STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 5 - 6, 2013

Prepared on November 1, 2013

ITEM NUMBER: 17

SUBJECT: Irrigated Lands Regulatory Program Update

STAFF CONTACT: Angela Schroeter 805/542-4644 or

angela.schroeter@waterboards.ca.gov

KEY INFORMATION:

Location: Regionwide

Type of Discharge: Irrigated Lands runoff and leaching to groundwater Existing Orders: Order No. RB3-2012-0011 and WQ 2013-0101

THIS ACTION: Informational

SUMMARY

This is an information item to update the Board regarding implementation of Agricultural Order R3-2012-0011, specifically activities related to enrollment, operator and landowner notification, Annual Compliance Form Reporting, Groundwater Monitoring and Reporting, Drinking Water Notifications, and Summary of Compliance. In addition, in response to Board Member request, a summary of modifications pursuant to the State Water Resources Control Board Order WQ 2013-0101 is also included in this update. Agenda Items 6, 18, and 19 are also associated with the Agricultural Order.

Please note that we have updated the program name from the Agricultural Regulatory Program to the **Irrigated Lands Regulatory Program**. The name Irrigated Lands Regulatory Program is consistent with the State Water Resources Control Board (State Water Board) and Central Valley Regional Water Board, and is more descriptive to the specific type of discharge regulated.

Enrollment

Since the launch of the electronic-Notice of Intent (eNOI) in 2010, enrollment in the Agricultural Order has continued to experience a steady increase over time. Current enrollment includes approximately 430,290 acres, which is 99% of the estimated irrigated acreage in the Central Coast region. Table 1 below includes enrollment statistics for the Agricultural Order, as of October 21, 2013.

While a large percentage of enrolled irrigated acreage is represented by an eNOI in the Water Board's GeoTracker data management system, there is still approximately 10,000 acres that individual growers previously enrolled prior to 2010 but still have not submitted an eNOI. As follow-up, staff issued Water Code Section 13267 letter and Notices of Violation letters to these growers in 2010 and 2011, respectively, for failure to submit an eNOI. Some of these individual

growers are no longer in business, based on information from the California Secretary of State database, and staff is recommending that the Executive Officer terminate enrollment for these operations (Attachment 1 will be provided as a supplemental sheet prior to the Board meeting). Staff is evaluating next steps regarding the remaining operations that are determined to be in business but have failed to submit an eNOI.

Table 1. Agricultural Order Enrollment Statistics

Central Coast Region Irrigated Agriculture Total Estimated Acreage	~435,000 acres				
	~430,290 acres				
Agricultural Order Total Enrolled Acreage	(~419,604 acres) Represented in eNOI	(~10,000 acres) Enrolled pre-2010, ~142 Growers have not submitted eNOI ¹ .			
Total eNOI Submittals	1739 eNOI Submitta	als or 4277 farms/ranches			

Data reported in GeoTracker as of October 21, 2013. The number of growers and acreage enrolled pre-2010 but that have not submitted updated eNOI is currently under review.

Notification of Requirements

The Central Coast Water Board implements specific action to provide landowners and operators with information about the requirements in the Agricultural Order. As both the landowner and the operator are responsible for compliance, Water Board staff provides information to the enrollee (typically the operator) upon enrollment and then notifies the landowner that their property has been enrolled and is regulated under the Agricultural Order (using landowner postcards). Attachment 2 is a grower resource document titled "Responsible Parties: Landowner and Operator" which provides additional information about landowner and operator responsibilities.

Various additional grower resource documents are also available to growers and landowners. These resource documents are intended to provide landowners and operators with information regarding requirements in the Agricultural Order, alternatives and methods to comply, Farm Plan and other templates, and resources for technical assistance. Attachment 2 is a grower resource document titled "5-Year Compliance Calendar" which is provided to growers upon enrollment with a list of Water Board contacts. These grower resource documents are available on the Water Board's website and are also provided in hard copy, upon request. Many are also available in Spanish and Chinese translation.

Annual Compliance Form Reporting

The Agricultural Order requires growers with Tier 2 and Tier 3 farms to submit an updated Annual Compliance Form (ACF) each year by October 1.

