is a requirement that the agency which renders the challenged decision must set forth findings to bridge the analytic gap between the raw evidence and ultimate decision or order." (*Topanga Assn. for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515; see *Myers v. Board of Supervisors* (1976) 58 Cal.App.3d 413, 429-431 [129 Cal.Rptr. 902].)"].)

Conclusory comments in support of environmental conclusions are generally inappropriate. (*Laurel Heights I., supra*, at p. 404.) The SEIR is fundamentally and basically inadequate and conclusory in nature, precluding meaningful public review and comment. *(Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043, 1051; *Laurel Heights I, supra,* at p. 404; Cal. Code Regs., tit. 14, § 15063(c); see Cal. ode Regs., tit. 14, § 15088.5, [regulations apply substantially to initial studies and negative declaration thresholds for recirculation as well.].)

These conclusory statements within the SEIR provide "no basis for a comparison of the problems involved with the proposed project and the difficulties involved in the alternatives." (*People v. County of Kern* (1974) 39 Cal.App.3d 830, 841-842, quoting *Silva v. Lynn* (1973) 482 F.2d 1282, 128; see also *Laurel Heights I, supra,* at p. 404, ["but neither can we countenance a result that would require *blind trust* by the public, especially in light of *CEQA's fundamental goal that the public be fully informed* as to the environmental consequences of action by their public officials" (emphasis added)]; *City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 415, ["The County's conclusory evaluation of the amendments fail to support its decision to adopt a negative declaration."].)

Even if a full discussion leaves some uncertainty regarding actual impacts of the anticipated project, CEQA requires some discussion of probable impacts, project alternatives, and the environmental consequences of those contingencies. (*Vineyard Area Citizens for Responsible Growth, Growth, Inc. v. City of Rancho Cordova, supra,* 40 Cal.4th at p. 432.) Such discussion must also be

supported by substantial evidence and allow for public participation and review.[20] (Pub. Resources Code, § 21091(d)(2); Cal. Code Regs., tit. 14, §§ 15088, 15121, 15384.) By failing to analyze probable impacts and merely concluding that impacts are speculative, the SEIR is improper and the error is prejudicial. (See Section B.10 Final SEIR Not Based on Substantial Evidence but Rather Mere Speculation, *supra*.)

12. The SEIR Contains An Inadequate Assessment Of Significant Impacts And Effects On The Environment

The CEQA Guidelines define a "significant effect" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (Cal. Code Regs., tit. 14, § 15382; see also Pub. Resources Code, § 21068.)

The CEQA Guidelines further state that, "An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area." (Cal. Code Regs., tit. 14, § 15064.) Appendix G of the CEQA Guidelines describes impacts that the California Resources Agency has determined are *normally considered significant*. These guidelines require that physical changes in the environment be evaluated based on factual evidence, reasonable assumptions supported by facts, and expert opinion based on fact. Given that many factors have to be analyzed and significant effects and impacts should be determined on a case-by-case basis, the Regional Board cannot rely on previous antiquated environmental analysis to conclude possible potential impacts from the 2012 Conditional Waiver. Rather, the Regional Board should have reviewed all scientific data and

---

[20] By relying on conclusory language, lack of evidence, unidentified and unsubstantiated claims, and unlike comparisons to support its findings that no significant environmental affects will occur, the public's ability to provide input, to collaborate with, and to aid in finding solutions to maintain and/or improve water quality is largely restricted and makes it impossible for the public, many of whom have actively asserted a keen and sophisticated interest in the development of revised/new discharge requirements, to fully participate in the assessment of project impacts and alternatives associated with the project. (See *Mountain Lion Coalition v. Fish & Game Comm.* (1989) 214 Cal.App.3d 1043, 1051.)

facts, especially information collected since the initiation of the 2004 Conditional Waiver, prior to determining the 2012 Conditional Waiver's potential to significantly effect or impact the environment.[21] By failing to proceed in this manner, proper environmental review was never conducted for the 2012 Conditional Waiver.

13. The Regional Board's Findings Violate CEQA

The Regional Board's Findings violate the requirements of the CEQA. (See Resolution No. R3-2012-0012.) The Findings fail to identify the changes or alterations that are required to avoid or substantially lessen the Project's significant environmental effects (Cal. Code Regs., tit. 14, § 15091(a)(1); the Findings are not supported by substantial evidence (*Id.*, § 15091(b)); and the Findings fail to specify the location and custodian of the record of proceedings (*Id.*, § 15091(e)). By failing to include the above along with a brief explanation of the rationale for each finding, the Resolution certifying the Final SEIR, Findings, and Statement of Overriding Considerations is improper.

14. The SEIR Fails To Consider Significance Of Social And Economic Impacts And Cumulative Effects

Although impacts that are solely economic in nature do not constitute "significant effects on the environment," economic or social impacts that will or have the potential to cause a physical change should be considered. (Cal. Code Regs., tit. 14, §§ 15064(e), 15131, 15382.) The term "significant effect on the environment" is defined in Section 21068 of CEQA as meaning "a substantial or potentially substantial adverse change in the environment." (Pub. Resources Code, § 21068.) This focus on physical changes is further reinforced by sections 21100 and 21151. (See discussion following Cal. Code Regs., tit. 14, § 15131.) Despite the implication of these sections, CEQA does not focus exclusively on physical changes, and it is not exclusively physical in concern. (*Ibid.*) Thus, in certain situations such as the adoption of an expansive regulatory irrigated lands discharge program, economic and social effects of the project *must* be used to determine the

[21] Water quality regulations that aim to improve environmental quality can have unintended consequences that harm the environment and natural resources. The reallocation of water from one location to another, to meet water quality regulations, may reduce the well-being of fish and wildlife dependent on the water in the source region. Reduction of use of chemical pesticides that reduce farm productivity may lead to an increase in utilized land use and expansion of the utilized land base to wilderness areas. Diversion of water resources to meet environmental quality objectives may reduce the capacity to utilize this water in provision of environmental amenities. Thus, proper environmental analysis is needed.

significant effects on the environment. (*Citizens Assn. for Sensible Development of Bishop Area, supra*, at p. 170, ["The lead agency shall consider the secondary or indirect environmental consequences of economic and social changes."].) Since such effects were not considered in the SEIR, the document is incomplete and flawed.

In *Citizens Association for Sensible Development of Bishop Area v. Inyo*, the court held that "economic or social change may be used to determine that a physical change shall be regarded as a significant effect of the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment." (*Ibid.*)

The 2012 Conditional Waiver's requirements result in dramatic and severe impacts on the agricultural industry, which will have a significant effect on the economic and social environment of the Region. Such impacts include negative economic consequences, the possibility of eliminating agricultural crops produced in the area, loss of jobs, loss of food supply, loss of prime agricultural lands, economic collapse of local communities, changes to the landscape and land uses, loss of wildlife habitat, loss of groundwater recharge areas, as well as other social and economic impacts. In addition to direct impacts, and indirect impacts and consequences, these cumulative[22] social and economic consequences are reasonably foreseeable and must be analyzed.

Realizing that the second and third sentences of section 15382 can cause confusion, the discussion portion of the section provides:

> The second and third sentences pose a problem of interpretation that has caused controversy for many years. The controversy centers around the extent to which CEQA applies to economic and social effects of projects. In determining whether an effect is significant, however, Section 21083(c) of CEQA requires an effect to be found significant *if the activity would cause an adverse effect on people*.

(Discussion following Cal. Code Regs., tit. 14, § 15382, emphasis added.) As indicated during public

---

[22] "Cumulative impacts" are "two or more individual effects which, when considered together, are considerable or....compound to increase other environmental impacts. (Cal. Code Regs., tit. 14, § 15355.)

testimony and written comments, the 2012 Conditional Waiver will have an adverse effect on the agricultural community in many ways. (See Letter from David Costa, Costa Family Farms (March 26, 2010) regarding economics, available at <http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2012/march/Item_4/item4_3_14_transcript.pdf>; Letter from Benny Jefferson, Martin Jefferson and Sons (Dec. 23, 2010), regarding riparian areas, buffers, conflicts with Leafy Greens and food safety, and enforcement, available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/11.pdf>.) These economic and social impacts will adversely affect people within the Region and the state. (See March 14, 2012 Hearing Transcript, pp. 191-194, [Dr. Brad Barbeau's testimony regarding economic and social changes from the Conditional Waiver; "[T]his regulation absolutely has the potential to be a game changer. It changes the rules of the game and it's going to cause an adaptive response." (*Id.* at p. 193, ¶¶ 14-17.) "This is going to impact growers. It's going to impact what crops get produced. It's going to impact land use in ways that I don't think anybody has a crystal ball to exactly know what the ultimate outcomes are going to be. (*Id.* at p. 193, ¶¶ 20-24.); Letter from William Thomas, Best Best & Kreiger (Dec. 28, 2010) regarding economics, available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/15.pdf>.)

Regardless of case law interpreting the need for review of economic and social effects, as well as the discussion within the CEQA Guidelines, the Regional Board maintains that no such analysis must be done. (Final SEIR, p. 40, Response to Comment No. 497: "The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment...The Water Board is only required to analyze the physical changes to the environment;" p. 42, Response to Comment No. 500: "[T]he CEQA Guidelines do not require an evaluation of social and economic impacts.") The Regional Board does not attempt to contrast case law, such as the following, that clearly state otherwise:

> 'CEQA is not a fair competition statutory scheme.' (*Waste Management of Alameda County, Inc. v. County of Alameda* (2000) 79 Cal.App.4th 1223, 1235, 94 Cal.Rptr.2d 740.) Therefore, the economic and social effects of proposed projects are outside CEQA's purview. (Guidelines, § 15131, subd. (a).) Yet, if the forecasted economic or social effects of a proposed project directly or indirectly will lead to adverse physical changes in the environment, then CEQA requires disclosure and analysis of these resulting physical impacts. (*Friends of Davis v. City of Davis* (2000) 83 Cal.App.4th

> 1004, 1019, 100 Cal.Rptr.2d 413 (*Friends of Davis*); *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d 433, 445–446, 243 Cal.Rptr. 727 (*Mt. Shasta).*) Subdivision (e) of Guidelines section 15064 provides that when the economic or social effects of a project cause a physical change, this change is to be regarded as a significant effect in the same manner as any other physical change resulting from the project. (See, e.g., *El Dorado Union High School Dist. v. City of Placerville* (1983) 144 Cal.App.3d 123, 131, 192 Cal.Rptr. 480 [potential of increased student enrollment in an already overcrowded school resulting from construction of the proposed apartment complex was an environmental effect that required treatment in an EIR because it could lead to the necessity of constructing at least one new high school].) Conversely, where economic and social effects result from a physical change that was itself caused by a proposed project, then these economic and social effects may be used to determine that the physical change constitutes a significant effect on the environment. (See, e.g., *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 197, 228 Cal.Rptr. 868 [when a waste management facility was proposed next to a religious retreat center, CEQA required study whether the physical impacts associated with the new facility would disturb worship in the natural environment of the retreat center].)

(*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205.) Rather, the SEIR attempts to dodge the issue by requiring the public to provide the substantial evidence to prove possible economic or social costs. (Final SEIR, p. 40, Response to Comment No. 497: "The commenter has provided no substantial evidence that economic costs will result in physical changes to the environment, other than speculating that some changes could occur.") As discussed *supra*, shifting the burden to provide substantial evidence to the public is improper. (See Section B.9 The SEIR Improperly Shifts The Burden of Proof And Determination Of Significance To The Public, *supra*.) The Final SEIR should have properly evaluated the resulting social and economic effects from the Project.

Given the numerous violations contained within the Final SEIR discussed *supra*, the appropriate remedy for the State Board is to set aside the Resolution certifying the SEIR, Findings, and Statement of Overriding Considerations, as well as voiding the adoption of the 2012 Conditional Waiver, in its entirety, which relies exclusively on the certification of the SEIR. (See *Friends of Sierra Madre v. City of Sierra Madre* (2001) 25 Cal.4th 165, 182, [the appropriate remedy for the CEQA violation was to set aside both the resolution placing Ordinance No. I-97-1 on the ballot and the election because failure to comply with CEQA made the election fundamentally unfair and affected the result.].)

C. THE 2012 CONDITIONAL WAIVER IS BASED UPON AN INCORRECT STANDARD IN DIRECT CONFLICT WITH THE PORTER-COLOGNE WATER QUALITY CONTROL ACT

The 2012 Conditional Waiver does not conform to the requirements and standards set forth by the Porter-Cologne Water Quality Control Act since the Conditional Waiver is based on inappropriate and arbitrary standards that are incorrectly utilized and relied upon to formulate the fundamental core requirements that will be used to control discharges from irrigated lands.

1. The Regional Board's Statutory Obligations Under The Porter-Cologne Act

In enacting the Porter-Cologne Act, the Legislature laid out specific goals and objectives for the State's waters. Regional Boards must conform to all such statutory mandates, including the Legislature's objective:

> The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to *attain the highest water quality which is reasonable*, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

(Wat. Code, § 13000, emphasis added.) In a recent decision, the California Supreme Court discussed the Legislature's intent, confirming its goal "to attain the highest quality which is reasonable." (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 619.)

The use of the term "reasonable" and the "reasonableness" standard is not limited to the express goals laid out in Water Code section 13000. Rather, the Porter-Cologne Act expressly calls for reasonable actions throughout. (See Wat. Code, § 13241, [calling for water quality objectives that will provide "*the reasonable protection of beneficial uses*" upon mandated review of specific factors], emphasis added; Wat. Code, § 13050(h), [defines "water quality objectives" as "the limits or levels of water quality constituents or characteristics which are established for *the reasonable protection of beneficial uses of water* or the prevention of nuisance within a specific area."], emphasis added.) Thus, when analyzing impacts to water quality and adopting conditional waivers of waste discharge, the Regional Board must comply with and conform to the Legislative intent of the Porter-Cologne Act by applying the "reasonableness standard," that is, evaluate if the activity or control limit will *reasonably* protect the beneficial uses.

2. The Regional Board Applied An Arbitrary And Capricious Standard When Drafting The 2012 Conditional Waiver

Although the Regional Board correctly cited its authority and obligation to control water quality, the Regional Board arbitrarily and capriciously applied its authority when crafting the 2012 Conditional Waiver. (Order No. R3-2012-0011, p. 41, ¶ 1.) Specifically, the Regional Board did not apply the proper standard when analyzing the water quality impacts, creating the conditions of the waiver, and developing the monitoring and reporting requirements. Instead, as documented throughout the 2012 Conditional Waiver and all associated documents, staff used "highest water quality" as the standard in determining compliance limits, conditions, analysis and comparison of impacts, and in staff's ultimate decision on the preferred alternative. For example, the opening paragraph of the Additional Findings states:

> The purpose of this Order is to is [sic] focus on the *highest water quality priorities and maximize water quality protection* to ensure the long-term reliability and availability of water resources of sufficient supply and quality for all present and future beneficial uses, including drinking water and aquatic life.

(*Ibid.*, emphasis added.) The Porter-Cologne Water Quality Control Act does not mandate absolute pure water quality or the highest level of protection possible. Rather, the Act calls for "the highest water quality which is reasonable" (Wat. Code, § 13000) and "ensure the reasonable protection of beneficial uses and the prevention of nuisance." (Wat. Code, § 13241.) Further, the Act does not mandate regulatory procedures that are unnecessary to protect water quality or that attempt to eliminate all measurable traces of compounds in waters.

Throughout the state, agricultural discharges are regulated under Chapter 4, Article 4 of the Act. Dischargers, such as agriculture, must file a report of waste discharge if their **discharge of waste** "could **affect the quality** of waters of the state."[23] (Wat. Code, § 13260(a)(1), emphasis added.) As emphasized above, agricultural nonpoint source dischargers are regulated if they are (1) discharging waste that (2) could affect the quality of waters of the state. (*Ibid.*) A mere discharge is not enough to trigger the regulation, control, or prohibition of nonpoint sources discharges in order to obtain the

[23] Many Regional Boards regulate the discharges of waste from irrigated lands through conditional waivers of waste discharge requirements pursuant to section 13269 in which each discharger's notice of intent constitutes a report of waste discharge.

"highest water quality." As currently written, the 2012 Conditional Waiver is overbroad and inconsistent with the Porter-Cologne Act.

The Regional Board cites no authority allowing the use of a standard to require conditions that obtain "*highest water quality priorities and maximize water quality protection.*" Rather, the statutory authority laid out in the Porter-Cologne Act and cited within the 2012 Conditional Waiver clearly and unequivocally calls for the "reasonable" protection of water. By using a different standard, the 2012 Conditional Waiver is fundamentally flawed in its analysis.

D. FAILURE TO ADEQUATELY ANALYZE THE ECONOMIC IMPACTS OF THE 2012 CONDITIONAL WAIVER UNDER PORTER-COLOGNE

The requirement to consider economics under Porter-Cologne is absolute. Water Code, section 13141 explicitly mandates:

> State policy for water quality control adopted or revised in accordance with the provisions of this article, and regional water quality control plans approved or revised in accordance with Section 13245, shall become a part of the California Water Plan effective when such state policy for water quality control, and such regional water quality control plans have been reported to the Legislature at any session thereof. *However, 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.*

(Wat. Code, § 13141, emphasis added.) Before a Regional Board can impose waste discharge requirements or conditioned water quality certification for discharges from irrigated lands, Porter-Cologne requires that the Regional Board "shall take into consideration" the following factors: "the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241." (Wat. Code, § 13263.) Section 13241 in turn lists six "factors to be considered," including "economic considerations" and "water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area." (Wat. Code, § 13241.)

While a cost considerations analysis was conducted within the Draft SEIR, no economic analysis has been conducted for the actual Project, the 2012 Conditional Waiver, which was substantially revised twice after the completion of the cost analysis. Given that the 2012 Conditional Waiver contains brand new components never previously analyzed, reliance on the previous cost

considerations analysis does not comply with Porter-Cologne. A full analysis properly acknowledging the total cost of an agricultural water quality control program and the potential sources of financing must be completed. Anticipated program implementation costs to the agricultural community include increases in potential fees, management practice implementation, monitoring costs, report preparation, and cost for education, as well as other costs. Given that the impacts of water quality regulations frequently take years to materialize, the Regional Board should analyze the economic costs and impacts within a dynamic structure taking into account the projected changes in the economic situation *over time.*

In addition to direct costs imposed on the agricultural community, the Regional Board should have evaluated indirect costs, including the economic consequences that are transmitted via market interactions to other groups, such as consumers. Water quality regulation, such as the 2012 Agricultural Order, increases the average cost of production and has a direct negative effect on the producer and the consumer through the resulting increase in variable costs and the output price. The propagation of the impacts of a regulation, such as this, through the economy is well documented and can be quantified by economic analysis. Further, such analysis shall be conducted prior to adoption or implementation of any program. (Wat. Code, § 13141.)

E. THE 2012 CONDITIONAL WAIVER DICTATES THE MANNER OF COMPLIANCE IN VIOLATION OF WATER CODE SECTION 13360

The 2012 Conditional Waiver violates the prohibitions set forth under Water Code section 13360 by illegally dictating the manner of compliance. Water Code section 13360(a) provides in pertinent part that:

> No waste discharge requirement or other order of a Regional Board or the state board or decree of a court issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner.

In summation, section 13360 allows the Regional Board to identify the "disease and command that it be cured," but prohibits the Regional Board from "dictating the cure." (See *Tahoe Sierra Preservation Council v. State Water Resources Control Board* (1989) 210 Cal.App.3d 1421, 1438, ["The .75 inch numerical SUSMP standard is clearly a 'design' standard and a particular manner in

which 'compliance may be had,' and represents 'dictating the cure.' As such, it violates the requirements of Water Code Section 13360(a)."].)

The 2012 Conditional Waiver violates Water Code section 13360(a) in numerous ways, i.e., in each instance where the Regional Board seeks to impose a "particular manner" in which compliance may be had. The 2012 Conditional Waiver does not simply direct dischargers to improve water quality by complying with a time schedule. Rather, the 2012 Conditional Waiver specifically states *how* a discharger will comply and *what* a discharger *must do on their field.* As such, the 2012 Conditional Waiver is in direct contrast with the situation presented in *Pacific Water Conditioning Assn., Inc. v. City Council* (1977) 73 Cal.App.3d 546, 554 in which no violation of Water Code section 13360 occurred because the order simply ordered the City to comply with portions of the order in accordance with a time schedule and did not state anything regarding the manner in which the City must comply.

Within the Final SEIR, it states that "the Central Coast Water Board *may not generally* specify the manner of compliance" or "the Central Coast Water Board may not specify the manner of compliance." (Order No. R3-2012-0011 p. 12, ¶ 41, emphasis added.) Unfortunately, in addition to the first quote misstating the law, these statements are incorrect since numerous times within the 2012 Conditional Waiver and accompanying documents, specific types of management practices are mandated, including, but not limited to:

> 37. Dischargers *must minimize the presence of bare soil* vulnerable to erosion and soil runoff to surface waters and implement erosion control, sediment, and stormwater management practices in non-cropped areas, such as unpaved roads and other heavy use areas. (Order No. R3-2012-0011 p. 20, ¶ 37, emphasis added.)
>
> 39. Dischargers must a) *maintain existing, naturally occurring, riparian vegetative cover* (such as trees, shrubs, and grasses) in aquatic habitat areas as necessary to minimize the discharge of waste; and b) *maintain riparian areas* for effective streambank stabilization and erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, and wildlife support to minimize the discharge of waste. (Order No. R3-2012-0011 p. 20, ¶ 39, emphasis added.)
>
> 80. By October 1, 2016, Tier 3 Dischargers…must develop a Water Quality Buffer Plan:
>
> *"**A filter strip of appropriate width**, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, **minimum width of the filter strip shall be***

thirty feet, wherever possible. (Order No. R3-2012-0011 pp. 30-31, ¶ 80, italics original, bold emphasis added; see also MRP Order No. R3-2012-03, p. 21, ¶ 2.)

Paragraph 37 requires prevention of bare soil. (Order No. R3-2012-0011 p. 20, ¶ 37.) Paragraph 39 requires maintenance of naturally occurring riparian cover and maintenance of riparian areas. (Order No. R3-2012-0011 p. 20, ¶ 39.) Paragraph 80 requires riparian habitat buffers in the form of filter strips of at least 30 feet, as well as vegetation within the buffer zone. (Order No. R3-2012-0011 pp. 30-31, ¶ 80, see also MRP Order No. R3-2012-03, p. 21, ¶ 2.) All of these conditions represent a dictation of the cure rather than allowing individual growers the ability to determine what management practices work best for their specific farms.

Condition 78 dictates the amount of fertilizer Tier 3 dischargers will be allowed to use.[24]

a. Dischargers producing crops in annual rotation (such as a cool season vegetable in a triple cropping system) must report progress towards a Nitrogen Balance ratio target equal to one (1).
b. Dischargers producing annual crops occupying the ground for the entire year (e.g., strawberries or raspberries) must report progress towards a Nitrogen Balance ratio target equal to 1.2.

(Order No. R3-2012-0011 p. 30, ¶¶ 78(a), (b).) This condition, besides prohibiting activities that are not inherently discharges of waste, regulates the exact amount of fertilizer a discharger can apply to his/her field. In order to meet a "nitrogen balance ratio" of 1.0 or 1.2 for a specific crop with uniform fertilizer application, the mathematical equation will provide only one answer--a discharger will only be allowed one specific amount of fertilizer that he/she can apply. Thus, by mathematics alone, this is a dictation of management practices.

The imposition of such "particular manners" of compliance violates the express prohibition under California Water Code Section 13360(a). "Section 13360 is a shield against unwarranted *interference with the ingenuity of the party* subject to a waste discharge requirement...It preserves the freedom of persons who are subject to a discharge standard to *elect between available strategies to comply with that standard.*" (*Tahoe-Sierra Preservation Council, supra,* (1989) 210 Cal.App.3d 1438, emphasis added.) The 2012 Conditional Waiver does not allow a grower the ability to "elect between

[24] In addition to being a dictation of management practices, regulation of fertilizers is beyond the scope and authority of the Regional Board.

available strategies" in order to "cure" the water quality issues. (*Ibid.*) Thus, the 2012 Conditional Waiver contains provisions that are in direct conflict with Water Code section 13360(a).[25]

F. THE 2012 CONDITIONAL WAIVER IS INCONSISTENT WITH THE REGIONAL BOARD'S BASIN PLAN

In addition to containing conditions that dictate the manner of compliance, *supra*, certain conditions within the 2012 Conditional Waiver are inconsistent with the Regional Board's Basin Plan.

Condition 39, which applies to all dischargers, requires dischargers to maintain existing, naturally occurring riparian vegetative cover and maintain riparian areas for effective stabilization and erosion control. (Order No. R3-2012-0011 p. 20, ¶ 39.) In contrast, the Basin Plan states that "erosion from nonpoint pollution sources shall be minimized through implementation of BMP's." (Water Quality Control Plan for the Central Coast Basin (June 8, 2011) Section V.G. 1, p. V-13, hereinafter "Basin Plan".) The Regional Board's Basin Plan allows for growers to determine which management practices to employ in order to minimize sediment and control erosion. By superseding the requirements within the Basin Plan and prescribing specific BMPs, condition 39 is improper.

Condition 80 requires filter strips of at least 30 feet in width. (Order No. R3-2012-0011 pp. 30-31, ¶ 80; see also MRP Order No. R3-2012-03, p. 21, ¶ 2.) In contrast, the Basin Plan states that filter strips of at least 30 feet are required for "construction activities." (Basin Plan, Section V.G. 4, p. V-14, ["For construction activities, minimum width of the filter strip shall be thirty feet, wherever possible as measured along the ground surface to the highest anticipated water line."].) The 2012 Conditional Waiver regulates the discharges of waste from irrigated lands; it does not regulate construction activities nor are routine agricultural activities considered construction activities. By

---

[25] Regional Board staff has stated that growers do not have to immediately comply with water quality standards given the "Time Schedule for Milestones" in Table 4 of the Conditional Waiver. (March 15, 2012 Hearing Transcript, p. 53, ¶¶ 22-24; p. 55, ¶¶ 5-7; Order No. R3-2012-0011, p.4.) However, Table 4 is simply a list of "milestones." As stated in the July 6, 2011 Staff Report: "The milestones, as described in Table 4 of the Draft Agricultural Order are not in of themselves compliance conditions and are not enforceable. They are targets or goals that staff will use to evaluate effectiveness of implementation efforts and progress improving towards water quality." (Staff Report For Regular Meeting of September 1, 2011 (July 6, 2011), p.18; see also March 15, 2012 Hearing Transcript, p. 73-74, ["What Table 4 states in the Order is that these milestones will be used to evaluate progress towards water quality improvement. That milestone is still how we're going to measure progress. *But it's not a compliance condition to achieve it.*"], emphasis added.) Notwithstanding the recognition that milestones are simply "goals" that cannot be enforced, the milestones in Table 4 continue to be referenced to back away from the Conditional Waiver's immediate compliance requirement. Any reliance on milestones does not change the plain terms of the Conditional Waiver which continues to require immediate compliance with water quality standards.

mandating 30 foot buffers for nonpoint source discharges, condition 80 is inconsistent with the Basin Plan.

G. THE MONITORING AND REPORTING PROVISIONS EXCEED THE REGIONAL BOARD'S AUTHORITY SINCE NO NEXUS IS PROVIDED

Within the 2012 Conditional Waiver, numerous monitoring reports and technical reports are required to be submitted to the Regional Board. (See Order No. R3-2012-0011 pp. 27-28, ¶¶ 67-68 [annual compliance document], p. 28, ¶ 69 [photo monitoring], p. 29, ¶¶ 70-71 [total nitrogen reporting], pp. 29-30, ¶¶ 74-79 [irrigation and nutrient management plan], pp. 30-31, ¶ 80-81 [water quality buffer plan].) Although the Regional Board has the authority, pursuant to Water Code section 13267, to require monitoring reports and technical reports, "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." (Wat. Code, § 13267(b)(1).) Additionally, the Regional Board *shall* provide each 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." (*Ibid.*, emphasis added.)

Although various monitoring reports and technical reports are referenced in the 2012 Conditional Waiver and accompanying appendices, no nexus as to the burden, costs, need, or benefits is found. Furthermore, no concrete evidence is provided that supports requiring farmers to provide such reports. Mere unsupported assertions that a need or nexus exists fail to validate a section 13267 request. Thus, the provisions requiring monitoring reports and technical reports do not comply with, in whole or in part, the Regional Board's statutory authority and are invalid.

H. THE 2012 CONDITIONAL WAIVER'S REQUIREMENT FOR IMMEDIATE COMPLIANCE WITH WATER QUALITY STANDARDS IS IMPROPER

The clear language of the many provisions throughout the 2012 Conditional Waiver illustrates the requirement for immediate compliance with water quality standards. For example, the following provisions all call for immediate compliance and do not contain qualifying language or provide future time frames for compliance:

> This Order requires compliance with water quality standards. (Order No. R3-2012-0011 p. 4, ¶ 10.)
>
> Dischargers must...meet water quality standards. (Order No. R3-2012-0011 p. 4, ¶ 10.)

> Dischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards. (Order No. R3-2012-0011 p. 15, ¶ 12.)
>
> Dischargers must comply with applicable water quality standards, as defined in Attachment A, protect the beneficial uses of waters of the State and prevent nuisance as defined in Water Code section 13050. (Order No. R3-2012-0011 p. 18, ¶ 22.)
>
> Order No. R3-2012-0011 (Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands) requires Dischargers to comply with applicable state plans and policies and applicable state and federal water quality standards. (Order No. R3-2012- 011 (Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands) requires Dischargers to comply with applicable state plans and policies and applicable state and federal water quality standards. (Order No. R3-2012-0011 p. 40.)

The requirement for immediate compliance with water quality standards is improper and inconsistent with the Water Code and the Nonpoint Source Policy. Water Code section 13269, the section governing conditional waivers of waste discharge requirements, contains no provisions requiring immediate compliance with water quality standards. Rather, the only provision applicable to the matter at hand is section 13269's call that "the waiver is consistent with any applicable state or regional water quality control plan." (Wat. Code, § 13269(a)(1).)[26]

The Nonpoint Source Policy also does not require immediate compliance with water quality standards. Key Element 2 states: "We recognize that in the earlier stages of some pollution control programs, *water quality changes may not be immediately apparent*, even with the implementation of pollution control actions. Although MP implementation never may be a substitute for meeting water quality requirements, MP implementation assessment may, in some cases, be used to measure nonpoint source control programs." (Nonpoint Source Policy, p. 12, emphasis added.) Key Element 3 goes on to state, "where a RWQCB determines it is necessary *to allow time to achieve water quality requirements, the NPS control implementation program shall include a specific time schedule*, and corresponding quantifiable milestones designed to measure progress toward reaching the specified

---

[26] The Regional Board's Basin Plan is to contain a program of implementation for achieving water quality objectives. Water Code section 13242 governs the program of implementation and requires: "(a) A description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private. (b) A time schedule for the actions to be taken. (c) A description of surveillance to be undertaken to determine compliance with objectives. (Wat. Code, § 13242.) Upon review of the Basin Plan, it fails to directly state what actions are necessary to achieve the objections as well as specifying a time schedule for the actions to be taken.

requirements."[27] (*Id.* at p. 13, emphasis added.) As evidenced by the Nonpoint Source Policy, implementation of management practices ("MP") is the process for achieving water quality standards. This exact method, recognized and supported by the State Board, can require time, and necessitates flexibility. (*Ibid.*, *Id.* at p. 10, ["The RWQCBs have broad flexibility and discretion in using their administrative tools to fashion NPS management programs."].) Imposing immediate compliance with water quality standards improperly conflicts with the Nonpoint Source Policy.

During the March 15, 2012 hearing, Board Counsel addressed comments raised by Petitioners regarding the 2012 Conditional Waiver's requirements for immediate compliance with water quality standards. Board Counsel stated:

> "[T]here are numerous provisions in the Order, both in the findings and in the Order part that make it clear that for purpose..." (March 15, 2012 Hearing Transcript, p. 53, ¶¶ 22-24.)
>
> "There's nothing in the Order that would require them to be in compliance tomorrow. It's made very clear." (March 15, 2012 Hearing Transcript, p. 55, ¶¶ 5-7.)

Those statements are incorrect. The Order itself does not contain appropriate compliance schedules. Further, the plain language of the Conditional Waiver does not contain any provisions qualifying the immediate compliance language. Finally, regarding the provision that does provide for some limiting language, it is not in the Order itself but rather embedded in the findings section of Attachment A. (Order No. R3-2012-0011 p. 41, ¶ 2.) Findings, by their very nature, are not conditions and cannot be enforced. Therefore, nothing within the provisions of the Order limits or modifies the plain language calling for immediate compliance with water quality standards.

---

[27] The "time schedule" within the 2012 Conditional Waiver does not meet the requirements for a time schedule put forth by the Nonpoint Source Policy. (See Order R3-2012-0011, pp. 32, 37-41.) The time schedule for Tier 3 contains generic statements that are not tied to water quality standards. Further, the requirements are not concentration standard requirements but load based. (*Id.* at p. 32.) Petitioners challenge the 2012 Conditional Waiver's failure to contain a proper compliance schedule tied to water quality standards. Petitioners herein incorporate by reference those arguments made by the petition submitted by Tess Dunham on April 16, 2012 regarding compliance with water quality standards, compliance schedules, and time schedules.

I. THE ANALYSIS OF THE AG ALTERNATIVE PROPOSAL WAS IMPROPER AND BIASED

1. The Ag Alternative Complies with Porter-Cologne and the Nonpoint Source Policy

The Addendum to the Staff Report, as well as statements made during the Board hearing on March 14 and 15, 2012, incorrectly concluded, "the Agricultural Alternative Proposal does not comply with Water Code Section 13269 and the NPS Policy." (Staff Report For Regular Meeting of September 1, 2010 (prepared August 10, 2011), p. 2; Staff Report For Regular Meeting of March 14-15, 2012 (Feb. 22, 2012), pp. 15-16; March 14, 2012 Hearing Draft Transcript, p. 33, ¶¶ 19-24, ["However, as we've reported to you many times in all of our Staff reports, we continue to find that the AG Proposal is legally inadequate and unenforceable because it's not crafted as required by the Nonpoint Source Policy or consistent with the Water Code."]; March 15, 2012 Hearing Transcript, p. 46, ¶¶ 23-25, p. 57, ¶¶ 18-25, p. 58, ¶¶ 1-25.) These conclusions are based on misguided interpretations of Porter-Cologne and the NPS Policy, and improperly biased members of the Board from fully considering the Ag Alternative Proposal. (March 15, 2012 Hearing Transcript, p. 130, ¶¶ 6-8, ["I was really leaning toward the Ag Proposal, and then the legality issues came up."].)

During the March 14, 2012 hearing, Regional Board staff once again concluded that the Ag Proposal, specifically the use of third party groups, does not comply with the Water Code or NPS Policy:

> [M]ost [sic] the reporting elements describe activities by the third-party group, and not activities or progress by the actual dischargers. Monitoring and reporting of discharger effectiveness and pollution reduction are necessary and required by the Water Code and the Nonpoint Source Policy.

(March 14, 2012 Hearing Draft Transcript, p. 34, ¶¶ 15-20.) The above statement attempts to disprove the legality of third-party groups and limit the application of Water Code section 13269 to individual dischargers only. Water Code 13269 states:

> [T]he provisions of subdivisions (a) and (c) of Section 13260, subdivision (a) of Section 13263, or subdivision (a) of Section *13264 may be waived by the state board or a regional board as to a specific discharge or type of discharge* if the state board or a regional board determines, after any necessary state board or regional board meeting, that the waiver is consistent with any applicable state or regional water quality control plan and is in the public interest. (Wat. Code, § 13269(a)(1), emphasis added.)

Accordingly, section 13269 does not limit the waiving of waste discharge requirements *only to*

individual dischargers. Rather, section 13269 is much broader and applies to "discharges or types of discharge," including the very conditions proposed in the Ag Alternative Proposal. (*Ibid.*)

Additionally, a conclusion is drawn that the Ag Alternative Proposal is not consistent with the Water Code, the Basin Plan, and the NPS Policy because it "would allow the 'third-party group' to be responsible for compliance, rather than the individual discharger." (March 14, 2012 Hearing Draft Transcript, p. 33, ¶¶ 19-24; March 15, 2012 Hearing Transcript, p. 46, ¶¶ 23-25, p. 57, ¶¶ 18-25, p. 58, ¶¶ 1-25; August 10, 2011 Staff Report, p. 5.) This conclusion is not supported by any evidence or citation.

Within the Ag Alternative Proposal, substantial conditions are included detailing the requirements for the third-party group as well as individual dischargers. Foremost, all dischargers, even those who participate within a third-party group, must comply with water quality standards. Explicit language in the May 2011 Attachment B clearly indicates that *both* the third-party groups *and* its participants are responsible for meeting all of the conditions contained therein. Specifically, the language of the May 2011 Attachment B states, "[a] third party group and/or its participants shall comply with the following conditions." (Ag Alternative Proposal, Attachment B (May 2011) p. 1.) The use of "and/or" is modeled directly after the Central Valley Regional Water Quality Control Board, Order No. R5-2006-0053, Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands, which utilizes the conjunctive "and" as well as the disjunctive "or" throughout the Order and Attachments. The use of "and/or" is not unclear (see July 6, 2011 Staff Report, p. 10), but rather overly inclusive and ensures that the individual discharger is ultimately responsible for the conditions of the Order, as specified in Attachment B. Thus, if a third-party group fails to perform the required conditions, the Regional Board may bring an enforcement action for noncompliance against the individual discharger. (See Wat. Code, § 13267; July 6, 2011 Staff Report, p. 23, [Consequences for noncompliance with the Ag Alternative Proposal is the same as that found in staff's Draft Order. Thus, the following sentence is applicable to both the Ag Alternative Proposal and staff's Draft Order: "If the discharger fails to address impacts to water quality by taking the actions required by the Order, including evaluating the effectiveness of their management practices

and improving as needed, the discharger would then be subject to progressive enforcement and possible monetary liability."].)[28]

Further, the Ag Alternative Proposal's third-party group conditions, as further detailed in Agriculture's Power Point Presentation presented during the March 14, 2012 Hearing, comply with the NPS Policy because individual dischargers, and not the third-party group, implement and improve management practices. As stated in the Staff Report to bolster staff's Draft Order, "consistent with the NPS Policy, dischargers comply by implementing and improving management practices." (July 6, 2011 Staff Report, pp. 22-23.) In other words, compliance with the conditional waiver and the NPS Policy is tantamount to the implementation of management practices. The Ag Alternative Proposal contains numerous provisions explicitly requiring the implementation of management practices:

> (4) Implement the Farm Plan and management practices to improve water quality; and
>
> (5) Assess the effectiveness of implemented agricultural management practices in attaining water quality benchmarks and, when necessary to attain water quality benchmarks, and identify, implement, or upgrade management practices. (Ag Alternative Proposal (Dec. 3, 2010), p. 1, ¶¶ 4-5, available at <www.waterboards.ca.gov/rwqcb3 /water_issues/programs/ag_waivers/docs/ag_order/ag_%20alt%20proposal_2010dec03.pdf>.)
>
> ...
>
> Dischargers who are participating in a third party group shall implement management practices, as necessary, to achieve best practicable treatment or control of the discharge to reduce wastes in the discharges. (Ag Alternative Proposal, Attachment B (May 2011) p. 2, ¶ 6.)

Therefore, as evidenced by these conditions, the Ag Alternative Proposal requires individual dischargers to implement and improve management practices, and complies with the NPS Policy. Given that the Staff Reports and statements made during the two-day hearing on the adoption of the

---

[28] As evidenced by the NPS Policy, the Regional Board retains its discretionary authority to ensure compliance with the conditions of the waiver:

> "[T]he RWQCBs retain their prosecutorial discretion to decide how to ensure compliance with their conditional waivers."
>
> ...
>
> "There are many different ways for the RWQCBs to ensure compliance."
>
> (NPS Policy, p. 5.)

The Ag Alternative Proposal does not infringe upon the Regional Board's discretion. Thus, statements within the Addendum to the Staff Report indicating that "it would limit the Board's Authority and discretion to enforce" or it "is clearly not enforceable" are irrelevant and improperly biased members of the Board. (July 6, 2011 Staff Report, p. 2.)

Conditional Waiver were legally incorrect and erroneous, the Board members' opinions on the legality and validity of the Ag Alternative Proposal were improperly biased.

2. The Ag Alternative's Use of Third-Party Groups/Coalitions to Manage Components of the Irrigated Lands Regulatory Program is Proper and Is Based on An Existing Coalition Group Conditional Waiver

The Ag Alternative Proposal's third-party group is based on the Central Valley Regional Water Quality Control Board's "Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands." (Central Valley Regional Water Quality Control Board, Order No. R5-2006-0053, Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands.) The Central Valley Regional Board has long approved of and encouraged the use of third-party groups to aid in the implementation of the irrigated lands regulatory program. The Central Valley Regional Board has found, and the State Board has agreed, that the use of coalitions or third-party groups is consistent with the Water Code and the NPS Policy. In particular, the Central Valley Regional Board's findings conclude:

> As authorized by Water Code Section 13269, this Order conditionally waives the requirement to file WDRs and obtain WDRs for Dischargers, as defined in Attachment A, who are participants in a Coalition Group that complies with the *Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*. (Central Valley Regional Board, Coalition Group Waiver, p. 2, ¶ 10.)
>
> The Central Valley Water Board acknowledges that the Coalition Groups are not responsible for enforcing the Water Code. (Central Valley Regional Board, Coalition Group Waiver, p. 3 ¶ 14.)
>
> Neither the Water Code nor Resolution No. 68-16 requires instantaneous compliance with applicable water quality standards. (Central Valley Regional Board, Coalition Group Waiver, p. 6 ¶ 24.)

The Ag Alternative Proposal's third-party group concept borrows conditions and language *directly* from the Central Valley Coalition Group Waiver, a waiver found to be in compliance with the NPS Policy and Porter-Cologne. Accordingly, if the inclusion of third-party groups is tantamount to a legal means of compliance within staff's Draft Order (see August 10, 2011 Staff Report, p. 7), the inclusion of a third-party group developed by agricultural stakeholders and based on a legally valid

existing coalition conditional waiver should also be a legal means to compliance.[29]

J. THE 2012 CONDITIONAL WAIVER'S TIERING STRUCTURE IS ARBITRARY

The 2012 Conditional Waiver groups individual farms, or dischargers, into three tiers with each tier distinguished by four criteria: size of farm operation, proximity to an impaired watercourse, use of certain chemicals, and type of crop grown. (See Order No. R3-2012-0011 pp. 16-17; Final SEIR, pp. 6-7.)

The four criteria used to distinguish the tiers are arbitrary designations not based on sound science and not supported by evidence. All of these factors have little bearing on relative risk to water quality: size does not equate to water quality problems; proper use of two types of approved pesticides does not equate to water quality problems; crop types do not equate to water quality problems; and proximity to a 303(d) listed waterbody does not equate to water quality problems especially since mere location is the trigger.[30] Additionally, by merely triggering the criteria above, the tiering structure creates a false premise of polluting water unless a grower can prove otherwise. (See Letter from David Costa, Costa Family Farms (Jan. 3, 2011), available at <http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order2/67.pdf> attached as Attachment 13.)[31]

The tiering structure is arbitrary and essentially flawed since it does not look at actual ways to analyze relative risk to water quality. Rather, the tiering structure improperly focuses the Program on arbitrary designations associated with agricultural production rather than scientifically sound and proven factors causing water quality impairments.

In addition to the arbitrary nature of the tiering structure, provisions within the 2012

---

[29] The State Board also recognizes the validity of third party groups within the irrigated lands regulatory program structure. (See SWRCB 2010-2011 Fee Schedule available at <http://www.swrcb.ca.gov/resources/fees/docs/Irrigated_agriculturial_discharge_waiver_fees.pdf>.) Moreover, the State Board, recognizing the benefits of a third-party group or coalition, encourages the use of third-party groups by reducing the fees associated with waivers for discharges from agricultural land if a discharger is a member of an approved third-party group. (*Ibid.; see also* State Board Water Quality Orders.) The payment of the annual fee, either through discharger participation in a third-party group or as an individual, is further reiterated by the NPS Policy: "Dischargers operating under a WDR must submit an annual fee to the appropriate RWQCB to cover administrative costs. The fee schedule is determined by the SWRCB, based upon factors such as total flow, volume, number of animals or area involved, etc." (SWRCB, Policy For Implementation and Enforcement of The Nonpoint Source Pollution Control Program (May 20, 2004) p. 4 ("NPS Policy").)

[30] Thus, even if a property does not drain into that watercourse but is nevertheless within 1,000 feet, the farm falls within the higher tier.

[31] Although many comment letters and public testimony spoke on the arbitrary nature of the tiers and failure to tie tier designations to risk of water quality, the testimony and comment letters were essentially ignored.

Conditional Waiver leave open-ended discretion to the Regional Board and Executive Officer to elevate dischargers to higher tiers. (See Order No. R3-2012-0011, p. 17, ¶ 18, p. 18, ¶ 19, p. 90, ¶ 44.) The open-ended discretion leads to no certainty in how many growers will be subjected to higher tier requirements; thus, all reliance on tier estimations is faulty. (See Letter from David Costa, Costa Family Farms, *supra*, (Jan. 3, 2011).) Further, the Conditional Waiver clearly states that "dischargers must determine the tier that applies to the individual farm(s)/ranch(es) at their operation or lands when they enroll or update their Notice of Intent." (Order No. R3-2012-0011, p. 16, ¶ 14.) In a Frequently Asked Questions Information Sheet released by the Regional Board after the adoption of the 2012 Conditional Waiver, tier classification is no longer self-determinable. Rather, the Regional Board will be placing dischargers into tiers without the discharger's participation, knowledge, or expertise regarding their farm, crops grown, pesticides used, and generally farming practices. The April 6, 2012 Frequently Asked Questions Information Sheet states:

> Water Board staff have updated the eNOI so enrolled growers can see which tier their farms/ranches are in when they access their eNOI information on the Water Board's GeoTracker website using their username and password.
>
> By May 15, 2012, Water Board staff will notify enrolled growers of their tier by mail.

(Frequently Asked Questions Information Sheet (April 6, 2012), p. 2, attached as Attachment 6.) This change in the very application of the Conditional Waiver is improper and contradicts with the very terms of the Order.

III. CONCLUSION

Based on this Petition and the evidence in the record, Petitioners respectfully request that the State Board rescind Order No. R3-2012-0011 in its entirety, including the Regional Board's incorporation of the Monitoring and Reporting Programs into the Conditional Waiver; rescind Resolution R3-2012-0012 certifying the Final SEIR, Findings, and Statement of Overriding Considerations; modify Order No. R3-2012-0011 with direction for revisions to cure defects, and issue an immediate stay of Order No. R3-2012-0011. (See Support for Request for Immediate Stay following this Petition).

SUPPORT FOR REQUEST FOR IMMEDIATE STAY

Pursuant to Water Code section 13321 and Title 23, California Code of Regulations section 2053, Petitioners request an immediate stay of Order No. R3-2012-0011.[32] Concurrently with this request for immediate stay, Petitioners request the State Board take any action necessary to extend the 2004 Agricultural Order at least until the State Board takes final action on this Petition in order to ensure that Petitioners are not immediately harmed. Under section 2053 of the State Board's regulations, (Cal. Code Regs., tit. 23, § 2053), a stay of the effect of an order shall be granted if petitioner shows:

(a) There will be substantial harm to the Petitioner or to the public interest if a stay is not granted;

(b) There will be no substantial harm to other interested persons and to the public interest if a stay is granted;

(c) There are substantial questions of fact or law regarding the disputed action.

The requirements for the issuance of a stay are clearly met in this case as evidenced in the Request for Stay submitted on or about April 16, 2012 by Theresa A. Dunham.

A. Petitioners Will Suffer Substantial Harm if a Stay is Not Granted

If Order No. R3-2012-0011is not stayed, Petitioners and their members will suffer substantial harm because of the obligation to comply immediately with the additional conditions imposed by the Conditional Waiver. In general, Petitioners and their members will be harmed by increased costs and additional monitoring and reporting obligations that must be incurred immediately in order to comply with the Conditional Waiver. These harms to Petitioners and their members are explained above in this Petition and are hereby incorporated by this reference.

B. Interested Persons and the Public Interest Will Not be Substantially Harmed if a Stay is Granted

Interested persons and the public interest will not be substantially harmed if a stay is granted as water quality will still be regulated.

---

[32] Petitioners hereby support and incorporate by this reference the arguments and declarations included in the Request for Stay submitted on or about April 16, 2012 by Theresa A. Dunham.

C. Substantial Questions of Law and Fact Exist

As explained in detail in the Request for Stay submitted on or about April 16, 2012 by Theresa A. Dunham, there are substantial questions of both law and fact regarding the Regional Board's adoption of Order No. R3-2012-0011.

FOR ALL THE FOREGOING REASONS, Petitioners respectfully support the Request For Stay and ask that the State Board grant a stay of the effect of Order No. R3-2012-0011 until such time as final action is taken on this Petition. Petitioners also request that the State Board take any action necessary to extend Order No. R3-2004-0117 while the stay is in effect.

Dated: April 16, 2012

CALIFORNIA FARM BUREAU FEDERATION

By: KARI E. FISHER
Attorney for California Farm Bureau Federation;
Monterey County Farm Bureau;
San Benito County Farm Bureau;
San Luis Obispo County Farm Bureau;
San Mateo County Farm Bureau;
Santa Barbara County Farm Bureau;
Santa Clara County Farm Bureau;
Santa Cruz County Farm Bureau

PROOF OF SERVICE

I, **PAMELA K. HOTZ,** declare as follows:

At the time of service I was at least 18 years of age; not a party to the within action; and employed in the County of Sacramento at 2300 River Plaza Drive, Sacramento, CA 95833.

On this date, I served the following document(s) in the manner set forth below: **PETITION FOR REVIEW, OR ALTERNATIVELY, REQUEST FOR OWN MOTION REVIEW OF THE CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD'S ORDER NO. R3-2012-0011, R3-2012-0011-01, R3-2012-0011-02, AND R3-2012-0011-03, RESOLUTION NO. R3-2012-0012 AND FILING OF THE NOTICE OF DETERMINATION FOR THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS; PRELIMINARY POINTS AND AUTHORITIES IN SUPPORT OF PETITION** [Water Code § 13320]

☒ **UNITED STATES MAIL [C.C.P. § 1013]** I enclosed the documents in a sealed envelope addressed to the following persons and

☐ deposited the sealed envelope with the United States Postal Service with postage thereon fully prepaid at Sacramento, CA addressed as follows:

☒ placed the envelope for collection and mailing, following our ordinary business practices. I am readily familiar with our practice for collection processing correspondence for mailing. On the same day that the correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Service, in a sealed envelope with postage thereon fully prepaid at Sacramento, CA address as follows :

Roger W. Briggs, Executive Officer
Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

☐ **OVERNIGHT DELIVERY [C.C.P. § 1013(c)]** I enclosed the documents in a sealed envelope provided by an overnight delivery carrier and addressed it to the persons identified below. I placed said envelope for collection at a regularly utilized drop box of the overnight carrier addressed as follows:

Tracking No:

☒ **EMAIL [C.C.P. § 1010.6]** Based on a court order or an agreement of the parties to accept service by email, I caused the documents to be sent to the following persons at the following email address, and did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful:

Email: jbashaw@waterboards.ca.gov

Executed at Sacramento, CA

Dated: April 16, 2012

Pamela K Hotz
PAMELA K .HOTZ

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

ORDER NO. R3-2012-0011

CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

The California Regional Water Quality Control Board, Central Coast Region finds that:

1. The Central Coast Region has approximately 435,000 acres of irrigated land and approximately 3000 agricultural operations, which may be generating wastewater that falls into the category of discharges of waste from irrigated lands.

2. The Central Coast Region has more than 17,000 miles of surface waters (linear streams/rivers) and approximately 4000 square miles of groundwater basins that are, or may be, affected by discharges of waste from irrigated lands.

3. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) are the principal state agencies with primary responsibility for the coordination and control of water quality pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act, codified in Water Code Division 7). The legislature, in the Porter-Cologne Act, directed the Water Board to exercise its full power and jurisdiction to protect the quality of the waters in the State from degradation, considering precipitation, topography, population, recreation, agriculture, industry, and economic development (Water Code § 13000).

4. On July 9, 2004, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted Resolution No. R3-2004-0117 establishing a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (2004 Agricultural Order). In the 2004 Agricultural Order, the Central Coast Water Board found that the discharge of waste from irrigated lands has impaired and polluted the waters of the State and of the United States within the Central Coast Region, has impaired the beneficial uses, and has caused nuisance. The 2004 Agricultural Order expired on July 9, 2009, and the Central Coast Water Board renewed it for a term of one year until July 10, 2010 (Order No. R3-2009-0050). On July 8, 2010, the Central Coast Water Board renewed the 2004 Agricultural Order again for an additional eight months until March 31, 2011 (Order No. R3-2010-0040).

ATTACHMENT 1

The Central Coast Water Board did not have a quorum to take action to adopt a renewal of the 2004 Agricultural Order with modifications by the March 31, 2011 termination date. On March 29, 2011, the Executive Officer signed Executive Officer Order No. R3-2011-0208 to extend the 2004 Agricultural Order again for an additional six months, with a September 30, 2011 termination date. The Central Coast Water Board did not have a quorum to take action to adopt a renewal of the 2004 Agricultural Order with modifications by the September 30, 2011 termination date. On September 30, 2011, the Executive Officer issued Executive Officer Order No. R3-2011-0017 to extend the 2004 Agricultural Order again for an additional year, with a September 30, 2012 termination date. Executive Officer Order No. R3-2011-0017 also required dischargers to implement an updated Monitoring and Reporting Program No. R3-2011-0018. This *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*, Order No. R3-2012-0011 (Order) renews and revises the 2004 Agricultural Order as set forth herein.

5. Since the issuance of the 2004 Agricultural Order, the Central Coast Water Board has compiled additional and substantial empirical data demonstrating that water quality conditions in agricultural areas of the region continue to be severely impaired or polluted by waste discharges from irrigated agricultural operations and activities that impair beneficial uses, including drinking water, and impact aquatic habitat on or near irrigated agricultural operations. The most serious water quality degradation is caused by fertilizer and pesticide use, which results in runoff of chemicals from agricultural fields into surface waters and percolation into groundwater. Runoff and percolation include both irrigation water and stormwater. Every two years, the Water Board is required by Section 303(d) of the federal Clean Water Act to assess water quality data for California's waters to determine if they contain pollutants at levels that exceed protective water quality criteria and standards. This Order prioritizes conditions to control pollutant loading in areas where water quality impairment is documented in the 2010 Clean Water Act section 303(d) List of Impaired Waterbodies (hereafter referred to as 2010 List of Impaired Waterbodies). As new Clean Water Act section 303(d) Lists of Impaired Waterbodies are adopted, the Central Coast Water Board will consider such lists for inclusion in tiering criteria and conditions for this and subsequent Orders.

6. Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is the largest primary source of nitrate pollution in drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices[1]. Researchers estimate that tens of millions of pounds of nitrate leach into groundwater in the Salinas Valley alone each year. Studies indicate that irrigated agriculture contributes approximately 78 percent of the nitrate loading to

[1] Carle, S.f., B.K. Esser, J.E. Moran, High-Resolution Simulation of Basin-Scale Nitrate Transport Considering Aquifer System Heterogeneity, Geosphere, June 2006, v.2, no. 4, pg. 195-209.

groundwater in agricultural areas[2]. Hundreds of drinking water wells serving thousands of people throughout the region have nitrate levels exceeding the drinking water standard[3]. This presents a significant threat to human health as pollution gets substantially worse each year, and the actual numbers of polluted wells and people affected are unknown. Protecting public health and ensuring safe drinking water is among the highest priorities of this Order. This Order prioritizes conditions to control nitrate loading to groundwater and impacts to public water systems. In the case where further documentation indicates nitrate impacts to small water systems and/or private domestic wells, the Central Coast Water Board will consider proximity to impacted small water systems and private domestic wells for inclusion in tiering criteria.

7. Agricultural use rates of pesticides in the Central Coast Region and associated toxicity are among the highest in the State[4]. Agriculture-related toxicity studies conducted on the Central Coast since 1999 indicate that toxicity resulting from agricultural discharges of pesticides has severely impacted aquatic life in Central Coast streams[5,6,7]. Some agricultural drains have shown toxicity nearly every time the drains are sampled. Twenty-two sites in the region, 13 of which are located in the lower Salinas/Tembladero watershed area, and the remainder in the lower Santa Maria area, have been toxic in 95% (215) of the 227 samples evaluated. This Order prioritizes conditions to address pesticides that are known sources of toxicity and sources of a number of impairments on the 2010 List of Impaired Waterbodies, specifically chlorpyrifos and diazinon. In the case where further documentation indicates that additional pesticides are a primary source of toxicity and impairments in the Central Coast region, the Central Coast Water Board will consider such pesticides for inclusion in tiering criteria.

