

## **IRRIGATED LANDS REGULATORY PROGRAM UPDATE**

### **August 2015**

This month's Irrigated Lands Regulatory Program (ILRP) report provides an update on the activities of the Central Valley Regional Water Quality Control Board (Regional Water Board) ILRP through July 31, 2015, as presented in the Regional Water Board July 30-31, 2015 Executive Officer report. Future monthly reports alternately present the status of the Central Valley Regional Water Board ILRP for one month, and the Regional Water Board ILRPs the alternate month. Current and past ILRP program monthly reports can be found on the [State Water Board Irrigated Lands Regulatory Program](#) website.

### **STATE WATER BOARD**

On August 3, 2015, Irrigated Lands Regulatory Program (ILRP) staff participated in a conference call with Almond Board staff to discuss: water issues under the FDA Food Safety Modernization Act (FSMA) – how you anticipate addressing any testing or verification aspects; recycled water under current state legislation/regulations; nitrates monitoring; and, groundwater management – how we might be able to leverage industry programs in terms of compliance areas.

On August 5, 2015, ILRP staff participated in a quarterly California Certified Crop Adviser Board of Director's meeting.

On August 5 – 6, 2015, ILRP staff participated in interviewing San Diego Regional Water Quality Control Board staff as part of the ILRP Information Management Solution project.

On August 12 – 13, 2015, ILRP staff participated in a quarterly Dairy – Confined Animal Facilities (CAF) roundtable. The roundtable was held at the Santa Ana Regional Water Quality Control Board office and included a site visit to the Scott Brothers Dairy. The Scott Brothers Dairy is a unique 1,100-cow dairy southern California dairy; it is the first-ever operation in the world known to produce no-sulfur renewable diesel products from manure on a livestock facility. The dairy's multi-stage system first separates high-BTU manure solids from the dairy's liquid manure effluent. In the first stage, the process removes 98 percent of the total suspended solids and 40 percent of the dissolved solids, making usable irrigation water for most farms. The extracted water is further purified to remove the other 2 percent of suspended solids and the remaining dissolved solids, making the water potable. The dairy's manure solids are then fed to a pyrolysis gasifier. The gas production module thermochemically decomposes the manure solids in the absence of air to produce syngas. The gas is scrubbed of impurities and compressed for storage. Using a Fischer-Tropsch process, the hydrogen and carbon in the gas is converted in the system's final stage into no-sulfur renewable diesel products. The Fischer-Tropsch

process had been used to convert other feedstocks to renewable diesel but until recently was never proven to work with manure, let alone on a farm. The process also produces a refined wax product in a controllable diesel-to-wax ratio. The wax product's market value is three times that of the renewable diesel and can be further processed or blended off-site with other petroleum products, such as jet fuel or kerosene.

On August 20, 2015, ILRP staff and the Highlands Consulting Group presented the ILRP IMS Stage 1 Business Analysis "As Is" findings to DWQ and DIT management. The "As Is" presentation reports on the results of interviews conducted with all nine Regional Water Quality Control Board staff and Assistant Executive Officer's. Also discussed was the strategy for the Stage 2 Business Alternatives "To Be" process of the ILRP IMS project.

On August 25, 2015, ILRP staff met with Sustainability In Practice (SIP). The SIP is a third-party certification group that is formally recognized by the Central Coast Regional Water Quality Control Board as part of the Regional Board's ILRP. The meeting with SIP was to discuss the possibility of SIP developing third-party certification groups in other regions to assist growers to meet ILRP requirements.

On August 26, 2015, ILRP staff participated in a California Water Environment Association Sacramento Chapter meeting on issues related to land application of biosolids and other solid waste material.

On August 28, 2015, ILRP staff participated in a Healthy Soils Initiative working group meeting. The Healthy Soils Initiative is a collaboration of state agencies and departments, led by the California Department of Food and Agriculture, to promote the development of healthy soils.

## **CENTRAL VALLEY REGION**

### **Waste Discharge Requirements (WDRs) Development:**

#### **Sacramento River Watershed WDRs**

On June 5, 2015, the Central Valley Regional Water Quality Control Board (Regional Water Board) adopted revisions to the Waste Discharge Requirements (WDRs) for Growers within the Sacramento River Watershed that are Members of a Third-party Group. The revisions changed the submittal date for the Comprehensive Groundwater Quality Management Plan to be due 60 days after Executive Officer approval of the Groundwater Assessment Report, rather than one-year after the Notice of Applicability, and added language to the MRP providing the third-party with an opportunity to participate in the Delta Regional Monitoring Program.