On September 24, 2013, the State Water Board adopted Order WQ 2013-0101 (State Order) requiring specific revisions to the ACF and other modifications to the Agricultural Order. Pursuant to the State Order, staff revised the ACF and made it available to growers on October 22, 2013. Modifications were made primarily to Section B (Irrigation Water), Section C (Nitrate Loading Risk Determination), H (Water Quality Management Practices), and K (Photo Monitoring).

The State Order requires growers with Tier 2 and Tier 3 farms to submit Section C - Groundwater Nitrate Loading Risk Determination reporting by January 15, 2014 and then annually by October 1. All other newly modified sections are due to be reported by October 1, 2014, and annually thereafter.

Summary of Compliance to Date

As requested by the Board, Table 2 provides a summary of compliance for farms/ranches enrolled in the Agricultural Order. The table provides an overview of compliance related to past reporting deadlines for specific Agricultural Order requirements, utilizing a format similar to the "5-year Compliance Calendar" grower resource document provided to growers. Staff plans provide this compliance information to the Board annually. As future reporting deadlines close, additional requirements and associated compliance will be added to the table for the next annual compliance update to the Board.

Table 2 summarizes compliance status for Agricultural Order requirements for individual farms/ranches as of December 2012 and October 2013, respectively. Overall, the compliance statistics for 2013 demonstrate a high and increasing rate of compliance. This is significant as the 2012 Agricultural Order, with newly added requirements, was adopted only 19 months ago. For instance, the requirement to submit an eNOI has a compliance rate of 96% (compared to 94% in December 2012) and the requirement to install backflow prevention devices has a compliance rate of 95%. Water Board staff prioritizes and evaluates follow-up for issues of noncompliance, as appropriate.

For groundwater and surface water receiving water monitoring, growers have the option to comply by joining a cooperative monitoring program. Agenda Item 18 is an update to the Board on the Central Coast Groundwater Coalition which conducts cooperative groundwater monitoring on behalf of growers in specific areas of the region. Central Coast Water Quality Preservation, Inc. (CCWQP) is a nonprofit organization that manages the Cooperative Monitoring Program (CMP) on behalf of growers in the Central Coast region who choose to comply with surface water receiving water monitoring as a cooperative. The CMP has implemented all MRP requirements to date except submittal of the data collected during the second quarter of 2013, April through June. This data was due on October 1, 2013 and has not yet been submitted. On October 30, 2013, Water Board staff sent a letter to CCWQP requesting submittal of that data as soon as possible.

Groundwater Monitoring and Reporting

Growers who choose to comply with groundwater monitoring requirements individually must sample the primary irrigation well and any domestic drinking water wells on their farm/ranch and results must be uploaded electronically to GeoTracker by the laboratory. As of October 22, 2013, individual growers have provided analytical results for approximately 2317 groundwater samples from 1289 groundwater wells representing 880 individual farms/ranches. Of the 1289 groundwater wells, approximately 396 provide domestic drinking water to individuals or groups of individuals. Staff responds to the analytical results first to insure public health protection for

anyone drinking water from the wells where high levels of nitrate are reported, and second to require additional monitoring as necessary and/or to prioritize where staff should further investigate implementation of farm water quality practices.

At this time, the Central Coast Water Board is awaiting final membership lists from the Central Coast Groundwater Coalition. Once the final membership list is received, staff will fully evaluate compliance with individual groundwater monitoring and reporting requirements.

Additionally, at that time, staff will review and evaluate the analytical results and determine appropriate follow up as described above.