8. Existing and potential water quality impairment from agricultural waste discharges takes on added significance and urgency, given the impacts on public health, limited sources of drinking water supplies and proximity of the region's agricultural lands to critical habitat for species of concern.

[2] Monterey County Flood Control and Water Conservation District, "Report of the Ad Hoc Salinas Valley Nitrate Advisory Committee." Zidar, Snow, and Mills. November 1990.
[3] California Department of Public Health Data obtained using GeoTracker GAMA (Groundwater Ambient Monitoring and Assessment) online database, http://geotracker.waterboards.ca.gov/gama/.
[4] Starner, K., J. White, F. Spurlock and K. Kelley. Pyrethroid Insecticides in California Surface Waters and Bed Sediments: Concentrations and Estimated Toxicities. California Department of Pesticide Regulation. 2006.
[5] Anderson, B.S., J.W. Hunt, B.M. Phillips, P.A. Nicely, V. De Vlaming, V. Connor, N. Richard, R.S. Tjeerdema. Integrated assessment of the impacts of agricultural drainwater in the Salinas River (California, USA). Environmental Pollution 124, 523 - 532. 2003.
[6] Anderson B.S., B.M. Phillips, J.W. Hunt, V. Connor, N. Richard, R.S. Tjeerdema. "Identifying primary stressors impacting macroinvertebrates in the Salinas River (California, USA): Relative effects of pesticides and suspended particles" Environmental Pollution 141(3):402-408. 2006a.
[7] Anderson, B.S., B.M. Phillips, J.W. Hunt, N. Richard, V. Connor, K.R. Worcester, M.S. Adams, R.S. Tjeerdema. Evidence of pesticide impacts in the Santa Maria River Watershed (California, USA). Environmental Toxicology and Chemistry, 25(3):1160 - 1170. 2006b.

9. This Order regulates discharges of waste[8] from irrigated lands by requiring individuals subject to this Order to comply with the terms and conditions set forth herein to ensure that such discharges do not cause or contribute to the exceedance of any Regional, State, or Federal numeric or narrative water quality standard (hereafter referred to as exceedance of water quality standards) in waters of the State and of the United States.

10. This Order requires compliance with water quality standards. Dischargers must implement, and where appropriate update or improve, management practices, which may include local or regional control or treatment practices and changes in farming practices to effectively control discharges, meet water quality standards and achieve compliance with this Order. Consistent with the Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy, 2004), dischargers comply by implementing and improving management practices and complying with the other conditions, including monitoring and reporting requirements. This Order requires the discharger to address impacts to water quality by evaluating the effectiveness of management practices (e.g., waste discharge treatment and control measures), and taking action to improve management practices to reduce discharges. If the discharger fails to address impacts to water quality by taking the actions required by this Order, including evaluating the effectiveness of their management practices and improving as needed, the discharger may then be subject to progressive enforcement and possible monetary liability. The Discharger has the opportunity to present their case to the Central Coast Water Board before any monetary liability may be assessed.

11. The Central Coast Water Board encourages Dischargers to coordinate the effective implementation of cooperative water quality improvement efforts, local or regional scale water quality protection and treatment strategies (such as managed aquifer recharge projects), and cooperative monitoring and reporting efforts to lower costs, maximize effectiveness, and achieve compliance with this Order. In cases where Dischargers are participating in effective local or regional treatment strategies, and individual on-farm discharges continue to cause exceedances of water quality standards in the short term, the Executive Officer will take into consideration such participation in the local or regional treatment strategy and progress made towards compliance with water quality standards in evaluating compliance with this Order. In cases where cooperative water quality improvement efforts, or local or regional treatment strategies, coordinated by a third-party group (e.g., watershed group, water quality coalition, or other similar cooperative effort) or by a group of Dischargers, necessitate alternative water quality monitoring or a longer time

[8] This Order regulates discharge of "waste" as defined in Water Code section 13050 and "pollutants" as defined in the Clean Water Act. For simplicity, the term "waste" or "wastes" is used throughout. The term "waste" is very broad and includes "pollutants" as defined in the Clean Water Act.

schedule to achieve compliance than required by this Order, Dischargers may submit an alternative water quality monitoring and reporting plan or time schedule for approval by the Executive Officer. Groups of Dischargers and/or third party groups (e.g., a watershed group or water quality coalition) may submit to the Executive Officer for approval alternative water quality monitoring and reporting programs. An alternative monitoring and reporting program must include collection of data that will provide indicators of water quality improvement or pollution load reduction, and aggregate monitoring and reporting must be on a scale sufficient to track progress in small sub-basins and be sufficiently representative of conditions. Aggregate monitoring may apply to surface and groundwater. The Executive Officer will evaluate the alternative monitoring and reporting programs on a case-by-case basis considering the potential effectiveness of the aggregate or alternative monitoring (e.g., request to conduct aggregate monitoring for a certain timeframe to give new practices or treatment time to maximize effectiveness, and other factors such as whether the farms are currently significantly contributing to impaired surface water or ground water with drinking water wells, or whether farms are in compliance with other provisions such as enrollment, or submittal of annual compliance information). Dischargers who participate in an alternative monitoring and reporting program maintain individual responsibility to comply with this Order's conditions.

Dischargers may continue to implement alternative treatment or monitoring programs approved by the Executive Officer as long as they demonstrate continuous improvement and sufficient progress towards water quality improvement based upon measurable indicators of pollutant load reduction. Dischargers may seek review of Executive Officer decisions by the Water Board.

12. The Central Coast Water Board encourages Dischargers to coordinate the implementation of management practices with other Dischargers discharging to common tile drains, including efforts to develop regional salt and nutrient management plans. The Executive Officer may require additional monitoring and reporting for discharges to tile drains as necessary to evaluate compliance with this Order.

13. The Central Coast Water Board encourages Dischargers to participate in regional or local groundwater monitoring efforts conducted as part of existing or anticipated groundwater monitoring programs, including efforts related to regional and local salt and nutrient management plans, integrated regional water management (IRWM) plans, or the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program.

14. Dischargers have the option of complying with surface receiving water quality monitoring conditions identified in MRP Order No. R3-2012-0011, either individually or through a cooperative monitoring program. The Central Coast Water Board encourages Dischargers to participate in a cooperative monitoring program to

comply with surface receiving water quality monitoring conditions. In the development of any cooperative monitoring program fee schedule, the Central Coast Water Board encourages Dischargers to scale the assessment of fees based on relative level of waste discharge and threat to water quality.

15. The Central Coast Water Board will evaluate various types of information to determine compliance with this Order such as, a) management practice implementation and effectiveness, b) treatment or control measures, c) individual discharge monitoring results, d) receiving water monitoring results, and e) related reporting.

16. Many owners and operators of irrigated lands within the Central Coast Region have taken actions to protect water quality. In compliance with the 2004 Agricultural Order, most owners and operators enrolled in the 2004 Agricultural Order, implemented the Cooperative Monitoring Program (CMP), participated in farm water quality education, developed farm water quality management plans and implemented management practices as required in the 2004 Agricultural Order. The 2004 Agricultural Order did not include conditions that allowed for determining individual compliance with water quality standards or the level of effectiveness of actions taken to protect water quality, such as individual discharge monitoring or evaluation of water quality improvements. This Order includes new or revised conditions to allow for such evaluations.

17. Water Code section 13260(a) requires that any person discharging waste or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file with the appropriate Regional Board a report of waste discharge (ROWD) containing such information and data as may be required by the Central Coast Water Board, unless the Central Coast Water Board waives such requirement.

18. Water Code section 13263 requires the Central Coast Water Board to prescribe waste discharge requirements (WDRs), or waive WDRs, for the discharge. The WDRs must implement relevant water quality control plans and the Water Code.

19. Water Code section 13269(a) provides that the Central Coast Water Board may waive the requirement to obtain WDRs for a specific discharge or specific type of discharge, if the Central Coast Water Board determines that the waiver is consistent with any applicable water quality control plan and such waiver is in the public interest, provided that any such waiver of WDRs is conditional, includes monitoring conditions designed to support the development and implementation of the waiver program, including, but not limited to verifying the adequacy and effectiveness of the waiver's conditions, unless waived, does not exceed five years in duration, and may be terminated at any time by the Central Coast Water Board.

20. As authorized by Water Code section 13269, this Order conditionally waives the requirement to obtain WDRs for Dischargers who comply with the terms of this Order. See Attachment A to this Order for additional findings related to legal and regulatory considerations, and rationale for this Order.

21. Pursuant to Water Code section 13267, the Executive Officer may require Dischargers to locate (inventory) and conduct monitoring of private domestic wells in or near agricultural areas with high nitrate in groundwater and submit technical reports evaluating the monitoring results. In addition, in compliance with Water Code section 13304, the Central Coast Water Board may require Dischargers to provide alternative water supplies or replacement water service, including wellhead treatment, to affected public water suppliers or private domestic well owners.

SCOPE OF ORDER NO. R3-2012-0011

Irrigated Lands and Agricultural Discharges Regulated Under this Order

22. This Order regulates (1) discharges of waste from irrigated lands, including, but not limited to, land planted to row, vineyard, field and tree crops where water is applied for producing commercial crops; (2) discharges of waste from commercial nurseries, nursery stock production, and greenhouse operations with soil floors that do not have point-source type discharges and are not currently operating under individual WDRs; and (3) discharges of waste from lands that are planted to commercial crops that are not yet marketable, such as vineyards and tree crops.

23. Discharges from irrigated lands regulated by this Order include discharges of waste to surface water and groundwater, such as irrigation return flows, tailwater, drainage water, subsurface drainage generated by irrigating crop land or by installing and operating drainage systems to lower the water table below irrigated lands (tile drains), stormwater runoff flowing from irrigated lands, stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands, runoff resulting from frost control, and/or operational spills. These discharges can contain wastes that could affect the quality of waters of the State and impair beneficial uses.

Dischargers Regulated Under this Order

24. This Order regulates both landowners and operators of irrigated lands on or from which there are discharges of waste that could affect the quality of any surface water or groundwater (Dischargers). Dischargers are responsible for complying with the conditions of this Order. The Central Coast Water Board will hold both the landowner and the operator liable for noncompliance with this Order.

25. The Central Coast Water Board recognizes that due to different types of operations and/or locations, discharges of waste from irrigated lands may have the potential for different levels of impacts on waters of the state or of the United States. This Order establishes three tiers of regulation to take into account the variation, including different regulatory conditions for the three tiers.

26. Dischargers who have not enrolled to comply with a previous order must submit to the Central Coast Water Board a completed electronic Notice of Intent (NOI) to comply with the conditions of this Order to comply with the Water Code.

27. Dischargers who have submitted a completed electronic NOI to the Central Coast Water Board to comply with a previous order must update their NOI to reflect current operation and farm/ranch information.

28. Landowners and operators of irrigated lands who obtain a pesticide use permit from a local County Agricultural Commissioner and that have a discharge of waste that could affect surface water or groundwater, must submit to the Central Coast Water Board, a completed electronic NOI to comply with the conditions of this Order to comply with the Water Code.

29. The NOI serves as a report of waste discharge (ROWD) for the purposes of this Order.

30. The Central Coast Water Board recognizes that certain limited resource farmers (as defined by the U.S. Dept. of Agriculture) may have difficulty achieving compliance with this Order. The Central Coast Water Board will prioritize assistance for these farmers, including but not limited to technical assistance, grant opportunities, and necessary flexibility to achieve compliance with this Order (e.g., adjusted monitoring, reporting, or time schedules).

Agricultural Discharges Not Covered Under this Order and Who Must Apply for Individual Waste Discharge Requirements

31. This Order does not waive WDRs for commercial nurseries, nursery stock production and greenhouse operations that have point-source type discharges, and fully contained greenhouse operations (those that have no groundwater discharge due to impervious floors). These operations must eliminate all such discharges of wastes or submit a ROWD to apply for individual WDRs as set forth in Water Code section 13260.

PUBLIC PARTICIPATION PROCESS

32. The Central Coast Water Board notified interested persons that the Central Coast Water Board will consider the adoption of this Order, which conditionally waives individual WDRs and establishes conditions for the control of discharges of waste from irrigated lands to waters of the State, and provided several opportunities for public input.

33. In December 2008, the Central Coast Water Board invited members of the public to participate in development of this Order and provide recommendations to Central Coast Water Board staff. In particular, the Central Coast Water Board requested the assistance of an agricultural advisory panel in developing appropriate milestones, timetables, and verification monitoring programs to resolve water quality problems and achieve compliance with the Basin Plan. Additionally, in early 2009, the Central Coast Water Board notified all water purveyors, water districts and municipalities that staff was developing recommendations for this Order.

34. In December 2009, the Central Coast Water Board encouraged any interested person who wanted to present alternative recommendations to this Order to provide those recommendations in writing by April 1, 2010.

35. On February 1, 2010, the Central Coast Water Board publicly released a preliminary report and preliminary draft order for the regulation of discharges from irrigated lands and accepted comments on the preliminary draft order through June 4, 2010.

36. The Central Coast Water Board held two public workshops (May 12, 2010, and July 8, 2010) to discuss the preliminary draft order, public comments, and alternative recommendations.

37. The Central Coast Water Board released a Draft Agricultural Order and staff report on November 19, 2010, for public review and comment, and held an additional public workshop on February 3, 2011. The Central Coast Water Board released further revised versions of the Draft Agricultural Order in March, July, and August 2011 and held an additional public workshop on February 1, 2012.

38. Between November 2009 and February 2012, Central Coast Water Board staff attended more than 60 meetings and conferences to describe the process for developing the Draft Agricultural Order, discuss options, and hear public input regarding the Draft Agricultural Order. These events included numerous stakeholders representing the agricultural industry and its technical assistance providers, environmental and environmental justice organizations, local and state government agencies and other members of the public.

39. Interested persons were notified that the Central Coast Water Board will consider adoption of an Order, which conditionally waives WDRs for discharges of waste from irrigated lands, as described in this Order, and were provided an opportunity for a public hearing and an opportunity to submit written comments.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

40. For purposes of adoption of this Order, the Central Coast Water Board is the lead agency pursuant to the California Environmental Quality Act (CEQA) (Pub. Res. Code §§ 21100 et seq.).

41. In 2004, the Central Coast Water Board adopted the 2004 Agricultural Order and a Negative Declaration prepared in compliance with CEQA. CEQA Guidelines state that no subsequent environmental impact report (SEIR) shall be prepared when an EIR has been certified or negative declaration adopted for a project unless the lead agency determines based on substantial evidence in light of the whole record, one or more of the following:

> *(1) if substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects; or,*
>
> *(2) if substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental impacts or a substantial increase in the severity of previously identified significant effects; or*
>
> *(3) if new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, becomes available.*

(Cal. Code Regs., tit. 14, § 15162(a).)

This regulation applies if there is a modification of a previous project. In this case, the Central Coast Water Board is proposing to renew the 2004 Agricultural Order, which is the previous project, with clarifications and new conditions. To assist in determining whether an SEIR would be necessary, the Central Coast Water Board staff held a CEQA scoping meeting on August 16, 2010, to receive input from interested persons and public agencies on potentially significant environmental effects of the proposed project. Staff also accepted written comments regarding

scoping up until August 27, 2010, in order to allow for comments from those who were unable to attend the meeting and/or for those who wished to submit additional comments. Members of the public and representatives of public agencies provided comments regarding their views on significant environmental effects associated with the adoption of a renewed Agricultural Order. As described in Findings 30 - 37 and prior to the scoping meeting in August 2010, significant public participation activities had occurred.

In preparing the Draft SEIR, Central Coast Water Board staff reviewed the 2004 Negative Declaration, including the Initial Study (Environmental Checklist), considered the comments received during the public participation process with respect to renewal of the 2004 Agricultural Order, including evidence in the record, written and oral comments, proposed alternatives, and information provided at and following the August 16, 2010 scoping meeting, and comments received on the Draft SEIR. Review of this information did not result in identification of any new environmental effects that had not already been evaluated in the 2004 Negative Declaration. Staff identified two areas included on the Environmental Checklist where there was a potential for an increase in the severity of environmental effects previously identified. These areas are (1) the potential for more severe impacts on agricultural resources due to the potential for an increase in the use of vegetated buffer strips and economic impacts due to new requirements that could take some land out of direct agricultural use and (2) the potential for more severe impacts on biological resources due to the potential for a reduction in water flows in surface waters.

The Central Coast Water Board issued a Notice of Availability on October 25, 2010, and provided the public with 45 days to submit written comments on the Draft SEIR. The Water Board received 12 written comment letters. Responses to the comments are in Section 7 of the Final SEIR. In response to comments, the Central Coast Water Board staff revised the Draft SEIR and prepared a draft Final SEIR for the Central Coast Water Board's certification. The 2004 Negative Declaration and the Final SEIR constitute the environmental analysis under CEQA for this Order.

42. With respect to Agricultural Resources, the Final SEIR concludes that adoption of the proposed alternative could result in some economic or social changes but that there was insufficient evidence to conclude that the economic changes would result in adverse physical changes to the environment. Commenters speculated that the economic impacts would be so large as to result in large scale end to agriculture and that land would be sold for other uses that would result in impacts on the environment. No significant information was provided to justify that concern. As described in Section 2.4 of this Final SEIR, the draft 2012 Agricultural Order would impose additional conditions on approximately 100 to 300 of the estimated 3000 owners or operators currently enrolled in the 2004 Agricultural Order. CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment. (Pub.

Res. Code § 21083.) The Final SEIR concludes that due to some new conditions, particularly the requirement that some dischargers may be required to implement vegetated buffer strips, could result in loss of land for agricultural production since the buffer strips would generally not produce crops and some land could be converted to other uses. This impact was found to be less than significant and that mitigation could reduce impacts further. The Central Coast Water Board may not generally specify the manner of compliance and therefore, dischargers may choose among many ways to comply with the requirement to control discharges of waste to waters of the state. Even if all dischargers who could be subject to the condition to use vegetated buffers or some other method to control discharges in the draft 2012 Agricultural Order (Tier 3 dischargers) chose to use vegetated buffers or converted to other uses, the total acreage is quite small compared to the total amount of acreage used for farming and was, therefore, found to be less than significant. In addition, since the land would be used as a vegetated buffer to comply with the Order, this would result in beneficial impacts on the environment, not adverse impacts.

With respect to Biological Resources, the Final SEIR concludes that wide scale water conservation could result in lower flows into surface water resulting in impacts on aquatic life. The Central Coast Water Board may not specify the manner of compliance so it has insufficient information to evaluate the extent to which dischargers would choose to use water conservation to comply and to evaluate potential physical changes to the environment that could result. Reduction in toxic runoff may offset impacts due to the reduced flows that could occur. In addition, reduction in water use could result in increased groundwater levels that would also result in more clean water to surface water.

Based on this information, the Final SEIR concludes that the environmental effects associated with the draft 2012 Agricultural Order may be significant with respect to biological resources. However, given the uncertainty associated with evaluating the available information, it is possible that the effects may turn out to be less than significant. In Resolution R3-2012-0012, the Central Coast Water Board has made findings consistent with the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15091) and a statement of overriding considerations (Cal. Code Regs., tit. 14, § 15093) with respect to biological resources.

ADDITIONAL FINDINGS

43. Attachment A to this Order, incorporated herein, includes additional findings that further describe a) the Water Board's legal and regulatory authority, b) the rationale for this Order, c) a description of the environmental and agricultural resources in the Central Coast Region, and d) impacts to water quality from agricultural discharges. Attachment A also identifies applicable plans and policies adopted by the State Water Board and the Central Coast Water Board that contain regulatory condition

that apply to the discharge of waste from irrigated lands. Attachment A also includes definitions of terms for purposes of this Order.

IT IS HEREBY ORDERED that:

1. Pursuant to Water Code sections 13260, 13263, 13267, and 13269, Dischargers must comply with the terms and conditions of this Order to meet the provisions contained in Water Code Division 7 and regulations and plans and policies adopted there under.

2. This Order shall not create a vested right to discharge, and all discharges of waste are a privilege, not a right, as provided for in Water Code section 13263(g).

3. Dischargers must not discharge any waste not specifically regulated by this Order except in compliance with the Water Code.

4. Pursuant to Water Code section 13269, the Central Coast Water Board waives the requirement that Dischargers obtain WDRs pursuant to Water Code section 13263(a) for discharges of waste from irrigated lands, if the Discharger enrolls in and complies with this Order, including Attachments and Monitoring and Reporting Program (MRP) Order No. R3-2012-0011.

5. Pursuant to Water Code section 13269, this action waiving the issuance of WDRs for certain specific types of discharges: 1) is conditional; 2) may be terminated by the Central Coast Water Board at any time; 3) may be superseded if the State Water Board or Central Coast Water Board adopts specific WDRs or general WDRs for this type of discharge or any individual discharger; 4) does not permit any illegal activity; 5) does not preclude the need for permits which may be required by other local or governmental agencies; 6) does not preclude the Central Coast Water Board from requiring WDRs for any individual discharger or from administering enforcement remedies (including civil liability) pursuant to the Water Code; and 7) includes conditions for the performance of individual, group, and watershed-based monitoring in the form of monitoring requirements designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions.

6. Dischargers or groups of Dischargers seeking regulatory requirements tailored to their specific operation, farm/ranch, geographic area, or commodity may submit an ROWD to obtain individual or general orders for a specific discharge or type of discharge (e.g., commodity-specific general order). This Order remains applicable until such individual or general orders are adopted by the Central Coast Water Board.

7. The Executive Officer may propose, and the Water Board may adopt, individual WDRs for any Discharger at any time.

8. The Central Coast Water Board or the Executive Officer may, at any time, terminate applicability of this Order with respect to an individual Discharger upon written notice to the Discharger.

9. Dischargers are defined in this Order as both the landowner and operator of irrigated cropland, and both must comply with this Order.

10. Dischargers may comply with this Order by participating in third-party groups (e.g., watershed group, or water quality coalition, or other similar cooperative effort) approved by the Executive Officer or Central Coast Water Board. In this case, the third-party group will assist individual growers in achieving compliance with this Order, including implementing water quality improvement projects and required monitoring and reporting programs as described in MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. R3-2012-0011-03, or alternative monitoring and reporting programs as provided in Condition 11 below. Consistent with the Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy, 2004), the ineffectiveness of a third-party group through which a Discharger participates in nonpoint source control efforts cannot be used as an excuse for lack of individual discharger compliance. Individual Dischargers continue to be responsible for complying with this Order.

11. Dischargers may form third party groups to develop and implement alternative water quality management practices (i.e., group projects) or cooperative monitoring and reporting programs to comply with this Order. At the discretion of the Executive Officer, Dischargers that are a participant in a third party group that implements Executive Officer-approved water quality improvement projects or Executive Officer-approved alternative monitoring and reporting programs may be moved to a lower Tier (e.g., Tier 3 to Tier 2, Tier 2 to Tier 1) and/or provided alternative project-specific timelines, and milestones.

    To be subject to Tier changes or alternative timelines, Projects will be evaluated for, among other elements:

    - Project Description. Description must include identification of participants, methods, and time schedule for implementation.
    - Purpose. Proposal must state desired outcomes or goals of the project (e.g., pollutants to be addressed, amount of pollution load to be reduced, water quality improvement expected).
    - Scale. Solutions must be scaled to address impairment.

- Chance of Success. Projects must demonstrate a reasonable chance of eliminating toxicity within the permit term (five years) or reducing discharge of nutrients to surface and groundwater.
- Long term solutions and contingencies. Proposals must address what new actions will be taken if the project does not meet goals and how the project will be sustained through time.
- Accountability. Proposals must set milestones that indicate progress towards goals stated as above in "purpose."
- Monitoring and reporting. Description of monitoring and measuring methods, and information to be provided to the Water Board. Monitoring points must be representative but may not always be at the edge-of-farm so long as monitoring results demonstrate water quality improvement and the efficacy of a project. In addition, monitoring must 1) characterize and be representative of discharge to receiving water, 2) demonstrate project effectiveness, 3) and verify progress towards water quality improvement and pollutant load reduction,

Project proposals will be evaluated by a Technical Advisory Committee (TAC) comprised of: Two researchers or academics skilled in agricultural practices and/or water quality, one farm advisor (e.g., from Natural Resources Conservation Service or local Resource Conservation Districts), one grower representative, one environmental representative, one environmental justice or environmental health representative, and one Regional Board staff. The TAC must have a minimum of five members to evaluate project proposals and make recommendations to the Executive Officer. The Executive Officer has discretion to approve any project after receiving project evaluation results and recommendations from the committee. If the Executive Officer denies approval, the third party group may seek review by the Regional Board. As stated in the NPS Policy, management practice implementation is not a substitute for compliance with water quality requirements. If the project is not effective in achieving water quality standards, additional management practices by individual Dischargers or the third party group will be necessary.

12. Dischargers who are subject to this Order shall implement management practices, as necessary, to improve and protect water quality and to achieve compliance with applicable water quality standards.

Part A. Tiers

13. Dischargers are classified into a tier based upon criteria that define the risk to water quality and the level of waste discharge. The Central Coast Water Board may update the criteria, as necessary.

14. Dischargers must determine the tier that applies to the individual farm(s)/ranch(es) at their operation or lands when they enroll or update their Notice of Intent (NOI), via electronic submittal. See Part D. Submittal of Technical Reports.

15. **Tier 1** – Applies to all Dischargers whose individual farm/ranch meets all of the criteria described in **(1a), (1b), and (1c)**, or whose individual farm/ranch is certified in a sustainable agriculture program identified in **(1d)** that requires and verifies effective implementation of management practices that protect water quality:

    1a. Discharger does not use chlorpyrifos or diazinon at the farm/ranch, which are documented to cause toxicity in surface waters in the Central Coast Region;

    1b. Farm/ranch is located more than 1000 feet from a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies[9] (Table 1);

    1c. If the Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) at the farm/ranch, and the farm/ranch total irrigated acreage is *less than* 50 acres, and is *not* within 1000 feet of a well that is part of a public water system (as defined by the California Health and Safety Code, section 116275) that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite[10];

    1d. Sustainability in Practice (SIP, certified by the Central Coast Vineyard Team) or other certified programs approved by the Executive Officer.

[9] The 2010 List of Impaired Waterbodies is available on the Water Board's Impaired Water Bodies website at http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

[10] California Department of Health Services (CDPH) has determined that public water system well location records are confidential and exempt from disclosure to the public. Until such time that public water system well location records become available to the public, the Central Coast Water Board will identify Dischargers who are within 1000 feet of a public water system well that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite. Dischargers should evaluate their tier for the purposes of this Order based on all information available. In the case where a Discharger should be placed into a different tier based on proximity to a public water system well, the Central Coast Water Board will provide appropriate notice to the Discharger. Approximate locations for public water system wells are available on the Water Board's GeoTracker GAMA website at http://geotracker.waterboards.ca.gov/gama/.

16. **Tier 2** – Applies to all Dischargers whose individual farm/ranch does not meet the Tier 1 or Tier 3 criteria. In general, a Tier 2 Discharger's farm/ranch meets at least one of the characteristics described in **(2a), (2b), or (2c)**:

    2a. Discharger applies chlorpyrifos or diazinon at the farm/ranch, which are documented to cause toxicity in surface waters in the Central Coast Region;

    2b. Farm/ranch is located within 1000 feet of a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies[9] (see Table 1);

    2c. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) at the farm/ranch, and the farm/ranch total irrigated acreage is greater or equal to 50 acres and *less than* 500 acres, or the farm/ranch is *within* 1000 feet of a well that is part of a public water system (as defined by the California Health and Safety Code, section 116275) that exceeds the maximum contaminant level (MCL) for nitrate, nitrite, or nitrate + nitrite[10];

17. **Tier 3** – Applies to all Dischargers whose individual farm/ranch meets one of the following sets of criteria ***(3a) or (3b)***:

    3a. Discharger grows crop types with high potential to discharge nitrogen to groundwater (as defined in Attachment A) at the farm/ranch, and farm/ranch total irrigated acreage is *greater than or equal* to 500 acres;

    3b. Discharger applies chlorpyrifos or diazinon at the farm/ranch, and the farm/ranch discharges irrigation or stormwater runoff to a waterbody listed for toxicity or pesticides on the 2010 List of Impaired Waterbodies[9] (Table 1);

18. Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier. The Discharger must provide information to demonstrate a lower level of waste discharge and a lower threat to water quality, including site-specific operational and water quality information to characterize the waste discharge and resulting effect on water quality. Dischargers remain in the tier determined by the criteria above and must meet all conditions for that tier until the Executive Officer approves the request to transfer to a lower tier. At a minimum, information provided by Dischargers requesting transfer to a lower tier must include the following:
    a. Farm/ranch maps(s) identifying discharge points and any water quality sampling locations;

b. Schematic showing the flow of irrigation and stormwater runoff, including where it leaves the farm/ranch and where the discharge enters receiving water;
c. Description of the volume of discharges and when the discharge is present;
d. Description of type of chemicals applied (e.g., pesticide and fertilizer use);
e. Description of estimated pollutant loading to groundwater;
f. Description and results of any individual discharge water quality sampling information available (e.g., irrigation runoff and stormwater sampling, lysimeter sampling);

19. The Executive Officer may elevate Tier 1 or Tier 2 Dischargers to a higher tier if the Discharger poses a higher threat to water quality based on information submitted as part of the NOI, MRP, or information observed upon inspection of a ranch/farm, or any other appropriate evidence that indicates the ranch/farm meets the criteria for a higher tier.

20. The Executive Officer may require Dischargers to enroll irrigated land with similar characteristics (e.g., same landowner or operator), and proximal, adjacent, or contiguous location, as a single operation or farm/ranch.

21. Unless otherwise specified, the conditions of this Order apply to all Dischargers, including Tier 1, Tier 2, and Tier 3.

Part B. General Conditions and Provisions for All Dischargers - Tier 1, Tier 2, and Tier 3

Water Quality Standards-

22. Dischargers must comply with applicable water quality standards, as defined in Attachment A, protect the beneficial uses of waters of the State and prevent nuisance as defined in Water Code section 13050.

23. Dischargers must comply with applicable provisions of the Central Coast Region Water Quality Control Plan (Basin Plan) and all other applicable water quality control plans as identified in Attachment A.

24. Dischargers must comply with applicable Total Maximum Daily Loads (TMDLs), including any plan of implementation for the TMDL, commencing with the effective date or other date for compliance stated in the TMDL. A list of TMDLs adopted by the Central Coast Water Board is available on the Central Coast Water Board website at:
http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ tmdl/index.shtml.

25. Discharges shall not discharge any waste not specifically regulated by the Order described herein, unless the Discharger complies with Water Code section 13260(a) by submitting a ROWD and the Central Coast Water Board either issues WDRs pursuant to Water Code section 13263 or an individual waiver pursuant to Water Code section 13269, or the conditions specified in Water Code section 13264(a) must be met by the Discharger. Waste specifically qualifying for conditional discharge under this Waiver includes earthen materials, including soil, silt, sand clay, rock: inorganic materials (such as metals, salts boron, selenium, potassium, nitrogen, etc.); organic materials; and pesticides that may enter or threaten to enter into waters of the state. Examples of wastes not qualifying for conditional discharge under this Order include hazardous waste and human waste.

26. Dischargers shall not discharge any waste at a location or in a manner different from that described in the NOI.

27. Dischargers shall not discharge chemicals such as fertilizers, fumigants or pesticides down a groundwater well casing.

28. Dischargers shall not discharge chemicals used to control wildlife (such as bait traps or poison) directly into surface waters, or place the chemicals in a location where they may be discharged to surface waters.

29. Dischargers shall not discharge agricultural rubbish, refuse, irrigation tubing or tape, or other solid wastes into surface waters, or place such materials where they may contact or may eventually be discharged to surface waters.

30. This Order does not authorize persons to discharge pollutants from point sources to waters of the United States, including wetlands, where the Discharger is required to obtain an NPDES permit under Clean Water Act section 402 (NPDES), or a dredge and fill permit under Clean Water Act section 404 (dredge and fill), except as authorized by an NPDES permit or section 404 permit. An area is considered a wetland, subject to Clean Water Act section 404, if it meets the United States Army Corps of Engineers' definition as described in the Code of Federal Regulations and associated wetland delineation procedures, or relevant Water Board definitions.

Waste Discharge Control-

31. **By October 1, 2012**, Dischargers that apply fertilizers, pesticides, fumigants or other chemicals through an irrigation system must have functional and properly maintained back flow prevention devices installed at the well or pump to prevent pollution of groundwater or surface water, consistent with any applicable DPR requirements or local ordinances. Back flow prevention devices used to protect

water quality must be those approved by USEPA, DPR, CDPH, or the local public health or water agency.

32. **By October 1, 2015,** Dischargers must properly destroy all abandoned groundwater wells, exploration holes or test holes, as defined by Department of Water Resources (DWR) Bulletin 74-81 and revised in 1988, in such a manner that they will not produce water or act as a conduit for mixing or otherwise transfer groundwater or waste constituents between permeable zones or aquifers. Proper well abandonment must be consistent with any applicable DWR requirements or local ordinances.

33. Dischargers who utilize containment structures (such as retention ponds or reservoirs) to achieve treatment or control of the discharge of wastes must manage, construct, or maintain such containment structures to avoid percolation of waste to groundwater that causes or contributes to exceedances of water quality standards, and to minimize surface water overflows that have the potential to impair water quality.

34. Dischargers must implement proper handling, storage, disposal and management of pesticides, fertilizer, and other chemicals to prevent or control the discharge of waste to waters of the State that causes or contributes to exceedances of water quality standards.

35. Upon request, Dischargers must submit information regarding compliance with any Department of Pesticide Regulation (DPR) adopted or approved surface water or groundwater protection requirements.

36. Dischargers must implement water quality protective management practices (e.g., source control or treatment) to prevent erosion, reduce stormwater runoff quantity and velocity, and hold fine particles in place.

37. Dischargers must minimize the presence of bare soil vulnerable to erosion and soil runoff to surface waters and implement erosion control, sediment, and stormwater management practices in non-cropped areas, such as unpaved roads and other heavy use areas.

38. Dischargers must comply with any applicable stormwater permit.

39. Dischargers must a) maintain existing, naturally occurring, riparian vegetative cover (such as trees, shrubs, and grasses) in aquatic habitat areas as necessary to minimize the discharge of waste; and b) maintain riparian areas for effective streambank stabilization and erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, and wildlife support to minimize the discharge of waste;

40. In the case where disturbance of aquatic habitat is necessary for the purposes of water quality improvement, restoration activities, or other permitted activities, Dischargers must implement appropriate and practicable measures to avoid, minimize, and mitigate erosion and discharges of waste, including impacts to aquatic habitat.

41. Upon request, where required by California Fish and Game Code, Dischargers must submit proof of an approved Streambed Alteration Agreement from the California Department of Fish and Game (CDFG) for any work conducted within the bed, bank or channel of a lake or stream, including riparian areas, that has the potential to result in erosion and discharges of waste to waters of the State.

42. Upon request, where required by California Forest Practice Rules, Dischargers must submit proof of California Department of Forestry and Fire Protection authorization, and enrollment in the Central Coast Water Board's General Conditional Waiver of WDRs – Timber Harvest Activities in the Central Coast Region, for any commercial harvesting of timber that has the potential to result in erosion and discharges of waste to waters of the State.

43. Upon request, where required by Clean Water Act Section 404, Dischargers must submit proof of a dredge and fill permit from the United States Army Corps of Engineers (USACOE) for any work that has the potential to discharge wastes considered "fill," such as sediment, to wetlands.

44. **By October 1, 2012**, Dischargers must develop a farm water quality management plan (Farm Plan), or update the Farm Plan as necessary, and implement it to achieve compliance with this Order. Farm Plans must be kept current, kept on the farm, and a current copy must be made available to Central Coast Water Board staff, upon request. At a minimum, Farm Plans must include:

    a. Copy of this Order and a copy of the Notice of Intent (NOI) submitted to the Central Coast Water Board for reference by operating personnel and inspection by Central Coast Water Board staff;
    b. Date the Farm Plan was last updated;
    c. Farm/ranch maps(s) identifying irrigation and stormwater runoff discharge locations where irrigation and stormwater runoff leaves or may leave the farm/ranch and where the discharge enters or may enter receiving water;
    d. Description of the typical volume of discharges and when the discharge is typically present;
    e. Description of type of chemicals applied (e.g., pesticide and fertilizer use);
    f. Description and time schedule for any farm water quality management practices, treatment and/or control measures implemented to comply with this Order. This includes, but is not limited to, management practices

related to irrigation efficiency and management, pesticide management, nutrient management, salinity management, sediment and erosion control (including stormwater management), and aquatic habitat protection to achieve compliance with this Order. In addition, Farm Plans must describe tile drain discharges and the management measures Dischargers have implemented or will implement to minimize impacts to water quality;

g. Description and results of methods used to verify practice effectiveness and compliance with this Order (e.g., water quality sampling, discharge characterization, reductions in pollutant loading);

45. Dischargers must obtain appropriate farm water quality education and technical assistance necessary to achieve compliance with this Order. Education should focus on meeting water quality standards by identifying on-farm water quality problems, implementing pollution prevention strategies and implementing practices designed to protect water quality and resolve water quality problems to achieve compliance with this Order.

Other Provisions and Conditions-

46. Pursuant to Water Code section 13267(c), the Central Coast Water Board staff or its authorized representatives may investigate the property of persons subject to this Order to ascertain whether the purposes of the Porter-Cologne Act are being met and whether the Discharger is complying with the conditions of this Order. The inspection shall be made with the consent of the owner or possessor of the facilities, 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). However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant.

47. 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 act authorized under this Order, the Dischargers must obtain authorization for an incidental take prior to taking action. Dischargers must be responsible for meeting all requirements of the applicable Endangered Species Act for the discharge authorized by this Order.

48. Dischargers must pay a fee to the State Water Resources Control Board in compliance with the fee schedule contained in Title 23 California Code of Regulations.

49. Dischargers must pay any relevant monitoring fees (e.g., Cooperative Monitoring Program) necessary to comply with monitoring and reporting conditions of this Order or comply with monitoring and reporting requirements individually.

Part C. Monitoring Conditions for All Dischargers- Tier 1, Tier 2, and Tier 3

50. Dischargers must comply with MRP Order No. R3-2012-0011, as ordered by the Executive Officer or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11.

    Monitoring and reporting conditions are different for each tier, based on level of waste discharge and affect on water quality. Attached to this Order are three specific MRPs, one for each tier:

    a. Tier 1 Dischargers must comply with monitoring and reporting conditions specified in MRP Order No. R3-2012-0011-01;
    b. Tier 2 Dischargers must comply with monitoring and reporting conditions specified in MRP Order No. R3-2012-0011-02;
    c. Tier 3 Dischargers must comply with monitoring and reporting conditions specified in MRP Order No. R3-2012-0011-03;

51. Tier 1, Tier 2, and Tier 3 Dischargers must conduct groundwater monitoring and reporting in compliance with MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. 2012-0011-03, or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11, so that the Central Coast Water Board can evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for waste discharge and nitrogen loading and exceedance of drinking water standards, and identify priority areas for nutrient management.

52. Tier 1, Tier 2, and Tier 3 Dischargers must conduct surface receiving water quality monitoring and reporting in compliance with MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. 2012-0011-03, either individually or through a cooperative monitoring program, or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11.

53. For Dischargers who choose to participate in a cooperative monitoring program, failure to pay cooperative monitoring program fees voids a selection or notification of the option to participate in a cooperative monitoring and hence requires individual monitoring report submittal per MRP Order No. R3-2012-0011, MRP Order No. R3-2012-0011-02, and MRP Order No. 2012-0011-03.

Part D. Submittal of Technical Reports for All Dischargers- Tier 1, Tier 2, Tier 3

Notice of Intent (NOI) to Enroll under the Order for All Dischargers in Tier 1, Tier 2 and Tier 3

54. Submittal of the electronic NOI is required pursuant to Water Code section 13260. Submittal of all other technical reports pursuant to this Order is required pursuant to Water Code section 13267. Failure to submit technical reports or the attachments in accordance with schedules established by this Order or MRP, or failure to submit a complete technical report (i.e., of sufficient technical quality to be acceptable to the Executive Officer), may subject the Discharger to enforcement action pursuant to Water Code sections 13261, 13268, or 13350. Dischargers must submit technical reports in the format specified by the Executive Officer.

55. Dischargers seeking authorization to discharge under this Order must submit a completed electronic NOI form to the Central Coast Water Board. Dischargers already enrolled in the 2004 Agricultural Order and who have submitted their NOI electronically are not required to submit a new NOI. Upon submittal of an accurate and complete electronic NOI, the Discharger is enrolled under the Order, unless otherwise informed by the Executive Officer.

    a. In the case where an operator may be operating for a period of less than 12 months, the landowner must submit the electronic NOI.

    b. **Within 60 days** of the adoption of this Order, any Discharger who did not enroll in the 2004 Agricultural Order must submit an electronic NOI, unless otherwise directed by the Executive Officer.

    c. **Prior to any discharge or commencement of activities that may cause a discharge,** including land preparation prior to crop production, any Discharger proposing to control or own a new operation or farm/ranch that has the potential to discharge waste that could directly or indirectly reach waters of the State and affect the quality of any surface water or groundwater must submit an electronic NOI.

    d. Dischargers must submit any updates to the electronic NOI by **October 1, 2012 and annually thereafter by October 1,** to reflect changes to operation or ranch/farm information.

    e. **Within 60 days**, in the event of a change in control or ownership of an operation, farm/ranch, or land presently owned or controlled by the

Discharger, the Discharger must notify the succeeding owner and operator of the existence of this Order by letter, and forward a copy of the letter to the Executive Officer.

f. **Within 60 days** of acquiring control or ownership of an operation or farm/ranch, any Discharger acquiring control or ownership of an existing operation or farm/ranch must submit an electronic NOI.

56. Dischargers must submit all the information required in the electronic NOI form including, but not limited to, the following information for the operation and individual farm/ranch:
    a. Identification of each property covered by enrollment,
    b. Tier applicable to each farm/ranch,
    c. Landowner(s),
    d. Operator(s),
    e. Contact information,
    f. Option selected to comply with surface receiving water quality monitoring conditions (cooperative monitoring or individual),
    g. Option selected to comply with groundwater monitoring conditions (cooperative monitoring or individual),
    h. Location of operation, including specific farm(s)/ranch(es),
    i. Farm/ranch map with discharge locations and groundwater wells identified,
    j. Total and irrigated acreage,
    k. Crop type,
    l. Irrigation type,
    m. Discharge type,
    n. Chemical use,
    o. Presence and location of any perennial, intermittent, or ephemeral streams or riparian or wetland area habitat.

57. Dischargers must submit a statement of understanding of the conditions of the Order and MRP signed by the Discharger (landowner or operator) with the electronic NOI form. If the operator signs and submits the electronic NOI, the operator must provide a copy of the completed NOI form to the landowner(s).

58. Dischargers must identify in the electronic NOI if the farm/ranch is a Tier 1, Tier 2, or Tier 3 and provide complete and accurate information in the NOI that allows the Central Coast Water Board to confirm the appropriate tier. For Dischargers who do not provide adequate information for the Water Board to confirm or determine the appropriate tier, the Executive Officer will place the farm/ranch in the appropriate tier based upon information submitted in the Notice of Intent or further communication with the Discharger.

59. Coverage under this Order is not transferable to any person except after submittal of an updated electronic NOI and approval by the Executive Officer.

60. For Dischargers who do not enroll in the Order in a timely manner as specified in this Order, the Executive Officer may require submittal of an ROWD, and the Discharger may be subject to WDRs.

Notice of Termination (NOT) for All Dischargers

61. **Immediately**, if a Discharger wishes to terminate coverage under the Order for the operation or an individual farm/ranch, the Discharger must submit a completed Notice of Termination (NOT). Termination from coverage is the date specified in the NOT, unless specified otherwise. All discharges, as defined in Attachment A, must cease before the date of termination, and any discharges on or after the date of termination shall be considered in violation of the Order, unless covered by other waivers of WDRs, general WDRs, or individual WDRs cover the discharge.

Monitoring and General Technical Reports for All Dischargers

62. Dischargers must submit monitoring reports in compliance with MRP Order No. R3-2012-0011, or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11, electronically in a format specified by the Executive Officer.

63. Any laboratory data submitted to the Central Coast Water Board by Dischargers must be submitted by, or under the direction of, a State registered professional engineer, registered geologist, State certified laboratory or other similarly qualified professional. Surface water quality data must be submitted electronically, in a format that is compatible with the Central Coast Ambient Monitoring Program (CCAMP), the State's Surface Water Assessment Program (SWAMP) or as directed by the Executive Officer. Groundwater quality data must be submitted in a format compatible with the electronic deliverable format (EDF) used by the State Water Board's Geotracker data management system, or as directed by the Executive Officer.

64. Dischargers must submit technical reports that the Executive Officer may require to determine compliance with this Order as authorized by Water Code section 13267, electronically in a format specified by the Executive Officer.

65. If the Discharger asserts that all or a portion of a report submitted pursuant to this Order is subject to an exemption from public disclosure (e.g., trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. Also, the Discharger must clearly indicate on the cover of the report (typically an electronic submittal)

that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection. In the interest of public health and safety, the Central Coast Water Board will not make available for public inspection, the precise location of any groundwater well monitored in compliance with this Order. Consistent with the reporting of groundwater wells on GeoTracker, groundwater well location and data will only be referenced within a one-half mile radius of the actual well location.

66. Dischargers or a representative authorized by the Discharger must sign technical reports submitted to comply with the Order. Any person signing a report submitted as required by this Order must make the following certification:

"In compliance with Water Code section *13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision, following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

Part E. Additional Conditions that Apply to Tier 2 and Tier 3 Dischargers

Annual Compliance Reporting for Tier 2 and Tier 3 Dischargers

67. By **October 1, 2012, and updated by October 1 annually thereafter**, Tier 2 and Tier 3 Dischargers must submit an Annual Compliance Form electronically, in a format specified by the Executive Officer that includes all the information requested, per MRP Order No. R3-2012-0011-02 and MRP Order No. R3-2012-0011-03, respectively. The purpose of the electronic Annual Compliance Form is to provide up-to-date information to the Central Coast Water Board to assist in the evaluation of affect on water quality from agricultural waste discharges and evaluate progress towards compliance with this Order, including implementation of management practices, treatment or control measures, or changes in farming practices.

68. **By October 1, 2012**, Tier 2 and Tier 3 Dischargers must determine nitrate loading risk factor(s) in accordance with MRP Order No. R3-2012-0011-02 and MRP Order No. R3-2012-0011-03 and report the nitrate loading risk factors and overall Nitrate Loading Risk level calculated for each ranch/farm or nitrate loading risk unit in the Annual Compliance Form, electronically (or in a format specified by the Executive Officer).

Photo Monitoring for Tier 2 and Tier 3 Dischargers with farms/ranches *adjacent to or containing* a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment

69. By **October 1, 2012,** and every four years thereafter, Tier 2 and Tier 3 Dischargers with farms/ranches adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment (identified in Table 1) must conduct photo monitoring per MRP Order No. R3-2012-0011-02 and MRP Order No. R3-2012-0011-03, respectively. Photo monitoring must document the condition of perennial, intermittent, or ephemeral streams and riparian and wetland area habitat, and demonstrate compliance with Basin Plan erosion and sedimentation requirements (see Part F. 80 of this Order), including the presence of bare soil vulnerable to erosion and relevant management practices and/or treatment and control measures implemented to address impairments. Photo documentation must be submitted electronically, in a format specified by the Executive Officer.

Total Nitrogen Reporting for Tier 2 and Tier 3 Dischargers with farms/ranches with High Nitrate Loading Risk

70. **By October 1, 2014 and by October 1 annually thereafter**, Tier 2 and Tier 3 Dischargers with a farm/ranch with High Nitrate Loading Risk must record and report total nitrogen applied in the Annual Compliance Form, electronically in a format specified by the Executive Officer, per MRP Order No. R3-2012-0011-02 and MRP Order No. R3-2012-0011-03, respectively.

71. As an alternative to reporting total nitrogen applied in the electronic Annual Compliance Form, Tier 2 and Tier 3 Dischargers with a farm/ranch with High Nitrate Loading Risk may propose an individual discharge groundwater monitoring and reporting program (GMRP) plan for approval by the Executive Officer. The GMRP plan must evaluate waste discharge to groundwater from each ranch/farm or nitrate loading risk unit with a High Nitrate Loading Risk.

Part F. Additional Conditions that Apply to Tier 3 Dischargers

72. **By October 1, 2013,** Tier 3 Dischargers must initiate individual surface water discharge monitoring per MRP Order No. R3-2012-0011-03 or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11.

73. **By March 15, 2014, October 1, 2014** and annually thereafter by October 1, Tier 3 Dischargers must submit individual surface water discharge monitoring data and reports per MRP Order No. R3-2012-0011-03, electronically, in a format specified by the Executive Officer, or alternative monitoring and reporting programs approved by Executive Officer as set forth in Finding 11 and Condition 11 .

Irrigation and Nutrient Management Plan for Tier 3 Dischargers with farms/ranches with High Nitrate Loading Risk

74. **By October 1, 2013,** Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must determine the typical crop nitrogen uptake for each crop type produced and report the basis for the determination (e.g., developed by commodity or industry group, published agronomic literature, research trials, site specific analysis of dry biomass of crop for the nitrogen concentration), per MRP Order No. R3-2012-0011-03.

75. Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) certified by a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy, or similarly qualified professional, per MRP Order No. R3-2012-0011-03.

76. As an alternative to the development and implementation of an INMP, Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches may propose an individual discharge groundwater monitoring and reporting program (GMRP) plan for approval by the Executive Officer. The GMRP plan must evaluate waste discharge to groundwater from each ranch/farm or nitrate loading risk unit and assess if the waste discharge is of sufficient quality that it will not cause or contribute to exceedances of any nitrate water quality standards in groundwater.

77. **By October 1, 2015 and annually thereafter,** Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must report specific INMP elements in the Annual Compliance Form per MRP Order No. R3-2012-0011-03, electronically in a format specified by the Executive Officer.

78. **By October 1, 2015,** Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must report progress towards the following Nitrogen Balance ratio

milestones or implement an alternative to demonstrate an equivalent nitrogen load reduction. The Nitrogen Balance ratio refers to the total number of nitrogen units applied to the crop (considering all sources of nitrogen) relative to the typical nitrogen uptake value of the crop (crop need to grow and produce, amount removed at harvest plus the amount remaining in the system as biomass).

a. Dischargers producing crops in annual rotation (such as a cool season vegetable in a triple cropping system) must report progress towards a Nitrogen Balance ratio target equal to one (1). A target of one (1) allows a Discharger to apply 100% of the amount of nitrogen required by the crop to grow and produce yield for every crop in the rotation. (Nitrogen applied includes any product, form or concentration, including but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil and nitrate in irrigation water.)

b. Dischargers producing annual crops occupying the ground for the entire year (e.g., strawberries or raspberries) must report progress towards a Nitrogen Balance ratio target equal to 1.2. A target of 1.2 allows a Discharger to apply 120% of the amount of nitrogen required by the crop to grow and produce a yield.

c. Beyond three years, Dischargers must demonstrate improved irrigation and nutrient management efficiency, improved Nitrogen Balance ratios, and reduced nitrate loading to groundwater. In the long term, the Nitrogen Balance ratio should compare the total amount of nitrogen applied to the crop against the total nitrogen removed at harvest, rather than the typical nitrogen crop uptake, to accurately calculate the nitrogen remaining and available to the crop or that could load to groundwater.

79. **By October 1, 2016,** Tier 3 Dischargers with High Nitrate Loading Risk farms/ranches must verify the overall effectiveness of the INMP per MRP Order No. R3-2012-0011-03. Dischargers must identify the methods used to verify effectiveness and include the results as a report with the Annual Compliance Form, submitted electronically in a format specified by the Executive Officer.

<u>Water Quality Buffer Plan for Tier 3 Dischargers with farms/ranches adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment</u>

80. **By October 1, 2016,** Tier 3 Dischargers with farms/ranches adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment (see Table 1) must develop a Water Quality Buffer Plan per MRP Order No. R3-2012-0011-03 that protects the

listed waterbody and its associated perennial and intermittent tributaries, including adjacent wetlands as defined by the Clean Water Act. Dischargers must submit the Water Quality Buffer Plan as a report with the Annual Compliance Form, submitted electronically in a format specified by the Executive Officer. The purpose of the Water Quality Buffer Plan is to control discharges of waste that cause or contribute to exceedances of water quality standards in waters of the State or United States in compliance with this Order and the following Basin Plan requirement:

a. Basin Plan (Chapter 5, p. V-13, Section V.G.4 – Erosion and Sedimentation, *"A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip shall be thirty feet, wherever possible. .."*

b. As an alternative to the development and implementation of a Water Quality Buffer Plan, Tier 3 Dischargers may submit evidence to the Executive Officer to demonstrate that any discharge of waste is sufficiently treated or controlled such that it is of sufficient quality that it will not cause or contribute to exceedances of water quality standards in waters of the State or of the United States.

81. Tier 3 Dischargers with farms/ranches adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment must implement the Water Quality Buffer Plan immediately upon submittal, unless the plan requests a time extension that is approved by the Executive Officer. If the Executive Officer determines the Water Quality Buffer Plan is not in compliance with this Order, the Executive Officer will notify the Discharger and the Discharger must make necessary modifications accordingly.

Part G. TIME SCHEDULE

82. Time schedules for compliance with conditions are identified in Conditions 84 – 87, and described in Table 2 (all Dischargers) and Table 3 (Tier 2 and Tier 3 Dischargers). Milestones are identified in Table 4. Dischargers must comply with Order Conditions by dates specified in Tables 2 and 3 in accordance with the MRP. The Water Board will consider the following information in determining the extent to which the Discharger is effectively controlling individual waste discharges and compliance with this Order:
    a) compliance with the time schedules;
    b) effectiveness of management practice implementation;

c) effectiveness of treatment or control measures (including cooperative water quality improvement efforts, and local and regional treatment strategies);
d) results of individual discharge monitoring (Tier 3);
e) results of surface receiving water monitoring downstream of the point where the individual discharge enters the receiving water body;
f) other information obtained by Water Board staff during inspections at operations or farms/ranches, or submitted in response to Executive Officer orders;

83. The Executive Officer may require additional monitoring and reporting as authorized by Water Code section 13267 in cases where Dischargers fail to demonstrate adequate progress towards compliance as indicated by milestones and compliance with other Conditions of the Order.

84. **By October 1, 2014**, Tier 3 Dischargers must effectively control individual waste discharges of pesticides and toxic substances to waters of the State and of the United States.

85. **By October 1, 2015**, Tier 3 Dischargers must effectively control individual waste discharges of sediment and turbidity to surface waters of the State or of the United States.

86. **By October 1, 2016**, Tier 3 Dischargers must effectively control individual waste discharges of nutrients to surface waters of the State or of the United States.

87. **By October 1, 2016,** Tier 3 Dischargers must effectively control individual waste discharges of nitrate to groundwater.

88. This Order becomes effective on March 15, 2012 and expires on March 14, 2017, unless rescinded or renewed by the Central Coast Water Board.

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order and Attachments adopted by the California Regional Water Quality Control Board, Central Coast Region, on March 15, 2012.