#### **Eastern San Joaquin River Watershed WDRs**

On June 17, 2015, the Regional Water Board Executive Officer issued final approval of the Management Practices Evaluation program (MPEP) Group formed to develop and

carry out the management practices effectiveness evaluations required by Orders applicable to the irrigated lands in the Central Valley. The MPEP Group consists of the East San Joaquin Water Quality Coalition, San Joaquin County Resource Conservation District on behalf of the San Joaquin County and Delta Water Quality Coalition, and San Joaquin Valley Drainage Authority on behalf of the Westside San Joaquin River Watershed Coalition. The Group Option allows multiple entities to prepare a joint MPEP Workplan to determine the effects, if any, irrigated agricultural practices may have on first encountered groundwater under different conditions that could affect the discharge of waste from irrigated lands to groundwater, and to address the conditions relevant to high vulnerability groundwater areas.

#### Western San Joaquin River Watershed WDRs

On June 25, 2015, Regional Water Board staff released proposed revisions to the Western San Joaquin River Watershed WDRs Order R5-2014-0002-R1 for public comment. The proposed revisions modify the Western San Joaquin River Watershed boundary to correspond to the corrected description of the area served by the Grassland Bypass Project, which defines the southern boundary of the Western San Joaquin River Watershed. Interested-person comments were due by July 25, 2015. The anticipated schedule for bringing the tentative revisions to WDRs to the board for consideration is on July 30-31, 2015.

#### Grassland Bypass Project/Grassland Drainage Area WDRs

Tentative Orders for the Grassland Bypass Project and the Grassland Drainage Area were posted May 8, 2015 for a 45-day comment period. Eleven letters were received by the June 22, 2015 deadline for comments. Regional Water Board hearing for adoption of the two Orders is scheduled for July 30-31, 2015.

#### **Nitrogen Management Plan Technical Advisory Work Group:**

On June 23, 2015, the Regional Water Board Executive Officer issued final approval for the Nitrogen Management Plan (NMP) Technical Advisory Work Group. The Work Group is being convened by the Central Valley Water Quality Coalitions (CV Coalitions) to develop guidance for member growers to estimate nitrogen removed as part of nitrogen management plans. The NMP Work Group will also be developing a "Crop Nitrogen Knowledge Gap Study Plan". The NMP Work Group met on June 26, 2015 to discuss methods to estimate available nitrogen in organic amendments and residual in soil.

#### **Compliance, Outreach, & Enforcement:**

##### Sacramento Valley Agricultural Parcel Inspections

In May and June 2015, Regional Water Board ILRP staff inspected 230 parcels in the Sacramento Valley Watershed. The purpose of these inspections is to determine if the parcels are commercial irrigated lands that require coverage under an Irrigated Lands General Order. Data gathered during these inspections will be used to focus and prioritize the issuance of 13260 directives to commercial irrigated lands that are not covered by the applicable Irrigated Lands General Order.

### *Tulare Lake Basin Agricultural Parcel Inspections*

In May and June 2015, Regional Water Board ILRP staff inspected 412 parcels in the Kings River Watershed Coalition Authority area, which cover approximately 9,370 acres. Information gathered during the inspections was used to determine which parcels require coverage under applicable irrigated lands General Orders. Owners of parcels requiring coverage were issued Directives pursuant to California Water Code Section 13260.

### *West San Joaquin Agricultural Parcel Inspections*

In May and June 2015, Regional Water Board ILRP staff inspected 30 parcels in the Westside San Joaquin River Watershed Coalition area. The purpose of these inspections is to determine if the parcels are commercial irrigated lands that require coverage under an Irrigated Lands General Order. Data gathered during these inspections will be used to focus and prioritize the issuance of 13260 directives to commercial irrigated lands that are not covered by the applicable Irrigated Lands General Order.

### *Sacramento Valley Water Code Section 13260 Directives*

In June 2015, Regional Water Board ILRP staff issued 121 Directives to growers in the Sacramento Valley. These directives were sent based on Regional Water Board staff inspections that confirmed the presence of irrigated agricultural operations. The recipients are required to submit a Notice of Intent obtain either group or individual regulatory coverage within 15 days of receipt of the Directive.