Table 2. Agricultural Order - Summary of Compliance 1

	TIE	R 2012 ² 2013 ³											
1	2	3	Agricultural Order R3-2012-0011 Requirement	Initial Due Date	Reporting Level	Required to Comply (#)	Failed to Comply (#)	Compliance (%)	Non-Compliance (%)	Required to Comply (#)	Failed to Comply (#)	Compliance (%)	Non-Compliance (%)
			Enroll - Submit eNOI	May-12	Farm Acres	435,000	26,128	94%	6%	435,000	15,396	96%	4%
			Develop/Update Farm Plan.		Operation	1,739	291	83%	17%	1,739	289	83%	17%
			Install Backflow Prevention devices		Farm					2,263	120	95%	5%
V	1		Report surface receiving water monitoring (Cooperative)	Dec-12	Operation	1,695	0	100%	0%	1,739	0	100%	0%
V	√		Report surface receiving water monitoring (Individual)	Dec-12	Operation	44	44	0%	100%	46	46	0%	100%
	$\sqrt{}$	$\sqrt{}$	Report groundwater monitoring (Individual) ⁴	Oct-13	Farm					Pending			
			Submit Annual Compliance Form.	Oct-12	T2/T3 Farm	1,810	460	75%	25%	1,824	428	77%	23%

¹ Compliance evaluation is based on information reported by growers to GeoTracker as of October 21, 2013, results are approximate.

² 1,739 total operations enrolled = 4,196 total farms enrolled

³ 1,739 total operations enrolled = 4,277 total farms enrolled

⁴ The groundwater cooperatives are currently compiling member lists that will be provided to the Water Board. Water Board staff will evaluate these member lists to determine which farms are required to comply with the Individual or Cooperative groundwater monitoring requirements.

Drinking Water Notifications

The Central Coast Water Board staff issues "Drinking Water Notification" letters to those growers and landowners whose domestic water supply wells exceed the drinking water standard for nitrate or nitrogen. The purpose of these letters is to notify growers that their domestic well exceeds the drinking water standard for either nitrate or nitrogen, and presents a health risk to those who may be drinking or cooking with the water. The letter also includes a grower resource document titled "Nitrate in Drinking Water" (See Attachment 4) which provides important information about the domestic well, human health risks associated with drinking water containing elevated levels of nitrate/nitrogen, and a list of resources and contacts where growers and persons using the well can obtain additional information and assistance. This guide is also available on our website and in English and Chinese translations.

As of October 29, 2013, the Central Coast Water Board has issued 47 drinking water notification letters to growers and landowners who have one or more domestic drinking water wells which exceed the drinking water standard – some farms/ranches have multiple groundwater wells with exceedances. The letter requests that the grower provide confirmation that they have notified the domestic well users of the nitrate exceedance, posted an appropriate public health notification, and identify any treatment method or alternative drinking water supplies provided to ensure safe drinking water, if applicable. To date, we have received positive responses from the majority of growers that received the notification letters. We have received responses from 37 of the 47 growers and landowners sent drinking water notifications letters. The responses indicate the growers and/or landowners provided notices of the nitrate exceedance and, either provided bottled water, or have a water treatment system in-place for the users of the drinking water wells. The responses breakdown as follows:

- Bottled water provided- 19 ranches
- Reverse osmosis systems- 11 ranches
- Other source/treatment- 5 ranches
- Ion exchange system- 2 ranches

Within the last 30 days staff has issued eight notices for which we are waiting responses. Two growers/landowners have not responded to past notification letters.

State Water Resources Control Board Order WQ 2013-0101

On September 24, 2013, The State Water Board issued Water Quality Order 2013-0101 (State Order) for the Central Coast region which resolved all of the petitions filed by environmental and agricultural interests seeking review of the Agricultural Order. The State Water Board allowed four written public comment periods and conducted three public meetings on proposed draft orders prior to adopting the State Order. As requested by Board Members, Table 3 briefly summarizes the State Order modifications to the Agricultural Order.

The State Order supports in large part, but modifies the Agricultural Order. The State Order confirmed that the Agricultural Order is consistent with Water Code section 106.3's directive to advance the human right to safe, clean, affordable, and accessible water, adequate for human consumption, cooking, and sanitary purposes, and with the State Water Board's Antidegradation Policy. The State Order requires farmers or coalitions of farmers to prioritize drinking water sampling and assessment for nitrate and notify well users if those nitrate levels exceed public health standards for drinking water, and further requires some farmers to report the amount of nitrogen they apply to crops. The State Order also directs an expert panel to be convened to provide a more thorough analysis and long-term statewide recommendations regarding many of the issues implicated in the Agricultural Order, especially focused on requirements related to nutrient management practices and nitrogen reporting.