Roger W. Briggs
Executive Officer

Table 1. 2010 Clean Water Act Section 303(d) List of Impaired Waterbodies Impaired for Toxicity, Pesticides, Nutrients, Temperature, Turbidity, or Sediment

Waterbody Name	Impairment(s)[1]
Alisal Creek (Monterey Co.)[3]	Toxicity, Nutrients
Aptos Creek[2]	Sediment
Arana Gulch[3]	Pesticides
Arroyo Paredon[3]	Toxicity, Pesticides, Nutrients
Beach Road Ditch[2]	Nutrients, Turbidity
Bean Creek[2]	Sediment
Bear Creek (Santa Cruz Co.)[2]	Sediment
Bell Creek (Santa Barbara Co.)[3]	Toxicity, Nutrients
Blanco Drain[2,3]	Pesticides, Nutrients, Turbidity
Blosser Channel	Toxicity, Nutrients
Boulder Creek[2]	Sediment
Bradley Canyon Creek[2,3]	Toxicity, Nutrients, Turbidity
Bradley Channel[3]	Toxicity, Pesticides, Nutrients
Branciforte Creek[2,3]	Pesticides, Sediment
Carbonera Creek[2]	Nutrients, Sediment
Carnadero Creek	Nutrients, Turbidity
Carneros Creek (Monterey Co.)[2]	Nutrients, Turbidity
Carpinteria Creek[3]	Pesticides
Carpinteria Marsh (El Estero Marsh)	Nutrients
Casmalia Canyon Creek[2]	Sediment
Chorro Creek[2]	Nutrients, Sediment
Chualar Creek[2,3]	Toxicity, Pesticides, Nutrients, Turbidity, Temperature
Corralitos Creek[2]	Turbidity
Elkhorn Slough[2,3]	Pesticides, Sediment
Esperanza Creek	Nutrients
Espinosa Lake[3]	Pesticides
Espinosa Slough[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Fall Creek[2]	Sediment
Franklin Creek (Santa Barbara Co.)[3]	Pesticides, Nutrients
Furlong Creek[2,3]	Pesticides, Nutrients, Turbidity
Gabilan Creek[2,3]	Toxicity, Nutrients, Turbidity
Glen Annie Canyon[3]	Toxicity, Nutrients

Greene Valley Creek (Santa Barbara Co.)[2,3]	Toxicity, Pesticides, Nutrients, Turbidity, Temperature
Kings Creek[2]	Sediment
Little Oso Flaco Creek[3]	Toxicity, Nutrients
Llagas Creek (below Chesbro Reservoir)[2,3]	Pesticides, Nutrients, Sediment, Turbidity
Lompico Creek[2]	Nutrients, Sediment
Los Berros Creek	Nutrients
Los Carneros Creek	Nutrients
Los Osos Creek[2]	Nutrients, Sediment
Love Creek[2]	Sediment
Main Street Canal[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
McGowan Ditch	Nutrients
Merrit Ditch[2,3]	Toxicity, Nutrients, Turbidity
Millers Canal[2,3]	Pesticides, Turbidity, Temperature
Mission Creek (Santa Barbara Co.)[3]	Toxicity
Monterey Harbor[3]	Toxicity
Moro Cojo Slough[2,3]	Pesticides, Nutrients, Sediment
Morro Bay[2]	Sediment
Moss Landing Harbor[2,3]	Toxicity, Pesticides, Sediment
Mountain Charlie Gulch[2]	Sediment
Natividad Creek[2,3]	Toxicity, Nutrients, Turbidity, Temperature
Newell Creek (Upper)[2]	Sediment
Nipomo Creek[3]	Toxicity, Nutrients
North Main Street Channel	Nutrients
Old Salinas River Estuary[3]	Pesticides, Nutrients
Old Salinas River[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Orcutt Creek[2,3]	Toxicity, Pesticides, Nutrients, Turbidity, Temperature
Oso Flaco Creek[3]	Toxicity, Nutrients
Oso Flaco Lake[3]	Pesticides, Nutrients
Pacheco Creek[2]	Turbidity
Pacific Ocean (Point Ano Nuevo to Soquel Point)[3]	Pesticides
Pajaro River[2,3]	Pesticides, Nutrients, Sediment, Turbidity
Prefumo Creek[2]	Nutrients, Turbidity
Quail Creek[2,3]	Toxicity, Pesticides, Nutrients, Turbidity, Temperature
Rider Creek[2]	Sediment
Rincon Creek[2,3]	Toxicity, Turbidity
Rodeo Creek Gulch[2]	Turbidity

Salinas Reclamation Canal[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920) [2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Salinas River (middle, near Gonzales Rd crossing to confluence with Nacimiento River) [2,3]	Toxicity, Pesticides, Turbidity, Temperature
Salinas River Lagoon (North) [3]	Pesticides, Nutrients
Salinas River Refuge Lagoon (South) [2]	Turbidity
Salsipuedes Creek (Santa Cruz Co.) [2]	Turbidity
San Antonio Creek (below Rancho del las Flores Bridge at Hwy 135) [3]	Pesticides, Nutrients
San Benito River[2,3]	Toxicity, Sediment
San Juan Creek (San Benito Co.) [2,3]	Toxicity, Nutrients, Turbidity
San Lorenzo River[2,3]	Pesticides, Nutrients, Sediment
San Luis Obispo Creek (below Osos St.) [3]	Pesticides, Nutrients
San Simeon Creek	Nutrients
San Vicente Creek (Santa Cruz Co.) [2]	Sediment
Santa Maria River[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Santa Rita Creek (Monterey Co.) [2]	Nutrients, Turbidity
Santa Ynez River (below city of Lompoc to Ocean)[2]	Nutrients, Sediment, Temperature
Santa Ynez River (Cachuma Lake to below city of Lompoc)	Sediment, Temperature
Schwan Lake	Nutrients
Shingle Mill Creek[2]	Nutrients, Sediment
Shuman Canyon Creek[2]	Sediment
Soda Lake	Nutrients
Soquel Creek[2]	Turbidity
Soquel Lagoon[2]	Sediment
Tembladero Slough[2,3]	Toxicity, Pesticides, Nutrients, Turbidity
Tequisquita Slough[2]	Turbidity
Uvas Creek (below Uvas Reservoir) [2]	Turbidity
Valencia Creek[2]	Sediment
Warden Creek	Nutrients
Watsonville Creek	Nutrients
Watsonville Slough[2,3]	Pesticides, Turbidity
Zayante Creek[2,3]	Pesticides, Sediment

[1]Dischargers with farms/ranches located within 1000 feet of a surface waterbody listed for toxicity, pesticides, nutrients, turbidity or sediment on the 2010 List of Impaired Waterbodies are included as Tier 2 or Tier 3;
[2]Tier 2 and Tier 3 Dischargers with farms/ranches adjacent to or containing a waterbody identified on the 2010 List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment must conduct photo monitoring, and Tier 3 Dischargers must also implement a Water Quality Buffer Plan.

[3]Dischargers who apply chemicals known to cause toxicity to surface water to a farm/ranch that discharges to a waterbody on the 2010 303(d) List of Impaired Waterbodies for toxicity or pesticides must meet conditions in this Order for Tier 3.

Table 2. Time Schedule for Compliance with Conditions for All Dischargers (Tier 1, Tier 2, and Tier 3)

CONDITIONS	COMPLIANCE DATE[1]
Submit Notice of Intent (NOI)	Within 60 days of adoption of Order or Within 60 days acquiring ownership/ control, and prior to any discharge or commencement of activities that may cause discharge.
Submit Update to NOI	Within 60 days, upon adoption of Order and upon change of control or ownership
Submit Notice of Termination	Immediately, when applicable
Submit Monitoring Reports per MRP	Per date in MRP
Implement, and update as necessary, management practices to achieve compliance with this Order.	Ongoing
Protect existing aquatic habitat to prevent discharge of waste	Immediately
Submit surface receiving water quality monitoring annual report	Within one year, and annually thereafter by January 1
Develop/update and implement Farm Plan	October 1, 2012
Install and maintain adequate backflow prevention devices.	October 1, 2012
Submit groundwater monitoring results and information	October 1, 2013
Properly destroy abandoned groundwater wells.	October 1, 2015

Table 3. Additional Time Schedule for Compliance with Conditions Tier 2 and Tier 3 Dischargers

CONDITIONS	COMPLIANCE DATE
Tier 2 and Tier 3:	
Submit electronic Annual Compliance Form	October 1, 2012, and updated annually thereafter by October 1.
Submit photo documentation of riparian or wetland area habitat (if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity, or sediment)	October 1, 2012, and every four years thereafter by October 1.
Calculate Nitrate Loading Risk level and report in electronic Annual Compliance Form	October 1, 2012, and annually thereafter by October 1.
Submit total nitrogen applied in electronic Annual Compliance Form (if discharge has High Nitrate Loading Risk)	October 1, 2014, and annually thereafter by October 1.
Only Tier 3:	
Initiate individual surface water discharge monitoring	October 1, 2013
Determine Crop Nitrogen Uptake (if discharge has High Nitrate Loading Risk)	October 1, 2013
Submit individual surface water discharge monitoring data	March 15, 2014, October 1, 2014 and annually thereafter by October 1
Submit INMP elements in electronic Annual Compliance Form (if discharge has High Nitrate Loading Risk), including Nitrogen Balance Ratio	October 1, 2015, and annually thereafter by October 1
Submit progress towards Nitrogen Balance Ratio target equal to one (1) for crops in annual rotation (e.g., cool season vegetables) or alternative, (if discharge has High Nitrate Loading Risk)	October 1, 2015
Submit progress towards Nitrogen Balance Ratio target equal to 1.2 for annual crops occupying the ground for the entire year (e.g., strawberries or raspberries) or alternative, (if discharge has High Nitrate Loading Risk)	
Submit Water Quality Buffer Plan or alternative (if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity, or sediment)	October 1, 2016
Submit INMP Effectiveness Report (if discharge has High Nitrate Loading Risk)	October 1, 2016

Table 4. Time Schedule for Milestones

MILESTONES[1]	DATE
Tier 1, Tier 2 and Tier 3:	
Measurable progress towards water quality standards in waters of the State or of the United States[1], or	Ongoing
Water quality standards met in waters of the State or of the United States.	October 1, 2016
Only Tier 3:	
Pesticide and Toxic Substances Waste Discharges to Surface Water	
- One of two individual surface water discharge monitoring samples is not toxic	*October 1, 2014*
- Two of two individual surface water discharge monitoring samples are not toxic	*October 1, 2015*
Sediment and Turbidity Waste Discharges to Surface Water	
- Four individual surface water discharge monitoring samples are collected and analyzed for turbidity.	*October 1, 2014*
- 75% reduction in turbidity or sediment load in individual surface water discharge relative to October 1, 2012 load (or meet water quality standards for turbidity or sediment in individual surface water discharge)	*October 1, 2015*
Nutrient Waste Discharges to Surface Water	
- Four individual surface water discharge monitoring samples are collected and analyzed	*October 1, 2014*
- 50% load reduction in nutrients in individual surface water discharge relative to October 1, 2012 load (or meet water quality standards for nutrients in individual discharge)	*October 1, 2015*

- 75% load reduction in nutrients in individual surface water discharge relative to October 1, 2012 load (or meet water quality standards for nutrients in individual surface water discharge)	*October 1, 2016*
Nitrate Waste Discharges to Groundwater *- Achieve annual reduction in nitrogen loading to groundwater based on Irrigation and Nutrient Management Plan effectiveness and load evaluation*	*October 1, 2016 and annually thereafter*
- Achieve Nitrogen Balance Ratio equal to one (1) for crops in annual rotation (e.g., cool season vegetables) or alternative, (if discharge has High Nitrate Loading Risk)	October 1, 2015
- Achieve Nitrogen Balance Ratio equal to 1.2 for annual crops occupying the ground for the entire year (e.g., strawberries or raspberries) or alternative, (if discharge has High Nitrate Loading Risk)	

[1] Indicators of progress towards milestones includes, but is not limited to data and information related to a) management practice implementation and effectiveness, b) treatment or control measures, c) individual discharge monitoring results, d) receiving water monitoring results, and e) related reporting.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

ORDER NO. R3-2012-0011
ATTACHMENT A

ADDITIONAL FINDINGS, APPLICABLE WATER QUALITY CONTROL PLANS AND DEFINITIONS FOR CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM IRRIGATED LANDS

Order No. R3-2012-0011 (Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands) requires Dischargers to comply with applicable state plans and policies and applicable state and federal water quality standards and to prevent nuisance. Water quality standards are set forth in state and federal plans, policies, and regulations. The California Regional Water Quality Control Board Central Coast Region's (Central Coast Water Board) Water Quality Control Plan contains specific water quality objectives, beneficial uses, and implementation plans that are applicable to discharges of waste and/or waterbodies that receive discharges of waste from irrigated lands. The State Water Resources Control Board (State Water Board) has adopted plans and policies that may be applicable to discharges of waste and/or surface waterbodies or groundwater that receive discharges of waste from irrigated lands. The United States Environmental Protection Agency (USEPA) has adopted the *National Toxics Rule* and the *California Toxics Rule*, which constitute water quality criteria that apply to waters of the United States.

The specific waste constituents required to be monitored and the applicable water quality standards that protect identified beneficial uses for the receiving water are set forth in Monitoring and Reporting Program (MRP) Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. R3-2012-0011-03.

This Attachment A lists additional findings (Part A), relevant plans, policies, regulations (Part B), and definitions of terms (Part C) used in Order No. R3-2012-0011.

PART A. ADDITIONAL FINDINGS

The California Regional Water Quality Control Board, Central Coast Region additionally finds that:

1. The Central Coast Water Board is the principal state agency in the Central Coast Region with primary responsibility for the coordination and control of water quality. (Cal. Wat. Code § 13001, Legislative Intent) The purpose of this Order is to is focus on the highest water quality priorities and maximize water quality protection to ensure the long-term reliability and availability of water resources of sufficient supply and quality for all present and future beneficial uses, including drinking water and aquatic life. Given the magnitude and severity of water quality impairment and impacts to beneficial uses caused by irrigated agriculture and the significant cost to the public, the Central Coast Water Board finds that it is reasonable and necessary to require specific actions to protect water quality.

2. The Central Coast Water Board recognizes that Dischargers may not achieve immediate compliance with all requirements. Thus, this Order provides reasonable schedules for Dischargers to reach full compliance over many years by implementing management practices and monitoring and reporting programs that demonstrate and verify measurable progress annually. This Order includes specific dates to achieve compliance with this Order and milestones that will reduce pollutant loading or impacts to surface water and groundwater in the short term (e.g., a few years) and achieve water quality standards in surface water and groundwater in the longer term (e.g., decades); some compliance dates extend beyond the term of this Order. The focus of this Order is non-tile drain discharges, although Tier 3 tile drain discharges on individual farms/ranches must be monitored. Dischargers with tile drains must also describe management practices used or proposed to be used to attain water quality standards or minimize exceedances in receiving waters while making progress to attain water quality standards. The Executive Officer will evaluate any proposed longer timeframes to address tile-drain discharges.

3. According to California Water Code Section 13263(g), the discharge of waste to waters of the State is a privilege, not a right. It is the responsibility of dischargers of waste from irrigated lands to comply with the Water Code by seeking waste discharge requirements (WDRs) or by complying with a waiver of WDRs. This Order waiving the requirement to obtain WDRs provides a mechanism for dischargers of waste from irrigated lands to meet their responsibility to comply with the Water Code and to prevent degradation of waters of the State, prevent nuisance, and to protect the beneficial uses. Dischargers are responsible for the quality of surface waters and ground waters that have received discharges of waste from their irrigated lands.

AGRICULTURAL AND WATER RESOURCES IN THE CENTRAL COAST REGION

4. In the Central Coast Region, nearly all agricultural, municipal, industrial, and domestic water supply comes from groundwater. Groundwater supplies approximately 90 percent of the drinking water on the Central Coast. Currently, more than 700 municipal public supply wells in the Central Coast Region provide drinking water to the public. In addition, based on 1990 census data, there are more than 40,000 permitted private wells in the Region, most providing domestic drinking water to rural households and communities from shallow sources. The number of private domestic wells has likely significantly increased in the past 20 years due to population growth.

5. In the Salinas, Pajaro, and Santa Maria groundwater basins, agriculture accounts for approximately 80 to 90 percent of groundwater pumping (MCWRA, 2007; PVWMA, 2002; Luhdorff and Scalmanini Consulting Engineers. April 2009).

6. The Central Coast Region supports some of the most significant biodiversity of any temperate region in the world and is home to the last remaining population of the California sea otter, three sub-species of threatened or endangered steelhead (*Oncorhynchus mykiss*) and one sub-species of endangered coho salmon (*Oncorhynchus kisutch*). The endangered marsh sandwort (*Arenaria paludicola*), Gambel's watercress (*Nasturtium rorippa gambelii*), California least tern (*Sterna antillarum browni*), and threatened red-legged frog (*Rana aurora*) are present in the region.

7. Several watersheds drain into Monterey Bay National Marine Sanctuary, one of the largest marine sanctuaries in the world. Elkhorn Slough is one of the largest remaining tidal wetlands in the United States and one of the National Oceanic and Atmospheric Administration (NOAA) designated National Estuarine Research Reserves. The southern portion includes the Morro Bay National Estuary and its extensive salt marsh habitat.

8. The two endangered plants, marsh sandwort and Gambel's watercress, are critically imperiled and their survival depends upon the health of the Oso Flaco watershed. The last remaining known population of marsh sandwort and one of the last two remaining known populations of Gambel's watercress occur in Oso Flaco Lake (United States Department of the Interior Fish and Wildlife Service, 2007).

9. The Central Coast of California is one of the most productive and profitable agricultural regions in the nation, reflecting a gross production value of more than six billion dollars in 2008 and contributing to more than 14 percent of California's agricultural economy. The region produces many high value specialty crops including lettuce, strawberries, raspberries, artichokes, asparagus, broccoli, carrots, cauliflower, celery, fresh herbs, mushrooms, onions, peas, spinach, wine

grapes, tree fruit and nuts. An adequate water supply of sufficient quality is critical to supporting the agricultural industry on the Central Coast.

LEGAL AND REGULATORY CONSIDERATIONS

10. This Attachment A to Order No. R3-2012-0011 identifies applicable plans and policies adopted by the State Water Board and the Central Coast Water Board that contain regulatory requirements that apply to the discharge of waste from irrigated lands. This Attachment A also provides definitions of terms for purposes of this Order.

11. The Water Code grants authority to the State Water Board with respect to State water rights and water quality regulations and policy, and establishes nine Regional Water Boards with authority to regulate discharges of waste that could affect the quality of waters of the State and to adopt water quality regulations and policy.

12. As further described in the Order, discharges from irrigated lands affect the quality of the waters of the State depending on the quantity of the waste 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, implementation of management practices and other site-specific factors. Discharges from irrigated lands have impaired and will continue to impair the quality of the waters of the State within the Central Coast Region if such discharges are not controlled.

13. Water Code Section 13267(b)(1) authorizes the Central Coast Water Board to require dischargers to submit technical reports necessary to evaluate Discharger compliance with the terms and conditions of this Order and to assure protection of waters of the State. The Order, this Attachment A, and the records of the Water Board provide the evidence demonstrating that discharges of waste from irrigated lands have degraded and/or polluted the waters of the state. Persons subject to this Order discharge waste from irrigated lands that impacts the quality of the waters of the state. Therefore it is reasonable to require such persons to prepare and submit technical reports.

14. Water Code Section 13269 provides that the Central Coast Water Board may waive the requirement in Water Code section 13260(a) to obtain WDRs. Water Code section 13269 further provides that any such waiver of WDRs shall be conditional, must include monitoring requirements unless waived, may not exceed five years in duration, and may be terminated at any time by the Central Coast Water Board or Executive Officer.

15. Water Code Section 13269(a)(4)(A) authorizes the Central Coast Water Board to include as a condition of a conditional waiver the payment of an annual fee established by the State Water Board. California Code of Regulations, Title 23, Division 3, Chapter 9, Article 1, Section 2200.3 sets forth the applicable fees. The Order requires each Discharger to pay an annual fee to the State Water Board in compliance with the fee schedule.

16. The Water Quality Control Plan for the Central Coast Basin (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 required to protect the beneficial uses of waters of the State identified in this Attachment A.

17. The Order is consistent with the Basin Plan because it requires Dischargers to comply with applicable water quality standards, as defined in this Attachment A, and requires terms and conditions, including implementation of management practices. The Order also requires monitoring and reporting as defined in MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. R3-2012-0011-03 to determine the effects of discharges of waste from irrigated lands on water quality, verify the adequacy and effectiveness of this Order's terms and conditions, and to evaluate individual Discharger's compliance with this Order.

18. Water Code Section 13246 requires boards, in carrying out activities that affect water quality to comply with State Water Board policy for water quality control. This Order requires compliance with applicable State Water Board policies for water quality control.

19. This Order is consistent with the requirements of the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy) adopted by the State Water Board in May 2004. The NPS Policy requires, among other key elements, that an NPS control implementation program's ultimate purpose shall be explicitly stated and that the implementation program must, at a minimum, address NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses, including any applicable anti-degradation requirements. The NPS Policy improves 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 provides a bridge between the State Water Board's January 2000 *NPS Program Plan* and its 2010 *Water Quality Enforcement Policy*. The NPS Policy's five key elements are:

a. Key Element #1 - Addresses NPS pollution in a manner that achieves and maintains water quality objectives and beneficial uses
b. Key Element #2 - Includes an implementation program with descriptions of the Management Practices (MPs) and other program elements and the process to be used to ensure and verify proper MP implementation
c. Key Element #3 - Includes a specific time schedule and corresponding quantifiable milestones designed to measure progress toward reaching the specified requirements
d. Key Element #4 - Contains monitoring and reporting requirements that allow the Water Board, dischargers, and the public to determine that the program is achieving its stated purpose(s) and/or whether additional or different MPs or other actions are required
e. Key Element #5 - Clearly discusses the potential consequences for failure to achieve the NPS control implementation program's stated purposes

20. Consistent with the NPS Policy, management practice implementation assessment may, in some cases, be used to measure nonpoint source control progress. However, management practice implementation never may be a substitute for meeting water quality requirements.

21. This Order is consistent with provisions of State Water Resources Control Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California." Regional boards, in regulating the discharge of waste, must maintain high quality waters of the State until it is demonstrated that any change in quality will be 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 the Regional Board's policies. The Order will result in improved water quality throughout the region. Dischargers must comply with all applicable provisions of the Basin Plan, including water quality objectives, and implement best management practices to prevent pollution or nuisance and to maintain the highest water quality consistent with the maximum benefit to the people of the State. The conditions of this waiver will protect high quality waters and restore waters that have already experienced some degradation.

22. This Order is consistent with State Water Board Resolution 68-16. This Order requires Dischargers to 1) comply with the terms and conditions of the Order and meet applicable water quality standards in the waters of the State; 2) develop and implement management practices, treatment or control measures, or change farming practices, when discharges are causing or contributing to exceedances of applicable water quality standards; 3) conduct activities in a manner to prevent nuisance; and 4) conduct activities required by MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. R3-2012-0011-03, and revisions thereto.

RATIONALE FOR THIS ORDER

23. On April 15, 1983, the Central Coast Water Board approved a policy waiving WDRs for 26 categories of discharges, including irrigation return flows and non-NPDES stormwater runoff. Pursuant to Water Code Section 13269, these waivers terminated on January 1, 2003.

24. On July 9, 2004, the Central Coast Water Board adopted Resolution No. R3-2004-0117 establishing the 2004 Agricultural Order.

25. Dischargers enrolled in the 2004 Agricultural Order established the Cooperative Monitoring Program (CMP) in compliance with monitoring requirements. The CMP collected and analyzed data for 15 to 20 parameters from 50 sites in multiple watersheds and identified severe surface water quality impairments resulting from agricultural land uses and discharges. CMP did not attempt to identify the individual farm operations that are causing the surface water quality impairments. The lack of discharge monitoring and reporting, the lack of verification of on-farm water quality improvements, and the lack of public transparency regarding on-farm discharges, are critical limitations of the 2004 Agricultural Order, especially given the scale and severity of the surface water and groundwater impacts and the resulting costs to society. The Order addresses these limitations.

26. The Central Coast Water Board extended the 2004 Agricultural Order multiple times. The 2004 Agricultural Order expires on September 30, 2012.

27. The Central Coast Water Board reviewed all available data, including information collected in compliance with the 2004 Agricultural Order, and determined that discharges of waste from irrigated lands continue to result in degradation and pollution of surface water and groundwater, and impairment of beneficial uses, including drinking water and aquatic habitat, and determined that additional conditions are necessary to ensure protection of water quality and to measure the effectiveness of implementation of the Order.

28. It is appropriate to adopt a waiver of WDRs for this category of discharges because, as a group, the discharges have the same or similar waste from the same or similar operations and use the same or similar treatment methods and management practices (e.g., source control, reduced agricultural surface runoff, reduced chemical use, holding times, cover crops, etc.).

29. It is appropriate to regulate discharges of waste from irrigated lands under a conditional waiver rather than individual WDRs in order to simplify and streamline the regulatory process. Water Board staff estimate that there are more than 3000 individual owners and/or operators of irrigated lands who discharge waste from

irrigated lands; therefore, it is not an efficient use of resources to adopt individual WDRs for all Dischargers within a reasonable time.

30. This Order is in the public interest because:

    a. The Order was adopted in compliance with Water Code Sections 13260, 13263, and 13269 and other applicable law;
    b. The Order requires compliance with water quality standards;
    c. The Order includes conditions that are intended to eliminate, reduce and prevent pollution and nuisance and protect the beneficial uses of the waters of the State;
    d. The Order contains more specific and more stringent conditions for protection of water quality compared to the 2004 Agricultural Order;
    e. The Order contains conditions that are similar to the conditions of municipal stormwater NPDES permits, including evaluation and implementation of management practices to meet applicable water quality standards and a more specific MRP;
    f. The Order focuses on the highest priority water quality issues and most severely impaired waters;
    g. The Order provides for an efficient and effective use of Central Coast Water Board resources, given the magnitude of the discharges and number of persons who discharge waste from irrigated lands;
    h. The Order provides reasonable flexibility for the Dischargers who seek coverage under this Order by providing them with a reasonable time schedule and options for complying with the Water Code.

31. This Order waives the requirement for Dischargers to obtain WDRs for discharges of waste from irrigated lands if the Dischargers are in compliance with the Order. This Order is conditional, may be terminated at any time, does not permit any illegal activity, does not preclude the need for permits that may be required by other State or local government agencies, and does not preclude the Central Coast Water Board from administering enforcement remedies (including civil liability) pursuant to the Water Code.

32. The Central Coast Water Board may consider issuing individual WDRs to some Dischargers because of their actual or potential contribution to water quality impairments, history of violations, or other factors.

IMPACTS TO WATER QUALITY FROM AGRICULTURAL DISCHARGES

Impacts to Groundwater – Drinking Water and Human Health

33. Nitrate pollution of drinking water supplies is a critical problem throughout the Central Coast Region. Studies indicate that fertilizer from irrigated agriculture is

the primary source of nitrate pollution of drinking water wells and that significant loading of nitrate continues as a result of agricultural fertilizer practices (Carle, S.F., et al., June 2006).

34. Groundwater pollution from nitrate severely impacts public drinking water supplies in the Central Coast Region. A Department of Water Resources (DWR, 2003) survey of groundwater quality data collected between 1994 and 2000 from 711 public supply wells in the Central Coast Region found that 17 percent of the wells (121 wells) detected a constituent at concentrations above one or more California Department of Public Health (CDPH) drinking water standards or primary maximum contaminant levels (MCLs). Nitrate caused the most frequent MCL exceedances (45 mg/L nitrate as nitrate or 10 mg/L nitrate as nitrogen), with approximately 9 percent of the wells (64 wells) exceeding the drinking water standard for nitrate. According to data reported by the State Water Resources Control Board's Groundwater Ambient Monitoring and Assessment Program (GAMA) GeoTracker website (http://www.waterboards.ca.gov/gama/), recent impacts to public supply wells are greatest in portions of the Salinas Valley (up to 20 percent of wells exceeding MCLs) and Santa Maria (approximately 17 percent) groundwater basins. In the Gilroy-Hollister Groundwater Basin, 12.5 percent of the public supply wells exceed MCLs (data obtained using the GeoTracker DPH Public Supply Well Search Tool for nitrate for wells located in the Gilroy-Hollister groundwater basin. The well data includes Department of Public Health data for well sampling information ranging from 2006 until 2009). CDPH identified over half of the drinking water supply wells as vulnerable to discharges from agricultural-related activities in that basin. This information is readily tracked and evaluated because data are collected on a regular frequency, made publicly available, and public drinking water supplies are regulated by CDPH as required by California law.

35. Groundwater pollution from nitrate severely impacts shallow domestic wells in the Central Coast Region resulting in unsafe drinking water in rural communities. Domestic wells (wells supplying one to several households) are typically drilled in relatively shallow groundwater, and as a result exhibit higher nitrate concentrations than deeper public supply wells. Water quality monitoring of domestic wells is not generally required and water quality information is not readily available; however, based on the available data, the number of domestic wells that exceed the nitrate drinking water standard is likely in the range of hundreds or thousands. Private domestic well water quality is not regulated and rural residents are likely drinking water from these impaired sources without treatment and without knowing the quality of their drinking water.

36. In the northern Salinas Valley, 25 percent of 352 wells sampled (88 wells) had concentrations above the nitrate drinking water standard. In other portions of the Salinas Valley, up to approximately 50 percent of the wells surveyed had

concentrations above the nitrate drinking water standard, with average concentrations nearly double the drinking water standard and the highest concentration of nitrate approximately nine times the drinking water standard (Monterey County Water Resources Agency [MCWRA], 1995). Nitrate exceedances in the Gilroy-Hollister and Pajaro groundwater basins reflect similar severe impairment, as reported by local water agencies/districts for those basins (SCVWD, 2001; SWRCB, 2005; San Benito County Water District, 2007; Kennedy/Jenks Consultants, 2008).

37. Local county and water district reports indicate that in the Pajaro River watershed, the highest recent nitrate concentration (over 650 mg/L nitrate, more than 14 times the drinking water standard) occurred in shallow wells in the eastern San Juan subbasin under intense agricultural production. High values of nitrate concentration in groundwater (greater than 500 mg/L nitrate) have also been reported in the Llagas subbasin and the lower Pajaro coastal aquifer.

38. The costs of groundwater pollution and impacts to beneficial uses caused by irrigated agriculture are transferred to the public. Public drinking water systems expend millions of dollars in treatment and replacement costs and private well owners must invest in expensive treatment options or find new sources. Rural communities, those least able to buy alternative water sources, have few options to replace the contaminated water in their homes. This Order addresses groundwater pollution to ensure protection of beneficial uses and public health.

39. Excessive concentrations of nitrate or nitrite in drinking water are hazardous to human health, especially for infants and pregnant women. The United States Environmental Protection Agency (USEPA) established a nitrate drinking water standard of 45 mg/L nitrate as nitrate (10 mg/L nitrate as nitrogen). While acute health effects from excessive nitrate levels in drinking water are primarily limited to infants (methemoglobinemia or "blue baby syndrome"), research evidence suggests there may be adverse health effects (i.e., increased risk of non-Hodgkin's, diabetes, Parkinson's disease, alzheimers, endrocrine disruption, cancer of the organs) among adults as a result of long-term consumption exposure to nitrate (Sohn, E., 2009; Pelley, J., 2003; Weyer, P., et. al., 2001, Ward, M.H., et. al., 1996).

40. Nitrogen compounds are known to cause cancer. University of Iowa research found that up to 20 percent of ingested nitrate is transformed in the body to nitrite, which can then undergo transformation in the stomach, colon, and bladder to form N-nitroso compounds that are known to cause cancer in a variety of organs in more than 40 animal species, including primates (Weyer, P., et. al., 2001).

41. In many cases, whole communities that rely on groundwater for drinking water are threatened due to nitrate pollution, including the community of San Jerardo and

other rural communities in the Salinas Valley. Local agencies and consumers have reported impacts to human health resulting from nitrate contaminated groundwater likely due to agricultural land uses, and spent significant financial resources to ensure proper drinking water treatment and reliable sources of safe drinking water for the long-term (CCRWQCB, 2009).

42. Current strategies for addressing nitrate in groundwater to achieve levels protective of human health typically include avoidance (abandoning impacted wells or re-drilling to a deeper zone), groundwater treatment to remove nitrate (i.e., dilution using blending, ion exchange, reverse osmosis, biological denitrification, and distillation), or developing additional water supplies (i.e., percolation ponds, surface water pipelines, reservoirs) to dilute nitrate-impacted sources (Lewandowski, A.M., May 2008; Washington State Department of Health, 2005).

43. The costs to treat and clean up existing nitrate pollution to achieve levels that are protective of human health are very expensive to water users (e.g., farmers, municipalities, domestic well users). Research indicates that the cost to remove nitrate from groundwater can range from hundreds of thousands to millions of dollars annually for individual municipal or domestic wells (Burge and Halden, 1999; Lewandowski, May 2008). Wellhead treatment on a region-wide scale is estimated to cost billions of dollars. Similarly, the cost to actively clean up nitrate in groundwater on a region wide scale would also cost billions of dollars, and would be logistically difficult. If the nitrate loading due to agricultural activities is not significantly reduced, these costs are likely to increase significantly.

44. Many public water supply systems are required to provide well-head treatment or blending of drinking water sources, at significant cost, to treat nitrate before delivery to the drinking water consumer due to elevated concentrations of nitrate in groundwater. The community of San Jerardo (rural housing cooperative of primarily low-income farmworker families with approximately 250 residents) initially installed well-head treatment to treat groundwater contaminated with nitrate and other chemicals at significant cost, with on-going monthly treatment costs of approximately $17,000. Monterey County public health officials determined that the community of San Jerardo requires a new drinking water well to ensure safe drinking water quality protective of public health at an approximate cost of more than $4 million. The City of Morro Bay uses drinking water supplies from Morro and Chorro groundwater basins. Study results indicate that agricultural activities in these areas, predominantly over-application of fertilizer, have impacted drinking water supplies resulting in nitrate concentrations more than four times the drinking water standard (Cleath and Associates, 2007). The City of Morro Bay must blend or provide well-head treatment to keep nitrate concentrations at levels safe for drinking water at significant cost (City of Morro Bay, 2006). The City of Santa Maria public supply wells are also impacted by nitrate (in some areas nearly twice

the drinking water standard) and must also blend sources to provide safe drinking water (City of Santa Maria, 2008).

Impacts to Groundwater – Nitrate and Salts

45. Groundwater pollution due to salts is also one of the most significant and critical problems in the Central Coast Region. Agricultural activities are a significant cause of salt pollution (Monterey County Flood Control and Water Conservation District, 1990). Salt increases in irrigated agricultural coastal basins are primarily due to the following:

    a. Seawater intrusion within the coastal basins (e.g., Salinas and Pajaro groundwater basins) caused primarily by excessive agricultural pumping (MCWRA, 2007).
    b. Agricultural pumping/recycling of groundwater that concentrates salts in the aquifers.
    c. Agricultural leaching of salts from the root zone.
    d. The importation of salts into the basin from agricultural soil amendments and domestic/municipal wastewater discharges.

46. Based on the high proportion of groundwater extractions, agricultural pumping of groundwater contributes to saltwater intrusion into the Salinas and Pajaro groundwater basins, which is causing increasing portions of the groundwater basins to be unusable for agriculture and municipal supply (MCWRA, 2008 and Pajaro Valley Water Resource Agency, 2002).

47. Agricultural activities contribute significant loading of nitrates into groundwater from the following sources (Monterey County Flood Control and Water Conservation District, 1988):

    a. Intensive fertilizer applications on permeable soils.
    b. Liquid fertilizer hookups on well pump discharge lines lacking backflow prevention devices.
    c. Groundwater wells that are screened through multiple aquifers, thereby acting as conduits for pollution transport into deeper groundwater.
    d. Spills and/or uncontrolled wash water or runoff from fertilizer handling and storage operations.

48. Agricultural waste discharges contribute to pollution of groundwater basins most vulnerable to waste migration, including major portions of the Santa Maria, Salinas, and Gilroy-Hollister groundwater basins. However, any groundwater basin, including those that are confined (pressured), are susceptible to downward waste migration through improperly constructed, operated (e.g., fertigation or chemigation without backflow prevention), or abandoned wells. Additionally, land with

permeable soils and shallow groundwater are susceptible to downward waste migration. Such areas of groundwater vulnerability often overlap with important recharge areas that serve to replenish drinking water supplies.

49. Agricultural discharges of fertilizer are the main source of nitrate pollution to shallow groundwater based on nitrate loading studies conducted in the Llagas subbasin and the lower Salinas groundwater basin (Carle, S.F., et al., June 2006). In 2007, the California Department of Food and Agriculture (CDFA) reported that approximately 56 million pounds of nitrogen were purchased as fertilizer in Monterey County. A 1990 Monterey County study of nitrate sources leaching to soil and potentially groundwater in Santa Cruz and Monterey Counties indicated that irrigated agriculture contributes approximately 78 percent of the nitrate loading to groundwater in these areas (Monterey County Flood Control and Water Conservation District, November 1990).

50. A groundwater study in the Llagas subbasin indicates that nitrate pollution in groundwater is elevated in the shallow aquifer because it is highly vulnerable due to high recharge rates and rapid transport, and that the dominant source of nitrate is synthetic fertilizers. Groundwater age data in relation to nitrate concentration indicate that the rate of nitrate loading to the shallow aquifer is not yet decreasing in the areas sampled. In areas east of Gilroy, groundwater nitrate concentrations more than double the drinking water standard correspond to younger groundwater ages (less than seven years old and in some cases less than two years old), indicating that the nitrate pollution is due to recent nitrate loading and not legacy farming practices (Moran et al., 2005).

51. The University of California Center for Water Resources (WRC) developed the Nitrate Groundwater Pollution Hazard Index (Nitrate Hazard Index) in 1995. The Nitrate Hazard Index identifies agricultural fields with the highest vulnerability for nitrate pollution to groundwater, based on soil, crop, and irrigation practices. Based on the Nitrate Hazard Index, the following crop types present the greatest risk for nitrate loading to groundwater: Beet, Broccoli, Cabbage, Cauliflower, Celery, Chinese Cabbage (Napa),Collard, Endive, Kale, Leek, Lettuce, Mustard, Onion, Spinach, Strawberry, Pepper, and Parsley.

Impacts to Groundwater – Pesticides

52. The Department of Pesticide Regulation (DPR) has identified two Groundwater Protection Areas that are vulnerable to pesticide contamination in San Luis Obispo County (south of Arroyo Grande, west of Nipomo Mesa, and north of the Santa Maria River) and Monterey County (Salinas area).

53. Based on a 2007 DPR report, pesticide detections in groundwater are rare in the Central Coast region. Of 313 groundwater wells sampled in the Central Coast

region, six wells (1.9%) had pesticide detections in less than two samples (considered unverified detections).

54. A review of DPR data collected from 1984 – 2009 indicates that the three pesticides/pesticide degradates with the highest detection frequency in groundwater were chlorthal-dimethyl and degradates (total), TPA (2,3,5,6-tetrachloroterephthalic acl) and carbon disulfide. Compounds reported by DPR above a preliminary health goal (PHG) or drinking water standard include (by county): ethylene dibromide (2002), atrazine (1993), and dinoseb (1987) Monterey; heptachlor (1989), ethylene dibromide (1989) Santa Barbara; benzene (various dates 1994-2007), 1,2,4-trichlorobenzene (1991) Santa Cruz; ethylene dibromide (1994, 2008, 2009) San Luis Obispo; and 1,1,2,2-tetrachloroethane (1998) Santa Clara.

55. Results from pesticide analyses conducted as part of the Groundwater Ambient Monitoring and Assesment Program (GAMA) studies in the Central Coast region (Kulongoski, 2007; Mathany 2010) indicate a significant presence of pesticides in groundwater. GAMA achieved ultra-low detection levels of between 0.004 and 0.12 micrograms per liter (generally less than .01 micrograms per liter). Out of 54 wells sampled in groundwater basins in the south coast range study unit (bounded by the Santa Lucia and San Luis Ranges, and San Raphael Mountains to the north and east, and the Santa Ynez mountains to the south), 28 percent of the wells had 11 pesticides or pesticide degradates detected in groundwater samples, with the three most abundant detections being deethylatrazine (18.5 percent), atrazine (9.3 percent), and simazine (5.6 percent). Twenty-eight percent of 97 wells sampled in the Monterey Bay and Salinas Valley Basins had pesticide detections, including 18 percent for simazine, 11 percent for deethylatrazine, and 5 percent for atrazine. None of the pesticides detected as part of the GAMA program exceeded any drinking water standard or health-based threshold value.

Impacts to Surface Water

56. The 2010 Clean Water Act Section 303(d) List of Impaired Waterbodies for the Central Coast Region (2010 List of Impaired Waterbodies) identified surface water impairments for approximately 700 waterbodies related to a variety of pollutants (e.g. salts, nutrients, pesticides/toxicity, and sediment/turbidity). Sixty percent of the surface water listings identified agriculture as one of the potential sources of water quality impairment.

57. The impact from agricultural discharges on surface water quality is or has been monitored by various monitoring programs, including:

    a. The Central Coast Water Board's Ambient Monitoring Program: Over the past 10 years, the Central Coast Ambient Monitoring Program (CCAMP) has

collected and analyzed water quality data to address 25 conventional water quality parameters from 185 sites across the Central Coast Region to assess surface water quality. To support analysis of conventional water quality data CCAMP has collected bioassessment data from 100 of the 185 sites, water toxicity data from 134 of the 185 sites, and sediment toxicity from 57 of the 185 sites. CCAMP data show widespread toxicity and pollution in agricultural areas.

b. Cooperative Monitoring Program (CMP): Over the last five years, the CMP has focused on assessing agricultural water quality for the 2004 Agricultural Order, and collected and analyzed data for 15 to 20 parameters from 50 sites in multiple watersheds. CMP data show widespread toxicity and pollution in agricultural areas.

58. Data from CCAMP and CMP indicate that surface waterbodies are severely impacted in the lower Salinas and Santa Maria watersheds due to the intensive agricultural activity in these areas, and water quality in these areas are the most severely impaired in the Central Coast Region.

Impacts to Surface Water – Nutrients

59. Nitrate pollution in surface water is widespread in the Central Coast Region, with 46 waterbodies listed as impaired for this pollutant on the 2010 List of Impaired Waterbodies List. Seventy percent of these nitrate listings occur in the three major agricultural watersheds: Salinas area (16 waterbodies), Pajaro River (5 waterbodies) and Santa Maria River (12 waterbodies). Other significant nitrate listings fall in small drainages in areas of intensive agriculture or greenhouse activity along the south coast, including Arroyo Paredon, Franklin Creek, Bell Creek, Los Carneros and Glen Annie creeks (CCRWQCB, 2009a)

60. The California Department of Public Health (CDPH) drinking water standard is 10 mg/L nitrate as N. The drinking water standard is not intended to protect aquatic life and Water Board staff estimates that 1 mg/L nitrate is necessary to protect aquatic life beneficial uses from biostimulation based on an evaluation of CCAMP data (CCRWQCB, 2009b). Water Board staff used this criteria to evaluate surface water quality impairment to aquatic life beneficial uses in the 2010 Impaired Waterbodies List.

61. In a broadly scaled analysis of land uses, nitrate pollution is associated with row crop agriculture. In addition, discharge from even a single agricultural operation can result in adjacent creek concentrations exceeding the drinking water standard and the much lower limits necessary to protect aquatic life. Many heavily urbanized creeks show only slight impacts from nitrate, with most urban impact associated with wastewater discharges. (CCAMP, 2010a).

62. Agricultural discharges result in significant nitrate pollution in the major agricultural areas of the Central Coast Region (CCAMP, 2010a). More than sixty percent of all sites from CCAMP and CMP combined datasets have average nitrate concentrations that exceed the drinking water standard and limits necessary to protect aquatic life (CCAMP, 2010b). Ten percent of all sites have average nitrate concentrations that exceed the drinking water standard by five-fold or more. Some of the most seriously polluted waterbodies include the following:

    a. Tembladero Slough system (including Old Salinas River, Alisal Creek, Alisal Slough, Espinosa Slough, Gabilan Creek and Natividad Creek),
    b. Pajaro River (including Llagas Creek, San Juan Creek, and Furlong Creek),
    c. Lower Salinas River (including Quail Creek, Chualar Creek and Blanco Drain),
    d. Lower Santa Maria River (including Orcutt-Soloman Creek, Green Valley Creek, and Bradley Channel),
    e. Oso Flaco watershed (including Oso Flaco Lake, Oso Flaco Creek, and Little Oso Flaco Creek).

63. Dry season flows decreased over the last five years in some agricultural areas that have large amounts of tailwater runoff. Detailed flow analysis by the CMP showed that 18 of 27 sites in the lower Salinas and Santa Maria watersheds had statistically significant decreases in dry season flow over the first five years of the program. Some sites that show increasing concentrations of nitrate have coincident declining trends in flow, possibly due to reductions in tailwater (CCWQP, 2009a). CCAMP monitoring has detected declining flows at other sites elsewhere in the Region through the end of 2009 (CCAMP, 2010a), likely because of drought.

64. Some statistically significant changes in nitrate concentration are evident in CCAMP and CMP data. Several drainages are improving in water quality in the Santa Barbara area (such as Bell Creek, which supports agricultural activities) and on Pacheco Creek in the Pajaro watershed. However, in some of the most polluted waters (Old Salinas River, Orcutt Creek, Santa Maria River mouth), nitrate concentrations are getting worse (CCAMP, 2010a). In the lower Salinas and Santa Maria watersheds, flow volumes are declining at some sites (CCWQP, 2009a; CCAMP, 2010a).

65. Nitrate concentrations in Oso Flaco Lake exceed the levels that support aquatic life beneficial uses, threatening remaining populations of two endangered plants, marsh sandwort and Gambel's watercress. In 25 water samples taken from Oso Flaco Lake in 2000-2001 and 2007, levels of nitrate/nitrite (as N) averaged 30.5 mg/L with a minimum of 22.0 mg/L and a maximum of 37.1 mg/L (CCAMP, 2010a). Biostimulation in Oso Flaco Lake has caused the rapid and extreme growth of

common wetland species, which are now crowding out sensitive species that have not become similarly vigorous (United States Department of the Interior Fish and Wildlife Service, 2010).

66. Agricultural discharges result in un-ionized ammonia concentrations at levels that are toxic to salmonids at some sites in areas dominated by agricultural activity (USEPA, 1999). The waterbodies where these sites are located are on the 2010 List of Impaired Waterbodies due to un-ionized ammonia, particularly in the lower Salinas and Santa Maria river areas (CCRWQCB, 2009).

Impacts to Surface Water – Toxicity and Pesticides

67. The Basin Plan general objective for toxicity states the following: "All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal or aquatic life." The Basin Plan general objective for pesticides states the following: "No individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life."

68. Based on CCAMP, CMP, and other monitoring data, multiple pesticides and herbicides have been detected in Central Coast surface waterbodies (identified below). The Basin Plan general objective for pesticides states that no individual pesticide or combination of pesticides shall reach concentrations that adversely affect beneficial uses, and no increase in pesticide concentrations shall be found in bottom sediments or aquatic life. Many currently applied pesticides have not been tested for, and staff is only recently aware of data showing several relatively new fungicides (azoxystrobin, pyraclostrobin and boscalid) in fish tissue and sediment of lagoons in the Central Coast Region.[1] This is a violation of the Basin Plan general objective for pesticides. Additional monitoring for individual pesticides is needed to identify changes in pesticide loading and to identify concentrations of toxic and/or bioaccumulating substances not previously identified.

2,4-D	esfenvalerate	oryzalin
Alachlor	ethalfluralin	oxadiazon
Aldicarb	ethoprop	oxamyl
Atrazine	fenamiphos	oxyfluorfen

[1] "Watershed-scale Evaluation of Agricultural BMP Effectiveness in Protecting Critical Coastal Habitats: Final Report on the Status of Three Central California Estuaries" (Anderson et al, 2010).
http://www.ccamp.org/ccamp/documents/EstuariesFinalReport022311.pdf.

azinphos-methyl
Azoxystrobin
Benefin
bentazon, sodium salt
Bifenthrin
Boscalid
Bromacil
bromoxynil octanoate
butylate
Carbaryl
Carbofuran
Chlorpyrifos
chlorthal-dimethyl
cycloate
Cyfluthrin
Cypermethrin
DDVP
Deltamethrin
Diazinon
Dicamba
Dicofol
Dimethoate
Disulfoton
Diuron
Endosulfan
EPTC
fenoxycarb
fenpropathrin
fipronil
glyphosate
hexazinone
hydramethylnon
imidacloprid
lambda cyhalothrin
linuron
malathion
MCPA
MCPA, dimethylamine salt
metalaxyl
methidathion
methiocarb
methomyl
methyl isothiocyanate
methyl parathion
metolachlor
metribuzin
molinate
naled
napropamide
norflurazon
paraquat dichloride
pendimethalin
permethrin
phorate
phosmet
prodiamine
prometon
prometryn
propanil
propargite
propiconazole
propoxur
propyzamide
Pyriproxyfen
pyraclostrobin
S.S.S-tributyl phosphorotrithioate
siduron
simazine
tebuthiuron
terbuthylazine
tetrachlorvinphos
thiobencarb
triallate
triclopyr
trifluralin

69. Multiple studies, including some using Toxicity Identification Evaluations (TIEs), have shown that organophosphate pesticides and pyrethroid pesticides in Central Coast waters are likely causing toxicity to fish and invertebrate test organisms (CCAMP, 2010a, CCWQP, 2008a; CCWQP, 2009; CCWQP, 2010a; CCWQP, 2010d (in draft); Hunt et al., 2003, Anderson, et al. 2003; Anderson et al., 2006b. This is a violation of the Basin Plan general objective for toxicity.

70. Agricultural use rates of pesticides in the Central Coast Region and associated toxicity is among the highest in the State. In a statewide study of four agricultural areas conducted by the Department of Pesticide Regulation (DPR), the Salinas study area had the highest percent of surface water sites with pyrethroid pesticides detected (85 percent), the highest percent of sites that exceeded levels expected

to be toxic and lethal to aquatic life (42 percent), and the highest rate (by three-fold) of active ingredients applied (113 lbs/acre) (Starner, et al. 2006).

71. Agriculture-related toxicity studies conducted on the Central Coast since 1999 indicated that toxicity resulting from agricultural waste discharges of pesticides has caused declining aquatic insect and macroinvertebrate populations in Central Coast streams (Anderson et al., 2003; Anderson et al., 2006a; Anderson et al., 2006b; Anderson et al., 2010). This is a violation of the Basin Plan general objective for toxicity.

72. The breakdown products of organophosphate pesticides are more toxic to amphibians than are the products themselves (Sparling and Fellers, 2007).

73. The lower Salinas and Santa Maria areas have more overall water column invertebrate toxicity than other parts of the Central Coast Region, with much of the toxicity explained by elevated diazinon and chlorpyrifos concentrations (CCAMP, 2010a, CCWQP, 2008a; CCWQP, 2009; Hunt et al., 2003, Anderson, et al. 2003; Anderson et al., 2006a). Some agricultural drains have shown toxicity nearly every time the drains are sampled (CCAMP, 2010a).

74. Fish and sand crabs from the Salinas, Pajaro, and Santa Maria estuaries had detectable levels of currently applied fungicides, herbicides, and legacy pesticides like DDT based on a recently completed study of these central coast lagoons Anderson et al. (2010). Multiple samples from the Santa Maria Estuary, the most impacted of the three estuaries, also contained chlorpyrifos, diazinon, and malathion (organophosphate pesticides) and bifenthrin and cyfluthrin (pyrethroid pesticides). Department of Public Health human consumption guideline levels for these pesticides in fish tissue are not available. This is the first study in this Region documenting these currently applied pesticides in fish tissue. The Basin Plan requires that "there shall be no increase in pesticide concentrations found in bottom sediments or **aquatic life** (emphasis added)".

75. The National Oceanic Atmospheric Administration National Marine Fisheries Service (NMFS) issued a Biological Opinion that concluded that US EPA's registration of pesticides containing chlorpyrifos, diazinon, and malathion is likely to jeopardize the continued existence of 27 endangered and threatened Pacific salmonids and is likely to destroy or adversely modify designated critical habitat for 25 threatened and endangered salmonids because of adverse effects on salmonid prey and water quality in freshwater rearing, spawning, migration, and foraging areas (NMFS, 2008)

76. Three court-ordered injunctions impose limitations on pesticide use (including chlorpyrifos, diazinon, and malathion) within certain proximity of waterbodies to protect endangered species (DPR, 2010).

77. Creek bottom sediments are most consistently toxic in the lower Salinas and Santa Maria watersheds, areas dominated by intensive agricultural activity. Seventy percent of sites sampled for sediment in the Central Coast region have been toxic at least once (although sites selected for sediment toxicity sampling typically represent higher risk areas) (CCAMP, 2010a).

78. A CMP follow-up study on sediment toxicity (CCWQP, 2010d, in draft) showed pyrethroid pesticides to be the most prevalent and severe source of toxicity to sediments. Santa Maria area sites averaged 7.5 toxic units (TUs) from pyrethroid pesticides and 1.3 TUs from chlorpyrifos. One TU is sufficient to kill 50% of the test organisms in a toxicity test). All Santa Maria area sites were toxic to test organisms. Second highest pesticide levels were found in Salinas tributaries and the Salinas Reclamation canal, averaging 5.4 TUs pyrethroids and 0.8 TUs chlorpyrifos. Organochlorine pesticides were present, but not at levels sufficient to cause toxicity.

79. Peer-reviewed research has also shown pyrethroid pesticides are a major source of sediment toxicity in agricultural areas of the Central Coast Region (Ng et al., 2008; Anderson et al., 2006a, Phillips et al., 2006; Starner et al., 2006).

80. Agricultural sources of metals are particulate emissions, irrigation water, pesticides, biosolids, animal manure, and fertilizer applied directly to the soil (Chang et al, 2004). Metals, including arsenic, boron, cadmium, copper, lead, nickel, and zinc are common active ingredients in many pesticides (Fishel, 2008; Nesheim, 2002; Holmgren, 1998; Reigert and Roberts, 1999). Metals can be present in subsurface drainage discharge and may be associated with sediment in tailwater discharge. Some phosphate fertilizers contain cadmium, which can lead to an increase in the concentration of cadmium in soil. Past studies have found soils containing high concentrations of cadmium and lead in major vegetable production areas of the Salinas Valley (Chang et al, 2004; Page et al, 1987; USEPA, 1978; Jelinek and Braude, 1978).

81. The Basin Plan contains the following general objective for Phenols, 0.1 mg/L or 100 µg/L. Phenols are components or breakdown products of a number of pesticide formulations, including 2,4 D, MCPA, carbaryl, propoxur, carbofuran, and fenthion (Crespin, et al., 2001, Agrawal, et al., 1999). Phenolic compounds can cause odor and taste problems in fish tissue, some are directly toxic to aquatic life, and some are gaining increasing notice as endocrine disruptors (e.g., bisphenol A and nonylphenol). The original water quality standards were developed in response to concerns about odor and taste and direct toxicity.

82. One phenolic compound of known concern in Central Coast waters is nonylphenol. Agricultural sources of nonylphenol and the related nonylphenol

ethoxylates include pesticide products as "inert" ingredients and as adjuvants added by the pesticide user. Adjuvant ingredients are not reported in California's Pesticide Use Database. Adjuvants enhance a chemical's effect. Nonylphenol and related compounds are used as surfactants to make the pesticide product more potent and effective (Cserhati, 1995). Nonylphenol and its ethoxylates are acutely toxic to a wide variety of animals, including aquatic invertebrates and fish. In some cases, the nonylphenol is more toxic to aquatic species than the pesticide itself (National Research Council of Canada, 1982). Concern exists about these adverse effects of nonylphenol and its ethoxylates increases because these compounds also bioaccumulate in algae, mussels, shrimp, fish, and birds (Ahel et al, 1993; Ekelund (1990).

83. The San Luis Obispo Science and Ecosystem Alliance (SLOSEA) at California Polytechnic State University has found nonylphenol in elevated concentrations in fish tissue and has linked the occurrence to gonadal abnormalities and liver damage in fish in Morro Bay and other Central Coast locations. The Basin Plan standard of 100 µg/L for phenols is relatively protective for direct toxicity of nonylphenol to rainbow trout, which have an LC50 (lethal concentration impacting 50% of test organisms) of 194 µg/L. However, this limit is not protective for endocrine disruption purposes, which for rainbow trout is estimated at an EC50 (estrogenic concentration impacting 50% of test organisms) of 14.14 µg/L (Lech, 1996). Regardless of the limitations of the Basin Plan standard, it is important to assess this chemical in areas that are heavily influenced by agricultural activity.

Impacts to Surface Water – Turbidity and Temperature

84. Turbidity is a cloudy condition in water due to suspended silt or organic matter. Waters that exceed 25 nephalometric turbidity units (NTUs) can reduce feeding ability in trout (Sigler et al., 1984). Elevated turbidity during the dry season is an important measure of discharge across bare soil, and thus can serve as an indicator of systems with heavy irrigation runoff to surface waters.

85. The Basin Plan requires that "Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses" (CCRWQCB, 1994).

86. Most CCAMP sites outside of agricultural areas have a median turbidity level less than 5 NTUs (CCAMP, 2010a). Many sampling sites that include significant agricultural discharge have turbidity levels that exceed 100 NTUs as a median value (CCAMP, 2010a).

87. Agricultural discharges cause and contribute to sustained turbidity throughout the dry season at many sampling sites dominated by agricultural activities. Resulting turbidity greatly exceeds levels that impact the ability of salmonids to feed. Many

of these sites are located in the lower Santa Maria and Salinas-Tembladero watersheds. The CMP detected some increasing trends in turbidity on the main stem of the Salinas River (CCRWQCB, 2009a; CCAMP, 2010a; CCWQP, 2009a).

88. Agricultural discharges and vegetation removal along riparian areas cause and contribute to water temperatures that exceed levels that are necessary to support salmonids at some sites in areas dominated by agricultural activity. Several of these sites are in major river corridors that provide rearing and/or migration habitat for salmonids. A good example of this is Orcutt Creek (CCAMP, 2010a), where upstream shaded areas are cooler than downstream exposed areas, in spite of lower upstream flows. Tailwater discharge and removal of riparian vegetation in downstream areas cause temperatures to rise above levels safe for trout. Several locations impacted by temperature are in major river corridors that provide rearing and/or migration habitat for salmonids. These include the Salinas, Santa Maria, and Santa Ynez rivers (CCAMP, 2010a).