### *Tulare Lake Basin Water Code section 13260 Directives*

In May and June 2015, Regional Water Board ILRP staff issued 237 Directives to growers in the Kings River Watershed Coalition Authority area covering approximately 12,602 acres, and 10 Directives to growers in the Tule Basin Water Quality Coalition area covering approximately 899 acres. These directives were sent based on Regional Water Board staff inspections which confirmed the presence of irrigated agricultural operations. The recipients are required to submit a Notice of Intent to obtain either group or individual regulatory coverage for the identified parcels within 15 days of receipt of the Directive.

### *West San Joaquin Water Code Section 13260 Directives*

In May 2015, Regional Water Board ILRP staff issued 18 Directives to growers in the Western San Joaquin River Watershed. These directives were sent based on Regional Water Board ILRP staff inspections that confirmed the presence of irrigated agricultural operations. The recipients are required to submit a Notice of Intent obtain either group or individual regulatory coverage within 15 days of receipt of the Directive.

### *West San Joaquin Notices of Violation for Failure to respond to a Water Code section 13260 Directive*

In June 2015, Regional Water Board ILRP staff mailed 14 Notices of Violation (NOVs) to landowners who failed to respond to a 13260 Directive. These owners of

commercial irrigated lands (as determined by Regional Water Board ILRP staff inspection) were previously mailed directives that required the recipients to submit proof of coalition membership or a Notice of Intent to get regulatory coverage. The NOV's give the recipients 15 days to respond or face administrative civil liability.

#### Tulare Lake Basin Administrative Civil Liability Complaints

On May 14, 2015, the Regional Water Board Assistant Executive Officer issued an Administrative Civil Liability Complaint R5-2015-0524 to M.C. Land Company for failure to obtain regulatory coverage for approximately 480 acres of commercial irrigated lands within the Kern River Watershed Coalition Authority and Kings River Watershed Coalition Authority areas.

#### **Coalitions:**

##### California Rice Commission Coalition

On May 20, 2015, the California Rice Commission submitted a Surface Water Quality Management Plan for Dissolved Oxygen (DO) which examines DO exceedances for the cold and warm water quality objectives from 2004 to 2014. The request for a Management Plan was triggered by water quality objective exceedances in the 2014 season.

On June 4, 2015, the California Rice Commission submitted a proposed Nitrogen Management Plan template as required by General Order R5-2014-0032. The proposed Nitrogen Management template is specific for rice and will be a web-based system to assist rice growers in managing nitrogen applications. The proposed template was posted for public review on June 4, 2015 comments were due by July 3, 2015.

On June 12, 2015, the California Rice Commission submitted a draft outline for the Groundwater Trend Monitoring Workplan and Data Gap Assessment Plan for staff review. The draft outline details the information and format for the Workplan required by October 1, 2015.

##### Sacramento Valley Water Quality Coalition

On May 1, 2015, the Sacramento Valley Water Quality Coalition (SVWQC) submitted their Annual Monitoring Report, Management Plan Progress Report, and Chlorpyrifos / Diazinon TMDL Report. Regional Water Board ILRP staff is in the process of reviewing the reports and preparing comments.

On May 7, 2015, a final Notice of Applicability was issued to the Northern California Water Association to serve as a third-party under General Order R5-2014-0030.

On May 27, 2015, Regional Water Board staff held a Quarterly Management Plan Meeting with the SVWQC to discuss the status of submitted management plan completion requests; progress of SVWQC's management plans; the evaluation process for the 2016 monitoring of copper in the Placer-Nevada-South Sutter-North

Sacramento (PNSSNS) subwatershed; and Regional Water Board staff tours of the Coalition subwatersheds.

On June 8, 2015, SVWQC submitted their Sediment Discharge and Erosion Assessment Report. The associated ArcGIS shape files were submitted on June 12, 2015. Regional Water Board ILRP staff is in the process of reviewing the report.

On June 9, 2015, the PNSSNS sub-watershed submitted a proposal for the Reduced Monitoring/Management Practices Verification Option for review and approval by the Regional Water Board Executive Officer. Regional Water Board ILRP staff is in the process of reviewing the proposal.

#### East San Joaquin Water Quality Coalition

On May 12, 2015, Regional Water Board staff visited the East San Joaquin Water Quality Coalition area. The purpose of the visit was to gain a better understanding of the crops, management practices, irrigation methods, and surface water quality sampling in the Coalition area.

On May 15, 2015, the Coalition submitted a Revised Sediment Discharge and Erosion Assessment Report (SDEAR). Regional Water Board ILRP staff is currently reviewing the SDEAR for compliance with the requirements of the Order.