The State Water Board, in its Order, concluded that the Central Coast Water Board did not violate any due process rights, ex parte communication rules, or notice and comment procedures when it included Provision 11, which authorizes the approval of third party approaches. The State Order states that Water Code sections 13141 and 13241 (related to state policy for water quality control) do not apply to the Central Coast Water Board's adoption of the Agricultural Order. The State Water Board also concluded in its Order that the tiered discharger classification scheme adopted by the Central Coast Water Board is a reasonable, interim approach based on the evidence in the record. The State Water Board also concluded that the Agricultural Order includes an adequate process based on existing statutory protections for dischargers to identify sensitive information that the dischargers assert should be exempt from disclosure to the public. Additional modifications are included in Table 3.

The Central Coast Water Board is implementing the Agricultural Order, as modified by the State Order. One such modification is the revision of the Annual Compliance Form which became available to Central Coast growers on October 22, 2013. In addition, per the State Order, staff is also coordinating with State Board and other Regional Water Boards to evaluate and confirm methods and content to notify domestic well users of exceedances of drinking water standards that are identified though groundwater monitoring and reporting in compliance with the Agricultural Order.

The State Order is available on the Water Board's website at: http://www.waterboards.ca.gov/public notices/petitions/water quality/a2209centralcoast ag.sht ml

Table 3. Summary of State Order modifications to the Agricultural Order

Agricultural Order Condition No.	State Order WQ 2013-0101 Modification
Provision 11	Page 14 – Modifies language to clarify that dischargers may form third party groups to develop and implement alternative projects and programs, and when such third party groups may qualify for Tier changes.
Provision 15	Page 23 - Modifies language to state that certified sustainable agricultural operations that qualify for Tier 1 are approved by the Central Coast Water Board, instead of Executive Officer.
Provision 18 and 19	Page 23 – Adds new language to state that if the Executive Officer approves a transfer to a lower tier, or requires transfer to a higher tier, any interested person may request that the Central Coast Water Board conduct a discretionary review the Executive Officer's determination.
Provision 22	Page 26 – Modifies language to state that dischargers shall not cause or contribute to exceedances of applicable water quality standards, as defined in Attachment A, shall protect the beneficial uses of waters of the State and shall prevent nuisance as defined in Water Code section 13050.
Provision 87.5	Page 26 – Adds new language in Provision 87.5 to make clear the intent that dischargers to comply with Provisions 22, 23, 33, and 84-87 of the Order, Dischargers must (1) implement management practices that prevent or reduce discharges of waste that are causing or contributing to exceedances of water quality standards; and (2) to the extent practice effectiveness evaluation or reporting, monitoring data, or inspections indicate that the implemented management practices have not been effective in preventing the discharges from causing or contributing to exceedances of water quality standards, the Discharger must implement improved management practices.
Provision 33	Page 26 – Modifies and adds new language to state that Dischargers who utilize containment structures (such as retention ponds or reservoirs) to