89. Biological sampling shows that benthic biota are impaired in the lower Salinas and Santa Maria watersheds, and also shows that several measures of habitat quality, such as in-stream substrate and canopy cover, are poor compared to the upper watersheds and to other high quality streams in the Central Coast Region (CCWQP, 2009b; CCWQP, 2009c, CCWQP, 2009d; CCWQP, 2009e; CCAMP, 2010b)

90. Agricultural land use practices, such as removal of vegetation and stream channelization, and discharges from agricultural fields, can cause the deposition of fine sediment and sand over stream bottom substrate (Waters, 1995). This problem is especially prevalent in areas dominated by agricultural activity (lower Salinas and Santa Maria rivers) (CCWQP, 2009b; CCWQP, 2009c, CCWQP, 2009d; CCWQP, 2009e; CCAMP, 2010b). This deposition of fine sediment and sand in streams causes major degradation of aquatic life beneficial uses by eliminating pools and by clogging gravel where fish eggs, larvae, and benthic invertebrates that serve as a food source typically live (CCAMP, 2010b; Waters, 1995). Effective erosion control and sediment control management practices include but are not limited to cover crops, filter strips, and furrow alignment to reduce runoff quantity and velocity, hold fine particles in place, and increase filtration to minimize the impacts to water quality (USEPA, 1991).

91. Orchards, vineyards, and row crops have the greatest erosion rates in irrigated agriculture, especially those that are managed with bare soil between tree or vine rows (ANR, 2006). A vegetative filter strip offers one way to control erosion rates and discharge of sediment rather than letting it be carried off site in drainage water. A vegetative filter strip is an area of vegetation that is planted intentionally to help remove sediment and other pollutants from runoff water (Dillaha et al., 1989) Vegetative filter strips intercept surface water runoff and trap as much as 75 to 100

percent of the water's sediment. They capture nutrients in runoff, both through plant uptake through adsorption to soil particles. They promote degradation and transformation of pollutants into less-toxic forms, and they remove over 60% of certain pathogens from the runoff. (ANR, 2006).

Impacts to the Marine Environment

92. The marine environment in the Central Coast Region is impacted by runoff from irrigated agriculture and other sources. Legacy pesticides have impacted the marine environment and are still found in sediment and tissue at levels of concern today (CCLEAN, 2007; Miller et al., 2007; Dugan, 2005, BPTCP, 1998). Currently applied pesticides are persistent in the aquatic environment, but initial testing has not found them in offshore areas of Monterey Bay (CCAMP, 2010b).

93. Two Marine Protected Areas (MPAs), Elkhorn Slough and Moro Cojo Slough, are heavily impacted by agricultural chemicals and activities in the vicinity. The Elkhorn Slough and Moro Cojo Slough MPAs are at very high to extremely high risk for additional degradation of beneficial uses. Other MPAs that are relatively near shore in agricultural areas are at medium risk for degradation of beneficial uses; these include the South Santa Ynez River MPA, and the two Monterey Bay MPAs. Other MPAs that are not near agricultural areas are at medium to low risk from agricultural discharges (CCAMP, 2010b).

94. Nitrate loading from the Pajaro and Salinas Rivers to Monterey Bay has been found to be a potential driver of plankton blooms during certain times of year. Research shows a clear onshore to offshore gradient in nitrate load influence from rivers, and also shows overall increasing trends in loading from rivers, whereas nitrate loading from upwelling shows no trends (Lane, 2009; Lane et al., in review). Using infrared remote sensing, Monterey Bay Aquarium Research Institute researchers have documented bloom initiation immediately following "first flush" events just offshore Moss Landing and Pajaro River discharges, that then evolved into very large red tides that killed many sea birds (Ryan, 2009; Jessup et al., 2009). These bloom initiation events were documented in 2007 and 2008.

Impacts to Aquatic Habitat and Riparian and Wetland Areas

95. Riparian and wetland areas play an important role in protecting several of the beneficial uses designated in the Basin Plan. Agricultural activities have degraded, and threaten to degrade, these beneficial uses related to aquatic habitat, which include, but are not limited to:

    a. Ground Water Recharge;
    b. Fresh Water Replenishment;
    c. Warm Fresh Water Habitat;

d. Cold Fresh Water Habitat;
e. Inland Saline Water Habitat;
f. Estuarine Habitat;
g. Marine Habitat;
h. Wildlife Habitat;
i. Preservation of Biological Habitats of Special Significance;
j. Rare, Threatened or Endangered Species;
k. Migration of Aquatic Organisms;
l. Spawning, Reproduction and/or Early Development;
m. Areas of Special Biological Significance;

96. The Basin Plan contains requirements to protect aquatic habitat, including, but not limited to, Chapter 2, Section II Water Quality Objectives to Protect Beneficial Uses, and Chapter 5, Page V-13, V.G. Erosion and Sedimentation: A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, shall be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip shall be thirty feet, wherever possible.

97. Riparian and wetland areas play an important role in achieving several water quality objectives established to protect specific beneficial uses. These include, but are not limited to, those water quality objectives related to natural receiving water temperature, dissolved oxygen, suspended sediment load, settleable material concentrations, chemical constituents, and turbidity.

98. The 2004 Agricultural Order required protection of beneficial uses including aquatic and wildlife habitat. This Order includes that requirement to achieve protection of aquatic life beneficial uses and to address water quality degradation that has occurred, in part, as a result of encroachment by agricultural land uses on riparian and wetland areas.

99. In particular, seasonal and daily water temperatures are strongly influenced by the amount of solar radiation reaching the stream surface, which is influenced by riparian vegetation (Naiman, 1992; Pierce's Disease/Riparian Habitat Workgroup (PDRHW), 2000.). Removal of vegetative canopy along surface waters threatens maintenance of temperature water quality objectives, which in turn negatively affects dissolved oxygen related water quality objectives, which in turn negatively affects the food web (PDRHW, 2000).

100. Riparian and wetland areas function to retain and recycle nutrients (National Research Council (NRC), 2002; Fisher and Acreman, 2004), thereby reducing nutrient loading directly to surface water or groundwater. Riparian and wetland areas trap and filter sediment and other wastes contained in agricultural runoff

(NRC, 2002; Flosi et al., 1998; PDRHW, 2000; Palone and Todd,1998), and reduce turbidity (USEPA, 2009). Riparian and wetland areas temper physical hydrologic functions, protecting aquatic habitat by dissipating stream energy and temporarily allowing the storage of floodwaters (Palone and Todd, 1998), and by maintaining surface water flow during dry periods (California Department of Water Resources, 2003). Riparian and wetland areas regulate water temperature and dissolved oxygen, which must be maintained within healthy ranges to protect aquatic life (PDRHW, 2000). In the absence of human alteration, riparian areas stabilize banks and supply woody debris (NRC 2002), having a positive influence on channel complexity and in-stream habitat features for fish and other aquatic organisms (California Department of Fish and Game 2003).

101. Riparian areas are critical to the quality of in-stream habitat. Riparian vegetation provides woody debris, shade, food, nutrients and habitat important for fish, amphibians and aquatic insects (California Department of Fish and Game 2003). Riparian areas help to sustain broadly based food webs that help support a diverse assemblage of wildlife (NRC, 2002). More than 225 species of birds, mammals, reptiles, and amphibians depend on California's riparian habitats (Riparian Habitat Joint Venture, 2004).

102. Riparian vegetation provides important temperature regulation for instream resources. In shaded corridors of the Central Coast region, temperatures typically stay under 20 degrees Celsius or 68 degrees F (within optimum temperature ranges for salmonids), but can rapidly increase above 20 degrees Celsius when vegetation is removed. Orcutt Creek in the lower Santa Maria watershed is an example where upstream shaded areas remain cooler than downstream exposed areas, in spite of lower upstream flows (CCAMP, 2010a).

103. Land management and conservation agencies describe three vegetated zones within a riparian buffer that can provide water quality protection (NRCS, 2006; Welsch, 1991, Tjaden and Weber). These zones are described below:
    a. Zone 1 – The goal for this zone is to control temperature and turbidity discharges by establishing a mix of trees and shrubs that provide shade and streambank stability. A mix of native woody species that vary from large tree species as they mature to understory trees and shrubs will provide canopy cover and shading next to the water.
    b. Zone 2 – The goal for this zone is to establish a mix of trees and shrubs that will absorb and treat waterborne nutrients and other pollutants and allow water to infiltrate into the soil.
    c. Zone 3 – The goal for this zone is to act as a transitional zone between cropland and zones 1 and 2, serving to slow flows, disperse flows out into more diffuse, sheet flow, and promote sediment deposition. The use of stiff multi-stemmed grasses and forbs are preferred and will help disperse concentrated flows.

104. CCAMP and CMP bioassessment data show that streams in areas of heavy agricultural use are typically in poor condition with respect to benthic community health and that habitat in these areas is often poorly shaded, lacking woody vegetation, and heavily dominated by fine sediment. Heavily sedimented stream bottoms can result from the immediate discharge of sediment from nearby fields, the loss of stable, vegetated stream bank habitat, the channelization of streams and consequent loss of floodplain, and from upstream sources.

105. Up to approximately 43 percent of the federally threatened and endangered species rely directly or indirectly on wetlands for their survival (United States Environmental Protection Agency, 2008). Of all the states, California has the greatest number of at-risk animal species (15) and, by far, the greatest number of at-risk plant species (104) occurring within isolated wetlands (Comer et al., 2005).

106. California has lost an estimated 91 percent of its historic wetland acreage, the highest loss rate of any state. Similarly, California has lost between 85 and 98 percent of its historic riparian areas (State Water Resources Control Board, 2008). Landowners and operators of agricultural operations historically removed riparian and wetland areas to plant cultivated crops (Braatne et al., 1996; Riparian Habitat Joint Venture, 2004).

107. The California Wetlands Conservation Policy (Executive Order W-59-93), also known as "the No Net Loss Policy," adopted by Governor Wilson in 1993, established the State's intent to develop and adopt a policy framework and strategy to protect California's unique wetland ecosystems. One of the goals of this policy is to ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values in California in a manner that fosters creativity, stewardship and respect for private property.

108. Real and/or perceived incompatible demands between food safety and environmental protection are a major issue in the Central Coast Region. Technical Assistance Providers have reported that growers have removed vegetated management practices intended to protect water quality (in some cases, after receiving substantial public funds to install vegetated management practices).

109. According to a spring 2007 survey by the Resource Conservation District of Monterey County (RCDMC), 19 percent of 181 respondents said that their buyers or auditors had suggested they remove non-crop vegetation from their ranches to prevent pollution from pathogens such as the O157:H7 bacteria. In response to pressures by auditors and/or buyers, approximately 15 percent of all growers surveyed indicated that they had removed or discontinued use of previously adopted management practices used for water quality protection. Grassed waterways, filter or buffer strips, and trees or shrubs were among the management

practices removed (RCDMC, 2007). According to a follow-up spring 2009 survey by RCDMC, growers are being told by their auditors and/or buyers that wetland or riparian plants are a risk to food safety (RCDMC, 2009). To assist in the co-management of water quality protection and food safety, the RCDMC has developed a handbook of agricultural conservation practices, photos, and descriptions with food safety considerations (RCDMC, 2009).

110. The Food Safety Modernization Act (FSMA) was signed into law on January 4, 2011 giving the U.S Food and Drug Administration (FDA) a mandate to pursue a farm to table system that is based on science and addresses food safety hazards. The law requires FDA to apply sound science to any requirements that might impact wildlife and wildlife habitat on and near farms, and take into consideration conservation and environmental practice standards and policies.

111. Riparian vegetation and vegetated buffer zones are critically important to prevent the transport of sediment and bacteria, which may include the downstream transport of O157:H7 bacteria. Tate et al. (2006) tested vegetated buffers on cattle grazing lands and found that they are a very effective way to reduce inputs of waterborne E. coli into surface waters. Data indicates that the major source of O157:H7 bacteria are cattle, not wildlife (RCDMC, 2006). In many agricultural areas of the Central Coast Region, cattle operations are located upstream of irrigated agricultural fields. Therefore, the removal of riparian and wetland vegetation and their buffer zones increases the transport of pathogens such as O157:H7 and the risk of food contamination. The removal of riparian and wetland vegetation for food safety purposes is not warranted, is not supported by the literature, and may increase the risk of food contamination.

112. Agriculture near surface waterbodies can lead to removal or reduction of riparian vegetation and the impairment of its ecological functions (ANR, 2007). Once riparian vegetation is removed, it no longer serves to shade water, provide food for aquatic organisms, maintain stream banks, provide a source of large woody debris, or slow or filter runoff to streams. The result is degraded water quality and fish habitat (ANR, 2007). For these reasons, maintenance of riparian vegetation is a critical element of any type of land use (ANR, 2007).

113. Buffer strips are areas of vegetation left beside a stream or lake to protect against land use impacts (ANR, 2007). Whether or not harvesting is permitted within the buffer strip, well-designed and managed buffers can contribute significantly to the maintenance of aquatic and riparian habitat and the control of pollution. Riparian buffer strips protect aquatic and riparian plants and animals from upland sources of pollution by trapping or filtering sediments, nutrients, and chemicals from forestry, agricultural and residential activities. (ANR, 2007).

114. Vegetated riparian areas provide greater environmental value than unvegetated floodplains or cropped fields. Riparian forests provide as much as 40 times the water storage of a cropped field and 15 times that of grass turf (Palone and Todd, 1998). Agricultural floodplains are approximately 80 to 150 percent more erodible than riparian forest floodplains (Micheli et al., 2004) and riparian forest floodplains serve a valuable function by trapping sediment from agricultural fields (National Resource Council, 2002; Flosi and others, 1998; PDRHW 2000; Palone and Todd 1998).

115. Riparian and wetland areas are an effective tool in improving agricultural land management. Wide riparian areas act as buffers to debris that may wash onto fields during floods, thereby offsetting damage to agricultural fields and improving water quality (Flosi et al., 1998; PDRHW, 2000).

116. Exotic plant species exclude native riparian and wetland vegetation by out-competing native species for habitat. Additionally, exotic plants do not support the same diversity of wildlife native to riparian forests, often use large amounts of water, and can exist as monocultural stands of grass. Grass habitat is very different from the complex habitat structure provided by a diversity of riparian trees and shrubs, and results in habitat changes that affect the aquatic based food web (California Department of Fish and Game, 2003).

MANAGEMENT PRACTICE IMPLEMENTATION

117. Commercial agriculture is an intensive use of land. Relatively sophisticated agronomic and engineering approaches are available and necessary to minimize the discharge of waste from irrigated lands, including sediment, nutrients, and pesticides that impact water quality and beneficial uses of waters of the State. Traditionally, conservation practices available to Dischargers were developed for irrigation efficiency or for erosion control, and not necessarily for water quality protection. To achieve water quality protection and improvement, Dischargers are responsible for selecting and effectively implementing management strategies to resolve priority water quality problems associated with the specific operation and receiving water, utilize proper management practice design and maintenance, and implement effectiveness monitoring.

118. The Central Coast Water Board recognizes efforts to maximize water quality improvement using innovative and effective local or regional treatment strategies and it is the Central Coast Water Board's intent to provide flexibility in the implementation of this Order to encourage discharger participation in such efforts. The Central Coast Water Board will evaluate proposed local or regional treatment strategies based upon the anticipated effectiveness, time schedule for implementation, and proposed verification monitoring and reporting to measure progress towards water quality improvement and compliance with this Order.

119. The Central Coast Water Board recognizes efforts to improve recharge conditions and restore groundwater recharge function that have been lost due to urbanization and agricultural development. Managed aquifer recharge (MAR) has been successfully applied in areas of the Central Coast region, improving both water supply and water quality in the basin (Racz et al., in review). Water applied to percolation basins for MAR projects often have a high quality relative to that in underlying aquifers in many locations, despite exceedances of water quality standards. Recharging this water into the ground is important for improving and maintaining water quality in critical aquifers. In addition, considerable improvement in water quality can be achieved during percolation of surface water because of beneficial microbial and filtering processes that occur (Schmidt et al., in review). The Central Coast Water Board encourages MAR efforts, which will result in improving both water supply and water quality.

120. Dischargers are responsible for implementing management measures to achieve water quality improvement, including practices and projects at the scale of a single farm, or cooperatively among multiple farms in a watershed or sub watershed.

121. The Farm Plan is an effective tool to identify the management practices that have been or will be implemented to protect and improve water quality in compliance with this Order. Elements of the Farm Plan include irrigation management, pesticide management, nutrient management, salinity management, sediment and erosion control, and aquatic habitat protection. Farm Plans also contain a schedule for implementation of practices and an evaluation of progress in achieving water quality improvement. The development and implementation of Farm Plans was a requirement of the 2004 Agricultural Order. This Order renews the requirement to prepare the Farm Plan, and adds new conditions requiring each Discharger to verify the effective implementation of management practices focused on resolving water quality issues and for a subset of Dischargers considered a higher threat to water quality to conduct individual discharge monitoring to verify the effective implementation of management practices.

122. Dischargers can significantly reduce the potential impact from agricultural discharges by the effective implementation of management practices identified in Farm Plans focused on priority water quality issues related to the specific operation and watershed.

123. Individual on-farm water quality monitoring is critical to adaptively manage and effectively implement practices to protect water quality. The data and reporting will inform the Discharger, the Water Board, and the public regarding compliance with this Order, and increases the potential success in adapting management practices to address priority water quality issues. Dischargers participating in on-farm water quality monitoring have reported, in some cases, significant reduction or

elimination of their discharge of waste through effective and adaptive management practice implementation.

124. Agricultural discharges, especially surface irrigation runoff, have the potential to transport sediments and associated waste constituents that exceed water quality standards. Minimizing irrigation runoff is an effective way to minimize and/or eliminate agricultural discharges of waste to waters of the State.

125. Agricultural water quality research identifies the importance of minimizing the amount of water runoff coming from farms. Irrigation runoff occurs when the application rate of the irrigation system exceeds the infiltration rate of the soil due to numerous factors, including poor irrigation efficiency. The percent of applied water lost to runoff may start off low, and increase towards the end of longer irrigations, or with frequent irrigation where soil is saturated. Fields with soils susceptible to low infiltration rates may lose 5 percent to 30 percent or more of their applied water to runoff.

126. Applying fertilizer, soil amendments, or agricultural products directly through an irrigation system (fertigation) increases nitrate levels in irrigation water. Runoff from fertigations is likely to be extremely high in nitrate concentrations. Agricultural research conducted in the Pajaro Valley and Salinas Valley watersheds has identified nitrate values in agricultural tailwater and drainage ditches exceeding 100 mg/L nitrate as N in some cases (more than ten times the drinking water standard, and likely more than 100 times the level necessary to protect aquatic life) (Anderson, 2003).

127. Agricultural studies document the common over-application of fertilizers, and fertilizer and animal manure are the most dominant and widespread nitrate sources to groundwater (Harter, 2009; Kitchen, 2008; Lawrence Livermore National Lab GAMA Studies Llagas subbasin, 2005). Effective irrigation and nutrient management practices to reduce the concentration of nutrients in irrigation runoff, deep percolation, and stormwater include but are not limited to, irrigation efficiency to reduce runoff and deep percolation, nutrient budgeting to optimize fertilizer application and eliminate excessive nutrient applications, and techniques to trap nutrients between crop growing seasons and during intense periods of rainfall.

128. Agricultural studies and practices demonstrate that minimizing the production of polluted tailwater through irrigation efficiency and nutrient management practices and keeping runoff from leaving the farm is cost effective (Meals, 1994). Improving irrigation water application according to real time soil moisture data has resulted in some of the lowest concentrations of nutrients in percolating waters, confirming that irrigation efficiency is a key factor in reducing leaching of nutrients (United Water Conservation District, 2007).

129. Nitrate in water leaving subsurface drain ("tile") systems often exceeds drinking water standards and contributes to low-oxygen in marine environments. Denitrification, including the use of wood-chip bioreactor treatment systems, is an effective method of removing nitrate from soil water before it enters subsurface drains (Jaynes, et al., 2006; Starrett, 2009).

130. Agricultural land uses can disrupt the natural vegetation-soil cycles and biota diversity, keeping the soil surface unprotected and vulnerable to erosive forces (wind and rain), which increases the amount of sediments dispersed and transported from agricultural lands into surface water (USEPA, 2003).

131. Agricultural mechanization and tillage of soil and land for bed preparation, crop maintenance and pest control, can destroy the soil structure and degrade the land, which increases the amount of sediment and associated waste constituents discharged into surface water (Fawcett, 2005).

132. Managing uncropped areas, minimizing and protecting bare soil and heavy use areas and unpaved road from concentrated flows of water, and implementing practices to detain or filter sediment and runoff before it leaves agricultural operations are effective ways to reduce soil erosion and capture sediment before it enters waterways, where it can cause water quality impairments downstream (ANR Publications 8124 and 8071).

133. Stormwater runoff from irrigated lands often results in significant erosion and the discharge of sediment, nutrients, and pesticides. Effective erosion control and sediment control management practices include but are not limited to cover crops, filter strips, and furrow alignment to reduce runoff quantity and velocity, hold fine particles in place, and increase filtration to minimize the impacts to water quality (USEPA, 1991). Crops grown using impervious plastic can be particularly problematic as they often result in significantly increased irrigation runoff volumes and velocities in agricultural furrows and ditches that may drain to waters of the State.

134. Education and technical assistance is an important tool in advancing the implementation of new effective management practices that protect and enhance water quality.

135. There are many technical resources available to the agricultural industry to assist farmers in pollution prevention and addressing water quality problems associated with irrigated agriculture. The United States Department of Agriculture - Natural Resources Conservation Service (NRCS), Resource Conservation Districts (RCD), and University of California Cooperative Extension (UCCE) provide non-regulatory technical services and research to promote conservation and address natural resource problems. There are also many non-profit agricultural and commodity-

specific organizations and initiatives that promote sustainable agriculture, and provide education and technical support. Private consulting companies and individual professionals working in the field of environmental and engineering sciences, investigations, site remediation and corrective actions, treatment system design, sampling, and reporting are available to assist the agricultural industry in water quality improvement and achieving compliance with this Order.

136. The State and Regional Water Boards have made over $600 Million of public grant funds available to address agricultural water quality issues from approximately 2000 – 2011. These funds came from Bond Propositions 13, 40, 50, and 84, and addressed a myriad of water quality projects, watershed protection, and nonpoint source pollution control throughout California. In addition, the State Water Board, in coordination with USEPA, also allocates approximately $4.5 Million per year in 319(h) program funding to address nonpoint source pollution. The amount of Water Board public grant funds recently awarded in the Central Coast Region for agricultural related projects is more than $55 Million.

AGRICULTURAL REGULATORY PROGRAM IMPLEMENTATION

137. The Central Coast Water Board is maximizing regulatory effectiveness by identifying and prioritizing actions that address the most significant agricultural water quality problems in the Central Coast Region, including nitrate in groundwater from discharge related to excess fertilizer application, the discharge of waste in agricultural tailwater, surface water toxicity resulting from pesticides, surface water nutrients from fertilizer, increasing salinity, sediment discharge, and degradation of aquatic habitat.

138. The Central Coast Water Board is addressing priority agricultural water quality issues, on a watershed basis in coordination with other Water Board programs and efforts, focused in the most intensive agricultural areas of the region including the Salinas, Pajaro, and Santa Maria watersheds. In addition, Central Coast Water Board staff will assess and track progress towards specific measures of water quality improvement, and adapt to the feedback the tracking provides.

139. The Central Coast Water Board will evaluate compliance of individual Dischargers with the terms and conditions of this Order based on enrollment information, threat of water quality impairment, content of technical reports (including Annual Compliance Document, Farm Plan, Irrigation and Nutrient Management Plan, and Water Quality Buffer Plan), prioritized inspections, and water quality monitoring data. Failure to comply with enrollment requirements may result in enforcement action for individual landowners and operators. In addition to the determination of noncompliance and water quality impairment, the Central Coast Water Board will enforce the conditions of this Order in a manner similar to enforcement of WDRs

and consistent with the State Water Board's Enforcement Policy, focusing on the highest priority water quality issues and most severely impaired waters.

140. The Central Coast Water Board will consider the history of compliance and violations and progress made toward compliance and water quality improvement demonstrated by individual Dischargers when determining potential enforcement actions. In some cases, the Central Coast Water Board may terminate coverage under this Order and require the Discharger to submit a ROWD and comply with the Water Code pursuant to individual WDRs.

PART B. RELEVANT PLANS, POLICIES, AND REGULATIONS

Water Quality Control Plan

The *Water Quality Control Plan for the Central Coast Region* (Basin Plan) was adopted by the Central Coast Water Board in 1975 and is periodically revised. Tables 1A and 1B include a summary of Narrative and Numeric Water Quality Objectives. The Basin Plan is available by contacting the Central Coast Water Board at (805) 549-3147 or by visiting the Central Coast Water Board's website at: http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/

Other Relevant Plans, Policies, and Regulations

State Water Resources Control Board, Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California,* October 1968.

State Water Resources Control Board, *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California*, June 1972.

State Water Resources Control Board, Resolution No. 74-43, *Water Quality Control Policy for the Enclosed Bays and Estuaries of California*, May 1974.

State Water Resources Control Board, Resolution No. 88-63, *Sources of Drinking Water Policy*, May 1988. Amended February 1, 2006.

State Water Resources Control Board, *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program,* May 2004.

State Water Resources Control Board, Resolution No. 2004-0063, *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List,* December 13, 2004.

State Water Resources Control Board, *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)*, February 2005

"State Water Resources Control Board, Resolution No. 2008-0070, *Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality,* August 25, 2009.

State Water Resources Control Board, *Water Quality Control Plan for Ocean Waters of California (CA Ocean Plan),* September 2009.

State Water Resources Control Board, Resolution No. 2009-0011, *Recycled Water Policy*, May 20,2010.

State Water Resources Control Board, *Water Quality Enforcement Policy,* May 20, 2010.

US EPA, *National Toxics Rule*, 40 CFR 131.36, 57 FR 60848, December 1992.

US EPA, *California Toxics Rule*, 40 CFR 131.38, 65 FR 31682, May 2000.

Table 1A. Narrative and Numeric Water Quality Objectives for Surface Water.

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	BENEFICIAL USE
TOXICITY	
Toxicity *(BPGO, III-4)* *Narrative Objective:* All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in, human, plant, animal, or aquatic life. *Indicators of Narrative Objective:* Chemical concentrations in excess of toxic levels for aquatic life including but not limited to the following: Chlorpyrifos 0.025 ug/L Diazinon 0.14 ug/L *(Source: Sipmann and Finlayson 2000)*	All Surface Waters
TOXICANTS	
Nutrients	
Ammonia, Total (N) *(BPSO, Table 3.3)* >30 mg/L NH4-N	AGR
Ammonia, **Un-ionized** *(BPGO, III-4)* 0.025 mg/L NH3 as N	All Surface Waters
Nitrate *(a. BPSO, Table 3-2* *b. BPSO, Table 3-3)* a. 10 mg/L NO3-N b. >30 mg/L NO3-N	a. MUN b. AGR
Organics	
Chemical Constituents *(BPSO, III-5 and* *Table 3-2)* Waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Article 4, Chapter 15,	MUN

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
Section 64435, Tables 2 and 3 as listed in Table 3-2.	
Chemical Constituents *(BPSO, III-5 and Table 3-3)* Waters shall not contain concentrations of chemical constituents in amounts which adversely affect the agricultural beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3. In addition, waters used for irrigation and livestock watering shall not exceed concentrations for those chemicals listed in Table 3-4	AGR
Chemical Constituents *(BPSO, III-10, Table 3-5, Table 3-6)* Waters shall not contain concentrations of chemical constituents known to be deleterious to fish or wildlife in excess of the limits listed in Table 3-5 or Table 3-6.	COLD, WARM, MAR
Oil and Grease *(BPGO, III-3)* *Narrative Objective:* Waters shall not contain oils, greases, waxes, or other similar materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.	All Surface Waters
Organic Chemicals *(BPSO, III-5 and Table 3-1)* All inland surface waters, enclosed bays, and estuaries shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22, Chapter 15, Article 5.5, Section 64444.5, Table 5 and listed in Table 3-1.	MUN
Other Organics *(BPGO, III-3)* **Phenol** *(BPSO, III-5)* Waters shall not contain organic substances in concentrations greater than the following:	All Surface Waters

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
Methylene Blue Activated Substances < 0.2 mg/L Phenols < 0.1 mg/L Phenol (MUN) ≤ 1.0 µg/L PCBs < 0.3 µg/L Phthalate Esters < 0.002 µg/L	
Metals	
Chromium *(BOSP, III-12)* ≤ 0.01 mg/L	SHELL
Cadmium *(BPGO, III-11)* ≤ 0.03 mg/L in hard water or ≤ 0.004 mg/L in soft water (Hard water is defined as water exceeding 100 mg/L $CaCO_3$).	COLD, WARM
Chromium *(BPGO, III-11)* ≤ 0.05 mg/L	COLD, WARM
Copper *(BPGO, III-11)* ≤ 0.03 mg/L in hard water or ≤ 0.01 mg/L in soft water (Hard water is defined as water exceeding 100 mg/L $CaCO_3$).	COLD, WARM
Lead *(BPGO, III-11)* ≤ 0.03 mg/L	COLD, WARM
Mercury *(BPGO, III-11)* ≤ 0.0002 mg/L	COLD, WARM
Nickel *(BPGO, III-11)* ≤ 0.4 mg/L in hard water or	COLD, WARM

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	BENEFICIAL USE
≤.0.1 mg/L in soft water (Hard water is defined as water exceeding 100 mg/L $CaCO_3$).	
Zinc *(BPGO, III-11)* ≤ 0.2 mg/L in hard water or ≤.0.004 mg/L in soft water (Hard water is defined as water exceeding 100 mg/L $CaCO_3$).	COLD, WARM
CONVENTIONALS	
Biostimulatory Substances *(BPGO, III-3)* *Narrative Objective:* Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses. *Indicators of Narrative Objective:* Indicators of biostimulation include chlorophyll-a, dissolved oxygen, phosphorous, and nitrate. *(Source: Central Coast Water Board. April 2009. Central Coast Ambient Monitoring Program Technical Paper: Interpreting Narrative Objectives for Biostimulatory Substances Using the Technical Approach for Developing California Nutrient Numeric Endpoints)*	All Surface Waters
Boron *(BPSO, III-13)* Waterbody specific. Median values, shown in Table 3-7 for surface waters. Sub-Basins Objectives range from 0.2 – 0.5 mg/L.	Specific Surface Waters
Chloride *(BPSO, III-13)* Waterbody specific. Median values, shown in Table 3-7 for surface waters. Sub-Basins Objectives range from 150-1400 mg/L.	Specific Surface Waters
Color *(BPGO, III-3)* Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. Coloration attributable to materials of waste origin shall not be greater than 15 units or 10 percent above natural background color, whichever is	All Surface Waters

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
greater.	
Conductivity *(BPSO, III-8, Table 3-3)* >3.0 mmho/cm	AGR
Dissolved Oxygen (DO) *(BPGO, III-2)* Mean annual DO ≥ 7.0 mg/L Minimum DO ≥ 5.0 mg/L	All Ocean Waters
Dissolved Oxygen *(BPGO, III-4)* For waters not mentioned by a specific beneficial use: DO ≥ 5.0 mg/L DO Median values ≥ 85 percent saturation	All Surface Waters
Dissolved Oxygen *(BPSO, III-10)* DO ≥ 7.0 mg/L	COLD, SPWN
Dissolved Oxygen *(BPSO, III-10)* DO ≥ 5.0 mg/L	WARM
Floating Material *(BPGO, III-3)* *Narrative Objective:* Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.	All Surface Waters
pH *(BPSO, III-10)* The pH value shall not be depressed below 7.0 nor above 8.5. Changes in normal ambient pH levels shall not exceed 0.5 in fresh waters.	COLD, WARM,
pH *(BPSO, III-10)*	MAR

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
The pH value shall not be depressed below 7.0 or raised above 8.5[2]. Changes in normal ambient pH levels shall not exceed 0.2 units.	
pH *(BPSO, III-5)* The pH value shall not be depressed below 6.5 nor above 8.3.	MUN, REC-1, REC-2, AGR
Settleable Material *(BPGO, III-3)* *Narrative Objective:* Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.	All Surface Waters
Sediment *(BPGO, III-3)* *Narrative Criteria:* The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.	All Surface Waters
Sodium *(BPSO, III-13)* Waterbody specific. Median values, shown in Table 3-7 for surface waters. Sub-Basins Objectives range from 20-250 mg/L.	
Sulfate *(BPSO, III-13)* Waterbody specific. Median values, shown in Table 3-7 for surface waters. Sub-Basins Objectives range from 10-700 mg/L.	
Suspended Material *(BPGO, III-3)* *Narrative Criteria:* Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.	All Surface Waters
Taste and Odor *(BPGO, III-3)*	All Surface Waters

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
Narrative Criteria: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.	
Temperature *(BPGO, III-3)* *Narrative Criteria:* Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.	All Surface Waters
Temperature *(BPGO, III-4)* *Narrative Objective:* Natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. *a) Indicators of Narrative Objective for COLD Habitat:* **Coho** December - April 48-54 ºF 7-DAM[3] 56-58 ºF 1-DAM May – November 57-63 ºF 7-DAM 68-70 ºF 1-DAM **Steelhead** December - April 55-57 ºF 7-DAM 56-58 ºF 1-DAM May – November 56-63 ºF 7-DAM 70-73 ºF 1-DAM *(Source: Hicks 2000)* *b) Indicators of Narrative Objective for WARM Habitat:* <u>**Stickleback**</u> Upper optimal limit = 75 ºF (This temperature is also the low end of the upper	All Surface Waters a) COLD b) WARM

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
lethal limit for steelhead) *(Source: Moyle 1976)* Note: 7-DAM refers to the rolling arithmetic average of seven consecutive daily maximum temperatures. 1-DAM refers to the highest daily maximum temperature.	
Temperature *(BPSO, III-10)* At no time or place shall the temperature be increased by more than 5°F above natural receiving water temperature.	COLD, WARM
Total Dissolved Solids (TDS) *(BPSO, III-13)* Waterbody specific. Median values, shown in Table 3-7 for surface waters. Sub-Basins Objectives range from 10-250 mg/L.	
Turbidity *(BPGO, III-3)* *Narrative Objective:* Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. *Indicators of Narrative Objective:* Turbidity greater than 25 NTU's causes reduction in juvenile salmonid growth due to interference with their ability to find food. *(Source: Central Coast Water Board. April 2009. Clean Water Act Sections 305(b) and 303(d) Integrated Report for the Central Coast Region; Sigler et al. 1984. Effects of chronic turbidity on density and growth of steelheads and coho salmon. Transactions of the American Fisheries Society 113:142-150)*	All Surface Waters
PATHOGEN INDICATORS	
Fecal Coliform *(BOSP,III-5)* Log mean 200 MPN/100mL. Max 400 MPN/100mL.	REC-1
Fecal Coliform *(BOSP,III-10)*	REC-2

SURFACE WATER QUALITY OBJECTIVE *(Source of WQO-Page in Basin Plan)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
Log mean 2000 MPN/100mL. Max 4000 MPN/100mL.	
E. coli *(USEPA)* Max 235 MPN/100 mL	REC-1
Total Coliform *(BOSP,III-12)* Median ≤ 70/100 MPN/100mL Max 230 MPN/100 mL	SHELL

Table 1B. Narrative and Numeric Water Quality Objectives for Groundwater.

GROUNDWATER QUALITY OBJECTIVE *(Source of WQO-Page in BP)* (Objectives are numeric unless labeled "narrative")	**BENEFICIAL USE**
TOXICANTS	
Chemical Constituents *(BPSO, III-14)* Groundwaters shall not contain concentrations of chemical constituents in excess of federal or state drinking water standards.	MUN
Chemical Constituents *(BPSO, III-14 and Tables 3-3 and 3-4)* Groundwaters shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use. Interpretation of adverse effect shall be as derived from the University of California Agricultural Extension Service guidelines provided in Table 3-3. In addition, water used for irrigation and livestock watering shall not exceed the concentrations for those chemicals listed in Table 3-4.	AGR
Total Nitrogen *(BPSO, III-15 and Table 3-8)* Groundwater Basin Objectives for Median values range from	Specific Groundwater Basins

GROUNDWATER QUALITY OBJECTIVE *(Source of WQO-Page in BP)* (Objectives are numeric unless labeled "narrative")	BENEFICIAL USE
1-10 mg/L as N.	
CONVENTIONALS	
Total Dissolved Solids (TDS) *(BPSO, III-15)* Groundwater Basin Objectives for median values range from 100-1500 mg/L TDS.	Specific Groundwater Basins
Chloride (Cl) *(BPSO, III-15)* Groundwater Basin Objectives for median values range from 20-430 mg/L Cl.	Specific Groundwater Basins
Sulfate (SO_4) *(BPSO, III-15)* Groundwater Basin Objectives for median values range from 10-1025 mg/L SO_4.	Specific Groundwater Basins
Boron (B) *(BPSO, III-15)* Groundwater Basin Objectives for median values range from 0.1-2.8 mg/L B.	Specific Groundwater Basins
Sodium (Na) *(BPSO, III-15)* Groundwater Basin Objectives for median values range from 10-730 mg/L.	Specific Groundwater Basins

Acronyms:
BP = Basin Plan or Water Quality Control Plan for the Central Coast Region
BPGO = Basin Plan General Objective
BPSO = Basin Plan Specific Objective related to a designated beneficial use
TMDL = Specific Objective related to an adopted Total Maximum Daily Load
WDR = Waste Discharge Requirements
SB = State Board established guideline
USEPA = US Environmental Protection Agency
CCAMP = Central Coast Ambient Monitoring Program
SWAMP = Surface Water Ambient Monitoring Program

MCL = Maximum Contaminant Level, California drinking water standards set forth in California Code of Regulations, Title 22.
NTU = Nephelometric Turbidity Unit
mg/L = milligram/Liter
MPN = Most Probable Number

PART C. DEFINITIONS

The following definitions apply to Order No. R3-2012-0011and MRP Order No. R3-2012-0011-01, MRP Order No. R3-2012-0011-02, and MRP Order No. R3-2012-0011-03 as related to discharges of waste from irrigated lands. The terms are arranged in alphabetical order. All other terms not explicitly defined for the purposes of this Order and Monitoring and Reporting Program shall have the same definitions as prescribed by California Water Code Division 7 or are explained within the Order or the MRP documents.

1. Anti-degradation. The State Water Board established a policy to maintain high quality waters of the State - Resolution 68-16 "*Statement of Policy with Respect to Maintaining High Quality Waters in California.*" Resolution 68-16 requires existing high quality water to be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of water, and will not result in water quality less than that prescribed in the policies. Regional Water Boards are required to ensure compliance with Resolution 68-16. The Central Coast Water Board must require discharges to be subject to *best practicable treatment or control* of the discharge necessary to avoid pollution or nuisance and to maintain the highest water quality consistent with maximum benefit to the people of the State. Resolution 68-16 has been approved by the USEPA to be consistent with the federal anti-degradation policy.

2. Aquatic Habitat. The physical, chemical, and biological components and functions of streams and lakes, including riparian areas and wetlands and their buffer zones.

3. Aquifer. A geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs. (see also uppermost aquifer).

4. Back flow Prevention. Back flow prevention devices are installed at the well or pump to prevent contamination of groundwater or surface water when fertilizers, pesticides, fumigants, or other chemicals are applied through an irrigation system. Back flow prevention devices used to comply with this Order must be those approved by USEPA, DPR, CDPH, or the local public health or water agency.

5. Basin Plan. The Basin Plan is the Central Coast's Region Water Quality Control Plan. The Basin Plan describes how the quality of the surface and groundwater in the Central Coast Region should be managed to provide the highest water quality reasonably possible. The Basin Plan includes beneficial uses, water quality objectives, and a program of implementation.

6. Beneficial Uses. The Basin Plan establishes the beneficial uses to be protected in the Central Coast Region. Beneficial uses for surface water and groundwater are divided into twenty-four standard categories identified below. The following beneficial uses have been identified in waterbodies within the Region:

- agricultural supply (AGR)
- aquaculture (AQUA)
- areas of special biological significance (ASBS)
- cold freshwater habitat (COLD)
- commercial and sportfishing (COMM)
- estuarine habitat (EST)
- freshwater replenishment (FRESH)
- groundwater recharge (GWR)
- hydropower generation (POW)
- industrial process supply (PRO)
- industrial service supply (IND)
- inland saline water habitat (SAL)
- marine habitat (MAR)
- municipal and domestic supply (MUN)
- migration of aquatic organisms (MIGR)
- navigation (NAV)
- non-contact recreation (REC2)
- preservation of biological habitats of special significance (BIOL)
- rare, threatened or endangered species (RARE)
- shellfish harvesting (SHELL
- spawning, reproduction, and development (SPWN)
- warm freshwater habitat (WARM)
- water contact recreation (REC1)
- wildlife habitat (WILD)

7. Chemigation. The application of pesticides, fertilizers, fumigants or other chemicals through an irrigation system.

8. Commercial. Irrigated lands producing commercial crops are those operations that have one or more of the following characteristics:

   a. The landowner or operator holds a current Operator Identification Number/Permit Number for pesticide use reporting;
   b. The crop is sold, including but not limited to (1) an industry cooperative, (2) harvest crew/company, or (3) a direct marketing location, such as Certified Farmers Markets;.
   c. The federal Department of Treasury Internal Revenue Service form 1040 Schedule F Profit or Loss from Farming is used to file federal taxes.

9. Concentration. The relative amount of a substance mixed with another substance. An example is 5 parts per million (ppm) of nitrogen in water or 5 mg/L.

10. Crop Types with High Potential to Discharge Nitrogen to Groundwater. Based on the Groundwater Pollution Nitrate Hazard Index developed by the University of California Division of Agriculture and Natural Resources (UCANR), the following crop types present the greatest risk for nitrogen loading to groundwater: beet, broccoli, cabbage, cauliflower, celery, Chinese cabbage (napa),collard, endive, kale, leek, lettuce (leaf and head), mustard, onion (dry and green), spinach, strawberry, pepper (fruiting), and parsley.

11. Discharge. A release of a waste to waters of the State, either directly to surface waters or through percolation to groundwater. Wastes from irrigated agriculture include but are not limited to earthen materials (soil, silt, sand, clay, and rock), inorganic materials (metals, plastics, salts, boron, selenium, potassium, nitrogen, phosphorus, etc.) and organic materials such as pesticides.

12. Discharger. The owner and operator of irrigated lands that discharge or have the potential to discharge waste that could directly or indirectly reach waters of the State and affect the quality of any surface water or groundwater. See also Responsible Party.

13. Discharges of Waste from Irrigated Lands. Surface water and groundwater discharges, such as irrigation return flows, tailwater, drainage water, subsurface drainage generated by irrigating crop land or by installing and operating drainage systems to lower the water table below irrigated lands (tile drains), stormwater runoff flowing from irrigated lands, stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands, runoff resulting from frost control, and/or operational spills containing waste.

14. Ephemeral Stream. A channel that holds water during and immediately after rain events.

15. Erosion. The wearing away of land surface by wind or water, intensified by land-clearing practices related to farming, residential or industrial development, road building, or logging.

16. Erosion and Sediment Control Practices. Practices used to prevent and reduce the amount of soil and sediment entering surface water in order to protect or improve water quality.

17. Environmental Justice. Providing equal and fair access to a healthy environment for communities of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies; and proactive efforts to take into account existing

environmental injustices and to protect from new or additional environmental hazards and inequitable environmental burdens;

18. Exceedance. A reading using a field instrument or a detection by a California State-certified analytical laboratory where the detected result is above an applicable water quality standard for the parameter or constituent. For toxicity tests, an exceedance is a result that is statistically lower than the control sample test result.

19. Farm or Ranch. For the purposes of this Order, a tract of land where commercial crops are produced or normally would have been produced. Individual farms/ranches typically have a similar farm/ranch manager, operator or landowner(s) and are categorized by farm size, primary output(s), and/or geographic location.

20. Farm Water Quality Management Plan (Farm Plan). The Farm Plan is a document that contains, at a minimum, identification of management practices that are being or will be implemented to protect and improve water quality by addressing irrigation management, pesticide management, nutrient management, salinity management, sediment and erosion control, and aquatic habitat protection. Farm Plans also contain a schedule for the effective implementation of management practices and verification monitoring to determine compliance with the requirements of this Order (schedules, milestones, effluent limits, etc.). Consistent with the Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands adopted by the Board in July 2004 (Order No. R3-2004-0117), this Order requires Dischargers to develop and implement a Farm Plan focused on the priority water quality issues associated with a specific operation and the priority water quality issues associated with a specific watershed or subwatershed.

21. Fertigation. The application of fertilizers through an irrigation system.

22. Freshwater Habitat. Uses of water that support cold or warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

23. Groundwater. The supply of water found beneath the earth's surface, usually in aquifers, which supply wells and springs.

24. Groundwater Protection Practices. Management practices designed to reduce or eliminate transport of nitrogen, pesticides, and other waste constituents into groundwater.

25. Integrated Pest Management Program (IPM). A pest management strategy that focuses on long-term prevention or suppression of pest problems through a

combination of techniques such as encouraging biological control, use of resistant varieties, or adoption of alternative cultivating, pruning, or fertilizing practices or modification of habitat to make it incompatible with pest development. Pesticides are used only when careful field monitoring indicates they are needed according to pre-established guidelines or treatment thresholds.

26. Intermittent Stream. A stream that holds water during wet portions of the year.

27. Irrigated Lands. For the purpose of this Order, irrigated lands include lands where water is applied for the purpose of producing commercial crops and include, but are not limited to, land planted to row, vineyard, field and tree crops as well as commercial nurseries, nursery stock production and greenhouse operations with soil floors, that do not have point-source type discharges, and are not currently operating under individual Waste Discharge Requirements (WDRs). Lands that are planted to commercial crops that are not yet marketable, such as vineyards and tree crops, must also obtain coverage under this Order.

28. Irrigation. Applying water to land areas to supply the water and nutrient needs of plants.

29. Irrigation Management Practices. Management practices designed to improve irrigation efficiency and reduce the amount of irrigation return flow or tailwater, and associated degradation or pollution of surface and groundwater caused by discharges of waste associated with irrigated lands.

30. Irrigation Runoff or Return Flow. Surface and subsurface water that leaves the field following application of irrigation water. See also, Tailwater.

31. Irrigation System Distribution Uniformity. Irrigation System Distribution Uniformity is a measure of how uniformly irrigation water is applied to the cropping area, expressed as a percentage. A nonuniform distribution can deprive portions of the crop of sufficient irrigation water, and can result in the excessive irrigation leading to water-logging, plant injury, salinization, irrigation runoff and transport of chemicals to surface water and groundwater.

32. Landowner. An individual or entity who has legal ownership of a parcel(s) of land. For the purposes of this Order, the landowner is responsible for ensuring compliance with this Order and for any discharge of waste occurring on or from the property.

33. Limited Resource Farmer. A Limited Resource Farmer is defined by the U.S. Dept. of Agriculture (USDA) as:

a. A person with direct or indirect gross farm sales not more than the current indexed value (determined by USDA) in each of the previous 2 years, and

b. A person who has a total household income at or below the national poverty level for a family of four, or less than 50 percent of county median household income in each of the previous 2 years.

The USDA's Limited Resource Farmer "Self Determination Tool" is available at: http://www.lrftool.sc.egov.usda.gov/DeterminationTool.aspx?fyYear=2012

34. Load. The concentration or mass of a substance discharged over a given amount of time, for example 10 mg/day or 5 Kg/day, respectively.

35. Monitoring. Sampling and analysis of receiving water quality conditions, discharge water quality, aquatic habitat conditions, effectiveness of management practices, and other factors that may affect water quality conditions to determine compliance with this Order or other regulatory requirements. Monitoring includes but is not limited to: surface water or groundwater sampling, on-farm water quality monitoring undertaken in connection with agricultural activities, monitoring to identify short and long-term trends in in-stream water quality or discharges from sites, inspections of operations, management practice implementation and effectiveness monitoring, maintenance of on-site records and management practice reporting.

36. Nitrate Hazard Index. In 1995, the University of California Center for Water Resources (WRC) developed the Nitrate Groundwater Pollution Hazard Index (Nitrate Hazard Index) (Wu, 2005). The purpose of the Nitrate Hazard Index is to identify agricultural fields with the highest vulnerability for nitrate pollution to groundwater, based on soil, crop, and irrigation practices. The hazard index number can range from 1 through 80 with the hazard increasing with increasing hazard index number. The WRC states that an index number greater than 20 indicates greater risk for nitrate pollution to groundwater and should receive careful attention.

http://ucanr.org/sites/wrc/Programs/Water_Quality/Nitrate_Groundwater_Pollution_Hazard_Index/

37. Nitrate Loading Risk Factor. A measure of the relative risk of loading nitrate to groundwater based on the following criteria a) Nitrate Hazard Index Rating by Crop Type, b) Irrigation System Type, and c) Irrigation Water Nitrate Concentration.

38. Non-point Source Pollution (NPS). Diffuse pollution sources that are generally not subject to NPDES permitting. The wastes are generally carried off the land by runoff. Common non-point sources are activities associated with agriculture, timber harvest, certain mining, dams, and saltwater intrusion.

39. Non-Point Source Management Measures. To combat NPS pollution, the State Water Board NPS Program adopted management measures as goals for the reduction of polluted runoff generated from five major categories, including agriculture. Management measures address the following components for agriculture: Erosion and sediment control; facility wastewater and runoff from confined animal facilities; nutrient management; pesticide management; irrigation water management; grazing management, and groundwater protection.

40. Non-Point Source Management Practices. Methods or practices selected by entities managing land and water to achieve the most effective, practical means of preventing or reducing pollution from diffuse sources, such as wastes carried off the landscape via urban runoff, excessive hill, slope or streambed and bank erosion, etc. Management Practices include, but are not limited to, structural and nonstructural controls and operation and maintenance procedures. Management Practices can be applied before, during, and after pollution-causing activities to prevent, reduce, or eliminate the introduction of wastes into receiving waters.

41. Nutrient. Any substance assimilated by living things that promotes growth.

42. Nutrient Management Practices. Management practices designed to reduce the nutrient loss from agricultural lands, which occur through edge-of-field runoff or leaching from the root zone.

43. Operator. Person responsible for or otherwise directing farming operations in decisions that may result in a discharge of waste to surface water or groundwater, including, but not limited to, a farm/ranch manager, lessee or sub-lessee. The operator is responsible for ensuring compliance with this Order and for any discharge of waste occurring on or from the operation.

44. Operation. A distinct farming business, generally characterized by the form of business organization, such as a sole proprietorship, partnership, corporation, and/or cooperative. A farming operation may be associated with one to many individual farms/ranches.

45. Operational Spill. Irrigation water that is diverted from a source such as an irrigation well or river, but is discharged without being delivered to or used on an individual field.

46. Perennial Stream. A stream that holds water throughout the year.

47. Pesticide Management Practices. Management practices designed to reduce or eliminate pesticide runoff into surface water and groundwater.

48. Point Source. Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which wastes are or may be discharged.

49. Pollutant. The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water, including dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

50. Public Water System. A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following: (1) Any collection, treatment, storage, and distribution facilities under control of the operator of the system which are used primarily in connection with the system; (2) Any collection or pretreatment storage facilities not under, the control of the operator that are used primarily in connection, with the system; (3) Any water system that treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.

51. Quality of the Water. The "chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affect its use" as defined in the California Water Code Sec. 13050(g).

52. Receiving Waters. Surface waters or groundwater that receive or have the potential to receive discharges of waste from irrigated lands.

53. Requirements of Applicable Water Quality Control Plans. Water quality objectives, prohibitions, Total Maximum Daily Load (TMDL) Implementation Plans, or other requirements contained in the Basin Plan, as adopted by the Central Coast Water Board and approved according to applicable law.

54. Responsible Party. The owner and operator of irrigated lands that discharge or have the potential to discharge waste that could directly or indirectly reach waters of the State and affect the quality of any surface water or groundwater. See also Discharger.

55. Riparian Area. Vegetation affected by the surface water or groundwater of adjacent perennial or intermittent streams, lakes or other waterbodies. Vegetation species are distinctly different from adjacent areas or are similar to adjacent areas

but exhibit more vigorous or robust growth forms indicative of increased soil moisture. Riparian areas may also include floodplains. Floodplains are critical areas for retaining floodwaters, allowing for sediment deposition and the natural movement of riparian areas, as well as space for colonization of new riparian and wetland vegetation necessary due to natural meandering. (Dall et. al. 1997, p.3)

56. Source of Drinking Water. Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan and/or as defined in SWRCB Resolution No. 88-63.

57. Stormwater. Stormwater runoff, snow melt runoff, and surface runoff and drainage, as defined in 40 CFR 122.26(b)(13).

58. Subsurface Drainage. Water generated by installing drainage systems to lower the water table below irrigated lands. The drainage can be generated by subsurface drainage systems, deep open drainage ditches or drainage wells.

59. Surface Runoff. Precipitation, snow melt, or irrigation water in excess of what can infiltrate the soil surface and be stored in small surface depressions; a major transporter of non-point source wastes in rivers, streams, and lakes.

60. Tailwater. Runoff of irrigation water from the lower end of an irrigated field. See also, Irrigation Runoff or Return Flow.

61. Tile Drains. Subsurface drainage which removes excess water from the soil profile, usually through a network of perforated tile tubes installed 2 to 4 feet below the soil surface. This lowers the water table to the depth of the tile over the course of several days. Drain tiles allow excess water to leave the field. Once the water table has been lowered to the elevation of the tiles, no more water flows through the tiles. The Central Coast Water Board anticipates evaluating longer timeframes necessary to address tile-drain discharges, for inclusion in a subsequent Agricultural Order.

62. Total Maximum Daily Load (TMDL). The condition of an impaired surface waterbody (on the List of Impaired Waterbodies) that limits the amount of pollution that can enter the waterbody without adversely affecting its beneficial uses, usually expressed as a concentration (e.g., mg/L) or mass (e.g., kg); TMDLs are proportionally allocated among dischargers to the impaired surface waterbody.

63. Total Nitrogen Applied. Total nitrogen applied includes nitrogen in any product, form or concentration) including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water; Reported in units of nitrogen per crop, per acre for each farm/ranch or nitrate loading risk unit;

64. Uppermost Aquifer. The geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer.

65. Waste. "Includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal" as defined in the California Water Code Sec. 13050(d). "Waste" includes irrigation return flows and drainage water from agricultural operations containing materials not present prior to use. Waste from irrigated agriculture includes *earthen materials* (such as soil, silt, sand, clay, rock), *inorganic materials* (such as metals, salts, boron, selenium, potassium, nitrogen, phosphorus), and *organic materials* such as pesticides.

66. Water Quality Buffer. A water quality protection zone surrounding perennial or intermittent channels, including adjacent wetlands (as defined by the Clean Water Act), with riparian vegetation and/or riparian functions that support beneficial uses and protect water quality.

67. Water Quality Control. The "regulation of any activity or factor which may affect the quality of the waters of the State and includes the prevention and correction of water pollution and nuisance" as defined in the California Water Code Sec. 13050(i).

68. Water Quality Criteria. Levels of water quality required under Sec. 303(c) of the Clean Water Act that are expected to render a body of water suitable for its designated uses. Criteria are based on specific levels of pollutants that would make the water harmful if used for drinking, swimming, farming, fish production, or industrial processes. The *California Toxics Rule* adopted by USEPA in April 2000, sets numeric Water Quality Criteria for non-ocean waters of California for a number of pollutants. See also, Water Quality Objectives.

69. Water Quality Objectives. "Limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specified area," as defined in Sec. 13050(h) of the California Water Code. Water Quality Objectives may be either numerical or narrative and serve as Water Quality Criteria for purposes of Section 303 of the Clean Water Act. Specific Water Quality Objectives relevant to this Order are identified in this Appendix A in Tables 1A and 1B.

70. Water Quality Standard. Provisions of State or Federal law that consist of the beneficial designated uses or uses of a waterbody, the numeric and narrative

water quality criteria that are necessary to protect the use or uses of that particular waterbody, and an anti-degradation statement. Water quality standards includes water quality objectives in the Central Coast Water Board's Basin Plan, water quality criteria in the California Toxics Rule and National Toxics Rule adopted by USEPA, and/or water quality objectives in other applicable State Water Board plans and policies. For groundwater with the beneficial use of municipal or domestic water supply, the applicable drinking water standards are those established by the United States Environmental Protection Agency (USEPA) or California Department of Public Health (CDPH), whichever is more stringent. Under Sec. 303 of the Clean Water Act, each State is required to adopt water quality standards.

71. Waters of the State. "Any surface water or groundwater, including saline waters, within the boundaries of the State" as defined in the California Water Code Sec. 13050(e), including all waters within the boundaries of the State, whether private or public, in natural or artificial channels, and waters in an irrigation system.

72. Wetland. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (40 CFR 230.3(t)).

73. Wildlife Habitat. Uses of water that support terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM
ORDER NO. R3-2012-0011-01

TIER 1

DISCHARGERS ENROLLED UNDER
THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM IRRIGATED LANDS

This Monitoring and Reporting Program Order No. R3-2012-0011-01 (MRP) is issued pursuant to California Water Code (Water Code) section 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. The Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Order No. R3-2012-0011 (Order) includes criteria and requirements for three tiers. This MRP sets forth monitoring and reporting requirements for **Tier 1 Dischargers** enrolled under the Order. A summary of the requirements is shown below.