	achieve treatment or control of the discharge of wastes must manage, construct, and maintain such containment structures to avoid discharges of waste to groundwater and surface water that cause or contribute to
	exceedances of water quality standards. Dischargers may choose the method of compliance appropriate for the individual farm, which may include, but is not limited to:
	 implementing chemical treatment (e.g., enzymes); implementing biological treatment (e.g., wood chips); recycling or reusing contained water to minimize infiltration or discharge of waste;
	- minimizing volume of water in the containment structure to minimize percolation of waste;
	 minimizing percolation of waste via a synthetic, concrete, clay, or low permeability soil liner.
Provision 44(g)	Page 29 – Modifies and adds new language to state that dischargers must include in the Farm Plan, a description of the method and schedule for assessing the effectiveness of each management practice, treatment, and control measure identified in accordance with subsection (f). Such methods for assessing effectiveness are expected to be based on standard practices such as, but not limited to: visual inspections, photographs, soil nutrient testing, soil moisture measurements, and recordkeeping. Dischargers may also choose more advanced methods for assessing effectiveness, such as water quality sampling, modeling software, calculated reductions in pollutant loading, toxicity testing, biological indicators evaluations, and other measurement types that prove useful to determining the effectiveness of a management practice. The use of advanced methods is not required.
Section A.6 of Part 2 of the Tier 1, 2, and 3 MRPs, and add	Page 33 – Adds new language to clarify that an interested person may seek discretionary review by the Regional Board of the Executive Officer's approval or denial of a cooperative groundwater monitoring program. Adds new language to clarify cooperative groundwater monitoring program requirements, including well selection, repeat sampling, timing of sampling, prioritization of drinking water evaluation, and reporting. Adds new language to state that sampling must be completed by December 1, 2014.
Section A.7 to Part 2 of the Tier 1, 2, and 3 MRPs	Adds new language to state that cooperative groundwater monitoring proposals may be submitted between September 24, 2013, and November 1, 2013. Dischargers who have not joined a cooperative groundwater monitoring group prior to September 24, 2013, may participate in an approved cooperative groundwater monitoring program, provided they have completed two rounds of monitoring as required under individual groundwater monitoring requirements.
Section A.7 of Part 2 of the Tier 1, 2, and 3 MRPs, and add Section A.7 to Part 2 of the Tier 1, 2, and 3 MRPs	Page 33 – Adds new language to state that if a discharger conducting individual groundwater monitoring or a third party conducting cooperative groundwater monitoring determines that water in any well that is used or may be used for drinking water exceeds or is projected to exceed 45 mg/L of nitrate as NO3 (or 10mg/L of nitrate + nitrite as N), the discharger or third party must provide notice to the Central Coast Water Board within 24 hours of learning of the exceedance or projected exceedance. For wells on a Discharger's far m/ranch, the Central Coast Water Board will require that the Discharger notify the users within 10 days. For all other wells, the Central Coast Water Board will notify the users promptly.
Provision 69	Page 36 – Revises dates to provide additional time for Tier 2 and Tier dischargers to conduct photo monitoring by June 1, 2014 and June 1, 2017. Adds new language to clarify that aerial photography and photography from an elevated vantage point are permitted methodologies for photo monitoring and that photo documentation is to be maintained in the Farm Plan and must be submitted upon request of the Executive Officer.
Provision 72 and Part	Page 39 – 42; Revises date to provide additional time for Tier 3 dischargers to

5, Section A, of the Tier 3 MRP as follows	initiate surface water discharge monitoring by December 1, 2013. Adds new language to clarify that individual discharge monitoring and reporting requirements apply to Tier 3 dischargers that with irrigation water or stormwater discharges to surface water from an outfall. Outfalls are locations where irrigation water and stormwater exit a farm/ranch, or otherwise leave the control of the discharger, after being conveyed by pipes, ditches, constructed swales, tile drains, containment structures, or other discrete structures or features that transport the water. Discharges that have commingled with discharges from another farm/ranch are considered to have left the control of the discharger. Adds new language to clarify that dischargers must monitor irrigation water and stormwater that leaves their farm/ranch from an outfall and to clarify specific monitoring points. Adds new language to clarify that storage ponds or other surface water containment structures must also be monitored unless structures that collect irrigation and stormwater runoff, unless the structure is (1) part of a tail-water return system where a major portion of the water in such structure is reapplied as irrigation water, or (2) the structure is primarily a sedimentation pond by design with a short hydraulic residence time (96 hours or less) and a discharge to surface water when functioning.
Provision 68	Page 42 – Revises dates to provide additional time for Tier 2 and Tier 3 dischargers to calculate their Nitrate Loading Risk Level by January 15, 2014.
Sections C.2 and C.5 of Part 2 of the Tier 2 and Tier 3 MRPs	Page 45 – Modifies language to clarify the methods required for reporting total nitrogen applied for Tier 2 and Tier 3 farms. Deletes alternative to propose individual discharge groundwater monitoring and reporting program.
Provisions 74, 76, 77, 78, and Section B.1 of Part 6 of the Tier 3 MRP.	Page 51 - Deletes Provision 74 requirement to determine typical crop nitrogen uptake. Deletes Provision 76, alternative to propose individual discharge groundwater monitoring and reporting program. Deletes Provision 77 and Section B.1 of Part 6 of the Tier 3 MRP requirement to report Tier 3 elements of Irrigation and Nutrient Management Plan. Deletes Provision 78 requirement to report progress towards nitrogen balance ratios.
Section B.2 of Part 6 of the Tier 3 MRP.	Page 52 – Modifies language to clarify reporting required in the Irrigation and Nutrient Management Plan Effectiveness Report.
Part 3 of the Tier 2 and Tier 3 MRPs as follows: Tier 2 MRP, Part 3	Page 57 – Modifies language to clarify reporting requirements in the Tier 2 and Tier 3 Annual Compliance Form related to assessing the effectiveness of management practices implemented and the outcomes of such assessments. Modifies language to require the reporting of average nitrogen concentration in irrigation water and calculated or estimated nitrogen load in Tier 2 and Tier 3 Annual Compliance Form.

Grant Opportunities for Growers

Consistent with Finding 30 of the Agricultural Order, the Central Coast Water Board recently awarded a grant of \$49,855 to the Agriculture and Land-based Training Association (ALBA) using PG&E Settlement Funds from the Non-Point Source Pollution Projects Fund of the Community Foundation for Monterey County. The project will provide free technical assistance to limited-resource growers in the Greater Salinas Valley (Lower Salinas, Bolsa Nueva, and Elkhorn Slough areas/watersheds) to implement water quality improvement practices required by the Agricultural Order.

Staff Presentations and Grower Outreach Events

Below is a list of staff presentations and grower outreach events by date:

Nov 14, 2013 – California Pesticide Control Advisor (CAPCA) Education Presentation by staff Monica Barricarte Santa Maria Elks Lodge

1309 N Bradley Rd, Santa Maria, CA 93454.

https://capcaed.com/continuing-ed-seminars/november-14-2013-santa-maria-central-coast-capca-ce-meeting/

Nov 18/19, 2013 - Sustainable Ag Expo Water Board Information Table in Vendor area Central Coast Vineyard Team Madonna Inn, San Luis Obispo, CA http://www.vineyardteam.org/events/schedule.php

Nov 20, 2013 – California Certified Organic Farms (CCOF) Central Coast Town Hall meeting Presentation by staff Monica Barricarte UCCE Salinas, Agricultural Center Conference Room 1432 Abbot St, Salinas CA, 93901 http://us4.campaign-archive1.com/?u=d32ff353cb8a5307578b8bae9&id=5c09d7d8bf&e=353ac6477d

Dec 6/7, 2013 – Cal Poly Sustainable Agriculture Pest Management Workshop College of Agriculture, Food and Environmental Sciences (CAFES) Center for Sustainability Presentation by staff Monica Barricarte SLO Veterans Memorial Building, 801 Grand Avenue, San Luis Obispo, CA 93405 http://calpoly.augusoft.net/index.cfm?method=ClassListing.ClassListingDisplay&int_category_id=87

Dec 10, 2013 – CAPCA Fertigation Workshop Presentation by staff Monica Barricarte Santa Maria Elks Lodge 1309 N. Bradley Road, Santa Maria 93454

Conclusion

Staff continues to implement the Irrigated Lands Regulatory to improve and protect water quality and make progress towards the Water Board's goals of clean groundwater, healthy aquatic habitat and properly managed land that protects watershed functions. Staff has reviewed the information and data submitted to date for compliance reporting with the requirements in the Agricultural Order to evaluate program performance. The Irrigated Lands Regulatory Program staff continuously considers the results of program performance evaluations, including feedback from the Water Board members and stakeholders, to adapt implementation strategies to improve effectiveness of protecting water quality impacted by irrigated lands in the Central Coast Region. Future updates to the Board will continue to report out on the status of implementation, including compliance.

ATTACHMENTS

- Memo to Executive Officer Recommending Termination of Enrollment for Agricultural Operations No Longer in Business [NOTE: This attachment will be provided as a supplemental sheet prior to the Board meeting]
- 2. Grower Resource Document, "Responsible Parties: Landowner and Operator"
- 3. Grower Resource Document, "5-Year Compliance Calendar"
- 4. Grower Resource Document, "Nitrate in Drinking Water"