SUMMARY OF MONITORING AND REPORTING REQUIREMENTS FOR TIER 1:

Part 1: Surface Receiving Water Monitoring and Reporting *(cooperative or individual)*;
Part 2: Groundwater Monitoring and Reporting;

Pursuant to Water Code section 13269(a)(2), monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. The monitoring and reports required by this MRP are to evaluate effects of discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Order.

MONITORING AND REPORTING BASED ON TIERS

The Order and MRP includes criteria and requirements for three tiers, based upon those characteristics of individual farms/ranches at the operation that present the highest level of waste discharge or greatest risk to water quality. Dischargers must meet conditions of the Order and MRP for the appropriate tier that applies to their land and/or the individual farm/ranch. Within a tier, Dischargers comply with requirements

ATTACHMENT 3

based on the specific level of discharge and threat to water quality from individual farms/ranches. The lowest tier, Tier 1, applies to dischargers who discharge the lowest level of waste (amount or concentration) or pose the lowest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. The highest tier, Tier 3, applies to dischargers who discharge the highest level of waste or pose the greatest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. Tier 2 applies to dischargers whose discharge has a moderate threat to water quality. Water quality is defined in terms of Regional, State, or Federal numeric or narrative water quality standards. Per the Order, Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier.

PART 1. SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Tier 1 Dischargers. Surface receiving water refers to water flowing in creeks and other surface waters of the State. Surface receiving water monitoring may be conducted through a **cooperative monitoring program**, or Dischargers may choose to conduct surface receiving water monitoring and reporting individually. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 4.

A. Surface Receiving Water Quality Monitoring

1. Dischargers must elect a surface receiving water monitoring option (cooperative monitoring program or individual receiving water monitoring) to comply with surface receiving water quality monitoring requirements, and identify the option selected on the Notice of Intent (NOI).

2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g., the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring requirements. Dischargers not participating in a cooperative monitoring program must conduct surface receiving water quality monitoring individually that achieves the same purpose.

3. Dischargers (individually or as part of a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain

discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

Surface Receiving Water Quality Sampling and Analysis Plan

4. **Within three months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP). Dischargers (or a third party cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water. The Executive Officer must approve the Sampling and Analysis Plan and QAPP.

5. The Sampling and Analysis Plan must include the following minimum required components:
    a. Monitoring strategy to achieve objectives of the Order and MRP;
    b. Map of monitoring sites with GIS coordinates;
    c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
    d. Identification of beneficial uses and applicable water quality standards;
    e. Identification of applicable Total Maximum Daily Loads;
    f. Monitoring parameters;
    g. Monitoring schedule, including description and frequencies of monitoring events;
    h. Description of data analysis methods;

6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA

methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines[1] and SWAMP templates[2], the receiving water quality monitoring QAPP must include the following minimum required components:

a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality control requirements are applicable to all the constituents sampled as part of the MRP, as described in the appropriate method.
c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QA Project Plan is implemented as prescribed.
d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection, laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.

7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.

8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring

[1] USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5
[2] http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa

parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1, unless otherwise approved by the Executive Officer. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g. CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual dischargers. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:

    a. Flow Monitoring;
    b. Water Quality (physical parameters, metals, nutrients, pesticides);
    c. Toxicity (water and sediment);
    d. Assessment of Benthic Invertebrates;

11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link:http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual farms/ranches and groups of Dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring

data must be compared to existing numeric and narrative water quality objectives.

13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing of the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of monitoring must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum monitoring frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly monitoring of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event monitoring must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.

16. **Within six months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must initiate receiving water quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

B. Surface Receiving Water Quality Reporting

Surface Receiving Water Quality Data Submittal

1. **Within nine months** of adoption of this Order and quarterly thereafter (by January 1, April 1, July 1, and October 1), Dischargers (individually or as part of a cooperative monitoring program) must submit water quality

monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines.

Surface Receiving Water Quality Monitoring Annual Report

2. **Within one year** of adoption of this Order and annually thereafter by January 1, Dischargers (individually or as part of a cooperative monitoring program) must submit an Annual Report electronically, in a format specified by the Executive Officer, including the following minimum elements:
   a. Signed Transmittal Letter;
   b. Title Page;
   c. Table of Contents;
   d. Executive Summary;
   e. Summary of Exceedance Reports submitted during the reporting period;
   f. Monitoring objectives and design;
   g. Monitoring site descriptions and rainfall records for the time period covered;
   h. Location of monitoring sites and map(s);
   i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;
   j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
   k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
   l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;
   m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
   n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;
   o. Electronic data submitted in a SWAMP/CCAMP comparable format;
   p. Sampling and analytical methods used;
   q. Copy of chain-of-custody forms;
   r. Field data sheets, signed laboratory reports, laboratory raw data;
   s. Associated laboratory and field quality control samples results;
   t. Summary of Quality Assurance Evaluation results;
   u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
   v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
   w. Conclusions;

PART 2. GROUNDWATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for groundwater identified in Part 2.A. and Part 2.B. apply to Tier 1 Dischargers. Key monitoring and reporting requirements for groundwater are shown in Table 3. Time schedules are shown in Table 4.

A. Individual Groundwater Monitoring

1. **Within one year** of adoption of the Order, Dischargers must sample private domestic drinking water and agricultural groundwater wells on their farm/ranch to evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for nitrogen loading and exceedance of drinking water standards, and identify priority areas for follow up actions.

2. Dischargers must sample at least one groundwater well for each farm/ranch on their operation. For farms/ranches with multiple groundwater wells, Dischargers must sample the primary irrigation well and all wells that are used or may be used for drinking water purposes. Groundwater monitoring parameters must include depth to groundwater (required if well construction provides for groundwater depth measurement) and well screen interval depths (if available), general chemical parameters, and general cations and anions listed in Table 3.

3. Dischargers must conduct two rounds of monitoring groundwater wells over a period of one year, one sample collected during spring (March/April) and one collected during fall (September/October). The first round of monitoring must be completed by October 2012. These two rounds of monitoring must be repeated every 5 years. As an alternative to groundwater monitoring requirements, where existing groundwater data is available, Dischargers may submit the following for Executive Officer approval:
    a. Existing groundwater quality data for individual farms/ranches that meet the following criteria: 1) at least one groundwater well for an individual farm/ranch, 2) a minimum of two samples collected for each well within the last five years, and 3) samples analyzed for nitrate using U.S. EPA approved analytical methods.
    b. Reference or citation of local groundwater quality monitoring study that includes data collected within the last 5 years and documents that local groundwater quality in the uppermost aquifer does not exceed drinking water standards.

4. Groundwater samples must be collected by a qualified third-party (e.g., consultant, technician, person conducting cooperative monitoring) using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples must be collected at or near the well head before the pressure tank and prior to any well head treatment. In

cases where this is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

5. Laboratory analyses for groundwater samples must be conducted by a State certified laboratory according to U.S. EPA approved methods; unless otherwise noted, all monitoring, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, United States Environmental Protection Agency, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link : http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

6. In lieu of conducting individual groundwater monitoring, Dischargers may participate in a cooperative groundwater monitoring effort to help minimize costs and to develop an effective groundwater monitoring program. Qualifying cooperative groundwater monitoring and reporting programs may include, but are not limited to, regional or subregional groundwater programs developed for other purposes as long as the proposed cooperative groundwater monitoring program meets the Central Coast Water Board's general purpose of characterizing groundwater quality and ensuring the protection of drinking water sources. Proposals for cooperative groundwater monitoring efforts, including the use of other regional or subregional groundwater monitoring programs, must be approved by the Executive Officer. At a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. Cooperative groundwater monitoring efforts must comply with the requirements for sampling protocols and laboratory analytical methods identified in this MRP, including parameters listed in Table 3, or propose a functional equivalent that meets the same objectives and purposes as individual groundwater monitoring. The cooperative groundwater monitoring program must report results consistent with individual groundwater reporting defined in part 2.B, or report results in a manner that is consistent with that approved by the Executive Officer in his or her approval of the cooperative groundwater monitoring proposal. Dischargers electing to participate in a cooperative groundwater monitoring effort must convey this election to the Central Coast Water Board within 90 days of adoption of this Order, and the individual groundwater monitoring requirements shall not apply as long as a cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year of adoption of this Order. If no cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year, then the

individual groundwater monitoring provisions shall apply and the Discharger shall have one (1) year to comply with the provisions identified in Part 2.

B. Individual Groundwater Reporting

1. **By October 1, 2013**, Dischargers must submit groundwater monitoring results and information, electronically, in a format specified by the Executive Officer. Dischargers must include the following information:
    a. Signed transmittal letter;
    b. Number of groundwater wells present at each farm/ranch;
    c. Identification of any groundwater wells abandoned or destroyed (including method destroyed) in compliance with the Order;
    d. Owner-assigned well identification;
    e. State identification number, if available;
    f. Well location (latitude and longitude);
    g. Water-use category (e.g., domestic drinking water, agricultural);
    h. Identification of primary irrigation well;
    i. Well construction information (e.g., total depth, screened intervals, depth to water), as available;
    j. Use for fertigation or chemigation;
    k. Presence and type of back flow prevention devices;
    l. Photo-documentation of well condition and back flow prevention device;
    m. Identification of wells sampled to comply with the Order and MRP;
    n. Laboratory data must be compatible with the Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program, and GeoTracker electronic deliverable format (EDF).

PART 3. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Submittal of Technical Reports

1. Dischargers must submit reports in a format specified by the Executive Officer. A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger or the Discharger's authorized agent:

    "In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are

true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

2. If the Discharger asserts that all or a portion of a report submitted pursuant to this Order is subject to an exemption from public disclosure (e.g. trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. The Discharger must clearly indicate on the cover of the report (typically an electronic submittal) that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection. In the interest of public health and safety, the Central Coast Water Board will not make available for public inspection, the precise location of any groundwater well monitored in compliance with this Order. Consistent with the reporting of groundwater wells on GeoTracker, groundwater well location and data will only be referenced within a one-half mile radius of the actual well location.

B. Enforcement and Violations

1. Monitoring reports are required pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the Water Code, a violation of a request made pursuant to Section 13267 may subject you to civil liability assessment of up to $1000 per day.

C. Executive Officer Authority

1. The Executive Officer may revise this MRP as necessary, and Dischargers must comply with the MRP as revised by the Executive Officer. Specifically, the Executive Officer may increase monitoring and reporting requirements where monitoring results, pesticide use patterns, or other indicators suggest that the increase is warranted due to an increased threat to water quality. Additionally, the Executive Officer can reduce monitoring and reporting requirements, including adjusting time schedules, where growers are coordinating efforts at watershed or subwatershed scales or where regional treatment facilities are implemented, or other indicators suggest that the reduction is warranted due to a reduced threat to water quality.

Roger W. Briggs
Executive Officer

March 15, 2012

Date

Table 1. Major Waterbodies in Agricultural Areas[1]

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek[2]	31023	Los Osos Creek
30510	Beach Road Ditch[2]	31023	Warden Creek
30530	Carnadero Creek	31024	San Luis Obispo Creek
30530	Furlong Creek[2]	31024	Prefumo Creek
30530	Llagas Creek	31031	Arroyo Grande Creek
30530	Miller's Canal	31031	Los Berros Creek
30530	San Juan Creek	31210	Bradley Canyon Creek
30530	Tesquisquita Slough	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Blanco Drain	31210	Orcutt Solomon Creek
30910	Old Salinas River	31210	Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Little Oso Flaco Creek
30920	Salinas River (above Gonzales Rd. and below Nacimiento R.)	31210	Santa Maria River
30910	Santa Rita Creek[2]	31310	San Antonio Creek[2]
30910	Tembladero Slough	31410	Santa Ynez River
30920	Alisal Creek	31531	Bell Creek
30920	Chualar Creek	31531	Glenn Annie Creek
30920	Espinosa Slough	31531	Los Carneros Creek[2]
30920	Gabilan Creek	31534	Arroyo Paredon Creek
30920	Natividad Creek	31534	Franklin Creek

[1] At a minimum, sites must be included for these waterbodies in agricultural areas, unless otherwise approved by the Executive Officer. Sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. Dischargers choosing to comply with surface receiving water quality monitoring, individually (not part of a cooperative monitoring program) must only monitor sites for waterbodies receiving the discharge.

[2] These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
WATER COLUMN SAMPLING		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP[9]	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	"
Electrical Conductivity (field measure) (uS/cm)	2.5	"
Dissolved Oxygen (field measure) (mg/L)	0.1	"
Temperature (field measure) (°C)	0.1	"
Turbidity (NTU)	0.5	"
Total Dissolved Solids (mg/L)	10	"
Total Suspended Solids (mg/L)	0.5	"
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	"
Total Ammonia (mg/L)	0.1	"
Unionized Ammonia (calculated value, mg/L))		"
Total Phosphorus (as P) (mg/L)	-	"
Soluble Orthophosphate (mg/L)	0.01	"
Water column chlorophyll a (mg/L)	0.002	"
Algae cover, Floating Mats, % coverage	-	"
Algae cover, Attached, % coverage	-	"
Water Column Toxicity Test		
Algae -*Selenastrum capricornutum, 4 day*	-	Twice in dry season, twice in wet season
Water Flea – *Ceriodaphnia (7-day chronic)*	-	"
Fathead Minnow - *Pimephales promelas (7-day chronic)*	-	"
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides[2] (ug/L)		
Carbamates		
Aldicarb	0.05	4 times, concurrent with water toxicity monitoring, in second year of Order term
Carbaryl	0.05	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Carbofuran	0.05	"
Methiocarb	0.05	"
Methomyl	0.05	"
Oxamyl	0.05	"
Organophosphate Pesticides		
Azinphos-methyl	0.02	"
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat dichloride	4	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (ug/L)		
Arsenic (total) [5,7]	0.3	4 times, concurrent with water toxicity monitoring, in second year of Order term
Boron (total) [6,7]	10	"
Cadmium (total & dissolved) [4,5,7]	0.01	"
Copper (total and dissolved) [4,7]	0.01	"
Lead (total and dissolved) [4,7]	0.01	"
Nickel (total and dissolved) [4,7]	0.02	"
Molybdenum (total) [7]	1	"
Selenium (total)[7]	0.30	"
Zinc (total and dissolved) [4,5,7]	0.10	"
Other (ug/L)		
Total Phenolic Compounds[8]	10	4 times, concurrent with water toxicity monitoring, in second year of Order term
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
SEDIMENT SAMPLING		
Sediment Toxicity - Hyalella azteca 10-day		Annually
Benthic Invertebrate and associated Physical Habitat Assessment	SWAMP SOP	Once during the second year of Order concurrent with sediment toxicity sampling
Pyrethroid Pesticides in Sediment (ug/kg)		
Gamma-cyhalothrin	2	Once during second year of Order, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	"
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Organochlorine Pesticides in Sediment		
DCPA	10	"
Dicofol	2	"
Other Monitoring in Sediment		
Chlorpyrifos (ug/kg)	2	"
Total Organic Carbon	0.01%	"
Sulfide		"
Sediment Grain Size Analysis	1%	"

[1]Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.
[2]Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.
[3] Reporting Limit, taken from SWAMP where applicable.
[4] Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.
[5]Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.
[6]Http://www.coastalagro.com/products/labels/9%25BORON.pdf; Boron is applied directly or as a component of fertilizers as a plant nutrient.
[7]Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.
[8]http://cat.inist.fr/?aModele=afficheN&cpsidt=14074525; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.
[9]See SWAMP field measures SOP, p. 17
mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Groundwater Sampling Parameters

Parameter	RL	Analytical Method[4]	Units
Depth to Groundwater[1]	-	Field Measurement	feet/bgs
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		
Total Alkalinity as $CaCO_3$		EPA Method 310.1 or 310.2	
Calcium	0.05	General Cations[2] EPA 200.7, 200.8, 200.9	mg/L
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO4)	1.0	General Anions EPA Method 300 or EPA Method 353.2	
Chloride	0.1		
Nitrate + Nitrite (as N)[3] or Nitrate as NO_3	0.1		

[1]Necessary to identify relevant water bearing zone; Required when well construction allows for groundwater depth measurement. [2]General chemistry parameters (major cations and anions) represent geochemistry of water bearing zone and assist in evaluating quality assurance/quality control of groundwater monitoring and laboratory analysis.
[3]The MRP allows analysis of "nitrate plus nitrite" to represent nitrate concentrations. The "nitrate plus nitrite" analysis allows for extended laboratory holding times and relieves the Discharger of meeting the short holding time required for nitrate. Dischargers may also analyze for Nitrate as NO_3.
[4]Dischargers may use alternative analytical methods approved by EPA.
bgs – below ground surface; RL – Reporting Limit; µS/cm – micro siemens per centimeter

Table 4. Tier 1 - Time Schedule for Key Monitoring and Reporting Requirements

REQUIREMENT	TIME SCHEDULE[1]
Submit Quality Assurance Project Plan and Sampling And Analysis Plan for Surface Receiving Water Quality Monitoring *(individually or through cooperative monitoring program)*	Within three months
Initiate surface receiving water quality monitoring *(individually or through cooperative monitoring program)*	Within six months
Submit surface receiving water quality monitoring data *(individually or through cooperative monitoring program)*	Within nine months, quarterly thereafter (January 1, April 1, July 1, and October 1)
Submit surface receiving water quality Annual Monitoring Report *(individually or through cooperative monitoring program)*	Within one year, annually thereafter by January 1
Initiate monitoring of groundwater wells	Within one year
Submit groundwater monitoring results	October 1, 2013

[1] Dates are relative to adoption of this Order, unless otherwise specified.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM
ORDER NO. R3-2012-0011-02

TIER 2

DISCHARGERS ENROLLED UNDER
THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM IRRIGATED LANDS

This Monitoring and Reporting Program Order No. R3-2012-0011-02 (MRP) is issued pursuant to California Water Code (Water Code) section 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. The Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Order No. R3-2012-0011 (Order) includes criteria and requirements for three tiers. This MRP sets forth monitoring and reporting requirements for **Tier 2 Dischargers** enrolled under the Order. A summary of the requirements is shown below.

SUMMARY OF MONITORING AND REPORTING REQUIREMENTS FOR TIER 2:

Part 1: Surface Receiving Water Monitoring and Reporting *(cooperative or individual)*;
Part 2: Groundwater Monitoring and Reporting;
Nitrate Loading Risk Factor Determination and Total Nitrogen Reporting *(required for subset of Tier 2 Dischargers if farm/ranch has high nitrate loading risk to groundwater);*
Part 3: Annual Compliance Form;
Part 4: Photo Monitoring
(required for subset of Tier 2 Dischargers if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity or sediment);

Pursuant to Water Code section 13269(a)(2), monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. The monitoring and reports required by this MRP are to evaluate effects of discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Order.

ATTACHMENT 2

MONITORING AND REPORTING BASED ON TIERS

The Order and MRP includes criteria and requirements for three tiers, based upon those characteristics of the individual farms/ranches at the operation that present the highest level of waste discharge or greatest risk to water quality. Dischargers must meet conditions of the Order and MRP for the appropriate tier that applies to their land and/or the individual farm/ranch. Within a tier, Dischargers comply with requirements based on the specific level of discharge and threat to water quality from individual farms/ranches. The lowest tier, Tier 1, applies to dischargers who discharge the lowest level of waste (amount or concentration) or pose the lowest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. The highest tier, Tier 3, applies to dischargers who discharge the highest level of waste or pose the greatest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. Tier 2 applies to dischargers whose discharge has a moderate threat to water quality. Water quality is defined in terms of Regional, State, or Federal numeric or narrative water quality standards. Per the Order, Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier.

PART 1. SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Tier 2 Dischargers. Surface receiving water refers to water flowing in creeks and other surface waters of the State. Surface receiving water monitoring may be conducted through a **cooperative monitoring program**, or Dischargers may choose to conduct surface receiving water monitoring and reporting individually. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 5.

A. Surface Receiving Water Quality Monitoring

1. Dischargers must elect a surface receiving water monitoring option (cooperative monitoring program or individual receiving water monitoring) to comply with surface receiving water quality monitoring requirements, and identify the option selected on the Notice of Intent (NOI).

2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g. the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring requirements. Dischargers not participating in a cooperative monitoring program must conduct surface receiving water quality monitoring individually that achieves the same purpose.

3. Dischargers (individually or as part of a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

Surface Receiving Water Quality Sampling and Analysis Plan

4. **Within three months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP). Dischargers (or a third party cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water. The Executive Officer must approve the Sampling and Analysis Plan and QAPP.

5. The Sampling and Analysis Plan must include the following minimum required components:
    a. Monitoring strategy to achieve objectives of the Order and MRP;
    b. Map of monitoring sites with GIS coordinates;
    c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
    d. Identification of beneficial uses and applicable water quality standards;
    e. Identification of applicable Total Maximum Daily Loads;
    f. Monitoring parameters;
    g. Monitoring schedule, including description and frequencies of monitoring events;
    h. Description of data analysis methods;

6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines[1] and SWAMP templates[2], the receiving water quality monitoring QAPP must include the following minimum required components:
    a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
    b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality control requirements are applicable to all the constituents sampled as part of the MRP, as described in the appropriate method.
    c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QA Project Plan is implemented as prescribed.
    d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection, laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.

---

[1] USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5
[2] http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa

7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.

8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1, unless otherwise approved by the Executive Officer. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g. CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual discharges. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:

    a. Flow Monitoring;
    b. Water Quality (physical parameters, metals, nutrients, pesticides);
    c. Toxicity (water and sediment);
    d. Assessment of Benthic Invertebrates;

11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, and analyzed as specified herein by the above analytical methods

and reporting limits indicated. Certified laboratories can be found at the web link:http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual farms/ranches and groups of dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring data must be compared to existing numeric and narrative water quality objectives.

13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of monitoring must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum monitoring frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly monitoring of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event monitoring must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.

16. **Within six months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must initiate receiving water quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

B. Surface Receiving Water Quality Reporting

Surface Receiving Water Quality Data Submittal

1. **Within nine months** of adoption of this Order and quarterly thereafter (by January 1, April 1, July 1, and October 1), Dischargers (individually or as part of a cooperative monitoring program) must submit water quality monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines.

Surface Receiving Water Quality Monitoring Annual Report

2. **Within one year** of adoption of this Order and annually thereafter by January 1, Dischargers (individually or as part of a cooperative monitoring program) must submit an Annual Report, electronically, in a format specified by the Executive Officer including the following minimum elements:
    a. Signed Transmittal Letter;
    b. Title Page;
    c. Table of Contents;
    d. Executive Summary;
    e. Summary of Exceedance Reports submitted during the reporting period;
    f. Monitoring objectives and design;
    g. Monitoring site descriptions and rainfall records for the time period covered;
    h. Location of monitoring sites and map(s);
    i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;
    j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
    k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
    l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;
    m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
    n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;
    o. Laboratory data submitted electronically in a SWAMP/CCAMP comparable format;
    p. Sampling and analytical methods used;

q. Copy of chain-of-custody forms;
r. Field data sheets, signed laboratory reports, laboratory raw data;
s. Associated laboratory and field quality control samples results;
t. Summary of Quality Assurance Evaluation results;
u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
w. Conclusions;

PART 2. GROUNDWATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for groundwater identified in Part 2.A., Part 2.B., and Part 2.C. apply to Tier 2 Dischargers. Key monitoring and reporting requirements for groundwater are shown in Table 3. Time schedules are shown in Table 5.

A. Individual Groundwater Sampling

1. **Within one year** of adoption of the Order, Dischargers must sample private domestic drinking water and agricultural groundwater wells on their farm/ranch to evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for nitrogen loading and exceedance of drinking water standards, and identify priority areas for follow up actions.

2. Dischargers must sample at least one groundwater well for each farm/ranch on their operation. For farms/ranches with multiple groundwater wells, Dischargers must sample the primary irrigation well and all wells that are used or may be used for drinking water purposes. Groundwater monitoring parameters must include depth to groundwater (required if well construction provides for groundwater depth measurement) and well screen interval depths (if available), general chemical parameters, and general cations and anions listed in Table 3.

3. Dischargers must conduct two rounds of monitoring groundwater wells over a period of one year, one sample collected during spring (March/April) and one collected during fall (September/October). The first round of monitoring must be completed by October 2012. These two rounds of sampling must be repeated every 5 years. As an alternative to groundwater monitoring requirements, where existing groundwater data is available, Dischargers may submit the following for Executive Officer approval:
    a. Existing groundwater quality data for individual farms/ranches that meet the following criteria: 1) at least one groundwater well for an individual farm/ranch, 2) a minimum of two samples collected for

each well within the last five years, and 3) samples analyzed for nitrate using U.S. EPA approved analytical methods.

b. Reference or citation of local groundwater quality monitoring study that includes data collected within the last 5 years and documents that local groundwater quality in the uppermost aquifer does not exceed drinking water standards.

4. Groundwater samples must be collected by a qualified third-party (e.g., consultant, technician, person conducting cooperative monitoring) using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples must be collected at or near the well head before the pressure tank and prior to any well head treatment. In cases where this is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

5. Laboratory analyses for groundwater samples must be conducted by a State certified laboratory according to U.S. EPA approved methods; unless otherwise noted, all monitoring, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, United States Environmental Protection Agency, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link below:
http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

6. In lieu of conducting individual groundwater monitoring, Dischargers may participate in a cooperative groundwater monitoring effort to help minimize costs and to develop an effective groundwater monitoring program. Qualifying cooperative groundwater monitoring and reporting programs may include, but are not limited to, regional or subregional groundwater programs developed for other purposes as long as the proposed cooperative groundwater monitoring program meets the Central Coast Water Board's general purpose of characterizing groundwater quality and ensuring the protection of drinking water sources. Proposals for cooperative groundwater monitoring efforts, including the use of other regional or subregional groundwater monitoring programs must be approved by the Executive Officer. At a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. Cooperative groundwater monitoring efforts must comply with the requirements for sampling protocols and laboratory analytical methods identified in this MRP, including parameters

listed in Table 3, or propose a functional equivalent that meets the same objectives and purposes as individual groundwater monitoring. The cooperative groundwater monitoring program must report results consistent with individual groundwater reporting defined in part 2.B, or report results in a manner that is consistent with that approved by the Executive Officer in his or her approval of the cooperative groundwater monitoring proposal. Dischargers electing to participate in a cooperative groundwater monitoring effort must convey this election to the Central Coast Water Board within 90 days of adoption of this Order, and the individual groundwater monitoring requirements shall not apply as long as a cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year of adoption of this Order. If no cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year, then the individual groundwater monitoring provisions shall apply and the Discharger shall have one (1) year to comply with the provisions identified in Part 2.

B. Individual Groundwater Reporting

1. **By October 1, 2013**, Dischargers must submit groundwater sampling results and information, electronically, in a format specified by the Executive Officer. Dischargers must include the following information:
    a. Signed transmittal letter;
    b. Number of groundwater wells present at each farm/ranch;
    c. Identification of any groundwater wells abandoned or destroyed (including method destroyed) in compliance with the Order;
    d. Owner-assigned well identification;
    e. State identification number, if available;
    f. Well location (latitude and longitude);
    g. Water-use category (e.g., domestic drinking water, agricultural);
    h. Identification of primary irrigation well;
    i. Well construction information (e.g., total depth, screened intervals, depth to water), as available;
    j. Use for fertigation or chemigation;
    k. Presence and type of back flow prevention devices;
    l. Photo-documentation of well condition and back flow prevention device;
    m. Identification of wells sampled to comply with the Order and MRP;
    n. Laboratory data must be compatible with the Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program, and GeoTracker electronic deliverable format (EDF).

C. Nitrate Loading Risk Factor Determination and Total Nitrogen Reporting

1. Tier 2 Dischargers must calculate the nitrate loading risk factor for each ranch/farm included in their operations. The nitrate loading risk factor is a measure of the relative risk of loading nitrate to groundwater. Tier 2 Dischargers must determine the nitrate loading risk factor for each ranch/farm, based on the highest risk activity existing at each ranch/farm. For example, if a Discharger uses both sprinkler and drip irrigation on the same crop, they must use the irrigation type "sprinkler" in the nitrate loading risk calculation. To calculate nitrate loading risk, Tier 2 Dischargers must use the criteria and methodology described in Table 4 of this MRP, or use the Nitrate Groundwater Pollution Hazard Index developed by University of California Division of Agriculture and Natural Resources (UCANR).

2. Tier 2 Dischargers may choose to subdivide the ranch/farm into "nitrate loading risk units," based on the variability of ranch/farm conditions for the purposes of complying with this Order. A nitrate loading risk unit is a subdivided unit of the ranch/farm with different farming conditions (irrigation system type, crop type, nitrate concentration in the irrigation water, etc.). The nitrate loading risk unit may be the total ranch, a number of blocks, or an individual block. If a Discharger chooses to subdivide the ranch/farm into individual nitrate loading risk units, the Discharger must maintain individual record keeping, and conduct monitoring and reporting for each nitrate loading risk unit.

3. Tier 2 Dischargers who choose to evaluate nitrate loading risk using the Table 4 criteria and methodology must calculate the ranch/farm or nitrate loading risk unit's nitrate loading risk level (low, moderate, or high), as described in Table 4. Dischargers must report Nitrate Loading Risk factors and level in the electronic Annual Compliance Form.
    a. LOW - Nitrate loading risk is less than 10;
    b. MODERATE – Nitrate loading risk is between 10 and 15;
    c. HIGH – Nitrate loading risk is more than 15;

4. Tier 2 Dischargers who choose to evaluate nitrate loading risk using the Nitrate Groundwater Pollution Hazard Index must characterize the soil type for the individual farm(s), including any variability in soil type, and utilize the index tool at the Internet link below. Soil types may vary across individual fields, and this variability must be accounted for when using the Nitrate Groundwater Pollution Hazard Index. If the soil type is unknown or if the soil type is not included in the UCANR Nitrate Groundwater Pollution Hazard Index tool, Dischargers must use the Table 4 criteria and methodology described above. Dischargers must provide documentation of input to the index for crop type, soil type, irrigation type, and deep rip. A

resulting Nitrate Groundwater Pollution Hazard Index number greater than or equal to 20 indicates a High Nitrate Loading Risk.

http://ucanr.org/sites/wrc/Programs/Water_Quality/Nitrate_Groundwater_Pollution_Hazard_Index/"

5. Tier 2 Dischargers with individual farms/ranches or nitrate loading risk units that have a HIGH nitrate loading risk must report total nitrogen applied per crop, per acre, per year to each farm/ranch or nitrate loading risk unit in the electronic Annual Compliance Form. Total nitrogen must be reported in units of nitrogen, for any product, form or concentration including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water;
    a. As an alternative to reporting total nitrogen, Tier 2 Dischargers with high nitrate loading risk may propose an individual discharge groundwater monitoring and reporting program (GMRP) plan for approval by the Executive Officer. The GMRP plan must evaluate waste discharge to groundwater from each ranch/farm or nitrate loading risk unit and assess if the waste discharge is of sufficient quality that it will not cause or contribute to exceedances of any nitrate water quality standards in groundwater.

PART 3. ANNUAL COMPLIANCE FORM

Tier 2 Dischargers must submit annual compliance information, electronically, in a format specified by the Executive Officer. The purpose of the electronic Annual Compliance Form is to provide information to the Central Coast Water Board to assist in the evaluation of threat to water quality from individual agricultural discharges of waste and measure progress towards water quality improvement and verify compliance with the Order and MRP. Time schedules are shown in Table 5.

A. Annual Compliance Form

1. **By October 1, 2012 and updated annually thereafter by October 1**, Tier 2 Dischargers must submit an Annual Compliance Form electronically, in a format specified by the Executive Officer. The electronic Annual Compliance Form includes, but is not limited to the following minimum requirements[3]:
    a. Signed transmittal letter;

[3] Items reported in the Annual Compliance Document are due by October 12, 2012 and annually thereafter, unless otherwise specified.

b. Verification that any change in general operation or farm/ranch information (e.g., crop type, irrigation type, discharge type) is reported on update to Notice of Intent (NOI);
c. Verification of compliance with monitoring requirements, including any cooperative monitoring fees;
d. Verification of completed Farm Plan and date of last update;
e. Information regarding type and characteristics of discharge (e.g., number of discharge points, estimated flow/volume, number of tailwater days);
f. Identification of any direct agricultural discharges to a stream, lake, estuary, bay, or ocean;
g. Identification of specific farm water quality management practices completed, in progress, and planned to address water quality impacts caused by discharges of waste including irrigation management, pesticide management, nutrient management, salinity management, stormwater management, and sediment and erosion control to achieve compliance with this Order;
h. Nitrate concentration of irrigation water;
i. Identification of the application of any fertilizers, pesticides, fumigants or other chemicals through an irrigation system (e.g. fertigation or chemigation) and proof of proper backflow prevention devices;
j. Description of method and location of chemical applications relative to surface water;
k. Nitrate Loading Risk factors in Table 4 or Nitrate Groundwater Pollution Hazard Index input and Nitrate Loading Risk level;
l. Proof of approved California Department of Fish and Game (CDFG) Streambed Alteration Agreement, as required by CDFG for any work proposed within the bed, bank or channel of a lake or stream, including riparian areas, that has the potential to result in erosion and discharges of waste to waters of the State;

Tier 2 Dischargers with farms/ranches that contain or are adjacent to a waterbody impaired for temperature, turbidity or sediment:

m. Photo monitoring to document condition of streams, riparian, and wetland area habitat and the presence of bare soil within the riparian habitat area that is vulnerable to erosion;

Tier 2 Dischargers with farms/ranches that have High Nitrate Loading Risk:

n. Total nitrogen applied per acre to each farm/ranch or nitrate loading risk unit (in units of nitrogen, in any product, form or concentration) including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas,

manure, extracts, nitrogen present in the soil, and nitrate in irrigation water[4];

PART 4. PHOTO MONITORING AND REPORTING REQUIREMENTS

Photo monitoring and reporting requirements identified in Part 4.A. apply to Tier 2 Dischargers that have farms/ranches that contain or are adjacent to a waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity or sediment (see Order Table 1). Time schedules are shown in Table 5.

A. Photo Monitoring and Reporting

1. **By October 1, 2012**, Tier 2 Dischargers that have farms/ranches that contain or are adjacent to a waterbody *impaired for temperature, turbidity or sediment* must conduct photo monitoring to do the following:

    a. Document the existing condition of perennial, intermittent or ephemeral streams (wet or dry), riparian or wetland area habitat; Photo monitoring of existing conditions must be repeated every four years and submitted with the electronic Annual Compliance Form.

2. Tier 2 Dischargers must conduct photo monitoring consistent with protocol established by the Executive Officer. Dischargers must include date of photo, photo location and point of reference in the photo. Photos must be accompanied by explanations and descriptions of the management practices demonstrated in the photos to meet the Basin Plan requirements specified below and must include estimated widths of riparian areas from top of bank.

    Basin Plan (Chapter 5, p. V-13, Section V.G.4 – Erosion and Sedimentation, *"A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, must be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip must be thirty feet, wherever possible...."*

[4] Due by October 1, 2014 and annually thereafter by October 1.

PART 5. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Submittal of Technical Reports

1. Dischargers must submit reports in a format specified by the Executive Officer. A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger or the Discharger's authorized agent:

   "In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

2. If the Discharger asserts that all or a portion of a report submitted pursuant to this Order is subject to an exemption from public disclosure (e.g. trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. The Discharger must clearly indicate on the cover of the report (typically an electronic submittal) that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection. In the interest of public health and safety, the Central Coast Water Board will not make available for public inspection, the precise location of any groundwater well monitored in compliance with this Order. Consistent with the reporting of groundwater wells on GeoTracker, groundwater well location and data will only be referenced within a one-half mile radius of the actual well location.

B. Enforcement and Violations

1. Monitoring reports are required pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the Water Code, a violation of a request made pursuant to Section 13267 may subject you to civil liability assessment of up to $1000 per day.

C. Executive Officer Authority

1. The Executive Officer may revise this MRP as necessary, and Dischargers must comply with the MRP as revised by the Executive Officer. Specifically, the Executive Officer may increase monitoring and reporting requirements where monitoring results, pesticide use patterns, or other indicators suggest that the increase is warranted due to an increased threat to water quality. Additionally, the Executive Officer can reduce monitoring and reporting requirements, including adjusting time schedules, where growers are coordinating efforts at watershed or subwatershed scales or where regional treatment facilities are implemented, or other indicators suggest that the reduction is warranted due to a reduced threat to water quality.

Roger W. Briggs
Executive Officer

March 15, 2012

Date

Table 1. Major Waterbodies in Agricultural Areas[1]

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek[2]	31023	Los Osos Creek
30510	Beach Road Ditch[2]	31023	Warden Creek
30530	Carnadero Creek	31024	San Luis Obispo Creek
30530	Furlong Creek[2]	31024	Prefumo Creek
30530	Llagas Creek	31031	Arroyo Grande Creek
30530	Miller's Canal	31031	Los Berros Creek
30530	San Juan Creek	31210	Bradley Canyon Creek
30530	Tesquisquita Slough	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Blanco Drain	31210	Orcutt Solomon Creek
30910	Old Salinas River	31210	Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Little Oso Flaco Creek
30920	Salinas River above Gonzales Rd. and below Nacimiento R.)	31210	Santa Maria River
30910	Santa Rita Creek[2]	31310	San Antonio Creek[2]
30910	Tembladero Slough	31410	Santa Ynez River
30920	Alisal Creek	31531	Bell Creek
30920	Chualar Creek	31531	Glenn Annie Creek
30920	Espinosa Slough	31531	Los Carneros Creek[2]
30920	Gabilan Creek	31534	Arroyo Paredon Creek
30920	Natividad Creek	31534	Franklin Creek

[1] At a minimum, sites must be included for these waterbodies in agricultural areas, unless otherwise approved by the Executive Officer. Sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. Dischargers choosing to comply with surface receiving water quality monitoring, individually (not part of a cooperative monitoring program) must only monitor sites for waterbodies receiving the discharge.

[2] These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
WATER COLUMN SAMPLING		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP[9]	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	"
Electrical Conductivity (field measure) (uS/cm)	2.5	"
Dissolved Oxygen (field measure) (mg/L)	0.1	"
Temperature (field measure) (°C)	0.1	"
Turbidity (NTU)	0.5	"
Total Dissolved Solids (mg/L)	10	"
Total Suspended Solids (mg/L)	0.5	"
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	"
Total Ammonia (mg/L)	0.1	"
Unionized Ammonia (calculated value, mg/L))		"
Total Phosphorus (as P) (mg/L)	-	"
Soluble Orthophosphate (mg/L)	0.01	"
Water column chlorophyll a (mg/L)	0.002	"
Algae cover, Floating Mats, % coverage	-	"
Algae cover, Attached, % coverage	-	"
Water Column Toxicity Test		
Algae -*Selenastrum capricornutum, 4 day*	-	Twice in dry season, twice in wet season
Water Flea – *Ceriodaphnia (7-day chronic)*	-	"
Fathead Minnow - *Pimephales promelas (7-day chronic)*	-	"
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides[2] (ug/L)		
Carbamates		
Aldicarb	0.05	4 times, concurrent with water toxicity monitoring, in second year of Order term

Parameters and Tests	RL[3]	Monitoring Frequency[1]
Carbaryl	0.05	"
Carbofuran	0.05	"
Methiocarb	0.05	"
Methomyl	0.05	"
Oxamyl	0.05	"
Organophosphate Pesticides		
Azinphos-methyl	0.02	"
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat dichloride	4	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (ug/L)		
Arsenic (total) [5,7]	0.3	4 times, concurrent with water toxicity monitoring, in second year of Order term
Boron (total) [6,7]	10	"
Cadmium (total & dissolved) [4,5,7]	0.01	"
Copper (total and dissolved) [4,7]	0.01	"
Lead (total and dissolved) [4,7]	0.01	"
Nickel (total and dissolved) [4,7]	0.02	"
Molybdenum (total) [7]	1	"
Selenium (total)[7]	0.30	"
Zinc (total and dissolved) [4,5,7]	0.10	"
Other (ug/L)		
Total Phenolic Compounds[8]	10	4 times, concurrent with water toxicity monitoring, in second year of Order term
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
SEDIMENT SAMPLING		
Sediment Toxicity - Hyalella azteca 10-day		Annually
Benthic Invertebrate and associated Physical Habitat Assessment	SWAMP SOP	Once during the second year of Order concurrent with sediment toxicity sampling
Pyrethroid Pesticides in Sediment (ug/kg)		
Gamma-cyhalothrin	2	Once during second year of Order, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	"
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Organochlorine Pesticides in Sediment		
DCPA	10	"
Dicofol	2	"
Other Monitoring in Sediment		
Chlorpyrifos (ug/kg)	2	"
Total Organic Carbon	0.01%	"
Sulfide		"
Sediment Grain Size Analysis	1%	"

[1]Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.
[2]Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.
[3] Reporting Limit, taken from SWAMP where applicable.
[4] Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.
[5]Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.
[6]Http://www.coastalagro.com/products/labels/9%25BORON.pdf; Boron is applied directly or as a component of fertilizers as a plant nutrient.
[7]Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.
[8]http://cat.inist.fr/?aModele=afficheN&cpsidt=14074525; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.
[9]See SWAMP field measures SOP, p. 17
mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Groundwater Monitoring Parameters

Parameter	RL	Analytical Method[4]	Units
Depth to Groundwater[1]	-	Field Measurement	feet/bgs
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		mg/L
Total Alkalinity as CaCO3	1	EPA Method 310.1 or 310.2	
Calcium	0.05	General Cations[2] EPA 200.7, 200.8, 200.9	
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO4)	1.0	General Anions EPA Method 300 or EPA Method 353.2	
Chloride	0.1		
Nitrate + Nitrite (as N)[3] or Nitrate as NO_3	0.1		

[1]Necessary to identify relevant water bearing zone; Required when well construction allows for groundwater depth measurement. [2]General chemistry parameters (major cations and anions) represent geochemistry of water bearing zone and assist in evaluating quality assurance/quality control of groundwater sampling and laboratory analysis.
[3]The MRP allows analysis of "nitrate plus nitrite" to represent nitrate concentrations. The "nitrate plus nitrite" analysis allows for extended laboratory holding times and relieves the Discharger of meeting the short holding time required for nitrate. Dischargers may also analyze for Nitrate as NO_3.
[4]Dischargers may use alternative analytical methods approved by EPA.
bgs – below ground surface; RL – Reporting Limit; µS/cm – micro siemens per centimeter

Table 4. Nitrate Loading Risk Factor Criteria and Risk Level Calculation

A. Crop Type Nitrate Hazard Index Rating

1 - Bean, Grapes, Olive.

2 - Apple, Avocado, Barley, Blackberry, Blueberry, Carrot, Chicory, Citrus, Lemon Oat, Orange, Peach, Pear, Pistachio, Raspberry, Walnut, Wheat.

3 - Artichoke, Bean, Brussel Sprout, Corn, Cucumber, Daikon, Peas, Radish, Squash, Summer, Tomato, Turnip, Squash, Rutabaga, Pumpkin, Potato.

4 – Beet, Broccoli, Cabbage, Cauliflower, Celery, Chinese Cabbage (Napa),Collard, Endive, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Pepper, Spinach, Strawberry.

(Based on UC Riverside Nitrate Hazard Index)

B. Irrigation System Type Rating

1 - Micro-irrigation year round (drip and micro-sprinklers) and no pre-irrigation;

2 - Sprinklers used for pre-irrigation only and then micro-irrigation;

3 - Sprinklers used for germination or at any time during growing season;

4 - Surface irrigation systems (furrow or flood) at any, and/or in combination with any other irrigation system type;

(Based on UC Riverside Nitrate Hazard Index, Adapted for the Central Coast Region)

C. Irrigation Water Nitrate Concentration Rating

1 – Nitrate concentration 0 to 45 mg/liter Nitrate NO3
2 - Nitrate concentration 46 to 60 mg/liter Nitrate NO3
3 - Nitrate concentration 61to 100 mg/liter Nitrate NO3
4 - Nitrate concentration > 100 mg/l Nitrate NO3

D. Nitrate Loading Risk Level Calculation = A x B x C

LOW - Nitrate loading risk is less than 10;
MODERATE – Nitrate loading risk is between 10 and 15;
HIGH – Nitrate loading risk is more than 15;

Note: Dischargers must determine the nitrate loading risk factor for each ranch/farm, based on the criteria associated with the highest risk activity existing at each ranch/farm. For example, the ranch/farm is assigned the highest risk factor, based on the single highest risk crop in the rotation, on one block under furrow irrigation, or on one well with high nitrate concentration. As an alternative to the nitrate loading risk level calculation described in Table 4, Dischargers may use the Groundwater Pollution Nitrate Hazard Index developed by UCANR, where a resulting Nitrate Hazard Index score equal or greater or equal to 20 indicates a HIGH nitrate loading risk to groundwater.

Table 5. Tier 2 - Time Schedule for Key Monitoring and Reporting Requirements

REQUIREMENT	TIME SCHEDULE[1]
Submit Quality Assurance Project Plan and Sampling And Analysis Plan for Surface Receiving Water Quality Monitoring (individually or through cooperative monitoring program)	Within three months
Initiate surface receiving water quality monitoring (individually or through cooperative monitoring program)	Within six months
Submit surface receiving water quality monitoring data (individually or through cooperative monitoring program)	Within nine months, quarterly thereafter (January 1, April 1, July 1, and October 1)
Submit surface receiving water quality Annual Monitoring Report (individually or through cooperative monitoring program)	Within one year, annually thereafter by January 1
Initiate monitoring of groundwater wells	Within one year
Tier 2 Dischargers with farms/ranches that contain or are adjacent to a waterbody impaired for temperature, turbidity or sediment: Conduct photo monitoring of riparian or wetland area habitat	October 1, 2012, and every four years thereafter by October 1
Submit electronic Annual Compliance Form	October 1, 2012, and updated annually thereafter by October 1
Submit groundwater monitoring results	October 1, 2013
Tier 2 Dischargers with farms/ranches that have High Nitrate Loading Risk: Report total nitrogen applied per acre to each	October 1, 2014, and annually thereafter by October 1.

farm/ranch or nitrate loading risk unit, in electronic Annual Compliance Form	

[1] Dates are relative to adoption of this Order or enrollment date for Dischargers enrolled after the adoption of this Order, unless otherwise specified.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM
ORDER NO. R3-2012-0011-03

TIER 3

DISCHARGERS ENROLLED UNDER
THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM IRRIGATED LANDS

This Monitoring and Reporting Program Order No. R3-2012-0011-03 (MRP) is issued pursuant to California Water Code (Water Code) section 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. The Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Order No. R3-2012-0011 (Order) includes criteria and requirements for three tiers. This MRP sets forth monitoring and reporting requirements for **Tier 3 Dischargers** enrolled under the Order. A summary of the requirements is shown below.

SUMMARY OF MONITORING AND REPORTING REQUIREMENTS FOR TIER 3:

Part 1: Surface Receiving Water Monitoring and Reporting *(cooperative or individual)*;
Part 2: Groundwater Monitoring and Reporting;
Nitrate Loading Risk Factor Determination and Total Nitrogen Reporting *(required for subset of Tier 3 Dischargers if farm/ranch has high nitrate loading risk to groundwater);*
Part 3: Annual Compliance Form;
Part 4: Photo Monitoring *(required for subset of Tier 3 Dischargers if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity or sediment);*
Part 5: Individual Surface Water Discharge Monitoring and Reporting;
Part 6: Irrigation and Nutrient Management Plan *(required for subset of Tier 3 Dischargers if farm/ranch has High Nitrate Loading Risk);*
Part 7: Water Quality Buffer Plan *(required for subset of Tier 3 Dischargers if farm/ranch contains or is adjacent to a waterbody impaired for temperature, turbidity or sediment);*

Pursuant to Water Code section 13269(a)(2), monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's conditions. The monitoring and reports required by this MRP are to evaluate effects of

ATTACHMENT 2

discharges of waste from irrigated agricultural operations and individual farms/ranches on waters of the state and to determine compliance with the Order.

MONITORING AND REPORTING BASED ON TIERS

The Order and MRP includes criteria and requirements for three tiers, based upon those characteristics of the individual farms/ranches at the operation that present the highest level of waste discharge or greatest risk to water quality. Dischargers must meet conditions of the Order and MRP for the appropriate tier that applies to their land and/or the individual farm/ranch. Within a tier, Dischargers comply with requirements based on the specific level of discharge and threat to water quality from individual farms/ranches. The lowest tier, Tier 1, applies to dischargers who discharge the lowest level of waste (amount or concentration) or pose the lowest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. The highest tier, Tier 3, applies to dischargers who discharge the highest level of waste or pose the greatest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. Tier 2 applies to dischargers whose discharge has a moderate threat to water quality. Water quality is defined in terms of Regional, State, or Federal numeric or narrative water quality standards. Per the Order, Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier.

PART 1. SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Tier 3 Dischargers. Surface receiving water refers to water flowing in creeks and other surface waters of the State. Surface receiving water monitoring may be conducted through a **cooperative monitoring program**, or Dischargers may choose to conduct surface receiving water monitoring and reporting individually. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 6.

A. Surface Receiving Water Quality Monitoring

1. Dischargers must elect a surface receiving water monitoring option (cooperative monitoring program or individual receiving water monitoring) to comply with surface receiving water quality monitoring requirements, and identify the option selected on the Notice of Intent (NOI).

2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g., the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring

requirements. Dischargers not participating in a cooperative monitoring program must conduct surface receiving water quality monitoring individually that achieves the same purpose.

3. Dischargers (individually or as part of a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of their waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

Surface Receiving Water Quality Sampling and Analysis Plan

4. **Within three months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP). Dischargers (or a third party cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water. The Executive Officer must approve the Sampling and Analysis Plan and QAPP.

5. The Sampling and Analysis Plan must include the following minimum required components:
    a. Monitoring strategy to achieve objectives of the Order and MRP;
    b. Map of monitoring sites with GIS coordinates;
    c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
    d. Identification of beneficial uses and applicable water quality standards;
    e. Identification of applicable Total Maximum Daily Loads;
    f. Monitoring parameters;

g. Monitoring schedule, including description and frequencies of monitoring events;
h. Description of data analysis methods;

6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines[1] and SWAMP templates[2], the receiving water quality monitoring QAPP must include the following minimum required components:
    a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
    b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality control requirements are applicable to all the constituents sampled as part of the MRP, as described in the appropriate method.
    c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QA Project Plan is implemented as prescribed.
    d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection,

[1] USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5
[2] http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa

laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.

7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.

8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1, unless otherwise approved by the Executive Officer. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g. CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual discharges. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:

    a. Flow Monitoring;
    b. Water Quality (physical parameters, metals, nutrients, pesticides);
    c. Toxicity (water and sediment);
    d. Assessment of Benthic Invertebrates;

11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling,

sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link: http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual farms/ranches and groups of Dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring data must be compared to existing numeric and narrative water quality objectives.

13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of monitoring must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum monitoring frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly monitoring of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event monitoring must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.

16. **Within six months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must initiate receiving water

quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

B. Surface Receiving Water Quality Reporting

Surface Receiving Water Quality Data Submittal

1. **Within nine months** of adoption of this Order and quarterly thereafter (by January 1, April 1, July 1, and October 1), Dischargers (individually or as part of a cooperative monitoring program) must submit water quality monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines.

Surface Receiving Water Quality Monitoring Annual Report

2. **Within one year** of adoption of this Order and annually thereafter by January 1, Dischargers (individually or as part of a cooperative monitoring program) must submit an Annual Report, electronically, in a format specified by the Executive Officer including the following minimum elements:
   a. Signed Transmittal Letter;
   b. Title Page;
   c. Table of Contents;
   d. Executive Summary;
   e. Summary of Exceedance Reports submitted during the reporting period;
   f. Monitoring objectives and design;
   g. Monitoring site descriptions and rainfall records for the time period covered;
   h. Location of monitoring sites and map(s);
   i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;
   j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
   k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
   l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;
   m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
   n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;

o. Laboratory data submitted electronically in a SWAMP/CCAMP comparable format;
p. Sampling and analytical methods used;
q. Copy of chain-of-custody forms;
r. Field data sheets, signed laboratory reports, laboratory raw data;
s. Associated laboratory and field quality control samples results;
t. Summary of Quality Assurance Evaluation results;
u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
w. Conclusions;

PART 2. GROUNDWATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for groundwater identified in Part 2.A., Part 2.B., and Part 2.C. apply to Tier 3 Dischargers. Key monitoring and reporting requirements for groundwater are shown in Table 3. Time schedules are shown in Table 6.

A. Individual Groundwater Monitoring

1. **Within one year** of adoption of the Order, Dischargers must sample private domestic drinking water and agricultural groundwater wells on their farm/ranch to evaluate groundwater conditions in agricultural areas, identify areas at greatest risk for nitrogen loading and exceedance of drinking water standards, and identify priority areas for follow up actions.

2. Dischargers must sample at least one groundwater well for each farm/ranch on their operation. For farms/ranches with multiple groundwater wells, Dischargers must sample the primary irrigation well and all wells that are used or may be used for drinking water purposes. Groundwater monitoring parameters must include depth to groundwater (required if well construction provides for groundwater depth measurement) and well screen interval depths (if available), general chemical parameters, and general cations and anions listed in Table 3.

3. Tier 3 Dischargers must initially conduct two rounds of monitoring of groundwater wells during the first year, one sample collected during spring (March/April) and one collected during fall (September/October), and once annually thereafter. The first round of monitoring must be completed by October 2012. The annual monitoring must be conducted during the quarter when nitrate concentration was at its maximum, based on quarterly groundwater monitoring.

4. Groundwater samples must be collected by a qualified third-party (e.g., consultant, technician, person conducting cooperative monitoring) using proper sampling methods, chain-of-custody, and quality assurance/quality control protocols. Groundwater samples must be collected at or near the well head before the pressure tank and prior to any well head treatment. In cases where this is not possible, the water sample must be collected from a sampling point as close to the pressure tank as possible, or from a cold-water spigot located before any filters or water treatment systems.

5. Laboratory analyses for groundwater samples must be conducted by a State certified laboratory according to U.S. EPA approved methods; unless otherwise noted, all monitoring, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, United States Environmental Protection Agency, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link below:
http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls

6. In lieu of conducting individual groundwater monitoring, Dischargers may participate in a cooperative groundwater monitoring effort to help minimize costs and to develop an effective groundwater monitoring program. Qualifying cooperative groundwater monitoring and reporting programs may include, but are not limited to, regional or subregional groundwater programs developed for other purposes as long as the proposed cooperative groundwater monitoring program meets the Central Coast Water Board's general purpose of characterizing groundwater quality and ensuring the protection of drinking water sources. Proposals for cooperative groundwater monitoring efforts, including the use of other regional or subregional groundwater monitoring programs, must be approved by the Executive Officer. At a minimum, the cooperative groundwater monitoring effort must include sufficient monitoring to adequately characterize the groundwater aquifer(s) in the local area of the participating Dischargers, characterize the groundwater quality of the uppermost aquifer, and identify and evaluate groundwater used for domestic drinking water purposes. Cooperative groundwater monitoring efforts must comply with the requirements for sampling protocols and laboratory analytical methods identified in this MRP, including parameters listed in Table 3, or propose a functional equivalent that meets the same objectives and purposes as individual groundwater monitoring. The cooperative groundwater monitoring program must report results consistent with individual groundwater reporting defined in Part 2.B., or report results in a manner that is consistent with that approved by the Executive Officer in his or her approval of the cooperative groundwater monitoring proposal.

Dischargers electing to participate in a cooperative groundwater monitoring effort must convey this election to the Central Coast Water Board within 90 days of adoption of this Order, and the individual groundwater monitoring requirements shall not apply as long as a cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year of adoption of this Order. If no cooperative groundwater monitoring proposal for that Discharger's area is submitted within one (1) year, then the individual groundwater monitoring provisions shall apply and the Discharger shall have one (1) year to comply with the provisions identified in Part 2.

B. Individual Groundwater Reporting

1. **By October 1, 2013 and annually thereafter by October 1**, Tier 3 Dischargers must submit groundwater monitoring results and information, electronically, in a format specified by the Executive Officer. Dischargers must include the following information:
    a. Signed transmittal letter;
    b. Number of groundwater wells present at each farm/ranch;
    c. Identification of any groundwater wells abandoned or destroyed (including method destroyed) in compliance with the Order;
    d. Owner-assigned well identification;
    e. State identification number, if available;
    f. Well location (latitude and longitude);
    g. Water-use category (e.g., domestic drinking water, agricultural);
    h. Identification of primary irrigation well;
    i. Well construction information (e.g., total depth, screened intervals, depth to water), as available;
    j. Use for fertigation or chemigation;
    k. Presence and type of back flow prevention devices;
    l. Photo-documentation of well condition and back flow prevention device;
    m. Identification of wells sampled to comply with the Order and MRP;
    n. Laboratory data must be compatible with the Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program, and GeoTracker electronic deliverable format (EDF).

C. Nitrate Loading Risk Factor Determination and Total Nitrogen Reporting

1. Tier 3 Dischargers must calculate the nitrate loading risk factor for each ranch/farm included in their operations. The nitrate loading risk factor is a measure of the relative risk of loading nitrate to groundwater. Tier 3 Dischargers must determine the nitrate loading risk factor for each ranch/farm, based on the highest risk activity existing at each ranch/farm.

For example, if a Discharger uses both sprinkler and drip irrigation on the same crop, they must use the irrigation type "sprinkler" in the nitrate loading risk calculation. To calculate nitrate loading risk, Tier 3 Dischargers must use the criteria and methodology described in Table 4 of this MRP, or use the Nitrate Groundwater Pollution Hazard Index developed by University of California Division of Agriculture and Natural Resources (UCANR).

2. Tier 3 Dischargers may choose to subdivide the ranch/farm into "nitrate loading risk units," based on the variability of ranch/farm conditions for the purposes of complying with this Order. A nitrate loading risk unit is a subdivided unit of the ranch/farm with different farming conditions (irrigation system type, crop type, nitrate concentration in the irrigation water, etc.). The nitrate loading risk unit may be the total ranch, a number of blocks, or an individual block. If a Discharger chooses to subdivide the ranch/farm into individual nitrate loading risk units, the Discharger must maintain individual record keeping, and conduct monitoring and reporting for each nitrate loading risk unit.

3. Tier 3 Dischargers who choose to evaluate nitrate loading risk using the Table 4 criteria and methodology must calculate the ranch/farm or nitrate loading risk unit's nitrate loading risk level (low, moderate, or high), as described in Table 4. Dischargers must report Nitrate Loading Risk factors and level in the electronic Annual Compliance Form.
    a. LOW - Nitrate loading risk is less than 10;
    b. MODERATE – Nitrate loading risk is between 10 and 15;
    c. HIGH – Nitrate loading risk is more than 15;

4. Tier 3 Dischargers who choose to evaluate nitrate loading risk using the Nitrate Groundwater Pollution Hazard Index must characterize the soil type for the individual farm(s), including any variability in soil type, and utilize the index tool at the Internet link below. Soil types may vary across individual fields, and this variability must be accounted for when using the Nitrate Groundwater Pollution Hazard Index. If the soil type is unknown or if the soil type is not included in the UCANR Nitrate Groundwater Pollution Hazard Index tool, Dischargers must use the Table 4 criteria and methodology described above. Dischargers must provide documentation of input to the index for crop type, soil type, irrigation type, and deep rip. A resulting Nitrate Groundwater Pollution Hazard Index number greater than or equal to 20 indicates a High Nitrate Loading Risk.

    http://ucanr.org/sites/wrc/Programs/Water_Quality/Nitrate_Groundwater_Pollution_Hazard_Index/"

5. Tier 3 Dischargers with individual farms/ranches or nitrate loading risk units that have a HIGH nitrate loading risk must report total nitrogen applied per

crop, per acre, per year to each farm/ranch or nitrate loading risk unit in the electronic Annual Compliance Form. Total nitrogen must be reported in units of nitrogen, for any product, form or concentration including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water;

a. As an alternative to reporting total nitrogen, Tier 3 Dischargers with high nitrate loading risk may propose an individual discharge groundwater monitoring and reporting program (GMRP) plan for approval by the Executive Officer. The GMRP plan must evaluate waste discharge to groundwater from each ranch/farm or nitrate loading risk unit and assess if the waste discharge is of sufficient quality that it will not cause or contribute to exceedances of any nitrate water quality standards in groundwater.

PART 3. ANNUAL COMPLIANCE FORM

Tier 3 Dischargers must submit annual compliance information, electronically, in a format specified by the Executive Officer. The purpose of the electronic Annual Compliance Form is to provide information to the Central Coast Water Board to assist in the evaluation of threat to water quality from individual agricultural discharges of waste and measure progress towards water quality improvement and verify compliance with the Order and MRP. Time schedules are shown in Table 6.

A. Annual Compliance Form

1. **By October 1, 2012 and updated annually thereafter by October 1,** Tier 3 Dischargers must submit an Annual Compliance Form electronically, in a format specified by the Executive Officer. The electronic Annual Compliance Form includes, but is not limited to the following minimum requirements[3]:
    a. Signed transmittal letter;
    b. Verification that any change in general operation or farm/ranch information (e.g., crop type, irrigation type, discharge type) is reported on update to Notice of Intent (NOI);
    c. Verification of compliance with monitoring requirements, including any cooperative monitoring fees;
    d. Verification of completed Farm Plan and date of last update;
    e. Information regarding type and characteristics of discharge (e.g., number of discharge points, estimated flow/volume, number of tailwater days);

[3] Items reported in the Annual Compliance Form are due by October 12, 2012 and annually thereafter, unless otherwise specified.

f. Identification of any direct agricultural discharges to a stream, lake, estuary, bay, or ocean;
g. Identification of specific farm water quality management practices completed, in progress, and planned to address water quality impacts caused by discharges of waste including irrigation management, pesticide management, nutrient management, salinity management, stormwater management, and sediment and erosion control to achieve compliance with this Order;
h. Nitrate concentration of irrigation water;
i. Identification of the application of any fertilizers, pesticides, fumigants or other chemicals through an irrigation system (e.g. fertigation or chemigation) and proof of proper backflow prevention devices;
j. Description of method and location of chemical applications relative to surface water;
k. Nitrate Loading Risk factors in Table 4 or Nitrate Groundwater Pollution Hazard Index input and Nitrate Loading Risk level;
l. Proof of approved California Department of Fish and Game (CDFG) Streambed Alteration Agreement, as required by CDFG for any work proposed within the bed, bank or channel of a lake or stream, including riparian areas, that has the potential to result in erosion and discharges of waste to waters of the State;

Tier 3 Dischargers with farms/ranches that contain or are adjacent to a waterbody impaired for temperature, turbidity or sediment:

m. Photo monitoring to document condition of streams, riparian, and wetland area habitat and the presence of bare soil within the riparian habitat area that is vulnerable to erosion;
n. Water Quality Buffer Plan or alternative[4];

Tier 3 Dischargers with farms/ranches that have High Nitrate Loading Risk:

o. Total nitrogen applied per acre to each farm/ranch or nitrate loading risk unit (in units of nitrogen, in any product, form or concentration) including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water[5];
p. Specific elements of the INMP (e.g., Proof of certification, Crop Nitrogen Uptake Values, Nitrogen Balance Ratio, Estimate of

[4] Due by October 1, 2016
[5] Due by October 1, 2014 and annually thereafter by October 1.

Nitrate Loading to Groundwater, Estimate of Reduction in Nitrate Loading to Groundwater)[6];

q. INMP Effectiveness Report[7]

PART 4. PHOTO MONITORING AND REPORTING REQUIREMENTS

Photo monitoring and reporting requirements identified in Part 4.A. apply to Tier 3 Dischargers that have farms/ranches that contain or are adjacent to a waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity or sediment (see Order Table 1). Time schedules are shown in Table 6.

A. Photo Monitoring and Reporting

1. **By October 1, 2012**, Tier 3 Dischargers that have farms/ranches that contain or are adjacent to a waterbody *impaired for temperature, turbidity or sediment* must conduct photo monitoring to do the following:

    a. Document the existing condition of perennial, intermittent or ephemeral streams (wet or dry), riparian or wetland area habitat; Photo monitoring of existing conditions must be repeated every four years and submitted with the electronic Annual Compliance Form.

2. Tier 3 Dischargers must conduct photo monitoring consistent with protocol established by the Executive Officer. Dischargers must include date of photo, photo location and point of reference in the photo. Photos must be accompanied by explanations and descriptions of the management practices demonstrated in the photos to meet the Basin Plan requirements specified in Part 7.A. and must include estimated widths of riparian areas from top of bank.

PART 5. INDIVIDUAL SURFACE WATER DISCHARGE MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for individual surface water discharge identified in Part 5.A. and Part 5.B. apply to all Tier 3 Dischargers. Key monitoring and reporting requirements for individual surface water discharge are shown in Tables 5A and 5B. Time schedules are shown in Table 6.

A. Individual Surface Water Discharge Monitoring

[6] Due by October 1, 2015
[7] Due by October 1, 2016

2. Tier 3 Dischargers must conduct individual surface water discharge monitoring to a) evaluate the quality of individual waste discharges, including concentration and load of waste (in kilograms per day) for appropriate parameters, b) evaluate effects of waste discharge on water quality and beneficial uses, and c) evaluate progress towards compliance with water quality improvement milestones in the Order.

Individual Sampling and Analysis Plan

3. **By March 15, 2013,** Tier 3 Dischargers must submit an individual surface water discharge Sampling and Analysis Plan and QAPP to monitor individual discharges of waste from their farm/ranch, including irrigation run-off (including tailwater discharges and discharges from tile drains, tailwater ponds and other surface water containment features unless constructed with impermeable liner), and stormwater discharges. The Sampling and Analysis Plan and QAPP must be submitted to the Executive Officer.

4. The Sampling and Analysis Plan must include the following minimum required components to monitor irrigation run-off, including tailwater discharges and discharges from tile drains, tailwater ponds and other surface water containment features, and stormwater discharges:
    a. Number and location of discharge points (identified with latitude and longitude or on a scaled map);
    b. Number and location of monitoring points;
    c. Description of typical irrigation runoff patterns;
    d. Map of discharge and monitoring points;
    e. Sample collection methods;
    f. Monitoring parameters;
    g. Monitoring schedule and frequency of monitoring events;

5. The QAPP must include appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, quality control activities, and documentation.

6. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may require modifications to the Sampling and Analysis Plan or Tier 3 Dischargers may propose Sampling and Analysis Plan modifications for Executive Officer approval, when modifications are justified to accomplish the objectives of the MRP.

Individual Surface Water Discharge Monitoring Points

7. Tier 3 Dischargers must select monitoring points to characterize at least 80% of the estimated irrigation run-off discharge volume from each farm/ranch at the point in time the sample is taken[8], including tailwater discharges and discharges from tile drains. Sample must be taken when irrigation activity is causing maximal run-off. Load estimates will be generated by multiplying flow volume of discharge by concentration of contaminants. Tier 3 Dischargers must include at least one monitoring point from each farm/ranch which drains areas where chlorpyrifos or diazinon are applied, and monitoring of runoff or tailwater must be conducted within one week of chemical application. If discharge is not routinely present, Discharger may characterize typical run-off patterns in the Annual Report. See Table 4a for additional details.

8. Tier 3 Dischargers must also monitor tailwater ponds and other surface water containment features. If multiple ponds are present, sampling must cover at least 80% by volume of the containment features. See Table 4b for additional details.

Individual Surface Water Discharge Monitoring Parameters, Frequency, and Schedule

9. Tier 3 Dischargers must conduct monitoring for parameters, laboratory analytical methods, frequency and schedule described in Tables 4A and 4B. Dischargers may utilize in-field water testing instruments/equipment as a substitute for laboratory analytical methods if the method is approved by U.S. EPA, meets reporting limits (RL) and practical quantitation limits (PQL) specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.

10. **By October 1, 2013** of the adoption of the Order, Tier 3 Dischargers must initiate individual surface water discharge monitoring per the Sampling and Analysis Plan and QAPP, unless otherwise directed by the Executive Officer.

B. Individual Surface Water Discharge Reporting

Individual Surface Water Discharge Monitoring Data Submittal

1. **By March 15, 2014,** October 1, 2014, and annually thereafter by October 1, Tier 3 Dischargers must submit individual surface water discharge monitoring data to the Central Coast Water Board electronically, in a format

[8] The requirement to select monitoring points to characterize at least 80% of the estimated irrigation run-off is for the purposes of collecting a sample that represents a majority of the volume of irrigation run-off discharged. The MRP does not specify the number or location of monitoring points to provide maximum flexibility for growers to determine how many sites are necessary and exact locations given site-specific conditions.

specified by the Executive Officer. The electronic data submittal must include the following minimum information:

a. Electronic laboratory data submitted;
b. Narrative description of typical irrigation runoff patterns;
c. Location of sampling sites and map(s);
d. Sampling and analytical methods used;
e. Specify the method used to obtain flow at each monitoring site during each monitoring event;
f. Photos obtained from all monitoring sites, clearly labeled with location and date;
g. Sample chain-of-custody forms do not need to be submitted but must be made available to Central Coast Water Board staff, upon request;

PART 6. IRRIGATION AND NUTRIENT MANAGEMENT PLAN

Monitoring and reporting requirements related to the Irrigation and Nutrient Management Plan (INMP) identified in Part 6.A., 6.B., and 6.C. apply to Tier 3 Dischargers that have farms/ranches with high nitrate loading risk. Time schedules are shown in Table 6.

A. Irrigation and Nutrient Management Plan Monitoring

1. Tier 3 Dischargers with High Nitrate Loading Risk must develop and initiate implementation of an Irrigation and Nutrient Management Plan (INMP) certified by a Professional Soil Scientist, Professional Agronomist, or Crop Advisor certified by the American Society of Agronomy, or similarly qualified professional.

2. The purpose of the INMP is to budget and manage the nutrients applied to each farm/ranch or nitrate loading risk unit considering all sources of nutrients, crop requirements, soil types, climate, and local conditions in order to minimize nitrate loading to surface water and groundwater in compliance with this Order.

3. The professional certification of the INMP must indicate that the relevant expert has reviewed all necessary documentation and testing results, evaluated nutrient balance calculations (total nitrogen applied relative to typical crop nitrogen uptake and nitrogen removed at harvest), evaluated estimated nitrate loading to groundwater, evaluated progress towards nutrient management targets, and conducted field verification to ensure accuracy of reporting.

4. Tier 3 Dischargers with High Nitrate Loading Risk must include the following elements in the INMP. The INMP is not submitted to the Central Coast Water Board, with the exception of key elements identified in Part 6B:
    a. Proof of INMP certification;
    b. Map locating each farm/ranch or nitrate loading risk unit;
    c. Identification of nitrate loading risk factors or input to the Groundwater Pollution Nitrate Hazard Index and overall Nitrate Loading Risk level calculation for each ranch/farm or nitrate loading risk unit;
    d. Identification of crop nitrogen uptake values for use in nutrient balance calculations;
    e. Record keeping of the total nitrogen applied per crop, per acre to each farm/ranch or nitrate loading risk unit (in units of nitrogen, in any product, form or concentration) including, but not limited to, organic and inorganic fertilizers, slow release products, compost, compost teas, manure, extracts, nitrogen present in the soil, and nitrate in irrigation water;
    f. Dischargers must take a nitrogen soil sample (e.g. laboratory analysis or nitrate quick test) or use an alternative method to evaluate nitrogen content in soil, prior to planting or seeding the field or prior to the time of pre-sidedressing. The amount of nitrogen remaining in the soil must be accounted for as a source of nitrogen when budgeting, and the soil sample or alternative method results must be maintained in the INMP.
    g. Annual balance of nitrogen applied compared to typical crop nitrogen uptake for each ranch/farm or nitrate loading risk unit (Nitrogen Balance ratio);
    h. Annual estimation of nitrogen loading to groundwater and surface water, including subsurface drainage (e.g., tile drains), from each ranch/farm or nitrate loading risk unit;
    i. Identification of irrigation and nutrient management practices in progress (identify start date), completed (identify completion date), and planned (identify anticipated start date) to reduce nitrate loading to groundwater to achieve compliance with this Order.
    j. Annual evaluation of reductions in nitrate loading to groundwater resulting from decreased fertilizer use and/or implementation of irrigation and nutrient management practices;
    k. Description of methods Discharger will use to verify overall effectiveness of the INMP.

5. Tier 3 Dischargers must evaluate the effectiveness of the INMP. Irrigation and Nutrient Management Plan effectiveness monitoring must be conducted or supervised by a registered professional engineer, professional geologist, Certified Crop Advisor, or similarly qualified professional with experience in

contaminant transport hydrogeology. Monitoring must evaluate measured progress towards protecting, preserving, and restoring groundwater quality in the upper-most aquifer (or perched aquifer, whichever is first encountered), resulting from reductions in loading based on reduced fertilizer use and improved irrigation and nutrient management practices. Monitoring methods used may include, but are not limited to lysimeter monitoring, shallow groundwater or soil monitoring, or groundwater well monitoring. If the physical monitoring by itself cannot demonstrate progress towards compliance with the Order, the Discharger may need to supplement physical monitoring with contaminant transport and flow modeling.

B. Irrigation and Nutrient Management Plan Reporting

1. **By October 1, 2015 and annually thereafter,** Tier 3 Dischargers with High Nitrate Loading Risk must report the following INMP elements in the electronic Annual Compliance Form:
    a. Identification of crop nitrogen uptake values for use in nutrient balance calculations;
    b. Annual balance of nitrogen applied per crop compared to typical crop nitrogen uptake for each ranch/farm or nitrate loading risk unit (Nitrogen Balance ratio);
    c. Annual estimation of nitrogen loading to groundwater and surface water, including subsurface drainage (e.g., tile drains), from each ranch/farm or nitrate loading risk unit;
    d. Annual evaluation of reductions in nitrate loading to groundwater resulting from decreased fertilizer use and/or implementation of nutrient management practices;

2. **By October 1, 2016**, Tier 3 Dischargers that have farms/ranches with high nitrate loading risk to groundwater must submit an INMP Effectiveness Report to evaluate measured progress towards protecting, preserving, and restoring groundwater quality in the upper-most aquifer, including reductions in loading based on the implementation of irrigation and nutrient management practices. The INMP Effectiveness Report must be prepared by a state registered professional engineer, professional geologist, Certified Crop Advisor with hydrogeology experience, or similarly qualified professional. Dischargers in the same groundwater basin or subbasin may choose to comply with this requirement as a group by submitting a single report that evaluates the overall effectiveness of the broad scale implementation of irrigation and nutrient management practices identified in individual INMPs to protect groundwater and achieve water quality standards for nitrate. Group efforts must use data from each farm/ranch (e.g., individual groundwater wells, lysimeters, and/or soil samples) to adequately represent groundwater quality and progress towards groundwater protection for all farms/ranches in the group. The INMP

Effectiveness Report must include the following elements and submitted with the electronic Annual Compliance Form:

a. A description of the methodology used to evaluate and verify effectiveness of the INMP (e.g., lysimeter monitoring, shallow groundwater or soil monitoring, groundwater well monitoring, contaminant transport and flow modeling);
b. An evaluation of how discharges of waste and any associated reductions in nitrate loading will decrease the concentration of nitrate in the upper-most aquifer, commensurate with water quality standards, within a reasonable and foreseeable time frame, and compared to milestones identified in the Order;
c. Based on estimated nitrate loading reductions to the groundwater basin or subbasin, the estimated number of years to achieve water quality standards in receiving water;

PART 7. WATER QUALITY BUFFER PLAN

Monitoring and reporting requirements related to the Water Quality Buffer Plan identified in Part 7.A. and Part 7.B. apply to Tier 3 Dischargers that have farms/ranches *that contain or are adjacent to waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity, or sediment).* Time schedules are shown in Table 6.

A. Water Quality Buffer Plan;

1. **By October 1, 2016**, Tier 3 Dischargers adjacent to or containing a waterbody identified on the List of Impaired Waterbodies as impaired for temperature, turbidity or sediment must submit a Water Quality Buffer Plan to the Executive Officer that protects the listed waterbody and its associated perennial and intermittent tributaries. The purpose of the Water Quality Buffer Plan is to prevent waste discharge, comply with water quality standards (e.g., temperature, turbidity, sediment), and protect beneficial uses in compliance with this Order and the following Basin Plan requirement:

   Basin Plan (Chapter 5, p. V-13, Section V.G.4 – Erosion and Sedimentation, *"A filter strip of appropriate width, and consisting of undisturbed soil and riparian vegetation or its equivalent, must be maintained, wherever possible, between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. For construction activities, minimum width of the filter strip must be thirty feet, wherever possible...."*

2. The Water Quality Buffer Plan must include the following or the functional equivalent, to address discharges of waste and associated water quality impairments:

    a. A minimum 30 foot buffer (as measured horizontally from the top of bank on either side of the waterway, or from the high water mark of a lake and mean high tide of an estuary);
    b. Any necessary increases in buffer width to adequately prevent the discharge of waste that may cause or contribute to any excursion above or outside the acceptable range for any Regional, State, or Federal numeric or narrative water quality standard (e.g., temperature, turbidity);
    c. Any buffer less than 30 feet must provide equivalent water quality protection and be justified based on an analysis of site-specific conditions and be approved by the Executive Officer;
    d. Identification of any alternatives implemented to comply with this requirement, that are functionally equivalent to described buffer;
    e. Schedule for implementation;
    f. Maintenance provisions to ensure water quality protection;
    g. Annual photo monitoring to be included in the Annual Compliance Form;

PART 8. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Submittal of Technical Reports

1. Dischargers must submit reports in a format specified by the Executive Officer (reports will be submitted electronically, unless otherwise specified by the Executive Officer). A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger or the Discharger's authorized agent:

    "In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

2. If the Discharger asserts that all or a portion of a report submitted pursuant to this Order is subject to an exemption from public disclosure (e.g. trade secrets or secret processes), the Discharger must provide an explanation of how those portions of the reports are exempt from public disclosure. The

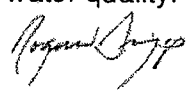
Discharger must clearly indicate on the cover of the report (typically an electronic submittal) that the Discharger asserts that all or a portion of the report is exempt from public disclosure, submit a complete report with those portions that are asserted to be exempt in redacted form, submit separately (in a separate electronic file) unredacted pages (to be maintained separately by staff). The Central Coast Water Board staff will determine whether any such report or portion of a report qualifies for an exemption from public disclosure. If the Central Coast Water Board staff disagrees with the asserted exemption from public disclosure, the Central Coast Water Board staff will notify the Discharger prior to making such report or portions of such report available for public inspection. In the interest of public health and safety, the Central Coast Water Board will not make available for public inspection, the precise location of any groundwater well monitored in compliance with this Order. Consistent with the reporting of groundwater wells on GeoTracker, groundwater well location and data will only be referenced within a one-half mile radius of the actual well location.

B. Enforcement and Violations

1. Monitoring reports are required pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the Water Code, a violation of a request made pursuant to Section 13267 may subject you to civil liability assessment of up to $1000 per day.

C. Executive Officer Authority

1. The Executive Officer may revise this MRP as necessary, and Dischargers must comply with the MRP as revised by the Executive Officer. Specifically, the Executive Officer may increase monitoring and reporting requirements where monitoring results, pesticide use patterns, or other indicators suggest that the increase is warranted due to an increased threat to water quality. Additionally, the Executive Officer can reduce monitoring and reporting requirements, including adjusting time schedules, where growers are coordinating efforts at watershed or subwatershed scales or where regional treatment facilities are implemented, or other indicators suggest that the reduction is warranted due to a reduced threat to water quality.



Roger W. Briggs, Executive Officer

March 15, 2012

Date

Table 1. Major Waterbodies in Agricultural Areas[1]

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek[2]	31023	Los Osos Creek
30510	Beach Road Ditch[2]	31023	Warden Creek
30530	Carnadero Creek	31024	San Luis Obispo Creek
30530	Furlong Creek[2]	31024	Prefumo Creek
30530	Llagas Creek	31031	Arroyo Grande Creek
30530	Miller's Canal	31031	Los Berros Creek
30530	San Juan Creek	31210	Bradley Canyon Creek
30530	Tesquisquita Slough	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Blanco Drain	31210	Orcutt Solomon Creek
30910	Old Salinas River	31210	Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Little Oso Flaco Creek
30920	Salinas River (above Gonzales Rd. and below Nacimiento R.)	31210	Santa Maria River
30910	Santa Rita Creek[2]	31310	San Antonio Creek[2]
30910	Tembladero Slough	31410	Santa Ynez River
30920	Alisal Creek	31531	Bell Creek
30920	Chualar Creek	31531	Glenn Annie Creek
30920	Espinosa Slough	31531	Los Carneros Creek[2]
30920	Gabilan Creek	31534	Arroyo Paredon Creek
30920	Natividad Creek	31534	Franklin Creek

[1] At a minimum, sites must be included for these waterbodies in agricultural areas, unless otherwise approved by the Executive Officer. Sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. Dischargers choosing to comply with surface receiving water quality monitoring, individually (not part of a cooperative monitoring program) must only monitor sites for waterbodies receiving the discharge.

[2] These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL[1]	Monitoring Frequency[1]
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
WATER COLUMN SAMPLING		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP[9]	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	"
Electrical Conductivity (field measure) (uS/cm)	2.5	"
Dissolved Oxygen (field measure) (mg/L)	0.1	"
Temperature (field measure) (°C)	0.1	"
Turbidity (NTU)	0.5	"
Total Dissolved Solids (mg/L)	10	"
Total Suspended Solids (mg/L)	0.5	"
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	"
Total Ammonia (mg/L)	0.1	"
Unionized Ammonia (calculated value, mg/L))		"
Total Phosphorus (as P) (mg/L)	-	"
Soluble Orthophosphate (mg/L)	0.01	"
Water column chlorophyll a (mg/L)	0.002	"
Algae cover, Floating Mats, % coverage	-	"
Algae cover, Attached, % coverage	-	"
Water Column Toxicity Test		
Algae -*Selenastrum capricornutum, 4 day*	-	Twice in dry season, twice in wet season
Water Flea – *Ceriodaphnia (7-day chronic)*	-	"
Fathead Minnow - *Pimephales promelas (7-day chronic)*	-	"
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides[2] (ug/L)		
Carbamates		
Aldicarb	0.05	4 times, concurrent with water toxicity monitoring, in second year of Order term

Parameters and Tests	RL[2]	Monitoring Frequency[1]
Carbaryl	0.05	"
Carbofuran	0.05	"
Methiocarb	0.05	"
Methomyl	0.05	"
Oxamyl	0.05	"
Organophosphate Pesticides		
Azinphos-methyl	0.02	"
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat dichloride	4	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (ug/L)		
Arsenic (total) [5,7]	0.3	4 times, concurrent with water toxicity monitoring, in second year of Order term
Boron (total) [6,7]	10	"
Cadmium (total & dissolved) [4,5,7]	0.01	"
Copper (total and dissolved) [4,7]	0.01	"
Lead (total and dissolved) [4,7]	0.01	"
Nickel (total and dissolved) [4,7]	0.02	"
Molybdenum (total) [7]	1	"
Selenium (total) [7]	0.30	"
Zinc (total and dissolved) [4,5,7]	0.10	"
Other (ug/L)		
Total Phenolic Compounds [8]	10	4 times, concurrent with water toxicity monitoring, in second year of Order term
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"

Parameters and Tests	RL[3]	Monitoring Frequency[1]
SEDIMENT SAMPLING		
Sediment Toxicity - Hyalella azteca 10-day		Annually
Benthic Invertebrate and associated Physical Habitat Assessment	SWAMP SOP	Once during the second year of Order concurrent with sediment toxicity sampling
Pyrethroid Pesticides in Sediment (ug/kg)		
Gamma-cyhalothrin	2	Once during second year of Order, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	"
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Organochlorine Pesticides in Sediment		
DCPA	10	"
Dicofol	2	"
Other Monitoring in Sediment		
Chlorpyrifos (ug/kg)	2	"
Total Organic Carbon	0.01%	"
Sulfide		"
Sediment Grain Size Analysis	1%	"

[1]Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.
[2]Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.
[3] Reporting Limit, taken from SWAMP where applicable.
[4] Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.
[5]Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.
[6]Http://www.coastalagro.com/products/labels/9%25BORON.pdf; Boron is applied directly or as a component of fertilizers as a plant nutrient.
[7]Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.
[8]http://cat.inist.fr/?aModele=afficheN&cpsidt=14074525; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.
[9]See SWAMP field measures SOP, p. 17
mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;
NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Groundwater Monitoring Parameters

Parameter	RL	Analytical Method[4]	Units
Depth to Groundwater[1]	-	Field Measurement	feet/bgs
pH	0.1	Field or Laboratory Measurement EPA General Methods	pH Units
Specific Conductance	2.5		µS/cm
Total Dissolved Solids	10		mg/L
Total Alkalinity as $CaCO_3$	1	EPA Method 310.1 or 310.2	
Calcium	0.05	General Cations[2] EPA 200.7, 200.8, 200.9	
Magnesium	0.02		
Sodium	0.1		
Potassium	0.1		
Sulfate (SO_4)	1.0	General Anions EPA Method 300 or EPA Method 353.2	
Chloride	0.1		
Nitrate + Nitrite (as N)[3] *or* Nitrate as NO_3	0.1		

[1]Necessary to identify relevant water bearing zone; Required when well construction allows for groundwater depth measurement. [2]General chemistry parameters (major cations and anions) represent geochemistry of water bearing zone and assist in evaluating quality assurance/quality control of groundwater monitoring and laboratory analysis.
[3]The MRP allows analysis of "nitrate plus nitrite" to represent nitrate concentrations. The "nitrate plus nitrite" analysis allows for extended laboratory holding times and relieves the Discharger of meeting the short holding time required for nitrate. Dischargers may also analyze for Nitrate as NO_3.
[4]Dischargers may use alternative analytical methods approved by EPA.
bgs – below ground surface; RL – Reporting Limit; µS/cm – micro siemens per centimeter

Table 4. Nitrate Loading Risk Factor Criteria and Risk Level Calculation

A. Crop Type Nitrate Hazard Index Rating

1 - Bean, Grapes, Olive.

2 - Apple, Avocado, Barley, Blackberry, Blueberry, Carrot, Chicory, Citrus, Lemon Oat, Orange, Peach, Pear, Pistachio, Raspberry, Walnut, Wheat.

3 - Artichoke, Bean, Brussel Sprout, Corn, Cucumber, Daikon, Peas, Radish, Squash, Summer, Tomato, Turnip, Squash, Rutabaga, Pumpkin, Potato.

4 – Beet, Broccoli, Cabbage, Cauliflower, Celery, Chinese Cabbage (Napa),Collard, Endive, Kale, Leek, Lettuce, Mustard, Onion, Parsley, Pepper, Spinach, Strawberry.

(Based on UC Riverside Nitrate Hazard Index)

B. Irrigation System Type Rating

1 - Micro-irrigation year round (drip and micro-sprinklers) and no pre-irrigation;

2 - Sprinklers used for pre-irrigation only and then micro-irrigation;

3 - Sprinklers used for germination or at any time during growing season;

4 - Surface irrigation systems (furrow or flood) at any, and/or in combination with any other irrigation system type;

(Based on UC Riverside Nitrate Hazard Index, Adapted for the Central Coast Region)

C. Irrigation Water Nitrate Concentration Rating

1 – Nitrate concentration 0 to 45 mg/liter Nitrate NO3
2 - Nitrate concentration 46 to 60 mg/liter Nitrate NO3
3 - Nitrate concentration 61to 100 mg/liter Nitrate NO3
4 - Nitrate concentration > 100 mg/l Nitrate NO3

D. Nitrate Loading Risk Level Calculation = A x B x C

LOW - Nitrate loading risk is less than 10;
MODERATE – Nitrate loading risk is between 10 and 15;
HIGH – Nitrate loading risk is more than 15;

Note: Dischargers must determine the nitrate loading risk factor for each ranch/farm, based on the criteria associated with the highest risk activity existing at each ranch/farm. For example, the ranch/farm is assigned the highest risk factor, based on the single highest risk crop in the rotation, on one block under furrow irrigation, or on one well with high nitrate concentration. As an alternative to the nitrate loading risk level calculation described in Table 4, Dischargers may use the Groundwater Pollution Nitrate Hazard Index developed by UCANR, where a resulting Nitrate Hazard Index score equal or greater or equal to 20 indicates a HIGH nitrate loading risk to groundwater.

Table 5A. Individual Discharge Monitoring for Tailwater, Tile drain, and Stormwater Discharges

Parameter	Analytical Method[1]	Maximum PQL	Units	Min Monitoring Frequency
Discharge Flow or Volume	Field Measure	---	CFS	(a) (d)
Approximate Duration of Flow	Calculation	---	hours/month	
Temperature (water)	Field Measure	0.1	°Celsius	
pH	Field Measure	0.1	pH units	
Electrical Conductivity	Field Measure	100	µS/cm	
Turbidity	SM 2130B, EPA 180.1	1	NTUs	
Nitrate + Nitrite (as N)	EPA 300.1, EPA 353.2	0.1	mg/L	
Ammonia	SM 4500 NH3, EPA 350.3	0.1	mg/L	
Chlorpyrifos[2]	EPA 8141A, EPA 614	0.02	ug/L	(b) (c) (d)
Diazinon[2]				
Ceriodaphnia Toxicity (96-hr acute)	EPA-821-R-02-012	NA	% Survival	
Hyalella Toxicity in Water (10-day)	EPA-821-R-02-013	NA	% Survival	

[1] In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.
[2] If chlorpyrifos or diazinon is used at the farm/ranch, otherwise does not apply. The Executive Officer may require monitoring of other pesticides based on results of downstream receiving water monitoring.

(a) Two times per year during primary irrigation season for farms/ranches less than or equal to 500 acres, and four times per year during primary irrigation season for farms/ranches greater than 500 acres. Executive Officer may reduce sampling frequency based on water quality improvements.
(b) Once per year during primary irrigation season for farms/ranches less than or equal to 500 acres, and two times per year during primary irrigation season for farms/ranches greater than 500 acres.
(c) Sample must be collected within one week of chemical application, if chemical is applied on farm/ranch;
(d) Once per year during wet season (October – March) for farms/ranches less than or equal to 500 acres, and two times per year during wet season for farms/ranches greater than 500 acres, within 18 hours of major storm events;
CFS – Cubic feet per second; NTU – Nephelometric turbidity unit; PQL – Practical Quantitation Limit;
NA – Not applicable

Table 5B. Individual Discharge Monitoring for Tailwater Ponds and other Surface Containment Features

Parameter	Analytical Method[1]	Maximum PQL	Units	Minimum Monitoring Frequency
Volume of Pond	Field Measure	1	Gallons	(a) (d)
Nitrate + Nitrite (as N)	EPA 300.1, EPA 353.2	50	mg/L	

[1] In-field water testing instruments/equipment as a substitute for laboratory analysis if the method is approved by EPA, meets RL/PQL specifications in the MRP, and appropriate sampling methodology and quality assurance checks can be applied to ensure that QAPP standards are met to ensure accuracy of the test.
(a) Four times per year during primary irrigation season; Executive Officer may reduce monitoring frequency based on water quality improvements.
(d) Two times per year during wet season (October – March, within 18 hours of major storm events)

Table 6. Tier 3 - Time Schedule for Key Monitoring and Reporting Requirements

REQUIREMENT	TIME SCHEDULE[1]
Submit Quality Assurance Project Plan and Sampling And Analysis Plan for Surface Receiving Water Quality Monitoring (individually or through cooperative monitoring program)	Within three months
Initiate surface receiving water quality monitoring (individually or through cooperative monitoring program)	Within six months
Submit surface receiving water quality monitoring data (individually or through cooperative monitoring program)	Within nine months, quarterly thereafter (January 1, April 1, July 1, and October 1)
Submit surface receiving water quality Annual Monitoring Report (individually or through cooperative monitoring program)	Within one year, annually thereafter by January 1
Initiate monitoring of groundwater wells	Within one year
Submit individual surface water discharge Sampling and Analysis Plan	March 15, 2013
Initiate individual surface water discharge monitoring	October 1, 2013
Submit individual surface water discharge monitoring data	March 15, 2014, October 1, 2014 and annually thereafter by October 1
Submit electronic Annual Compliance Form	October 1, 2012, and updated annually thereafter by October 1
Submit groundwater monitoring results	October 1, 2013

Tier 3 Dischargers with farms/ranches that contain or are adjacent to a waterbody impaired for temperature, turbidity or sediment:	
Conduct photo monitoring of riparian or wetland area habitat	October 1, 2012, and every four years thereafter by October 1
Submit Water Quality Buffer Plan or alternative	October 1, 2016
Tier 3 Dischargers with farms/ranches that have High Nitrate Loading Risk:	
Report total nitrogen applied per acre to each farm/ranch or nitrate loading risk unit, in electronic Annual Compliance Form	October 1, 2014, and annually thereafter by October 1.
Determine Crop Nitrogen Uptake	October 1, 2013
Submit INMP elements in electronic Annual Compliance Form	October 1, 2015, and annually thereafter by October 1
Submit indication of progress towards Nitrogen Balance Ratio milestone equal to one (1) for crops in annual rotation (e.g. cool season vegetables) or alternative,	October 1, 2015
Submit indication of progress towards Nitrogen Balance Ratio milestone equal to 1.2 for annual crops occupying the ground for the entire year (e.g. strawberries or raspberries) or alternative	
Submit INMP Effectiveness Report	October 1, 2016

[1] Dates are relative to adoption of this Order, unless otherwise specified.

APPENDIX H

Staff Recommendations for Agricultural Order

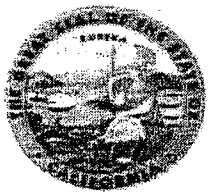
ENVIRONMENTAL DOCUMENTS PURSUANT TO CEQA

CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

March 2011

Water Boards

ATTACHMENT 3



Edmund G. Brown Jr., Governor
State of California

Linda S. Adams, Secretary
California Environmental Protection Agency

State Water Resources Control Board
http://www.waterboards.ca.gov/

Charles R. Hoppin, Chair
Frances Spivey-Weber, Vice Chair
Tam Doduc, Board Member
Dwight P. Russell, Board Member

Tom Howard, Executive Director

California Regional Water Quality Control Board
Central Coast Region
http://www.waterboards.ca.gov/centralcoast

Jeffrey S. Young, Chair
Russell M. Jeffries, Vice Chair
Monica S. Hunter, Board Member
David T. Hodgin, Board Member
John H. Hayashi, Board Member
Jean-Pierre Wolff, Board Member

Roger Briggs, Executive Officer
Michael Thomas, Assistant Executive Officer

This report was prepared under the direction of:

Angela Schroeter, Senior Engineering Geologist
Lisa Horowitz McCann, Environmental Program Manager

Assisted by the following Central Coast Water Board Staff:

Mary Adams
Monica Barricarte
Burton Chadwick
Cecile DeMartini
Katie DiSimone
Donette Dunaway
John Goni
Phil Hammer
Hector Hernandez
Mike Higgins
Corinne Huckaby
Alison Jones
Matt Keeling
Shanta Keeling
Howard Kolb
Peter Meertens
Gary Nichols
Jill North
Sorrel Marks
John Mijares
Harvey Packard
Lindsay Ringer
John Robertson
Dominic Roques
Chris Rose
Elaine Sahl
Kim Sanders
Steve Saiz
Sheila Soderberg
Dean Thomas
Thea Tryon
Karen Worcester

DRAFT
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
RESOLUTION NO. R3-2011-0021

Certification, Pursuant to the California Environmental Quality Act, of the Final Subsequent Environmental Impact Report and CEQA, Findings, and Statement of Overriding Considerations for the Adoption of a Renewal of a Waiver of Waste Discharge Requirements for Discharges of Waste from Irrigated Lands in the Central Coast Region (Order No. R3-2011-0006)

1. The Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) is the lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 et seq.) in connection with its adoption of a waiver of waste discharge requirements for discharges of waste from irrigated lands (Order No. R3-2011-0006) (2011 Agricultural Order).

2. On July 9, 2004, the Central Coast Water Board adopted Order No. R3-2004-0117, Conditional Waiver of Waste Discharger Requirements for Discharges from Irrigated Lands, waiving waste discharge requirements for discharges of waste from irrigated lands in the Central Coast Region (2004 Agricultural Order) and adopted a Negative Declaration under CEQA (2004 Negative Declaration). No person filed any legal challenge to the 2004 Agricultural Order or the 2004 Negative Declaration.

3. The Central Coast Water Board has engaged in a lengthy public process to consider renewal of the 2004 Agricultural Order. During most of 2009, the Water Board convened an Agricultural Advisory Group consisting of grower and environmental group representatives to work on updating the Order. On February 1, 2010, the Central Coast Water Board released for public review a Preliminary Staff Draft Conditional Waiver of Waste Discharge Requirements for Discharges of Waste from Irrigated Lands (February Preliminary Staff Draft Order) and received comments and alternative proposals to the Preliminary Staff Draft Order. On May12, 2010 and July 8, 2010, the Central Coast Water Board held public workshops to provide an opportunity for public comments and recommendations on the renewal of the 2004 Ag Order. Between February 1, 2010 and February 18, 2010, Central Coast Water Board staff held meetings with persons interested in the renewal of the 2004 Agricultural Order, including individuals and representatives of farming groups, environmental groups, and public health groups. On August 16, 2010, the Central Coast Water Board staff held a scoping meeting pursuant to CEQA to receive information about the scope of the proposal and potential environmental effects of a renewal of the 2004 Ag Order. The Central Coast Water Board also received written comments with respect to scoping and other aspects of the renewal of the 2004 Ag Order.

4. On October 14, 2010, the Central Coast Water Board sent to the Office of Planning and Research and each responsible and trustee agency a notice of preparation in compliance with CEQA Guidelines section 15082 (Cal. Code Regs., tit. 14, § 15082) stating that the Board intended to prepare a subsequent environmental impact report (SEIR) and provided those agencies with 30 days to provide comments prior to the release of the SEIR. The Central Coast Water Board received comments from California State Lands Commission (CSLC), the Native American Heritage Commission (NAHC), and the California Department of Transportation (Caltrans).

5. On October 25, 2010, the Central Coast Water Board provided public notice of the availability of a Draft SEIR and a notice of completion of the Draft SEIR to the Office of Planning and Research in compliance with CEQA Guidelines section 15087 (Cal. Code Regs., tit. 14, § 15087). The public notice was provided by noticing on the Board's website, by electronic mail to known interested

persons and agencies, and by publication in a newspaper of general circulation. The State Clearinghouse also distributed the Draft SEIR to state agencies for review. The Draft SEIR and associated documents, including the Staff Report and appendices and proposed Order No. R3-2011-0006, were made available at the time of notice of the availability of the Draft SEIR.

6. Agencies and interested persons were provided a minimum of 45 days for the submittal of comments on the Draft SEIR. The Central Coast Water Board received no comments from public agencies on the Draft SEIR. The Central Coast Water Board received 12 comment letters from interested persons commenting on the Draft SEIR and 116 comment letters from interested persons commenting on draft Order No. R3-2011-0006 and associated documents. These comments are available for public review on the Central Coast Water Board's website http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml.

7. On March 1, 2010, the Central Coast Water Board issued a Final SEIR for Order No. R3-2011-0006. The Final SEIR clarifies several issues, including clarification of mitigation measures, and makes minor clarifying edits in response to comments.

8. The Final SEIR consists of the Draft SEIR as revised, the Responses to Comments to the Draft SEIR, and documents referenced and incorporated into the Final SEIR.

9. The Final SEIR identifies no new significant impacts as compared to the Draft SEIR.

10. The Final SEIR identifies the potential significant environmental impacts of the project and, where appropriate, identifies feasible mitigation measures to reduce impacts to a less than a significant level.

11. The Final SEIR has been completed in compliance with CEQA.

12. The Final SEIR has been presented to the Central Coast Water Board and the Central Coast Water Board has reviewed and considered the information contained in the Final SEIR prior to adopting the 2011 Agricultural Order.

13. The Central Coast Water Board has reviewed and considered the information contained in the Final SEIR, and hereby adopts and certifies the Final SEIR.

14. The CEQA Guidelines specify that the lead agency shall not prepare a subsequent environmental impact report unless it determines on the basis of substantial evidence in the light of the whole record that there would be a substantial increase in the severity of previously identified significant effects. (Cal. Code. Regs, tit. 14 §15162(a)(1).) Members of the public and public agencies had suggested that there could be an increase in the severity of previously identified significant effects compared to the 2004 Agricultural Order, so the Central Coast Water Board staff prepared the Draft SEIR to evaluate the potential effects. After review of all the evidence and comments, the Final SEIR concludes that with respect to impacts on Agricultural Resources the adoption of the 2011 Agricultural Order will not result in significant environmental effects and with respect to Biological Resources concludes that reduction in surface water flows as the result of compliance with the 2011 Agricultural Order could result in potentially significant impacts on aquatic life, but that to the extent there is an impact it would likely be short term.

15. With respect to Agricultural Resources, the Final SEIR concludes that adoption of the proposed alternative could result in some economic or social changes but that there was insufficient evidence to conclude that the economic changes would result in significant adverse physical changes to the environment. Commenters speculated that the economic impacts would be so large as to result in large scale termination of agriculture and that land would be sold for other uses that would result in impacts on the environment. No significant information was provided to justify that concern. As described in the Section 2.4 of the Final SEIR, the proposed 2011 Agricultural Order would impose additional conditions on approximately 100 to 300 of the approximately 3000 owners or operators currently

enrolled in the 2004 Agricultural Order. CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment. (Pub. Res. Code § 21083.) The Final SEIR concludes that due to some new conditions, particularly the requirement that some dischargers may implement vegetated buffer strips, could result in loss of land for agricultural production since the buffer strips would generally not produce crops and some land could be converted to other uses. This impact was found to be less than significant and that mitigation could reduce impacts further. The Central Coast Water Board may not generally specify the manner of compliance and therefore, dischargers may choose among many ways to comply with the requirement to control discharges of waste to waters of the state. Even if all dischargers who could be subject to the condition to use vegetated buffers or some other method to control discharges in the proposed 2011 Agricultural Order (Tier 3 dischargers) chose to use vegetated buffers or converted to other uses, the total acreage is quite small compared to the total amount of acreage used for farming and was, therefore, found to be less than significant. In addition, since the land would be used as a vegetated buffer to comply with the Order, this would result in beneficial impacts on the environment, not adverse impacts. Even if the effects could be more severe, they can be mitigated due to actions by dischargers.

16. With respect to Biological Resources, the Final SEIR concludes that wide scale water conservation to comply with the 2011 Agricultural Order could result in lower flows into surface water resulting in impacts on aquatic life. Because the Central Coast Water Board may not specify the manner of compliance and the Order would not direct persons to reduce flows, the Board has insufficient information, after reviewing the entire record, including information provided by resource agencies, to determine the extent to which dischargers would choose to use water conservation to comply and to evaluate potential physical changes to the environment that could result. Wildlife agencies suggested that reduction in toxic runoff would offset impacts due to reduced flows that could occur. In addition, reduction in water use could result in increased groundwater levels that would also result in more clean water recharging surface water. The potential exists for improved base flow conditions in the event that tailwater is allowed to percolate to groundwater, rather than being discharged to surface waterbodies where it is quickly transported downstream. The potential for improved base flow conditions also exists in the event that growers reduce groundwater pumping in an effort to reduce tailwater discharge to surface waterbodies. Consequently, reduced or elimination of tailwater does not necessarily equate to elimination of flow. Furthermore, what flow would be available will be of higher quality, and therefore have a higher potential of supporting desirable habitat, particularly native species.

17. Based on this information, the Final SEIR concludes that the environmental effects on Biological Resources associated with the 2011 Agricultural Order may actually not be significant but that due to the uncertainty associated with evaluating the available information, the Central Coast Water Board is making these written findings.

18. With respect to Biological Resources, there are mitigation measures available to reduce potentially significant environmental impacts to less than significant levels. Potential mitigation measures to prevent reduced flows or to reduce the impact of reduced flows include phasing in management practices that could result in reduced flows; reducing or eliminating conditions in the proposed draft 2011 Agricultural Order with respect to tile drain discharges; and use of riparian buffers that will effectively treat the water to remove pollutants, but not necessarily reduce flows. In some cases, other agencies have the ability to require or implement these mitigation measures and are required under CEQA to consider whether to implement the mitigation measures when they undertake their own evaluation of impacts associated with compliance with the 2011 Agricultural Order, including the Department of Fish and Game, which regulates impacts on endangered species, and the United States Corps of Engineers, that regulates dredge and fill activities. This finding is made pursuant to Title 14, California Code of Regulations, section 15091(a)(2). There are legal considerations that may make infeasible some of the mitigation measures that could be implemented. The Central Coast Water Board may not specify the manner of compliance with its orders and as a result implementation of potential mitigation measures are not under the control or discretion of the Central Coast Water Board. This finding is made pursuant to Title 14, California Code of Regulations, section 15091(a)(3).

19. CEQA requires a public agency that makes findings required under section 15091(a) to require mitigation monitoring or reporting. The 2011 Agricultural Order requires reports to evaluate the effectiveness of management practices, including monitoring groundwater and surface water.

20. Pursuant to CEQA Guidelines section 15093 (Cal. Code. Regs., tit. 14., § 15093), the Central Coast Water Board hereby finds that the project's benefits override and outweigh its potential unavoidable significant adverse impacts, for the reasons more fully set forth in the Staff Report and appendices thereto. Specific economic, social, and environmental benefits justify the adoption of this project despite the project's potential significant adverse environmental impacts. The Central Coast Water Board has the authority and responsibility to regulate discharges of waste associated with irrigated agriculture. Many of those discharges have caused significant widespread degradation and/or pollution of waters of the state as described in the 2011 Agricultural Order and Staff Report and associated reference materials. The 2011 Agricultural Order would result in actions to restore the quality of the waters of the state and protect the beneficial uses, including aquatic habitat. While some impacts could occur due to reduced flows from implementing actions to comply with the Order, the benefits, which include contributing to the present and future restoration of beneficial water uses, and reducing or eliminating pollution, nuisance and contamination, warrant approval of the project, despite each and every unavoidable impact. Upon review of the environmental information generated for the 2011 Agricultural Order and in view of the entire record supporting the need for the 2011 Agricultural Order, the Central Coast Water Board determines that specific economic, legal, social, technological, environmental, and other benefits of this proposed prohibition outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.

21. The Final SEIR reflects the Central Coast Water Board's independent judgment and analysis.

THEREFORE IT IS RESOLVED THAT:

The Central Coast Water Board certifies that the Final SEIR for the adoption of Order No. R3-2011-0006, the Conditional Waiver of Waste Discharge Requirements for Irrigated Agricultural Waste Discharges, complies with the requirements of CEQA (Pub. Resources Code § 21000 et seq.).

CERTIFICATION

I, Roger W. Briggs, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of the resolution adopted by the California Regional Water Quality Control Board, Central Coast Region, on March 17, 2011.

_____

Roger W. Briggs
Executive Officer

FINAL Subsequent Environmental Impact Report

Draft Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands,

Order No. R3-2011-0006

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

805-549-3147
www.waterboard.ca.gov/centralcoast

March 17, 2011

State Clearinghouse No. 2010101073

This page intentionally left blank

FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FROM IRRIGATED LANDS, DRAFT ORDER NO. R3-2011-0006 March 17, 2011

Table of Contents

1. Introduction 1
2. Project Description 3
   2.1. Project Purpose 3
   2.2. Regulatory Requirements 4
   2.3. Project Location 4
   2.4. Description of the Project (Renewed Order) 5
3. CEQA Authority for the Subsequent Environmental Impact Report 7
4. Environmental Analysis 9
   4.1. Agricultural Resources 11
      4.1.1. Introduction 11
      4.1.2. Williamson Act and Farmland Security Zone Contracts 13
      4.1.3. Analysis 14
   4.2. Biological Resources 18
      4.2.1. Introduction 18
      4.2.2. Endangered Species Act 18
      4.2.3. Analysis 20
   4.3. Mandatory Findings of Significance 27
5. Discussion of Climate Change 27
6. Discussion of "No Impacts" Finding 28
7. Public and Agency Comments 28
   7.1. Agency Comments 28
   7.2. Public Comments 29
8. Alternatives 29
   8.1. No Project Alternative 29
   8.2. Renewing Existing 2004 Agricultural Order for Five Years 30
   8.3. Adoption of Waste Discharge Requirements or Prohibitions 30
   8.4. Alternatives Submitted by Agricultural Groups 30
      8.4.1. Alternative Proposed by the California Farm Bureau Federation 30
      8.4.2. Alternative Proposed by OSR Enterprises, Inc. 31
      8.4.3. Alternative Proposed by the California Farm Bureau Federation (second version) 31
   8.5. Alternative Submitted by Environmental Defense Center, Monterey Coastkeeper, Ocean Conservancy, Santa Barbara Channelkeeper, SurfRider Foundation - Santa Barbara Chapter 32
9. Cumulative Impacts 32
10. Conclusions 33
11. References 33

Table of Figures

Figure 1. Map showing project area (irrigated agricultural lands are shown in white within shaded areas within Region 3 boundary). Irrigated agricultural lands are identified from prime, state and unique farmland, as identified by the Farmland Mapping and Monitoring Program (FMMP) dataset, 2008. 5

Table of Tables

Table 1. Changes in Environmental Checklist from 2004 Negative Declaration for the 2004 Agricultural Order to the Final SEIR for the draft 2011 draft Agricultural Order. 9
Table 2. Threatened or endangered species that occur on irrigated agricultural lands within the Central Coast Region 21

Attachment A: Responses to CEQA Comments

List of Acronyms and Abbreviations

This report contains many acronyms and abbreviations. The following alphabetical list of acronyms/abbreviations used in this report is provided for the convenience of the reader:

2004 Agricultural Order	Conditional Waiver of Waste Discharge Requirements from Irrigated Lands, Order No. 2004-0117
2011 Agricultural Order	Conditional Waiver of Waste Discharge Requirements from Irrigated Lands, Order No. R3-2011-0006
CCAMP	Central Coast Ambient Monitoring Program
CDPH	California Department of Public Health
Central Coast Water Board	Central Coast Regional Water Quality Control Board
CEQA	California Environmental Quality Act
CMP	Cooperative Monitoring Program
CNDDB	California Natural Diversity Data Base
CWC	California Water Code
DPR	Department of Pesticide Regulation
DWR	Department of Water Resources
FMMP	Farmland Mapping and Monitoring Program
MCL	Maximum Contaminant Level
MPA	Marine Protected Areas
MRP	Monitoring and Reporting Program
NTU	Nephelometric Turbidity Units
RCDMC	Resource Conservation District of Monterey County
SEIR	Subsequent Environmental Impact Report
UCCE	University of California Cooperative Extension

1. Introduction

On July 2004, the Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board or Board) adopted a Conditional Waiver of Waste Discharge Requirements from Irrigated Agricultural Lands (R3-2004-0117) (2004 Agricultural Order). On July 10, 2009 the Board renewed the 2004 Agricultural Order without any substantive revisions for a term ending on July 10, 2009. On July 8, 2010, the Board renewed the 2004 Agricultural Order again without any substantive revisions for a term ending on March 31, 2011. The draft 2011 Agricultural Order is intended to renew the 2004 Agricultural Order and add some new conditions[1]. The Central Coast Water Board plans to consider adoption of a conditional waiver of waste discharge requirements at its March 17, 2011 meeting.

The Central Coast Water Board is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Res. Code §§ 21000 *et seq.*) for purposes of approval of the waiver of waste discharge requirements for discharges of waste from irrigated lands. In July 2004, the Board adopted an Initial Study and Negative Declaration[2] prior to adoption of the 2004 Agricultural Order. CEQA and the CEQA Guidelines state that when a Negative Declaration has been adopted for a project, no subsequent environmental impact report (SEIR) shall be prepared for the project unless the lead agency determines that, among other reasons, changes are being proposed in the project that could involve an increase in the severity of environmental effects identified in the Negative Declaration. (Cal. Code Regs., tit 14 § 15162(a)(1).)

To assist in determining whether an SEIR would be necessary, the Central Coast Water Board staff held a CEQA scoping meeting on August 16, 2010 to receive input from interested persons and public agencies on potentially significant environmental effects of the proposed project. Staff also accepted written comments regarding scoping up until August 27, 2010 in order to allow for comments from those who were unable to attend the meeting and/or for those who wished to submit additional comments. Members of the public and representatives of public agencies provided comments regarding their views on significant environmental effects associated with the adoption of a renewed Agricultural Order. Prior to the scoping meeting in August, 2010, Water Board staff conducted significant public participation activities. In December 2008, staff organized the agricultural advisory group, and met with that group through fall of 2009, utilizing a facilitator for most of the joint meetings. Beginning in November 2009, Central Coast Water Board staff engaged in sessions with interested persons, including representatives of agriculture, environmental groups, and community groups. On May 12, 2010 and July 8, 2010, the Central Coast Water Board held public workshops to provide information and an opportunity to comment on renewal of the 2004 Agricultural Order. In February 2010,

[1] http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

[2] http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2004/july/item3/index.shtml (see attachment 1 for the Initial Study and Negative Declaration)

Central Coast Water Board staff released a preliminary staff draft order (February Preliminary Draft Order) and provided an opportunity for comment. Following release of the February 2010 Preliminary Draft Order many interested persons submitted proposed alternatives and comments. From November 2009 to February 2011, the Central Coast Water Board staff participated in more than 37 public and private meetings with interested persons and public agencies to discuss and receive information about renewal of the 2004 Agricultural Order.

The Central Coast Water Board issued a Notice of Availability on October 25, 2010 and provided the public with 45 days to submit written comments on the Draft SEIR. The Water Board received 12 written comment letters. Responses to the comments are discussed in Section 7 of this Final SEIR and included as Attachment A to the Final SEIR.

In preparing this Final SEIR, Central Coast Water Board staff reviewed the 2004 Negative Declaration, including the Initial Study (Environmental Checklist), considered the comments received during the public participation process with respect to renewal of the 2004 Agricultural Order, including evidence in the record, written and oral comments, proposed alternatives, and information provided at and following the August 16, 2010 scoping meeting, and comments received on the Draft SEIR. Review of this information did not result in identification of any new environmental effects that had not already been evaluated in the 2004 Negative Declaration. Staff identified two areas included on the Environmental Checklist where there was a potential for an increase in the severity of environmental effects previously identified. These areas are the potential for more severe impacts on agricultural resources due to the potential for an increase in the use of vegetated buffer strips and economic impacts due to new requirements that could take some land out of direct agricultural use and impacts on biological resources due to the potential for a reduction in water flows in surface waters. This Final SEIR evaluates those potential environmental effects.

With respect to Agricultural Resources, the Final SEIR concludes that adoption of the proposed alternative could result in some economic or social changes but that there was insufficient evidence to conclude that the economic changes would result in adverse physical changes to the environment. Commenters speculated that the economic impacts would be so large as to result in large scale termination of agriculture and that land would be sold for other uses that would result in impacts on the environment. No significant information was provided to justify that concern. As described in the Section 2.4 of this Final SEIR, the draft 2011 Agricultural Order would impose additional conditions on approximately 100 to 300 of the 3000 of owners or operators currently enrolled in the 2004 Agricultural Order. CEQA states that economic or social effects of a project shall not be treated as significant effects on the environment. (Pub. Res. Code § 21083.) The Final SEIR concludes that due to some new conditions, particularly the requirement that some dischargers may be required to implement vegetated buffer strips, the Order could result in loss of land for agricultural production since the buffer strips would generally not produce crops and some land could be converted to other uses. This impact was found to be less

than significant[3] and that mitigation could reduce impacts further. The Central Coast Water Board may not generally specify the manner of compliance and therefore, dischargers may choose among many ways to comply with the requirement to control discharges of waste to waters of the state. Even if all dischargers who could be subject to the condition to use vegetated buffers or some other method to control discharges in the draft 2011 Agricultural Order (Tier 3 dischargers) chose to use vegetated buffers or converted to other uses, the total acreage is quite small compared to the total amount of acreage used for farming and was, therefore, found to be less than significant. In addition, since the land would be used as a vegetated buffer to comply with the Order, this would result in beneficial impacts on the environment, not adverse impacts.

With respect to Biological Resources, the Final SEIR concludes that wide scale water conservation could result in lower flows into surface water resulting in impacts on aquatic life. The Central Coast Water Board may not specify the manner of compliance so it has insufficient information to evaluate the extent to which dischargers would choose to use water conservation to comply and to evaluate potential physical changes to the environment that could result. Reduction in toxic runoff may offset impacts due to the possibly reduced flows. In addition, reduction in water use could result in increased groundwater levels that would also result in more clean water recharging surface water (an offsetting effect).

Based on this information, the Final SEIR concludes that the environmental effects associated with the draft 2011 Agricultural Order may be significant with respect to biological resources. However, given the uncertainty associated with evaluating the available information, it is possible that the effects may turn out to be less than significant. This Final SEIR provides this information to the public and to the Central Coast Water Board so that it can make an informed decision. In Resolution R3-2011-0006, the Central Coast Water Board has made findings consistent with the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15091) and a statement of overriding considerations (Cal. Code Regs., tit. 14, § 15093).

2. Project Description

2.1. Project Purpose

The purpose of this project is to renew the 2004 Agricultural Order with revised conditions. The draft 2011 Agricultural Order (Order No. R3-2011-0006) would regulate discharges of waste from irrigated agricultural lands in a manner protective of water

[3] The "less than significant" finding in the final SEIR represents a change from the Nov. 2010 draft SEIR as the Nov. draft SEIR found impacts to Agricultural Resources "less than significant with mitigation." The final SEIR concluded this change was appropriate because the 2011 draft Agricultural Order's requirement for riparian buffers was reduced to a very small number (smaller than the Feb. 2010 draft Agricultural Order) and no significant information was provided to suggest the impacts to agricultural resources would be anything more than "less than significant".

quality and consistent with the Porter-Cologne Water Quality Control Act (Wat. Code Div. 7) and associated plans and policies.

2.2. *Regulatory Requirements*

Persons who discharge waste that could affect the quality of the waters of the state are required to submit a report of waste discharge (Wat. Code § 13260) and obtain waste discharge requirements (Wat. Code § 13263), unless those procedural requirements are conditionally waived by the Water Board (Wat. Code § 13269). The term "waste" is defined in the Porter-Cologne Water Quality Control Act to include sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. (Wat. Code § 13050, subd. d). Waste includes sediment, pesticides, nutrients, plastics, and other materials used and discharged from agricultural operations. Discharge authorization can be in the form of waste discharge requirements or a conditional waiver of waste discharge requirements. Historically, discharges from irrigated agricultural activities have been authorized by a conditional waiver of waste discharge requirements, most recently the 2004 Agricultural Order. Any conditional waiver of waste discharge requirements must be consistent with applicable state or regional water quality control plans (basin plans), including compliance with water quality standards and prohibitions, and must be in the public interest. Waivers may not exceed five years in duration, but may be renewed following a public meeting and may be terminated at any time. Generally, a conditional waiver must include monitoring and dischargers may be required to pay fees. (Wat. Code § 13269.)

Discharges of waste from agricultural operations are generally considered "nonpoint" sources of waste. Consistent with Water Code section 13369(a)(2)(B), the State Water Board adopted the *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Implementation and Enforcement Policy). This Policy identifies use of waste discharge requirements and waivers of waste discharge requirements as appropriate regulatory tools to address nonpoint source discharges. The Policy requires the regulation of nonpoint sources to meet five key elements, including the goal of achieving compliance with water quality objectives, use of management practices and processes to verify use of management practices, time schedules and milestones to achieve compliance with water quality requirements, feedback mechanisms to achieve compliance, and must identify consequences of failure to comply.

2.3. *Project Location*

The draft 2011 Agricultural Order would continue to regulate discharges from agricultural lands throughout the Central Coast Region. The project area encompasses agricultural areas throughout the entire Central Coast Region; including all or portions of San Mateo, Santa Cruz, Santa Clara, San Benito, Monterey, San Luis Obispo, Santa

Barbara, and Ventura Counties (see Figure 1). Approximately 93% of the irrigated agricultural lands within the Central Coast Region have already enrolled in the 2004 Agricultural Order and would continue to be eligible to be enrolled in the draft 2011 Agricultural Order.

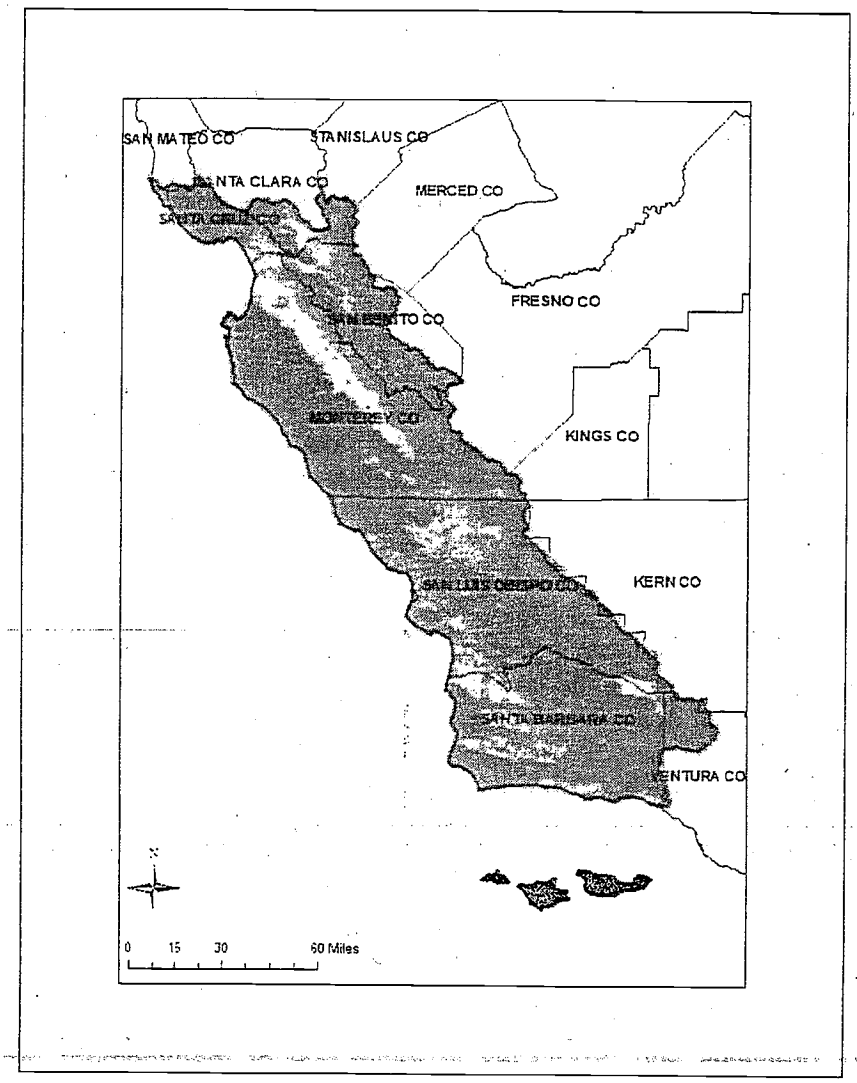


Figure 1. Map showing project area (irrigated agricultural lands are shown in white within shaded areas within Region 3 boundary). Irrigated agricultural lands are identified from prime, state and unique farmland, as identified by the Farmland Mapping and Monitoring Program (FMMP) dataset, 2008.

2.4. Description of the Project (Renewed Order)

Consistent with Water Code section 13269, the 2004 Agricultural Order waived the requirements for dischargers of waste from irrigated lands in the Central Coast Region to submit reports of waste discharge (applications) pursuant to Water Code section 13260(a) and obtain waste discharge requirements pursuant to Water Code section 13263(a), if the discharger complied with the conditions and monitoring requirements of the waiver. Dischargers enrolled by completing a Notice of Intent (NOI) that contained specified information. The 2004 Agricultural Order established two tiers of dischargers. Tier 1 and 2 dischargers were required to complete an education program, prepare an implement a Farm Plan describing management practices to control discharges of waste, and perform individual water quality monitoring or participate in a cooperative monitoring program. All dischargers were required, among other conditions, to comply with water quality control plans, not cause or contribute to exceedances of water quality standards, protect groundwater for its beneficial uses nor cause groundwater to exceed drinking water standards, comply with time schedules, and submit reports.

The draft 2011 Agricultural Order would continue similar conditions. Like the 2004 Agricultural Order all dischargers are required to comply with water quality control plans, not cause or contribute to exceedances of water quality standards, protect groundwater for its beneficial uses, not cause groundwater to exceed drinking water standards, and submit reports. The draft 2011 Agricultural Order also includes the requirement to complete an education program, prepare and implement a Farm Plan describing management practices to control discharges of waste, and perform individual water quality monitoring or participate in a cooperative monitoring program.

The draft 2011 Agricultural Order would establish a new tiering structure that would group farm operations, or dischargers, into three tiers, each tier distinguished by four criteria that indicate threat to water quality: size of farm operation, proximity to an impaired watercourse, use of chemicals of concern, and type of crops grown. Dischargers with the highest threat have the greatest amount of discharge control requirements, monitoring and reporting. Conversely, dischargers with the lowest threat have the least amount of discharger control requirements, individual monitoring and reporting.

As proposed Tier 1 dischargers (approximately 1256 farms and 21% of the total acres) would be subject to conditions slightly less burdensome than the 2004 Agricultural Order. Tier 1 dischargers would be required to prepare and implement a Farm Plan and implement management practices to control discharges of waste and protect aquatic habitat, sample existing groundwater wells, conduct individual or cooperative surface water monitoring, use backflow devices on wells if applying chemicals, and participate in education programs. Tier 2 dischargers (approximately 1367 farms and 25% acres) would be subject to conditions that are about the same as the 2004 Agricultural Order. Like Tier 1 dischargers, Tier 2 dischargers would be required to prepare and implement a Farm Plan and implement management practices to control discharges of waste and protect aquatic habitat, sample existing groundwater wells, conduct individual or cooperative surface water monitoring, use backflow devices on wells if applying chemicals, and participate in education programs. They would also have to submit an annual compliance document and evaluate their nitrate loading. Tier 3 dischargers (approximately 100 to 300

management practices to control or prevent discharges of waste. As set forth in the 2004 Negative Declaration for adoption of the 2004 Agricultural Order, the adoption of an agricultural order requiring compliance with water quality standards will improve the environment, not adversely impact the environment. Both the 2004 and the draft 2011 Agricultural Order require implementation of management practices to comply. The draft 2011 Agricultural Order would include some more specific conditions that could result in potentially more severe adverse environmental effects with respect to agricultural resources and biological resources as compared to the 2004 Agricultural Order. In particular, with respect to agricultural resources, farmland could be considered to be converted to non-farm uses due to new conditions, such as requiring buffers, or due to economic impacts that result in selling of farmland for other uses. With respect to biological resources, implementation of new management practices that minimize discharge of tailwater or other water from the fields could result in the reduction in flow of water in surface waters that could affect aquatic habitat.

The purpose of the project is to require persons who discharge waste to comply with the California Water Code and applicable plans and policies, including the Central Coast Water Board Basin Plan and the State Water Board Nonpoint Source Policy. According to the Porter-Cologne Act no discharge of waste, whether made pursuant to waste discharge requirements or not, shall create a vested right to continue the discharge. "All discharges of waste into waters of the state are privileges, not rights." (Wat. Code § 13263, subd. (g).)

The Central Coast Water Board may not specify the manner of compliance with its orders; dischargers may comply in any lawful manner. (Wat. Code § 13360). The potential methods of compliance are no different between the 2004 Agricultural Order and the draft 2011 Agricultural Order. The draft 2011 Agricultural Order includes more specific conditions than the 2004 Agricultural Order, but the basic conditions are still the same – dischargers must implement management practices to assure that discharges of waste from their property do not violate water quality standards, adversely impact beneficial uses, or cause nuisance. Management practices are intended to assure that discharges of waste do not harm water quality; they are not intended to cause adverse impacts on the environment. However, due to some of the new conditions proposed in the draft 2011 Agricultural Order, more dischargers may implement management practices that they previously have not implemented. As a result, this SEIR was prepared to evaluate whether the increase in use of management practices or other changes could cause an increase in the severity of adverse environmental effects than was determined in the 2004 Agricultural Order.

The Water Board has not received any specific evidence by commenters and has little evidence in the record to demonstrate conclusively that the draft 2011 Agricultural Order will result in significant adverse environmental effects on agricultural or biological resources. The Water Board staff expects that compliance with the draft 2011 Agricultural Order will result in significant beneficial impacts on the environment. The Water Board must require compliance with water quality standards, consistency with its water quality control plan (Basin Plan), and compliance with the State Water Board's

Nonpoint Source Policy. The existing 2004 Agricultural Order and the draft 2011 Agricultural Order set forth conditions to achieve compliance with the water quality standards, the Basin Plan, and the Nonpoint Source Policy. Compliance with the conditions will result in environmental benefits. There is not sufficient information to determine the scope of any changes in environmental effects and any potential impacts are very speculative. In addition, even if all dischargers take the same actions, the adverse environmental impacts may be less than significant. For example, conversion of prime farmland, even if it occurs, may not result in more severe environmental effects depending on the nature of any new use. The use of vegetated buffer strips is expected to produce significant environmental benefits rather than adverse impacts and reduced discharges of water from farmland may not result in significant adverse environmental effects due to the nature of particular waterbody and or the reduction in discharge of pollutants associated with the reduce discharge of water.

Consistent with the goal of CEQA, this analysis provides information about the potential for adverse environmental effects to provide the Central Coast Water Board with sufficient information to make an informed decision.

4.1. Agricultural Resources

4.1.1. Introduction

This section describes agricultural land uses in the project area and evaluates the potential environmental effects on agricultural resources as a result of adoption of the draft 2011 Agricultural Order, specifically whether the revisions in the draft Order would convert prime farmland. This evaluation focuses on potential conversion of farmland due to the use of vegetated buffers or due to increased costs associated with compliance with the draft 2011 Agricultural Order. (See Appendix F of Draft Staff Report recommending the Draft Agricultural Order for cost information[4].)

The November 2010 Draft SEIR concluded that the potential adverse environmental impacts to agricultural resources were *less than significant impact with mitigation*. This Final SEIR concludes that potential adverse environmental impacts to agricultural resources are *less than significant*. This is because the 2011 draft Agricultural Order's requirement for riparian buffers was reduced to a very small number (smaller than the Feb. 2010 draft Agricultural Order) and no significant information was provided to suggest the finding would be anything more than "less than significant." If some dischargers choose to use riparian buffers in order to implement the draft Agricultural Order, these buffers will result in beneficial, not adverse, impacts on the environment.

Agricultural lands within the Central Coast Region account for approximately 540,000 acres of land[5], according to the State of California Department of Conservation's

[4] http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

[5] 539,284.17 acres according to FMMP 2008 (prime, state and unique farmland). This excludes farmland of local importance because these lands are not irrigated.

Farmland Mapping and Monitoring Program (FMMP 2008).[6] The FMMP identifies and maps important farmland throughout California. Farmland categories relevant to this project include:

- *Prime Farmland* is land with the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed in accordance with accepted farming methods. In addition, the land must have been used for irrigated agricultural production in the last 4 years to qualify as Prime Farmland.
- *Farmland of Statewide Importance* is land other than Prime Farmland that has a good combination of physical and chemical characteristics for the production of crops.
- *Unique Farmland* is land that does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, and that has been used for the production of specific high–economic value crops at some time during the two update cycles prior to the mapping date. This land is usually irrigated but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.

Farmland that was *not* considered as part of this project was farmland of local importance because these lands are not irrigated and therefore not included in the Agricultural Order. Each County defines farmland of local importance slightly differently; however, all farm lands of local importance within the Central Coast Region are not irrigated.

- *Farmland of Local Importance* is land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. Each county defines local importance as follows:

  - Monterey - The Board of Supervisors determined that there will be no Farmland of Local Importance for Monterey County.

  - San Benito - Land cultivated as dry cropland. Usual crops are wheat, barley, oats, safflower, and grain hay. Also, orchards affected by boron within the area specified in County Resolution Number 84-3.

  - San Luis Obispo - Local Importance (L): areas of soils that meet all the characteristics of Prime or Statewide, with the exception of irrigation. Additional farmlands include dryland field crops of

[6] According to the 2008 California Department of Conservation Report, California Farmland Conversion Report 2004-2006, farm lands in California are decreasing. All counties within the Central Coast region netted a loss in agricultural land during this period with the exception of Santa Clara County.

wheat, barley, oats, and safflower. Local Potential (LP): lands having the potential for farmland, which have Prime or Statewide characteristics and are not cultivated.

- San Mateo - Lands other than Prime, Statewide, or Unique that produce the following crops: oats, Christmas trees, pumpkins, dryland pasture, other grains, and haylands. These lands are not irrigated.

- Santa Barbara - All dryland farming areas and permanent pasture (if the soils were not eligible for either Prime or Statewide). Dryland farming includes various cereal grains (predominantly wheat, barley, and oats), sudan, and many varieties of beans. (Although beans can be high value crops the production areas are usually rotated with grain, hence the decision to include them under Local rather than Unique. Also, bean crop yields are highly influenced by climate, so there can be a wide variance in cash value.)

- Santa Clara - Small orchards and vineyards primarily in the foothill areas. Also land cultivated as dry cropland for grains and hay.

- Santa Cruz - Soils used for Christmas tree farms and nurseries, and that do not meet the definition for Prime, Statewide, or Unique.

Farmland within the Central Coast Region varies from county to county and includes a long list of many crops. Some of the largest income-producing crops include broccoli, lettuces, strawberries and grapes (Monterey County 2009 crop report).

4.1.2. Williamson Act and Farmland Security Zone Contracts

The California Land Conservation Act (Government Code Section 51200 et seq.) of 1965, commonly known as the Williamson Act, provides a tax incentive for the voluntary enrollment of agricultural and open space lands in contracts between local government and landowners. The contract enforceably restricts the land to agricultural and open space uses and compatible uses defined in state law and local ordinances. An agricultural preserve, which is established by local government, defines the boundary of an area within which a city or county will enter into contracts with landowners. The State of California has the following policies regarding public acquisition of and locating public improvements on lands in agricultural preserves and on lands under Williamson Act contracts (Government Code Sections 51290–51295).

> (a) It is the policy of the state to avoid, whenever practicable, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land therefore in agricultural preserves.
>
> (b) It is further the policy of the state that whenever it is necessary to locate such an improvement within an agricultural preserve, the improvement shall, whenever practicable, be located upon land other than land under a contract pursuant to this chapter.
>
> (c) It is further the policy of the state that any agency or entity proposing to locate such an improvement shall, in considering the relative costs of parcels of land and the development of improvements, give consideration to the value to the public, as indicated in Article 2 (commencing with Section 51220), of land, and particularly prime agricultural land, within an agricultural preserve.

Since 1998, another option in the Williamson Act Program has been established with the creation of Farmland Security Zone contracts. A Farmland Security Zone is an area created within an agricultural preserve by a board of supervisors upon the request of a landowner or group of landowners. Farmland Security Zone contracts offer landowners greater property tax reduction and have a minimum initial term of 20 years. Like Williamson Act contracts, Farmland Security Zone contracts renew annually unless a notice of nonrenewal is filed.

4.1.3. Analysis

The draft 2011 Agricultural Order does not propose or require any person to take agricultural lands out of production. Rather, the draft 2011 Agricultural Order, like the 2004 Agricultural Order, would require growers to comply with the Water Code and the Basin Plan by reducing or eliminating discharges of toxic and other pollutants into surface and groundwater using management practices. The project, as proposed, would require Tier 3 dischargers who are adjacent to waterbodies identified as impaired for temperature, turbidity, or sediment under the Clean Water Act section 303(d) list, to evaluate the use of riparian habitat buffers or other practices to control discharges of waste. Where dischargers choose to install riparian habitat buffers to control discharges of waste, some farm land could be taken out of production. The project, as proposed, would increase the level of compliance for some Tier 2 and 3 dischargers as compared with the 2004 Agricultural Order, which could result in increased costs, including increased monitoring costs, report preparation, nitrate requirements, and potential increase in management practice implementation (buffers).

Riparian Habitat Buffers

The draft 2011 Agricultural Order would continue to require discharges to implement management practices and take other actions to protection waters of the state.

Riparian habitat buffer are one of the methods of compliance a discharger may use in order to comply with the draft 2011 Agricultural Order. For the purposes of this project, a riparian habitat buffer is a vegetated area that helps to intercept pollutants of concern such as sediment, nutrients and pesticides so that they are not carried to a receiving water.[7] Buffers often shade the receiving water. This can reduce the temperature of the receiving water and is environmentally beneficial for many species. Buffers can also stabilize banks that may be otherwise subject to erosion. Only dischargers posing the greatest threat to water quality (e.g., in Tier 3)[8] *and* adjacent to or containing a waterbody impaired by turbidity, sediment or temperature, are required to implement practices, such as buffers, that could result in taking some land out of production.

Dischargers may choose to install riparian habitat buffer strips to comply with the Order, which could result in taking land out of crop production. In general, installing buffers is not expected to have an adverse environmental effect and should have an overall positive environmental impact because buffers will result in eliminating or reducing discharges of waste to waters of the state that have severely impacted the beneficial uses. As discussed further below and in Appendix F of Draft Staff Report recommending the Draft Agricultural Order[5], if all growers in Tier 3 chose to install buffer strips to comply with the Order, approximately 82 to 233 acres or 0.002 to 0.004% of the 540,000 acres of agricultural lands within the Region, would be taken out of production. Given the total number of acres farmed in the Central Coast Region, the impact on acres farmed is not cumulatively significant even if all 233 acres was converted to some other use. This estimate represents the acreage of land that would be taken out of production if *all* growers chose to install riparian habitat buffers and all of those buffers did not yield any agricultural products. The estimate may be less than this because of alternative means of compliance and/or mitigation. No significant evidence has been provided to support a conclusion that a large amount of agricultural lands would be sold and converted to non-agricultural uses (e.g., urban development) as a result of compliance with the draft 2011 Agricultural Order. See discussion below in "Conversion due to economic pressure". The draft 2011 Agricultural Order does not require the use of buffers; other methods may be used or the discharges may not be significant due to existing practices. In addition, some mitigation measures are identified in this SEIR that would offset potential impacts of land being taken out of production.

The Draft SEIR concluded that the potential adverse environmental effects due to installation of riparian habitat buffers have a *less than significant impact with mitigation*. This Final SEIR concludes that the proposed condition to evaluate use of riparian buffers would have a *less than significant impact* due to the small quantity of acres that could potentially used for riparian buffers even if all Tier 3 growers chose that practice to comply or all 233 acres were converted to other uses. If some dischargers choose to use riparian buffers, these buffers will result in beneficial, not adverse, impacts on the environment.

[7] Please see Appendix A - Draft Agricultural Order, Attachment A, findings 87-105.

[8] See Draft Staff Report recommending the Draft Agricultural Order, Section 3.A. for an explanation of the various tiers. http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

As already noted, the Central Coast Water Board cannot specify the manner of compliance and, in this situation, therefore, it cannot require any specific mitigation measures. However, since this Final SEIR concludes that the impact on prime farmland due to the riparian buffer condition is less than significant, the Water Board is not required to identify mitigation measures. There are, however, practices that discharges may implement other than installation of buffers that would further reduce any potential impacts on prime farm land. Measures to make this potential impact even less significant include:

1. Dischargers could choose to install other practices besides buffers to insure turbidity, sediment and temperature water quality standards are met.
2. Dischargers could plant ground cover, berry bushes and/or fruit/nut bearing trees which would serve as both agricultural land as well as a buffer. The land would not be converted to a non-agricultural use because it would still generate economically viable produce, but would function as a buffer. This buffer containing agricultural land would need to meet the requirements of the Agricultural Order.
3. Dischargers could eliminate any activities that cause erosion, generate sediment, or otherwise may cause or contribute to exceedances of water quality standards for turbidity, sediment and temperature, near a waterbody so may not need to install a buffer.
4. Dischargers may choose to install a riparian habitat buffer and find that it decreases erosion on the farm and serves to help maintain soil and sediment on the farm (2000 Information Manual Riparian Vegetation Management for Pierce's Disease in North Coast California Vineyards).

Sedimentation Basins

Like the 2004 Agricultural Order, the draft 2011 Agricultural Order contains no condition that would require any discharger to install sedimentation basins. However, sedimentation basins are one management practice that could assist growers in complying with water quality standards. Sedimentation basins are structures that receive run-off. These basins have the capability to settle out sediment. The water can either percolate into the ground - if they are unlined - or be used for another use.

No significant evidence has been provided to support a conclusion that a large number of growers would choose to install sedimentation basins in order to comply with the draft 2011 Agricultural Order as compared to the 2004 Agricultural Order resulting in a new significant adverse effect on the environment .

Conversion due to economic pressure

Interested persons have submitted comments with regards to the economic pressure the draft 2011 Agricultural Order would place on them. These interested persons speculated that costs of complying with the draft 2011 Agricultural Order may be so high, that a grower would be forced to sell their land or would be forced out of business

resulting in conversion of prime farmland to other non-agricultural uses. They did not provide specific evidence that this would, in fact, occur. As described above, the draft 2011 Agricultural Order would establish a tiering structure; Tiers 2 and 3 could be required to comply with conditions that are more costly as compared to the 2004 Agricultural Order. Under CEQA, economic or social effects of the project shall not be treated as significant effects on the environment. (Cal. Code Regs., tit. 14, § 15131.). Only physical changes to the environment can be considered significant and there must be a chain of cause and effect from economic or social changes to physical changes. Commenters have stated that the costs are too high, but have not provided a chain of cause and effect to physical changes. As noted above, only Tier 3 dischargers would be subject to a significantly higher level of compliance in the draft 2011 Agricultural Order as compared to the 2004 Agricultural Order. Many dischargers who would tentatively be placed in Tier 3 may demonstrate that they have already implemented practices to reduce their impacts and would be moved to Tier 1 or 2.[9] In addition, there are many factors, other than costs of environmental compliance, that could result in growers going out of business or selling land, including competition from agriculture in other areas, increases in costs of fertilizers, pesticides and gasoline needed to run operations.

Many of these agricultural lands are in areas that are designated as agricultural lands through City and/or County ordinances. These ordinances typically protect agricultural resources and zoning. Additionally, many of these agricultural lands are in areas directly adjacent to a creek where the land would not be able to be developed into other land uses because of the proximity to a waterbody. Even if a grower succumbs to economic pressure and is forced to sell their land or be forced out of business, the most likely possibility is that the land would be sold to another grower, which would result in a similar environmental impact.[10] Specific local ordinances are not addressed in this Final SEIR.

For some dischargers, the draft 2011 Agricultural Order will result in increased costs of compliance. However, economic effects do not translate into direct physical impacts on the environment, therefore, the economic effects are considered *less than significant.* In addition, dischargers were already required by the 2004 Agricultural Order to implement management practices to control discharges that impact beneficial uses. There are many cost-effective practices growers can implement to comply with the Order.

In conclusion, while the potential exists that a small percentage of agricultural land may be converted to buffers or sold for other uses; the effects are anticipated to be *less than significant.* This Final SEIR was prepared to provide the Central Coast Water Board with information to allow it to make an informed decision about the potential effects.

[9] See comment letters from vineyard and orchard operators, for example.

[10] 14 CCR section 15382 - A social or economic change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

4.2. Biological Resources

4.2.1. Introduction

This section describes potential impacts on vegetation and wildlife with respect to compliance with the draft 2011 Agricultural Order. In general, information about the implementation of the 2004 Agricultural Order supports the conclusion that the new conditions that could be imposed by the draft 2011 Agricultural Order will result in beneficial effects on biological resources, including reduction of discharge of waste to receiving water and groundwater and overall habitat improvements.

Some conditions of the draft 2011 Agricultural Order could result in reduction or elimination of tailwater, or other releases of water due to other management practices, which could reduce surface water flow. In general, the reduction or elimination of tailwater will have a net positive affect on the environment due to the reduction in discharges of waste to receiving water. There may, however, be periods of time where some species could encounter potentially significant adverse environmental effects due to reduced flow. The following section addresses these potential impacts to species due to reduction of flow.

4.2.2. Endangered Species Act

Federal Endangered Species Act

The federal Endangered Species Act does not apply to the State, but this information is included because the Central Coast Water Board has received comments by federal agencies who are required to comply with this federal law. The Endangered Species Act (ESA) protects plant and animal species and their habitats identified by the US Fish and Wildlife Services and National Marine Fisheries (NMFs) as threatened or endangered. Endangered refers to species or subspecies that are in danger of extinction through all or a significant portion of their range. Threatened refers to species or subspecies that are likely to become endangered in the near future.

Section 7 – Endangered Species Act Consultation Process

Section 7 ESA consultation provides a means for authorizing take of listed species for actions by federal agencies. Federal agency actions include activities that are:

- On federal land,
- Conducted by a federal agency,
- Funded by a federal agency, or
- Authorized by a federal agency (including issuance of federal permits and licenses).

Under Section 7, the federal agency conducting, funding, or permitting an action (the federal lead agency) must, in consultation with USFWS or NMFs as appropriate, ensure that its proposed action will not jeopardize the continued existence of an endangered or threatened species, or destroy or adversely modify designated critical habitat. If a

proposed project "may affect" a listed species or designated critical habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the expected effect. The biological assessment is prepared for the proposed action and is submitted to USFWS or NMFs to initiate consultation. In response to a biological assessment, USFWS or NMFs issues a biological opinion, with a determination that the proposed action either:

- May jeopardize the continued existence of one or more listed species (jeopardy finding) or result in the destruction or adverse modification of critical habitat (adverse modification finding), or
- Will not jeopardize the continued existence of any listed species (no jeopardy finding) or result in adverse modification of critical habitat (no adverse modification finding).

The biological opinion issued by USFWS or NMFs may stipulate discretionary "reasonable and prudent" conservation measures. If the proposed action would not jeopardize a listed species, USFWS or NMFs may issue an incidental take statement to authorize the proposed activity and may include appropriate measures to offset the impacts of take.

Section 9 – Endangered Species Act Prohibitions

Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered. Take of threatened species is also prohibited under Section 9, unless otherwise authorized by federal regulations. Take, as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (Section 3 of the ESA; 16 United States Code [USC] Section 1532[19]). Harm is defined by regulation as "any act that kills or injures the species, including significant habitat modification" (50 CFR 17.3 222.102). In addition, Section 9 prohibits removing, digging up, cutting, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If the project may result in take prohibited by Section 9, this take would need to be authorized through ESA Sections 7 or 10 (providing for the issuance of "incidental take" permits).

California Endangered Species Act

The California Endangered Species Act generally parallels the main provisions of the Federal Endangered Species Act. The CESA (California Fish and Game Code [CFGC] Sections 2050–2068) generally parallels the main provisions of the ESA (16 USC 1531–1544) and is administered by the California Department of Fish and Game (DFG). A state lead agency is required to consult with DFG to ensure that any action it undertakes is not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of essential habitat.

The CESA prohibits taking of listed species except as otherwise provided in state law. Unlike the ESA, the CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species.

Section 2081 of the CFGC expressly allows DFG to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity,
- The impacts of the authorized take are minimized and fully mitigated,
- Issuance of the permit will not jeopardize the continued existence of the species,
- The permit is consistent with any regulations adopted in accordance with Sections 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area), and
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that an incidental take permit obtained under the ESA may authorize the taking of the same species if it is listed under the CESA, with no further CESA authorization or approval required (CFGC Section 2080.1).

Regarding rare plant species, CESA defers to the California Native Plant Protection Act (CNPPA), which prohibits importing rare and endangered plants into California, taking rare and endangered plants, and selling rare and endangered plants. State-listed plants are protected mainly in cases where state agencies are involved in projects subject to CEQA. In these cases, plants listed as rare under the CNPPA are not protected under the CESA but can be protected under CEQA.

4.2.3. Analysis

Staff analyzed whether or not there were special status species (threatened or endangered) in the Central Coast Region in areas where there is irrigated agricultural land. See Table 2. Staff used 2008 FMMP data along with 2008 California Natural Diversity Data Base (CNDDB) and intersected the two layers in order to derive a list and area overlap of irrigated agricultural lands and special status species. The CNDDB is a program that inventories the status and location of rare plants, animals and insects in California. Staff looked at plants, animals and insects that were listed as either threatened or endangered on both the state and federal level. There were 46 special status species in areas where there were irrigated agricultural lands. These special status species' habitats account for approximately 76,922 acres within irrigated agricultural lands, comprising 14% of the irrigated lands in the Central Coast Region. This overlay only counted the areas where special status species habitat areas directly overlaid irrigated agricultural land. The analysis did not take into account areas downstream from agriculture.

Table 2. Threatened or endangered species that occur on irrigated agricultural lands within the Central Coast Region

Common and Scientific Names	Federal Status	California Status	Geographic Distribution within irrigated agriculture
Bank swallow *Riparia riparia*	None	Threatened	Thompson Canyon, Moss Landing - *Monterey County* Moss Landing - *Santa Cruz County* Chittenden - *Santa Benito County*
Bay checkerspot butterfly *Euphydryas editha bayensis*	Threatened	None	Mt. Madonna - *Santa Clara County*
Blunt-nosed leopard lizard *Gambelia sila*	Endangered	Endangered	Cuyama, Cuyama Peak - *Santa Barbara County* Cuyama, New Cuyama - *San Luis Obispo County*
California black rail *Laterallus jamaicensis coturniculus*	None	Threatened	Oceano - *San Luis Obispo County*
California clapper rail *Rallus longirostris obsoletus*	Endangered	Endangered	Prunedale - *Monterey County*
California condor *Gymnogyps californianus*	Endangered	Endangered	Ballinger Canyon - *Kern County*
California jewel-flower *Caulanthus californicus*	Endangered	Endangered	New Cuyama - *Santa Barbara County* Cuyama - *San Luis Obispo County*
California least tern *Sternula antillarum browni*	Endangered	Endangered	Oceano - *San Luis Obispo County*
California red-legged frog *Rana draytonii*	Threatened	None	Big Sur, Carmel Valley, Moss Landing, Natividad, Prunedale, Seaside - *Monterey County* Carpinteria, Foxen Canyon, Guadalupe, Lompoc, Los Alamos, Orcutt, Santa Maria, Sisquoc, Tajiguas, Twitchell Dam - *Santa Barbara County* Chittenden, Hollister, San Felipe, Tres Pinos - *San Benito County* Chittenden - *Santa Clara County* Ano Nuevo, Davenport, Santa Cruz, Watsonville West - *Santa Cruz County* Arroyo Grande NE, Cambria, Cayucos, Lopez Mtn., Morro Bay South, Oceano, Santa Margarita, Santa Maria, Tar Spring Ridge, Twitchell Dam - *San Luis Obispo County* Pigeon Point - *San Mateo County*
California tiger salamander *Ambystoma californiense*	Threatened	None	Gonzales, Moss Landing, Mt. Carmel, Natividad, Palo Escrito Peak, Prunedale, Rana Creek, Salinas - *Monterey County* Los Alamos, Orcutt, Santa Maria, Sisquoc, Twitchell Dam - *Santa Barbara County* Hollister, Paicines, San Felipe, San Juan Bautista, Tres Pinos - *San*

Common and Scientific Names	Federal Status	California Status	Geographic Distribution within irrigated agriculture
			Benito County Mt. Madonna, Mt. Sizer - *Santa Clara County* Watsonville West - *Santa Cruz County* San Luis Obispo - *San Luis Obispo County*
Coho salmon - central California coast ESU *Oncorhynchus kisutch*	Endangered	Endangered	Ano Nuevo, Davenport, Felton - *Santa Cruz County*
Gambel's water cress *Nasturtium gambelii*	Endangered	Threatened	Oceano - *San Luis Obispo County*
Gaviota tarplant *Deinandra increscens ssp. villosa*	Endangered	Endangered	Sacate - *Santa Barbara County*
Giant kangaroo rat *Dipodomys ingens*	Endangered	Endangered	Cuyama, New Cuyama, Taylor Canyon - *Santa Barbara County* Cuyama - *San Luis Obispo County*
La Graciosa thistle *Cirsium loncholepis*	Endangered	Threatened	Guadalupe, Point Sal, Sisquoc, Surf - *Santa Barbara County* Oceano - *San Luis Obispo County*
Least Bell's vireo *Vireo bellii pusillus*	Endangered	Endangered	Foxen Canyon, San Marcos Pass - *Santa Barbara County* Chittenden - *San Benito County* Chittenden - *Santa Clara County*
Marsh sandwort *Arenaria paludicola*	Endangered	Endangered	Oceano - *San Luis Obispo County*
Metcalf Canyon jewel-flower *Streptanthus albidus ssp. albidus*	Endangered	None	Gilroy, Mt. Sizer - *Santa Clara County*
Monterey spineflower *Chorizanthe pungens var. pungens*	Threatened	None	Espinosa Canyon, Marina, Moss Landing, Prunedale, Soledad, Watsonville East - *Monterey County* Loma Prieta, Moss Landing, Watsonville West - *Santa Cruz County* San Simeon - *San Luis Obispo County*
Morro Bay kangaroo rat *Dipodomys heermanni morroensis*	Endangered	Endangered	Morro Bay South - *San Luis Obispo County*
Nelson's antelope squirrel *Ammospermophilus nelsoni*	None	Threatened	Cuyama - *Santa Barbara County* Cuyama, Shandon - *San Luis Obispo County*
Nipomo Mesa lupine *Lupinus nipomensis*	Endangered	Endangered	Oceano - *San Luis Obispo County*
Pismo clarkia *Clarkia speciosa ssp. immaculata*	Endangered	Rare	Arroyo Grande NE - *San Luis Obispo County*
Robust spineflower *Chorizanthe robusta var. robusta*	Endangered	None	Salinas, Soledad - *Monterey County* Laurel - *Santa Cruz County*
San Francisco garter snake	Endangered	Endangered	Ano Nuevo, Franklin Point, Pigeon Point, San Gregorio - *San Mateo*

Common and Scientific Names	Federal Status	California Status	Geographic Distribution within irrigated agriculture
Thamnophis sirtalis tetrataenia			*County*
San Joaquin kit fox *Vulpes macrotis mutica*	Endangered	Threatened	Bradley, Espinosa Canyon, Greenfield, Hames Valley, Paraiso Springs, Pinalito Canyon, San Ardo, San Lucas, Soledad, Tierra Redonda Mountain - *Monterey County* Cuyama, Cuyama Peak, New Cuyama - *Santa Barbara County* Hollister, Paicines, Three Sisters, Tres Pinos - *San Benito County* Cuyama, Paso Robles, Shandon, Shedd Canyon - *San Luis Obispo County*
San Joaquin woollythreads *Monolopia congdonii*	Endangered	None	Fox Mountain - *Santa Barbara County* Cuyama - *San Luis Obispo County*
San Luis Obispo fountain thistle *Cirsium fontinale var. obispoense*	Endangered	Endangered	Pebblestone Shut-in - *San Luis Obispo County*
Sand gilia *Gilia tenuiflora ssp. arenaria*	Endangered	Threatened	Marina, Moss Landing, Salinas - *Monterey County*
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	Endangered	Endangered	Moss Landing, Prunedale - *Monterey County* Watsonville West - *Santa Cruz County*
Santa Cruz tarplant *Holocarpha macradenia*	Threatened	Endangered	Soquel, Watsonville East, Watsonville West - *Santa Cruz County*
Santa Cruz wallflower *Erysimum teretifolium*	Endangered	Endangered	Davenport - *Santa Cruz County*
Seaside bird's-beak *Cordylanthus rigidus ssp. littoralis*	None	Endangered	Moss Landing - *Monterey County* Lompoc Hills, Los Alamos, Santa Rosa Hills - *Santa Barbara County*
Smith's blue butterfly *Euphilotes enoptes smithi*	Endangered	None	Seaside - *Monterey County*
Southern steelhead - southern California ESU *Oncorhynchus mykiss irideus*	Endangered	None	Santa Rosa Hills - *Santa Barbara County* Cayucos - *San Luis Obispo County*
Southwestern willow flycatcher *Empidonax traillii extimus*	Endangered	Endangered	Solvang - *Santa Barbara County*
Steelhead - Central California Coast ESU *Oncorhynchus mykiss irideus*	Threatened	None	Ano Nuevo, Davenport, Felton, Laurel, Santa Cruz - *Santa Cruz County*
Steelhead - south/central California coast ESU *Oncorhynchus mykiss irideus*	Threatened	None	Carmel Valley, Junipero Serra Peak - *Monterey County* Chittenden, Mt. Madonna - *Santa Clara County* Loma Prieta - *Santa Cruz County* Arroyo Grande NE, Cambria, Morro Bay North, Morro Bay South, Pismo Beach - *San Luis Obispo County*

Common and Scientific Names	Federal Status	California Status	Geographic Distribution within irrigated agriculture
Tidewater goby *Eucyclogobius newberryi*	Endangered	None	Marina, Moss Landing - *Monterey County* Carpinteria, Dos Pueblos Canyon, Sacate, Tajiguas - *Santa Barbara County* Ano Nuevo, Davenport, Moss Landing, Santa Cruz - *Santa Cruz County* Cambria, Cayucos, Morro Bay South, Pismo Beach - *San Luis Obispo County*
Two-fork clover *Trifolium amoenum*	Endangered	None	Gilroy - *Santa Clara County*
Vernal pool fairy shrimp *Branchinecta lynchi*	Threatened	None	Paso Robles, Pismo Beach - *San Luis Obispo County*
Western snowy plover *Charadrius alexandrinus nivosus*	Threatened	None	Marina, Moss Landing - *Monterey County* Moss Landing, Santa Cruz - *Santa Cruz County* Oceano - *San Luis Obispo County* Ano Nuevo - *San Mateo County*
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Candidate	Endangered	Paicines - *Santa Barbara County*
White-rayed pentachaeta *Pentachaeta bellidiflora*	Endangered	Endangered	Felton - *Santa Cruz County*
Yadon's rein orchid *Piperia yadonii*	Endangered	None	Prunedale, Seaside - *Monterey County*
Zayante band-winged grasshopper *Trimerotropis infantilis*	Endangered	None	Felton - *Santa Cruz County*

Although there are 46 special status species that were identified in agricultural areas, the staff found no conclusive evidence and none was provided by commenters to indicate that any of the species would be affected if some of the growers choose to eliminate discharge. Some of the species that may be affected by reduced flow include: California red-legged frog, Gambel's water cress, La Graciosa thistle, least bell's vireo, marsh sandwort, seaside bird's beak, southern steelhead - southern California, steelhead - Central California Coast, steelhead - south/central California coast, southwestern willow flycatcher, and the tidewater goby. These species were singled out as potentially being affected because of their water requirements either for habitat and/or reproductive purposes.

Reduced flow may have the *potential* to significantly impact these species. However, specific data to support this position were not found. Staff solicited professional opinions from US Fish and Wildlife Service and the California Department of Parks (State Parks) regarding the issue of impact. Both US Fish and Wildlife Service and State Parks opined that there may be potentially adverse effects. US Fish and Wildlife acknowledged that there are a range of possibilities. Reduced flow may benefit native species in the long run, making it harder for invasive species to survive. Reduced flows would likely allow the hydrology to go back to a more natural state and would likely be a benefit; however, it could have negative effects. Those potential negative effects are dependant on many variables including where the flow is reduced, by how much and at what times of the year. State Parks' position was similar. State Parks discussed that there would likely be an adjustment period. They suggested further hydrological analysis in these areas where there are special status species with certain water requirements. Additionally, State Parks suggested mitigation measures such as phasing in implementation of requirements in some areas and adjusting them on a watershed basis.

Irrigated agriculture (and dams and urban development) has modified the Central Coast's natural hydrology. In places where there used to be no water, there is water year round. Plants and animals are opportunistic and will respond to changing environments, including the creation of a new surface water. Currently, many plants and animals are found near agricultural tail water and/or tile drains. Plants and animals were accustomed to the Mediterranean climate in which there was rain in the fall, winter and early spring and there was usually little rainfall late spring, summer and early fall. These plants and animals were accustomed to many of the streams drying up during this dry season and flowing in the wet season. Reducing flow in these agricultural drainages is likely to mimic historic flow regimes.

While there are many plants and animals that are found on irrigated agricultural lands or directly adjacent or downstream, there still may be some negative effects on these organisms because of the high occurrence of water and sediment toxicity associated with agricultural discharges. Additionally, while the plants and animals may be present, excessive levels of pesticides, nutrients and sediment are not desirable for a healthy

environment. Consequently, while the species are present because of the discharged water, continuing to discharge water of low quality is not an environmentally desirable situation.

Staff has data indicating that water flow in surface waters is already being reduced in the Central Coast Region (CCAMP data), potentially due to compliance with the 2004 Agricultural Order, but has no data regarding how this is affecting special status species.

The potential exists for improved base flow conditions in the event that tailwater is allowed to percolate to groundwater, rather than being discharged to surface waterbodies where it is quickly transported downstream. The potential for improved base flow conditions also exists in the event that growers reduce groundwater pumping in an effort to reduce tailwater discharge to surface waterbodies. Consequently, reduced or elimination of tailwater does not necessarily equate to elimination of flow. Furthermore, what flow would be available will be of higher quality, and therefore have a higher potential of supporting desirable habitat, particularly native species.

The Negative Declaration for the 2004 Agricultural Order addressed the issue of the potential for reduced flow and found no impact. Due to comments from federal and state agencies about the potential adverse environmental impacts due to low flows, this issue was reevaluated. There is still insufficient and inconsistent information to conclude whether there will be adverse environmental effects, but there could be some adverse impacts if all dischargers reduced flow. It is more likely that such impacts would be short term, but as described herein, reduced flows could be offset by increased recharge, higher quality of the discharges, and other beneficial impacts of compliance.

This Final SEIR concludes that compliance with the changes proposed in the draft 2011 Agricultural Order could result in reduction in surface water flows that could in turn result in potentially significant adverse environmental effects on biological resources that would be more severe than identified in the Negative Declaration for the 2004 Agricultural Order. Potential mitigation measures to prevent reduced flows or to reduce the impact include phasing in management practices that could result in reduced flows; having dischargers separate clean from polluted wastewater;; and use of riparian buffers that will effectively treat the water to remove pollutants, but not necessarily reduce flows. Because the Water Board may not specify the manner of compliance with the Order, it may not explicitly mandate the use of some of the potential mitigation measures, such as use of riparian buffers.

In conclusion, given the uncertainty with respect to the effects of reduced flows, if they actually occur, the impact may not actually be significant, but this Final SEIR concludes that there will be a significant effect. The Central Coast Water Board will make findings required by the CEQA Guidelines. (Cal. Code Regs., tit. 14, § 15091, 15093.)

To evaluate the effectiveness of mitigation measures, the draft 2011 Agricultural Order requires the dischargers to prepare a Farm Plan that documents the actions taken to comply with the Order, which will provide with respect to the effectiveness of management practices and to monitor water quality.

4.3. Mandatory Findings of Significance

CEQA guidelines set forth certain mandatory findings of significance. If the project has the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or substantially reduce the number or restrict the range of an endangered, rare or threatened species, the lead agency must make a mandatory finding of significance and complete an EIR.[11]

Because of the reason explained in Section 4.2. Biological Resources, this Final SEIR changes Mandatory Findings of Significance from *no impact* to *potentially significant impact.*

5. Discussion of Climate Change

Climate change was not addressed in the 2004 Agricultural Order because it was not on the 2004 CEQA Environmental Checklist. Staff finds that the draft 2011 Agricultural Order will have "no impact" with regards to climate change.

There is no evidence to suggest that the draft 2011 Agricultural Order will result in the emission of more greenhouse gases. Agricultural activities use equipment that can result in discharges of air pollutants. However, there is no evidence to conclude that those activities would be more significant based on the draft 2011 Agricultural Order. One commenter suggested that the order would require widespread use of reverse osmosis units, but that is not an accurate representation of the conditions. The 2004 Agricultural Order already required dischargers to implement management practices. On the contrary, staff anticipates that the inclusion of riparian buffers will increase the amount of more permanent vegetation, which can act as a carbon sink and therefore help aid in reducing effects of global warming. However, the amount of additional vegetation will likely be small and will net a slightly positive effect. Additionally, the potential for less fertilizer use (a source a N_2O emissions) may actually reduce emissions.

With regards to additional trips for monitoring, staff does not anticipate these additional trips will contribute greatly to greenhouse gases because the additional monitoring required will not necessarily increase the number or frequency of trips significantly. An individual farm could combine trips associated with their own monitoring requirements

[11] 14 Cal. Code Regs section 15065, subd. (a)(1).

and a group of adjacent farms could combine monitoring into fewer trips. In these ways, the farms could minimize fuel use and maximize efficiency.

With regards to energy use, if growers begin pumping less groundwater, energy usage may be reduced and therefore a reduction in emissions may be recognized. Again, staff acknowledges that this contribution may be small, but it would be a positive impact rather than negative.

Overall, staff concludes that there will be no impact on climate change with regards to compliance with the draft 2011 Agricultural Order.

6. Discussion of "No Impacts" Finding

This SEIR addresses only those impacts found to be potentially more severe than previously identified in the 2004 Negative Declaration. See attached 2004 Negative Declaration for discussion of no impacts.

7. Public and Agency Comments

7.1. Agency Comments

On October 14, 2010 the Central Coast Water Board issued a notice of preparation to the Office of Planning and Research and to each responsible and trustee agency in compliance with the CEQA Guidelines (Cal. Code Regs., tit.14 § 15082(a)(1).) The Board received comments from the California State Lands Commission (CSLC), the Native American Heritage Commission (NAHC), and the California Department of Transportation (Caltrans).

The CSLC described the scope of its jurisdiction and authority with respect to tidal and submerged lands, and beds of navigable rivers, sloughs, and lakes and that such lands are subject to the Public Trust. The CSLC explained that the Public Trust is a sovereign public property right held by the state or its delegated trustee for the benefit of all the people. The CSLC expressed its concern that alternatives to the waiver (e.g., if the waiver were to lapse or include less stringent conditions) would have a significant adverse impact on biological resources, water quality, recreation, humans, and environmental justice, including cumulative impacts. As described in the Section 8. Alternatives, of this SEIR, the alternative of allowing the 2004 Agricultural Order lapse or an alternative of including less stringent conditions would not be appropriate for consideration because they would not result in compliance with the Water Code.

The NAHC recommended that the lead agency contact the appropriate regional archaeological Information Center for a record search, determine if an archaeological inventory survey would be required, and contact the NAHC for a Sacred Lands File

Check and list of appropriate contacts for consultation. The NAHC described that lack of surface evidence of archeological resources does not preclude their subsurface existence. Implementation of the draft 2011 Agricultural Order should not result in any more land disturbance than is currently occurring under the 2004 Agricultural Order.

Caltrans commented that discharges from irrigated lands place sediment within Caltrans owned drainage facilities on an ongoing basis. This is a cost issue for Caltrans as well as a potential safety issue on the highways. Caltrans encourages Central Coast Water Board to adopt policies that would reduce discharge of sediment into waterbodies. Implementation of the draft 2011 Agricultural Order will reduce discharges of sediment into waterbodies.

7.2. Public Comments

On November 19, 2010 concurrently with the public notice of the draft 2011 Agricultural Order, the Central Coast Water Board provided notice and an opportunity to comment on this Draft SEIR.

The Central Coast Water Board received 12 letters commenting on the Draft SEIR. The comments are posted on the Water Board's website[12] . A summary of the comments and responses are set forth in Attachment A to this Final SEIR.

8. Alternatives

The CEQA Guidelines require the agency to identify a reasonable range of alternatives that could feasibly accomplish the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. As set forth in this SEIR, the staff has identified the possibility of more severe adverse environmental impacts with respect to agricultural and biological resources. The following alternatives have been considered:

8.1. No Project Alternative

The "No Project" alternative would consist of letting the 2004 Agricultural Order lapse and not renewing it. This alternative is not appropriate for consideration because it would not result in compliance with the Water Code in the short term. In the long term it would require each discharger, that is, each owner and/or operator of irrigated lands that discharge waste that could impact the quality of waters of the state, to submit a report of waste discharge to the Water Board and seek waste discharge requirements. That would not meet the project objectives to provide a general conditional waiver that is more efficient and effective in obtaining compliance with the Water Code.

[12] http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

8.2. *Renewing Existing 2004 Agricultural Order for Five Years*

This alternative would consist of adopting the current 2004 Agricultural Order with no substantive changes. This alternative would also not meet the project objectives to provide clarification of the 2004 Order and new conditions to provide for more effective protection of water quality. The Negative Declaration for the 2004 Agricultural Order evaluated the environmental effects of that Order so further evaluation of that alternative is not required in this SEIR. The potentially significant adverse environmental effects are evaluated in Section 4 of this SEIR.

8.3. *Adoption of Waste Discharge Requirements or Prohibitions*

This alternative would consist of adoption of waste discharge requirements, either individual or general, requiring each discharger to be covered. This alternative would be based on a different provision of the Water Code (Section 13260 rather than 13269) but would include compliance requirements essentially the same as the conditions of the 2004 Agricultural Order or the draft 2011 Agricultural Order. Therefore, it is not necessary to further discuss this alternative since the environmental effects would be essentially the same as a waiver of waste discharge requirements.

8.4. *Alternatives Submitted by Agricultural Groups*

Prior to notice of the Draft SEIR, the Central Coast Water Board received two proposals from agricultural interests identified as "alternatives" to the draft 2011 Agricultural Order; the California Farm Bureau Federation and OSR Enterprises. These "alternatives" consist primarily of proposals similar to the 2004 Agricultural Order. These alternatives are discussed in Appendix I of the Draft Staff Report recommending the Draft Agricultural Order.[13] Because these alternatives are similar to the 2004 Agricultural Order, further environmental review is not required because the environmental analysis required under CEQA was included in the 2004 Negative Declaration.

On January December 3, 2010, the Central Coast Water Board received a new proposed alternative from the California Farm Bureau Federation. The December 2010 January 2011 alternative is also similar to the 2004 Agricultural Order and, therefore further environmental analysis required under CEQA is not necessary because it was included in the 2004 Negative Declaration.

8.4.1. Alternative Proposed by the California Farm Bureau Federation

The California Farm Bureau Federation submitted a conceptual proposal for revision of the 2004 Agricultural Waiver to the Central Coast Water Board April 1, 2010[14]. The Farm Bureau hopes that the Central Coast Water Board will proceed with development

[13] http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

[14] Please see http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/Alt1.pdf for this alternative.

of a long-term program rather than conditional waivers limited to five-year terms. The proposal focused on six key points: 1) the Farm Plan, 2) Implementation Practices, 3) Education, 4) Monitoring, 5) Groundwater, and 6) Land Use Regulations.

With regards to CEQA, the alternative proposed by the California Farm Bureau Federation is similar in concept to the 2004 Order. Therefore no new environmental review is required. With respect to moving towards a long-term program instead of conditional waivers, staff evaluated many different options to address discharge from irrigated agriculture (e.g., Waste Discharge Requirements, Basin Plan amendment) and determined that continuing with Conditional Waivers provided the most flexibility and efficiency for both the Water Board and the dischargers.

8.4.2. Alternative Proposed by OSR Enterprises, Inc.

Price, Postel and Parma - the law firm representing OSR Enterprises, Inc. - submitted a proposal for recommendations for an agricultural order on March 31, 2010[15]. In summary, the "alternative" submitted uses the 2004 Agricultural Order as its baseline, supports Farm Plans being maintained onsite (not at the Water Board), supports confidentiality of sampling results, wants Water Board to defer to Department of Pesticides authority for dealing with pesticide application and supports cooperative monitoring and education.

With regards to CEQA, the alternative proposed by OSR Enterprises, Inc. is similar in concept to the 2004 Order. Therefore no new environmental review is required.

8.4.3. Alternative Proposed by the California Farm Bureau Federation (second version)

The California Farm Bureau Federation submitted a second proposal for revision of the 2004 Agricultural Waiver to the Central Coast Water Board December 3, 2010[16].

With regards to CEQA, the alternative proposed by the California Farm Bureau Federation is similar in concept to the 2004 Order. Therefore no new environmental review is required. With respect to moving towards a long-term program instead of conditional waivers, staff evaluated many different options to address discharge from irrigated agriculture (e.g., Waste Discharge Requirements, Basin Plan amendment) and determined that continuing with Conditional Waivers provided the most flexibility and efficiency for both the Water Board and the dischargers.

[15] Please see http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/alt2.pdf for this alternative.

[16] Please see http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/ag_%20alt%20proposal_2010dec03.pdf for this alternative.

8.5. Alternative Submitted by Environmental Defense Center, Monterey Coastkeeper, Ocean Conservancy, Santa Barbara Channelkeeper, SurfRider Foundation - Santa Barbara Chapter

The Central Coast Water Board received a proposal from environmental interest groups (Environmental Defense Center, Monterey Coastkeeper, Ocean Conservancy and Santa Barbara Channelkeeper on April 1, 2010[17]. identified as an "alternative" to the draft 2011 Agricultural Order. In general, this letter describes support for the February 2010 preliminary draft Agricultural Order and offers some additional suggestions to make the Draft Order even more protective of water quality. Support for the draft Agricultural Order includes clear standards and timelines, inclusion of riparian habitat buffers, individual discharge characterization monitoring and provisions related to groundwater monitoring. Some of those suggestions to improve the Order include: collecting dissolved oxygen measurements at dawn, dischargers to submit complete data to the Water Board and in a "useful format," stormwater protections should be stronger, and the Order should be better enforced. Specific changes to the draft 2011 Agricultural Order begin on pg. 7 of the submittal.

With regards to CEQA, the alternative proposed by Environmental Defense Center, Monterey Coastkeeper, Ocean Conservancy and Santa Barbara Channelkeeper is similar in concept to the draft 2011 Agricultural Order. This alternative is discussed in Appendix I of the Draft Staff Report recommending the Draft Agricultural Order.[18] Therefore the environmental review is similar to the environmental review evaluated within this SEIR. In comments on the Draft SEIR, these environmental groups stated that the draft 2011 Agricultural Order, "would not result in negative impacts to the environment." They appreciated the Draft SEIR, but agreed that none of the impacts analyzed would rise to a level of significance.

9. Cumulative Impacts

The lead agency is required to discuss cumulative impacts if the project has possible environmental effects that are individually limited but cumulatively considerable[19]. This SEIR evaluated the worst case scenarios with respect to agricultural and biological resources as discussed in Section 4, Environmental Analysis. In other words, staff evaluated impacts on agricultural resources based on every discharger in Tier 3 installing a riparian habitat buffer. Additionally, staff evaluated potential impacts on biological resources based on every discharger eliminating their discharge. Staff does not anticipate that every discharger will install a riparian habitat buffer nor will every discharger choose to eliminate their discharge. Therefore, Section 4, Environmental Analysis already addressed cumulative impacts resulting from all dischargers installing

[17] Please see http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/Alt%203.pdf for this alternative.

[18] http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order.shtml

[19] CEQA section 21083(b)(2)

buffers and eliminating discharge by evaluating impacts cumulatively rather than individually.

10. Conclusions

As described in this SEIR and the Central Coast Water Board's record for this project, agricultural activities in the Central Coast Region have result in significant adverse environmental impacts due to the discharge of sediment, pesticides, nutrients, and other wastes. The approval of the project – to renew the 2004 Agricultural Order with revisions – will result in substantial beneficial environmental and public health benefits by reducing the discharges of waste to waters of the state and protecting aquatic habitat. The Negative Declaration prepared for the 2004 Agricultural Order did not identify any significant adverse environmental effects. In preparing revisions to the 2004 Agricultural Order and in considering comments received from the public and agencies, staff identified that compliance with revisions to the draft 2011 Agricultural Order would generally not result in new impacts or impacts that are more severe than previously identified. There could be the potential for an increase in the severity of impacts on agricultural and biological resources as described in this SEIR.

The CEQA Guidelines specify that the lead agency shall not prepare a subsequent environmental impact report unless it determines on the basis of substantial evidence in the light of the whole record that there would be a substantial increase in the severity of previously identified significant effects. (Cal. Code. Regs, tit. 14 §15162(a)(1).) Members of the public and public agencies have suggested that there could be an increase in the severity of previously identified significant effects, so the Central Coast Water Board staff prepared the Draft SEIR to evaluate the potential effects. This SEIR concludes that there is not sufficient evidence in the record to conclude whether in fact the potential effects would be more severe than under the 2004 Agricultural Order. Even if the effects could be more severe, they can be mitigated due to actions by dischargers. The adoption of the draft 2011 Agricultural Order or some other alternative with the same or similar conditions is necessary to assure compliance with the Porter-Cologne Water Quality Control Act and associated plans, such as the Central Coast Water Board's Basin Plan and the State Water Resources Control Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program.

Consistent with the CEQA Guidelines, the Central Coast Water Board will adopt findings in a resolution. (Cal. Code Regs., tit. 14, §§ 15091 & 15093.).

11. References

California Department of Conservation Report, 2008, *California Farmland Conversion Report 2004-2006*, Appendix A, http://www.conservation.ca.gov/dlrp/fmmp/pubs/2004-2006/Pages/FMMP_2004-2006_FCR.aspx (November 2, 2010).

California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP), 2008 GIS data, http://www.consrv.ca.gov/dlrp/FMMP/Pages/Index.aspx (November 2, 2010).

Central Coast Water Board, Central Coast Ambient Monitoring Program (CCAMP) data on flow reduction, http://www.ccamp.info/ 2010/view_data.php (November 2, 2010).

Department of Fish and Game, California Natural Diversity Data Base (CNDDB), GIS data, http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp (June 2008).

Monterey County, *2009 Crop Report*, http://www.co.monterey.ca.us/ag/2009_CropReport.htm (November 2, 2010).

http://www.cnr.berkeley.edu/xylella/control/PDNorthCoast/manual_section_iv.pdf The Pierce's Disease/Riparian Habitat Workgroup. 2000. Information Manual Riparian Vegetation Management for Pierce's Disease in North Coast California Vineyards. 9/1/2000.

ATTACHMENT A: Responses to CEQA Comments

Responses to CEQA Comments

The following letters contained one or more CEQA comments and were received by January 3, 2011 in response to the November 19, 2010 Public Notice for the Draft Agricultural Order.

Letter No.	Date Received	Association	Representative
5	12/15/2010	COLAB	J. Andrew Caldwell
15	12/28/2010	Ocean Mist and RC Farms	William J Thomas
21	12/8/2010	Sue and Karl Luft	A. Sue Luft
34	12/30/2010	Santa Clara County Farm Bureau	Tim Chiala
79	1/3/2011	California Farm Bureau Federation	Kari E. Fischer
82	1/3/2011	Grower Shipper Association	Richard S. Quandt
83	1/3/2011	California Strawberry Commission	Theresa A. Dunham
85	1/3/2011	Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy	Nathan G. Alley
86	1/3/2011	Rincon Farms, Inc.	Wayne Gularte
93	1/3/2011	Clean Water Action, Community Water Center	Jennifer Clary
94	1/3/2011	Darlene Din	Darlene Din
97	1/3/2011	County of Santa Barbara	Glen Russell
109	1/3/2011	Jensen Family Farms, Inc.	Jensen Family Farms Inc.

Responses to CEQA Comments

Comment ID	CEQA Comment	Response
Comment No. 518 from COLAB. Letter No. 5, p.2.	Another Class One Impact that will arise from these rules is the conversion of prime farm ground to other uses as most farming operations will not be able to withstand implementing these arbitrary and capricious standards. They will be forced by regulatory fiat and economic necessity to convert their lands to other uses. In view of the requirements of CEQA, your board should have to make overriding determinations to effect these impacts upon agriculture as agriculture itself is considered a significant resource by the State. Ag is worthy of the same protection as the water flea you are ostensibly trying to protect at the expense of our farms and ranches.	The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment. (14 Cal. Code Regs, § 15131, subd. (a).) The Water Board is only required to analyze the physical changes to the environment. The SEIR and the Staff Report analyze the economic costs in great detail. See responses to Letter 79 (Comment No. 497 and Comment No. 500). The proposed Order, as does the 2004 Agricultural Order, requires discharges to comply with the Water Code by controlling or treating discharges of waste to meet water quality standards, using management practices of the discharger's choosing. This requirement is not "arbitrary and capricious;" it is required by the law. Specifically Water Code section 13269 requires any waiver of waste discharge requirements to implement the Basin Plan and other state and regional board plans. The State Water Board's Nonpoint Source Policy requires use of management practices to control discharges.
Comment No. 519 from Ocean Mist and RC Farms. Letter No. 15, p.11.	The economic analysis is hopelessly inadequate to capture the dramatic impact this staff alternative will have on the region's farms and the ripple effect throughout the region's communities. This inadequate economic analysis is insufficient for compliance with either the California Water Code or CEQA.	The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment. (14 Cal. Code Regs, § 15131, subd. (a).) The Water Board is only required to analyze the physical changes to the environment. The SEIR and the Staff Report analyze the economic costs in great detail. See responses to Letter 79 (Comment No. 497 and Comment No. 500). The comment misstates the conditions contained in the 2011 Draft Order. In issuing a waiver of waste discharge requirements, the Regional Board must include conditions that are consistent with the Basin Plan and other plans, including the State Water Board's Nonpoint Source Plan. The 2011 Draft Order includes conditions requiring compliance with the Basin Plan water quality standards, but it does not mandate any particular management practices. Dischargers may comply in any lawful manner.
Comment No. 520 from Ocean Mist and RC Farms. Letter	Findings 29 through 31 of the staff draft regarding CEQA attempts to avoid any responsibility to do a complete environmental evaluation. This staff draft proposes to avoid a full CEQA and environmental analysis by	Please see the Staff Report, Appendix H and response to Letter 79 (Comment No. 496.

Comment ID	CEQA Comment	Response
No. 15, p.11.	utilizing the negative declaration process.	
Comment No. 521 from Ocean Mist and RC Farms. Letter No. 15, p.11.	The staff draft alternative is by far the most rigorous and thereby regulatorily impacting program even advanced dealing with water quality. The Regional Board staff held a CEQA scoping hearing in San Luis Obispo where the public presented dozens of examples of how this alternative would have significant environmental impacts and economic impacts. There were only a few modest amendments made to that previous version to the staff draft, and in large part these changes increased the environmental impact rather than mitigated the environmental impact of this regulation.	The public presented many examples of how they perceived the Draft Ag Order would have significant environmental impacts and economic impacts at the August 16, 2010 CEQA Scoping meeting. The SEIR evaluates the two main issues brought up at this meeting - lack of flow to comply with the Draft Ag Order and loss of agricultural land due to buffers and/or conversion - in the SEIR. While staff understands that some of the other issues raised at the meeting are valid concerns for the growers, the issues not included in the SEIR were not directly related to CEQA. The Regional Board is not required to revisit issues raised and addressed in the 2004 Negative Declaration except as set forth in the CEQA Guidelines, Cal. Code Regs., tit. 14, § 15162, subd. (a). Also see response to Letter 79 (Comment No. 496).
Comment No. 522 from Ocean Mist and RC Farms. Letter No. 15, p.12.	Clearly, therefore, the record does not support the position that the Regional Board can declare that this program would have a negative environmental impact. The Regional Board cannot casually take such a position merely because the far lesser regulation that was advanced some five years prior were subject only to the negative declaration (and those were never challenged) because this proposed waiver is of an entirely different level of environmental consequence.	The CEQA Guidelines provide for preparation of a subsequent CEQA document only where the Regional Board makes certain findings as set forth in Section 15162, subd. (a). See response to Letter 79 (Comment No. 496).
Comment No. 523 from Ocean Mist and RC Farms. Letter No. 15, p.12.	Furthermore, when the existing waiver was originally promulgated and supported by a declaration of negative environmental impact other regional boards had used that same approach concerning their respective waivers. That is now no longer the case as the Central Valley Regional Board is engaging a full NEPA environmental review on amending its ag waiver even though all of the five alternatives being discussed do not even come close to the significant environmental impact advanced by this proposed Central Coast waiver. Consequently, the Regional Board should pull back this proposed waiver and engage a proper environmental CEQA review with this alternative being one of the several considered alternatives.	The Central Coast Water Board is required to comply with CEQA by evaluating whether its proposed action could have a significant impact on the environment; not to address CEQA the way other Regional Boards have. The Central Coast Water Board adopted a Negative Declaration when it adopted the 2004 Ag Order. Staff thoroughly reviewed the record in this matter and found that some impacts evaluated in the 2004 Negative Declaration could be more severe under the 2011 Draft Ag Order. Therefore, staff prepared a draft Subsequent EIR to evaluate those impacts that could be more severe. The Central Coast Water Board is not required to prepare a completely new EIR. See response to Letter 79 (Comment No. 496).
Comment No. 65 from	Another area where the Draft Agricultural Order oversteps the Regional Board's authority is the	Staff evaluated the potentially significant impacts associated with removing agricultural lands from

Comment ID	CEQA Comment	Response
Sue and Karl Luft. Letter No. 21, p.2.	vegetated buffer requirements, which we do not believe the Regional Board has the authority to require. Not only are the buffer requirements for Tier 3 growers outside the Board's authority, they would remove significant amounts of land from production without appropriate CEQA consideration, would decrease the supply of fresh, safe, local produce, and could potentially pose a food safety threat.	production as required pursuant to CEQA. Please see pgs. 8-14 of the Draft SEIR.
Comment No. 495 from California Farm Bureau Federation. Letter No. 79, p.2.	The commenter noted that the goal of the Conditional Ag Waiver program is to improve water quality over time and that farmers are equally concerned about water quality and the environment. "In order to reach this goal, the primary focus of maintaining and improving water quality over time should remain. To aid in reaching this goal, the Regional Board should evaluate water quality data collected and use such data to implement and adjust management practice implementation." The commenter further stated that the Draft Order would subject the growers to the most rigorous regulatory program in the state, contains duplicative regulation in areas already regulated by the Department of Pesticide Regulation and the California Department of Food and Agriculture, U.S. Fish and Wildlife Service, the Department of Fish and Game, the Army Corps of Engineers, and local agencies. It also contains numerous provisions that are improper, illegal, and exceed the Regional Board's statutory authority and the Draft Order fails to properly concerning impacts to agricultural resources under the California Environmental Quality Act (CEQA).	The Regional Board staff agrees with the commenter's characterization of the general goals of the staff's 2011 Draft Order, and understands that farmers are equally concerned about water quality and the environment. Staff disagrees with the comment that the staff's Draft Order is duplicative of other agencies and that the CEQA document fails to consider impacts on agricultural resources. The Regional Board has authority and the responsibility to implement the Porter-Cologne Water Quality Control Act (Cal. Wat. Code Div. 7), to comply with State Water Resources Control Board plans and policies, such as the State Board's Non-point Source Policy, and to protect water quality. As further discussed in response to specific comments, the 2004 Negative Declaration and the 2011 Subsequent Environmental Impact Report (SEIR) considered impacts on agricultural resources.
Comment No. 496 from California Farm Bureau Federation. Letter No. 79, p.3.	The 2011 SEIR improperly relies on the 2004 Negative Declaration because the 2004 Agricultural Order was a different project. "The CEQA documents describe a conditional waiver of waste discharges for irrigated lands, but the similarities end here. The 2011 Draft Order includes new regulatory concepts, increases the scope of regulatory coverage, has been expanded to cover all irrigated lands growing commercial crops, requires new monitoring and reporting requirements, and encompasses regulation of all discharges to surface waters and groundwater, including tile drains and stormwater. Given the distinct nature of each conditional waiver, the 2004 Order and 2011	The CEQA Guidelines specify that when an EIR or negative declaration has been prepared, no additional EIR can be prepared except in these circumstances: (1) if subsequent changes are proposed which will require important revisions of the previous EIR or negative declaration due to the involvement of new significant environmental impacts not considered in the previous EIR or negative declaration, (2) if substantial changes occur with respect to the circumstances under which the project is undertaken which will require important revisions of the previous EIR or negative declaration due to the involvement of new significant environmental impacts not covered in the previous EIR or negative

Comment ID	CEQA Comment	Response
	Draft Order are separate projects under CEQA and require independent environmental review."	declaration, or (3) if new information of substantial importance to the project becomes available. (Cal. Code Regs., tit. 14, § 15162, subd. (a).) This regulation applies if there is a modification of a previous project. In this case, the 2011 Draft Order is a renewal of the 2004 Ag Order with modifications. The Subsequent Environmental Impact Report (SEIR) explains that the staff prepared an environmental checklist and reviewed the record to assist in determining whether an SEIR was required. See *Friends of Davis v. City of Davis* (3d Dist. 2000) 83 Cal.App.4th 1004. Based on that analysis, the staff concluded that revisions contained in the 2011 Draft Order and other reasonable alternatives could result in significant environmental impacts not considered in the 2004 Negative Declaration. (Cal. Code Regs., tit. 14, § 15162, subd. (a)(1).). Therefore, staff determined it was appropriate to prepare an SEIR to address those specific impacts identified. The CEQA Guidelines guiding whether an SEIR must be prepared are intended to address the situation where changes are proposed in a previous project. The changes proposed in the 2011 Draft Order do not make it a new project requiring a full EIR. The Regional Board need only address in an SEIR, the potential new significant environmental effects, not reconsider effects that are not new significant effects. See 43 Cal. App. 4th, 425, 437 (cannot challenge underlying neg dec). It is important to also note that CEQA restricts the powers of agencies to prepare new CEQA documents. See, e.g., *Bowman v. City of Petaluma* (1986) 185 Cal.App.3d 1065, 1073-1074. ("The intent of *section 21166* is] to restrict the powers of agencies by prohibiting them from requiring a subsequent or supplemental environmental impact report' unless the stated conditions are met. [Citation.]") The CEQA Guidelines do not provide guidance on when a renewal of a "permit" is a new project. However, case law suggests that the agency should focus on the nature of the project. See, e.g., *Gentry v. City of Murrieta*, 36 Cal.App.4th, 1359, 1401 (1995). In this case, Water Code section 13269 authorizes the Regional Board to renew an existing waiver. A renewed waiver must

Comment ID	CEQA Comment	Response
		still comply with the other requirements of section 13269, e.g., be consistent with the Basin Plan, include conditions, and include monitoring. The 2011 Draft Ag Order applies to the same types of dischargers and addresses the same types of discharges as the 2004 Ag Order. It also requires the same type of compliance, i.e., development and implementation of management practices to control discharges to protect water quality and monitoring to determine the effectiveness of the practices. Existing dischargers are not required to submit a new Notice of Intent (NOI) to comply, but will be required to update their existing NOI. The Regional Board staff recognized that some of the modifications in the 2011 Draft Ag Order could potentially result in more significant environmental effects than under the 2004 Ag Order and therefore prepared the SEIR to address those potentially more significant effects. The Regional Board is not required to prepare a completely new environmental document.
Comment No. 497 from California Farm Bureau Federation. Letter No. 79, p.6.	The SEIR's analysis of impacts is improper. It fails to analyze the potential impacts associated with loss of agricultural lands taken out of production, cost of compliance, loss of agricultural lands through regulatory takings for the installation of riparian buffers, and the impacts from restrictions on the use of the drains rendering farm land virtually unproductive and thus unusable. CEQA's informational purposes are not satisfied by an EIR that ignores or assumes a solution to potential discharges to waters of the state. Decision makers and the public must be presented with sufficient facts to evaluate the pros and cons of a conditional waiver of waste discharge requirements. By failing to analyze probable impacts and merely concluding that impacts are speculative, the SEIR is improper and the error is prejudicial.	The commenter mischaracterizes the record. The SEIR and documents referenced therein contains a detailed analysis of the potential impacts on agriculture, including potential economic impacts (Appendix F to the staff report). The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment. (14 Cal. Code Regs, § 15131, subd. (a).) The Water Board is only required to analyze the physical changes to the environment. The CEQA Guidelines state that the EIR may trace a chain of cause and effect from a proposed decision through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes, but intermediate economic or social changes need not be analyzed in any detail greater than is necessary. (14 Cal. Code Regs. § 15131, subd. (a). A waiver of waste discharge requirements must include conditions that require dischargers to comply with the Basin Plan. Compliance with the conditions and the Basin Plan will result in positive impacts on the environment, not adverse impacts. Actions, such as implementation of management practices, to protect waters of the state in compliance with the Basin Plan could result in adverse impacts. Adverse economic costs may not be treated as significant effects on the environment. The commenter's suggestion that some farmers could go out of business due to

Comment ID	CEQA Comment	Response
		the costs is not, in and of itself, an adverse physical change to the environment. The commenter has provided no substantial evidence that economic costs will result in physical changes to the environment, other than speculating that some changes could occur. Because the Water Board cannot generally specify the manner of compliance, the SEIR concluded that it was speculative as to what methods farmers may choose to use to comply. Nevertheless, the SEIR and documents referenced therein provide detailed evaluation of the potential impacts of various methods of compliance, including cost impacts and use of filter strips, and that information is sufficient to inform the decision makers about the potential impacts. It is important to note that even if costs are high, the dischargers have an obligation to comply with the Water Code by controlling discharges that violate water quality standards. There is no right to discharge waste to waters of the state. (Cal. Wat. Code § 13263, subd. (g). It is within the ability of farmers to control the costs by choosing the manner of compliance that is effective in complying with the Water Code. The 2011 Draft Order does not result in a regulatory taking contrary to the constitutional principles. The 2011 Draft Order does not result in any physical taking of property, but instead sets forth conditions to require compliance with the California Water Code and the Basin Plan to protect waters of the state from documented discharges of waste. The 2011 Draft Order does not result in a taking based on economic impacts. Generally, courts have held that the economic loss to the property as a whole must be extreme. *See, for example, Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*, 535 U.S. 302, 319 n.15 (2002) (citing examples of large diminution in value found not to be a taking); *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 384 (1926) (loss in value of more than 75 percent not a taking); *Hadacheck v. Sebastion*, 239 U.S. 394, 405 (1915) (loss in value of more than 90 percent not a taking); *William C. Haas & Co. v. City & County of San Francisco*, 605 F.2d 1117, 1120 (9th Cir. 1979) (95 percent reduction in value not a taking). In addition, setbacks and buffers have been found to be a legitimate land use planning tool. *See, for example, Big Creek Lumber Co. v. County of San Mateo*, 31 Cal. App.

Comment ID	CEQA Comment	Response
		4th 418 (Cal. Ct. App. 1995) (upholding use of 1000 foot buffer between timber harvesting and residential zoning districts). In this situation, the Basin Plan sets forth an implementation program requiring the minimization of erosion and sediment discharges from nonpoint sources through implementation of management practices, including, for example, filter strips of appropriate width to be maintained between significant land disturbance activities and watercourses, lakes, bays, estuaries, marshes, and other water bodies. See, Basin Plan at page V-13, #4. Consistent with the Basin Plan, the 2011 Draft Order proposes a minimum filter strip in certain circumstances with an option to use other methods of control to prevent discharges of waste that cause water quality problems and includes conditions requiring implementation of management practices to control discharges of waste to waters of the state.
Comment No. 498 from California Farm Bureau Federation. Letter No. 79, p.8.	The SEIR contains an inadequate assessment of significant impacts and effects on the environment. The Regional Board must review all scientific data and facts, especially information collected since the initiation of the 2004 Conditional Waiver, prior to determining the 2011 Draft Order's potential to significantly effect or impact the environment.	The commenter mischaracterizes the record. The SEIR and documents referenced in the SEIR, including the Staff Report, contain a detailed analysis of environmental impacts associated with the 2004 Conditional Waiver. The SEIR was prepared because modifications to the existing waiver could potentially result in impacts that are more significant than previously considered and those potential more severe impacts were reviewed in detail in the SEIR.
Comment No. 499 from California Farm Bureau Federation. Letter No. 79, p.8.	The SEIR's analysis of project alternatives is improper. The SEIR's analysis of project alternatives is inadequate and improper and does not fulfill CEQA's mandates. Such "brief" treatment of so called alternatives is legally deficient, as no project alternatives are fully analyzed, described, evaluated, or provided in detail to allow the public to provide meaningful comments.	See response to Letter 79 (Comment No. 497). In addition, the CEQA Guidelines state that the rule of reason applies to evaluating alternatives and that limited new analysis is required where a previous document analyzed alternatives. See Cal. Code Regs., tit. 14, § 15126.6, subd. (f).
Comment No. 500 from California Farm Bureau Federation. Letter No. 79, p.10.	The SEIR fails to consider significance of social and economic impacts and cumulative effects. The 2011 Draft Order proposes dramatic and severe impacts on the agricultural industry, which will have a significant effect on the economic and social environment of the Region. Such impacts include negative economic consequences, the possibility of eliminating crops produced in the area, loss of jobs, loss of food supply, loss of prime agricultural lands, economic collapse of local communities,	The 2011 Draft Order includes conditions requiring agricultural dischargers to comply with the applicable law, including the California Water Code, Division 7, the Basin Plan, and the State Water Board's Nonpoint Source Policy. As discussed in the response to Letter 79 (Comment No. 497), the CEQA Guidelines do not require an evaluation of social and economic impacts.

Comment ID	CEQA Comment	Response
	changes in the landscape and land uses, loss of wildlife habitat, loss of groundwater recharge areas, as well as other social and economic impacts. In addition to direct impacts, indirect impacts and consequences, these cumulative social and economic consequences are reasonably foreseeable and must be analyzed.	
Comment No. 501 from California Farm Bureau Federation. Letter No. 79, p.10.	Agricultural resources must be considered during environmental review. The CEQA Guidelines, Appendix G, section II, Agricultural Resources require an evaluation of whether the project would convert prime farmland, conflict with existing zoning, or involve other changes in the environment that could result in conversion of farmland to non-agricultural use. The SEIR makes conclusory statements and includes mitigation without authority.	The commenter is incorrect that the SEIR did not consider impacts on agricultural resources. The 2004 Negative Declaration identified impacts on agricultural resources and found them not to be significant. Given the changes proposed in the draft 2011 Agricultural Order, the 2011 draft SEIR evaluated impacts on agricultural resources and found less than significant environmental impacts. Documents referenced in the SEIR, including the Staff Report, Appendix F, provide a lengthy and extremely detailed account of the potential impacts on agricultural. The CEQA Guidelines specify that economic and social effects of a project shall not be treated as significant effects on the environment. (14 Cal. Code Regs, § 15131, subd. (a).) Nevertheless, the SEIR and documents referenced therein provide a thorough analysis of the possible loss of prime farmland, including loss through the implementation of vegetated buffers and from loss due economic impacts. The draft SEIR concluded that the loss due to implementation of vegetated buffers would not be significant because it at worse be a very tiny percentage of the total agricultural acreage. In addition, the use of vegetated buffers would primarily result in beneficial impacts on the environment and not adverse impacts, so the impact would not be significant. See Staff Report at Appendix G. Section 3.1 Importance and Functions of Riparian and Wetland Areas and Appendix D. Section VI. Options for Riparian and Wetland Area Protection Requirements. The other impacts described by the commenter are very speculative without the support of substantial evidence and are social and economic impacts, not physical changes in the environment. The Water Board may not specify the manner of compliance with its orders, and therefore, cannot determine with certainty what methods dischargers will use to comply. The SEIR and documents referenced therein provide a detailed analysis of the possible methods of compliance, the cost to comply, and the potential impacts of those methods of compliance. After reviewing the

Comment ID	CEQA Comment	Response
		comments submitted on the draft SEIR and the draft 2011 Agricultural Order, the draft Final SEIR concludes that the impacts on agricultural resources are less than significant, since the bulk of the comments address economic impacts. See Draft Resolution certifying SEIR.
Comment No. 502 from California Farm Bureau Federation. Letter No. 79, p.13.	The SEIR may conflict with CEQA functional equivalency of the State's Pesticide Regulatory Program. DPR regulatory scheme ensures continuous evaluation of the environmental impacts of registered pesticide products. DPR is required by CEQA to consider the full and reasonably foreseeable environmental context of its actions. Farmers and ranchers must comply with DPR requirements. Farmers should not be held liable under the 2011 Draft Order if those pesticides are detected in groundwater.	The Regional Water Board is a public agency that must comply with CEQA prior to taking a discretionary action that could have a significant impact on the environment. The authority to adopt the 2011 Draft Ag Order or other order regulating discharges from agricultural lands is independent of DPR's authority to regulate pesticide use and its own requirement to comply with CEQA. The 2011 Draft Order does not duplicate or usurp DPR's authority to regulate pesticides. The Water Board has the statutory authority under the Porter-Cologne Water Quality Control Act to regulate the discharges of waste to ground and surface waters. Cal. Wat. Code §§ 13000, et seq. Specifically with regard to pesticides, the term "waste" has been held to include pesticides used for the control of insects, rodents and diseases on farms. (43 Cal. Ops. Atty. Gen. 302, 304 (1964), 48 Cal. Ops. Atty. Gen. 30, 34 (1966)). See also, Water Quality Order No. 2004-008-DWQ, Statewide General National Pollutant Discharge Elimination System Permit for Discharges of Aquatic Pesticides to Surface Waters of the United States for Vector Control, General Permit No. CAG990004. (This permit regulates NPDES discharges, not nonpoint source discharges, but in it the Water Board regulates the discharges of pesticides that leave the treatment area, demonstrating the Water Boards' authority to regulate discharges of pesticides: "This General Permit addresses the application of pesticides to Treatment Areas for the control of vectors. Aquatic pesticides that are applied to waters of the United States in accordance with FIFRA label requirements are not considered pollutants. However, pesticides or by-products that persist in or leave the Treatment Area after a specified treatment period are considered pollutants and require coverage under this General Permit." Fact Sheet at p. 8)
Comment No. 508 from California	The 2011 Draft Order will cause foreseeable negative consequences to the environment, such as use of lined retention ponds could	The 2011 Draft Order does not contain new conditions that would expand the use of lined retention ponds beyond those that might have

Comment ID	CEQA Comment	Response
Farm Bureau Federation. Letter No. 79, p.17.	prevent groundwater recharge.	been used to comply with the 2004 Agricultural Order. Therefore, there was no new potentially significant environmental impact that is required to be considered in the SEIR. The Water Board may only prepare an SEIR consistent with the CEQA Guidelines. (Cal. Code. Regs., tit. 14, §15162, subd. (a).)
Comment No. 525 from Grower Shipper Association. Letter No. 82, p.4.	The Subsequent Environmental Impact Report Understates the Impact to Agricultural Resources and Needs to be Revised and Recirculated. The Environmental Impact Report submitted fails to analyze the impacts of the project and understates the loss of agricultural resources as a result of Water Quality Buffer Plan requirements.	See response to Letter 79 (Comment No. 497).
Comment No. 526 from Grower Shipper Association. Letter No. 82, p.5.	This discrepancy between the proposed project and what was analyzed results in the impacts being severely understated in the Environmental Impact Report. Moreover, the four mitigations identified in the report are not feasible. Those mitigations refer to other practices besides buffers which are identified as sediment basins, cover crops and vegetative roads. These mitigations will result in the loss of even more farmland than riparian buffer strips. They do not mitigate the impacts but actually increase the loss of agricultural land.	The commenter mischaracterizes the SEIR. The SEIR was prepared because there was information in the record to suggest that there could be potentially significant environmental impacts as compared to the 2004 Ag Order. The Regional Board may not specify the manner of compliance with its Orders, but dischargers may comply in any lawful manner, but it must be consistent with the Basin Plan. The Basin Plan includes a requirement that dischargers implement filter strips to protect waters of the state from land disturbance activities. Therefore, the Regional Board has the authority to require buffer strips. In this case, the 2011 Draft Order proposed buffer strips for only a limited group of dischargers and provides alternatives to such use. Dischargers are also free to implement any management practice of their choosing to control discharges of waste to waters of the state. The SEIR identified the potential for agricultural land to be taken out of production and included an extensive analysis of the potential number of acres and the costs of such potential losses. Because the 2011 Draft Order does not mandate the method of compliance, the Draft SEIR could not determine with certainty that all dischargers would in fact choose buffer strips as the method of compliance, but essentially evaluated the worst case situation. The Draft SEIR proposed four mitigation measures (see pg. 13) including buffers. Mitigation measures were included as ways to reduce or eliminate agricultural lands being taken out of production. Specifically, mitigation measure no. 2 - planting ground cover, berry bushes and/or fruit/nut bearing trees - would serve as both a buffer and agricultural land.

Comment ID	CEQA Comment	Response
		Thus, the land would not be taken out of production. Growers may choose the method of compliance that is protective of waters of the state and is the most economical for the discharger. See also response to Letter 79 (Comment No. 497).
Comment No. 527 from Grower Shipper Association. Letter No. 82, p.5.	The findings in the Environmental Impact Report that the percentage of farmland that will be converted to riparian buffers to be less than significant with mitigation is based on a flawed analysis. It does not comply with CEQA. It needs to be revised to fairly disclose the impacts consistent with the Draft Order and MRP being recommended for adoption.	See responses to Letter 79 (Comment No. 497 and Comment No. 500).
Comment No. 528 from California Strawberry Commission. Letter No. 83, p.2.	Findings 29 through 31 regarding compliance with the California Environmental Quality Act (CEQA) are addressed in detail by the California Farm Bureau Federation (CFBF). CSC hereby incorporates by reference CFBF's comments on Findings 29-31 and the Draft Subsequent Environmental Impact Report. Finding 32 incorporates the findings from Attachment A, which are addressed separately in section III below.	Please see responses to the California Farm Bureau Federation Letter 79.
Comment No. 529 from Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy . Letter No. 85, p.12.	The conditional waiver program described in the November Draft Order, while not adequately protective of water quality, would result in some beneficial environmental impacts and would not result in negative impacts to the environment. We appreciate that several potential impacts are analyzed in the Draft SEIR, and we agree that none of these potential impacts could rise to a level of significance.	Staff agrees.
Comment No. 530 from Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy . Letter No. 85, p.12.	The RWQCB approved a Negative Declaration when it adopted Order No. R3-2004-0117 in July 2004. In doing so, the RWQCB noted that the 2004 Order was "designed to reduce discharges of agricultural pollutants and improve water quality." The Draft Order would "not require or allow any changes in practices that could degrade the quality of the environment or have environmental effects that could cause substantial indirect or direct adverse effects on human beings." (2004 Negative Declaration, at p. 34.) The same finding holds true today, with respect to the November Draft Order.	While staff generally agrees with the above, staff concluded that information in the record indicates that some impacts evaluated in the 2004 Negative Declaration with respect to reduced flows could potentially be more significant. Therefore, staff prepared a Draft SEIR to provide full information to the Regional Board.
Comment	The 2004 Negative Declaration provides	Comment noted. See also response to Letter 79.

Comment ID	CEQA Comment	Response
No. 531 from Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy . Letter No. 85, p.12.	guidance for analysis of farmland conversion:... The Draft SEIR provides numeric support for a conclusion that agricultural resources will not be significantly affected.	(Comment No. 500)
Comment No. 646 from Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy . Letter No. 85, p.13.	In our August 27 scoping letter, we urged staff to examine an alternative that only implements WDRs, and a separate alternative that utilizes a combination of WDRs, waiver(s) and other tools at the RWQCB's disposal. Page 26 of the Draft SEIR briefly discusses a WDR alternative and concludes that it would function similarly to the proposed Conditional Waiver. We do not wish to bog the CEQA process down in perpetual delay; as noted above, as it is far past time for an updated Conditional Waiver. However, we respectfully disagree with the assessment that individual WDRs would function almost identically to a Conditional Waiver program. For example, while individual monitoring *should* be an integral part of any Conditional Waiver, under a WDR program more site-specific monitoring would be required, and individual, on-site accountability would be much greater.	The Water Board staff agrees that monitoring in typical waste discharge requirements is generally more site specific. However, Water Code section 13269 explicitly requires waivers of waste discharge requirements to include monitoring; Water Code section 13263 that applies to issuance of waste discharge requirements does not explicitly require monitoring. Also see Staff Report Appendix D. Options Considered for discussion of Waste Discharge Requirements and other tools.
Comment No. 532 from Env. Defense Center, Mont. Coastkeeper, Ocean Conservancy . Letter No. 85, p.13.	Urges staff to examine an alternative that implements WDRs, instead of waivers because of various aspects; individual monitoring being one example. If the SEIR is revised before March 2011, this group requests the WDR alternative be analyzed in greater detail.	The Regional Water Board has directed staff at this time to develop a renewed waiver of waste discharge requirements. However, waste discharge requirements, like waivers of waste discharge requirements, must also implement the Basin Plan and other plans, such as the State Water Board's Nonpoint Source Policy. Therefore, the potential environmental effects of WDRs would not be significantly different than a waiver – the effects would depend on the conditions imposed. The primary differences between WDRs and a waiver are that a waiver may only be for a term of 5 years (which can be renewed) and must include monitoring. WDRs have no specific term limit, but must be reviewed periodically and there is no explicit requirement for monitoring.
Comment No. 533 from Rincon Farms, Inc. Letter No. 86, p.1.	Some provisions of the EIR, if and when ultimately forced upon us farmers, should surely deem the waiver unconstitutional.	In this instance, the commenter seems to be referring to the Draft Ag Order, and not the EIR as the SEIR is the environmental analysis and not the conditional waiver of waste discharge requirements.

Comment ID	CEQA Comment	Response
Comment No. 534 from Rincon Farms, Inc. Letter No. 86, p.3.	Speaking of unconstitutional, how dare the EIR to have the nerve to determine that I would have to switch my farm operations to other crops, grazing lands, or dry land farming! The reporters are ignorant of the long term commitments that we have to our landlords and the buyers/shippers of our produce!	The 2011 Draft Order does not require any discharger to change farm operations to other crops, grazing lands, or dry land farming. The Regional Board was required in the Draft SEIR to evaluate possible ways farmers could comply with the Water Code requirement to control discharges of waste that affect the quality of waters of the state. The Regional Board does not specify the manner of compliance, but sets goals of compliance – to comply with water quality standards. Dischargers may choose to comply with the Water Code in any lawful manner.
Comment No. 535 from Rincon Farms, Inc. Letter No. 86, p.5.	Those in your staff who helped draft this current proposal and those who developed the EIR obviously have no understanding of our farming system in the Salinas Valley nor how our nation feeds its people. We have to rent our land over long term commitments of five to ten years with options in order to secure long term relationships with our shipper. To suggest that we change our farming practices to conform to this draft will not necessarily cause farmers to "sell their land" as the EIR mentions because we don't really own much of it! What is more likely is we would simply get foreclosed on by the banks, shut the business down, go broke, cause a loss of hundreds if not thousands of related jobs, breaking up of family structure and communities; and the state of California as a whole loses the control and stature it has of what kinds of food it produces for this nation.	Staff agrees that staff persons cannot understand the farming system in the Salinas Valley as well as someone who has essentially farmed there his whole life. However, the Regional Board is required by CEQA to consider potential impacts of the 2011 Draft Order, including the possible loss of prime farmland and other impacts on agriculture. To clarify, staff has inserted language, "or would be forced out of business," to the SEIR in order to address that a potential impact might be the loss of business for those who do not own the land they grow on.
Comment No. 536 from Clean Water Action, Community Water Center. Letter No. 93, p.1.	Further, the related Draft Subsequent Environmental Impact Report (SEIR) fails to analyze deficiencies in the November draft order or to compare it adequately with the February proposal. Specifically, the current proposal fails to identify or mitigate continuing polluted discharges to groundwater from most irrigated agriculture, and fails to analyze the related costs to human health of that failure, most notably through the creation of tiers that ignore existing areas of high nitrate contamination.	The Regional Board is required by CEQA to analyze the potential adverse environmental impacts of its action to regulate discharges of waste. The Regional Board prepared a Negative Declaration in 2004 and staff has prepared the draft SEIR in compliance with the CEQA Guidelines (Cal. Code. Regs. Tit. 14, § 15162, subd. (a). The Regional Board is not required to compare the November draft to the February proposal, but to consider whether the renewal of the waiver would result in new significant environmental effects not analyzed in the 2004 Negative Declaration. The 2004 Ag Order required and the February draft and the 2011 Draft Order would require dischargers to continue to implement and improve management practices to comply with water quality standards, including controlling discharges of nitrate to groundwater. The Regional Board may not specify the manner of compliance with its orders, but can establish

Comment ID	CEQA Comment	Response
		the goal, which is to control discharges of waste such that they do not result in violations of water quality standards. This Order does not address cleanup of existing nitrate contamination, but requires efforts to reduce future discharges of nitrates that impact beneficial uses.
Comment No. 537 from Clean Water Action, Community Water Center. Letter No. 93, p.6.	The analysis of the current draft proposal is inadequate because it assumes that the program as described will achieve water quality objectives. However, since the program exerts minimal oversight over operations under 1000 acres, that assumption is not defensible. The analysis should look at the cumulative impact of the reduced requirements for smaller operations, particularly in those areas that already have contaminated groundwater basins.	The 2004 Ag Order and the 2011 Draft Ag Order would waive the requirement that dischargers obtain waste discharge requirements. Consistent with Water Code section 13269(a), the dischargers are required to comply with the Basin Plan, including meeting all water quality standards. Both the current order and the proposed renewal require dischargers to meet water quality standards, including standards to protect groundwater. Under Water Code section 13360, the Regional Board may not specify the manner of compliance; dischargers may comply in any lawful manner. The waivers require development and implementation of management practices to meet water quality standards. The 2011 Draft Ag Order does not exert minimal oversight; it requires all dischargers to implement management practices and demonstrate their effectiveness. The Regional Board is not required to "look at the cumulative impact of the reduced requirements for smaller operations." The Regional Board under CEQA must look at the environmental effects of its action; in this case, the action is to require compliance with water quality standards by implementation of effective management practices. Compliance with such conditions will not result in cumulative impacts. In addition, because the proposed action is to renew the existing 2004 Ag Order, the Regional Board is not required to consider impacts it already considered in the previous order, except in certain circumstances. See response Letter 79 (Comment No. 496)
Comment No. 538 from Clean Water Action, Community Water Center. Letter No. 93, p.6.	In addition, this SEIR fails to analyze the health impact on communities that must rely upon groundwater that remains contaminated because the amended proposal fails to improve groundwater quality to a level that meets drinking water standards. Given this lack of regulation, the SEIR proposal must assume that water quality will not improve in the timeframe (as staff's 2025 schedule for compliance indicates) and may continue to degrade, and analyze those impacts.	Pursuant to CEQA, the existing conditions of the groundwater are considered the baseline environmental conditions on which to base the environmental analysis. The Staff Report documents the existing impacts to groundwater, including nitrate contamination. There is not a lack of regulation of discharges. The 2004 Ag Order and the 2011 Draft Ag Order require dischargers to comply with water quality standards by implementing management practices to protect waters of the state, including groundwater. The Regional Board may not

Comment ID	CEQA Comment	Response
		specify the manner of compliance; dischargers may comply in any lawful manner. The 2004 Ag Order and the 2011 Draft Ag Order set forth conditions that comply with Water Code section 13269, including requiring consistency with the Basin Plan to protect beneficial uses. The Regional Board adopted a Negative Declaration in 2004 and is not required to reevaluate that document except as set forth in the CEQA Guidelines. The SEIR evaluates potential new significant environmental impacts not previously addressed. Impacts on groundwater from discharges of waste from agricultural activities are not new impacts. In addition the 2011 Draft Ag Order includes some additional conditions with respect to groundwater than those included in the 2004 Ag Order. See response to Letter 79 (Comment No. 496).
Comment No. 539 from Darlene Din. Letter No. 94, p.1.	The Agricultural Order is in direct conflict with CEQA.	This comment letter was first submitted and dated August 27, 2010, but the SEIR and 2011 Draft Order were not made available for public comment until November 19, 2010. The commenter resubmitted the letter as a response to the SEIR and 2011 Draft Order. It is unclear in the comment, what specific concern the commenter has with the SEIR and 2011 Draft Order with respect to CEQA. Nevertheless, the SEIR and 2011 Draft Order comply with CEQA and the Water Code and are not in direct conflict with CEQA.
Comment No. 540 from Darlene Din. Letter No. 94, p.1.	Alternative revisions of the New Order should be constructed within the proper parameters set forth through the Porter-Cologne Water Quality Control Act and CEQA (California Water Code [CWC] §§'s 13000 et seq.) that are at least feasible to all present and probable future beneficial uses of water within the Central Coast.	The Draft SEIR and the Staff Report evaluate several alternatives to the 2011 Draft Ag Order, including proposals submitted by some members of the agricultural community. The existing 2004 Ag Order and the 2011 Draft Ag Order require dischargers to implement management practices to assure compliance with water quality standards consistent with the Basin Plan. The dischargers may comply in any lawful manner taking into account their own specific circumstances.
Comment No. 541 from Darlene Din. Letter No. 94, p.2.	It has been recognized and established that agriculture is a beneficial use of water, through state and federal policies such as CEQA, the Farmland Protection Policy Act and the National Environmental Policy Act.	The Regional Board agrees that agricultural water supply is a beneficial use. The Central Coast Basin Plan sets forth the beneficial uses, including specifying agricultural water supply as a beneficial use of much of the groundwater and surface water in the Region. Note, that the Regional Board is not allowed by the Clean Water Act to designate waste transport or waste assimilation as a designated beneficial use for any waters of the United States. See 40 C.F.R. § 131.10, subd. (a). The existing 2004 Ag Order and the 2011

Comment ID	CEQA Comment	Response
		Draft Ag Order require actions to control discharges of waste that impact beneficial uses, including agricultural beneficial uses.
Comment No. 542 from Darlene Din. Letter No. 94, p.3.	CEQA sets forth guidelines and provides direction that agencies should refer to the 1997 California Agricultural Land Valuation and Site Assessment Model as prepared by the California Department of Conservation an optimal model to use in assessing impacts on agriculture and farmland. It asks agencies to take into account whether a proposed project would: 1) Convert prime farmland, unique farmland, or farmland of state-wide importance to Non-agricultural use. 2) Conflict with existing zoning for agricultural use or a Williamson Act contract. 3) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland to non-agricultural use. California Code of Regulations, Title 14, CEQA Guidelines Appendix G, § II, Agricultural Resources.	The 2004 Negative Declaration and the 2011 Draft SEIR evaluated the impacts of the waivers on agricultural resources consistent with CEQA. See response to Letter 79 (Comment No. 496).
Comment No. 543 from Darlene Din. Letter No. 94, p.3.	The CCRWQCB instead asks "interested persons" to provide information with specificity as to potentially significant environmental impacts, including unavoidable significant adverse environmental impacts associated with the means of compliance	Staff is assuming the commenter means we asked interested persons to provide information on potentially significant impacts instead of following CEQA guidelines mentioned in the previous comment. Staff conducted a CEQA scoping meeting on August 16, 2010 to provide an opportunity for public input on the environmental document staff was going to prepare. CEQA scoping is recommended in the CEQA Guidelines. See Cal. Code Regs., tit. 14, § 15083.
Comment No. 544 from Darlene Din. Letter No. 94, p.3.	The CCRWQB staff does not generate this New Order proposal within the authority in which CEQA and the California Code of Regulations, title 14 sets forth. It seems, (without seeing the actual proposal), that if the New Order the Region 3 Water Quality Control Board is proposing may even be exceeding its authority and abusing it's discretion.	The Water Board has complied with CEQA and the Water Code. The Regional Board is considering the 2004 Negative Declaration and an SEIR. The 2011 Draft Order is required under Water Code section 13369 to include conditions consistent with the Basin Plan and to require monitoring. It is not clear from the comment, in which way the commenter asserts that the Water Board is exceeding its authority or abusing its discretion. See also response to Letter 94 (Comment No. 539).
Comment No. 545 from	I would request that staff responds to the comments provided by the public at the hearing	The Water Board did not hold a public hearing on August 16, 2010, but staff held a CEQA scoping

Comment ID	CEQA Comment	Response
Darlene Din. Letter No. 94, p.3.	on August 16th and to evaluative as having impacts that cannot be mitigated.	meeting. In evaluating whether to prepare an SEIR, staff considered the 2004 Negative Declaration, the oral and written comments provided during the CEQA scoping meeting, and the rest of the relevant Water Board's record. The Draft SEIR evaluated certain impacts due, in large part, to the comments received at the scoping meeting.
Comment No. 547 from Darlene Din. Letter No. 94, p.4.	In closing, it is urged that the board keep in mind the various possible conflicts that the staff's proposal could bring about in the New Order. An alternative proposal should be drafted to reflect the concerns with the adverse economic and environmental effect that these policy considerations that would likely be brought about by this New Order. The (new) New Order should be drawn with heed to the dozens of competent, relevant and meaningful responses to the February 1, 2010 Preliminary Draft Staff Recommendations, with special consideration spent on: 1) Preliminary Alternative Agricultural Proposal provided by the California Farm Bureau Federation, April 1, 2010 Group 1, FB6. 2) Somach, Simmons & Dunn, April 1, 2010 Group 4, A21. 3) Central Coast Agriculture Water Quality Coalition, Group 4, A24. 4) Western Growers, April 17, 2010 Group 13, A29. 5) Best, Best & Kreiger, March 31, 2010 Group 4, FB6. 6) William Elliot, dated April 1, 2010, Group 6 F47.	The Draft SEIR includes an evaluation of alternatives, including the preliminary alternative agricultural proposal provided by the California Farm Bureau. Please see pgs. 26-27 in the SEIR.
Comment No. 548 from Darlene Din. Letter No. 94, p.5.	The Ag industry will be adversely affected in a significant economic fashion. After considerable effort has been made in the preparation of these responses containing possible alternative plans as well as various areas of concern, be they economic or environmental, as well as possible conflict with local, state and federal laws that would be brought about in the adoption of the staff recommendations. The production of these letters should not be in vain, they should be read, reviewed, and responded to as according to CEQA, Porter-Cologne, and the California Code of Regulations, in order to form a more reasonable, attainable, and feasible water quality management plan.	Comment noted. The Draft SEIR and Staff Report document and evaluate economic impacts of the 2011 Draft Ag Order consistent with CEQA. See responses to Letter 79 (Comment No. 497 and Comment No. 501). The 2011 Draft Ag Order has been revised in response to comments and the Water Board may direct staff to make other revisions in response to comments.

Comment ID	CEQA Comment	Response
Comment No. 549 from County of Santa Barbara. Letter No. 97, p.1.	The SEIR should include a Mitigation Monitoring and Reporting Program (MMRP) required pursuant to CEQA.	The existing 2004 Ag Order and the 2011 Draft Ag Order include a monitoring and reporting program that is sufficient to evaluate the effectiveness of mitigation.
Comment No. 550 from County of Santa Barbara. Letter No. 97, p.1.	The document should also profile the timeline showing the sequence of events for the proposed project since initial adoption of the 2004 Agricultural Order in July 2004 through release of the SEIR.	Please see the Draft Ag Order Staff Report and Staff Report Appendix I for a timeline.
Comment No. 551 from County of Santa Barbara. Letter No. 97, p.1.	The SEIR repeatedly refers to a prior staff report and appendices. The relationship of these documents should be discussed in the SEIR and any appendices used for analysis in the SEIR included in the document.	The SEIR includes a detailed list of documents used to prepare the SEIR and references within the SEIR the Staff Report and appendices. The Final SEIR clarifies the list.
Comment No. 552 from County of Santa Barbara. Letter No. 97, p.1.	There are multiple references in the SEIR when the reference is listed as see "Error! References source no found." This should be corrected to refer to the document title.	The "cross reference" errors were corrected.
Comment No. 553 from County of Santa Barbara. Letter No. 97, p.1.	Figure 1. illustrates a regional map showing the general project area with irrigated agricultural lands with Prime, State and Unique Farmland in white shaded areas. The scale of this map, which includes the Santa Cruz, San Benito, Monterey, San Luis Obispo and Santa Barbara counties makes it difficult to identify the location of affected parcels for this proposed project. CEQA Guidelines Section l15128(a) [sic – actually section 15124(a)] requires that a project description identify the precise location and boundaries of the proposed project shown on a detailed map, preferably topographic. The location of the project shall also appear on a regional map. The SEIR should contain individual detailed maps illustrating the precise location and boundaries of the proposed project for each affected county. Additionally, a table listing all affected Assessor Parcel Numbers (APN's) for each County should be included in the SEIR. In the absence of a detailed map for Santa Barbara County identifying irrigated	CEQA Guidelines section 15124 requires a detailed project description, but "should not supply extensive detail beyond that needed for evaluation and review of the environmental impacts." The proposed action of the Water Board is to renew an existing waiver of waste discharge requirements for discharges of waste from irrigated lands. The SEIR is prepared to address potential new significant impacts associated with revisions to the existing 2004 Ag Order. Given that the Water Board has regulated agricultural discharges under Water Code section 13269 (as revised effective January 2003) for nearly seven years now, and was subject to environmental review in the 2004 Ag Order, the project description in the SEIR is sufficient to evaluate the potential environmental effects of the renewal of the 2004 Ag Order. The SEIR was prepared to address potentially significant impacts consistent with the CEQA Guidelines (Cal. Code Regs. § 15162, subd. (a). The information provided in the SEIR and the Staff Report

Comment ID	CEQA Comment	Response
	agricultural lands, and a listing of all affected APN's analyzed under this SEIR, the County is currently unable to ascertain affected parcels for the proposed project.	referenced therein, provides sufficient information to evaluate environmental effects. Additional information about the parcels affected by the 2011 Draft Ag Order readily available through the County Agricultural Commissioner's Office for each county (Assessor Parcel Numbers that include irrigated agriculture). If Santa Barbara County is unable to obtain this information, you may contact the Central Coast Water Board office and staff can assist with providing the APNs for Santa Barbara County.
Comment No. 554 from County of Santa Barbara. Letter No. 97, p.2.	The SEIR states that the proposed draft 2011 Agricultural Order groups farm operations, or dischargers, into three tiers with various compliance requirements. Countywide detailed maps identifying affected APN's within each distinct tier should be included in the SEIR. In the absence of such detailed maps, the County is unable to ascertain parcels affected by the proposed tier grouping for the proposed project.	The SEIR was prepared to address certain potentially significant impacts consistent with the CEQA Guidelines (Cal. Code Regs. § 15162, subd. (a). The information provided in the SEIR and the Staff Report referenced therein, provides sufficient information to evaluate environmental effects. See also response to Letter 79 (Comment No. 504), which addresses tiering.)
Comment No. 555 from County of Santa Barbara. Letter No. 97, p.2.	Table 1. Changes in Environmental Checklist from 2004 Agricultural Order to the 2011 draft Agricultural Order should be expanded to include a column that identifies mitigation measures that will reduce impacts to "less than significant" with mitigation for agricultural resources. Furthermore, biological resource impacts and mandatory findings of significance which identify "potentially significant impacts" should clarify if these impacts can be reduced to a level of "less than significant" with mitigation. If mitigations are proposed, these should be included in the table. As currently written, it is not clear whether these impacts are "significant and unavoidable."	The Draft SEIR in Section 4 discusses the potential impacts and possible mitigation measures that could be used to reduce impacts.
Comment No. 556 from County of Santa Barbara. Letter No. 97, p.2.	The SEIR presents contradictory statements concerning environmental impacts resulting from the proposed project, as noted below:.[various quotes from SEIR]. Table 1. Changes in Environmental Checklist from 2004 Agricultural Order to the 2011 draft Agricultural Order clearly identifies "potentially significant impacts" and impacts that can be reduced to "less than significant" with mitigation. This information should be reconciled with the above statements to definitively indicate what adverse environmental impacts will result from the proposed project. The SEIR should identify, disclose and mitigate for impacts resulting from this project.	The CEQA Guidelines specify that no additional EIR shall be prepared except in very limited circumstances as set forth in CEQA Guidelines section 15162(a). The 2004 Negative Declaration found no significant impacts. The Water Board staff compared the 2004 Ag Order with the 2011 Draft Ag Order and other potential alternatives and found that there are changes proposed to the 2004 Ag Order that could potentially result in impacts more severe than evaluated in the 2004 Negative Declaration, so chose to prepare an SEIR for the specific impacts identified. Commenters, however, asserted that the effects on agricultural resources would be more severe than under the 2004 Ag Order. Staff does not agree that that is the case, however, since all