On May 19, 2015, Regional Water Board ILRP staff attended the East San Joaquin Water Quality Coalition grower meeting. The Coalition presented the 2014 monitoring results and explained the instructions to fill out the Nitrogen Management Plan worksheet. Invited agricultural experts presented information regarding the role of certified crop advisors in nitrogen management planning and irrigation system performance on nitrate movement.

On May 19, 2015, the Coalition submitted a request for approval of the second set of Core sites as required by the Order. After confirming the selection of large, representative and not- frequently-dry subwatersheds, the Regional Water Board Executive Officer issued an approval letter on June 15, 2015. The Coalition will include the approved second set of Core sites in the August 1, 2015 Monitoring Plan Update report.

On May 21, 2015, Regional Water Board ILRP staff released the Coalition Groundwater Quality Management Plan for public comment. Regional Water Board staff is currently reviewing the Plan and is considering comments provided by the Stakeholders.

On June 1, 2015, Regional Water Board ILRP staff received the East San Joaquin Water Quality Coalition's Quarterly Monitoring Data Report for the period October-December 2014.

On June 1, 2015, the Regional Water Board Executive Officer approved the East San Joaquin Water Quality Coalition request to extend the submission of

Groundwater Trend Monitoring Program Quality Assurance Project Plan (QAPP). The extension will allow the Coalition to develop a list of specific monitoring locations and monitoring schedule. The QAPP will be submitted 30 days from approval of the Groundwater Quality Trend Monitoring Program Workplan.

On June 4, 2015, the Coalition submitted the Groundwater Quality Trend Monitoring Program Workplan, Phase I – Monitoring Design Approach. Regional Water Board ILRP staff is currently reviewing the proposed trend monitoring workplan for compliance with the requirements of the Order.

#### *San Joaquin County and Delta Water Quality Coalition*

On May 1, 2015, Regional Water Board ILRP staff received the San Joaquin County and Delta Water Quality Coalition's Annual Monitoring Report (AMR) for the reporting period January through September 2014. This is the first AMR since the March 2014 Order was adopted. As approved, this AMR does not cover the water year reporting period discussed in the Order. The next AMR will provide data for the water year October through September 2015. The AMR is under staff review.

On May 1, 2015, Regional Water Board ILRP staff received the San Joaquin County and Delta Water Quality Coalition's Surface Water Quality Management Report by the Order's deadline. The report provides an evaluation of water quality impairments, evaluation of management practices, and establishes performance goals and measures with a timetable. Regional Water Board ILRP staff received one comment letter before the 30-day public comment period ended and will take those comments under consideration.

On June 19, 2015, the San Joaquin County and Delta Water Quality Coalition's submitted a QAPP amendment request. The Coalition seeks to revise the data quality objectives for acceptable percent recovery limits in laboratory control spikes and matrix spikes.

#### *Westside San Joaquin River Watershed Coalition*

On May 21, 2015, Regional Water Board ILRP staff toured the Coalition's monitoring sites and the respective sub-watersheds. The Coalition representative provided information about various sub-watershed areas.

On May 28, 2015, Regional Water Board ILRP staff held a meeting with the Coalition, APPL Labs and Pacific Eco Risk representatives to discuss Electronic Data Deliverable issues. The Coalition will propose an amendment to their Quality Assurance Project Plan to address changes needed to address current protocols.

On June 8, 2015, Regional Water Board ILRP staff held a meeting with the Coalition regarding the Semi-Annual Monitoring Report and Surface Water Quality Management Plan (SQMP) issues. Regional Water Board ILRP staff provided the details about various timelines along with the guidance to prepare the SQMP.

On June 15, 2015, Coalition submitted their June 2015 Semi-Annual Monitoring Report (SAMR), which covers the monitoring period from September 2014 through February 2015. The SAMR is currently under staff review.

#### Kern River Watershed Coalition Authority

On May 6, 2015, Regional Water Board ILRP staff visited the Kern River Watershed Coalition Authority area to observe irrigation water deliveries, farm drainages, and identify viable surface water monitoring locations. The information will aid staff in the review of the Coalition's revised Surface Water Monitoring Plan.

#### Tule Basin Water Quality Coalition

On June 19, 2015, Regional Water Board ILRP staff visited the Tule Basin Water Quality Coalition area to observe the locations of proposed surface water monitoring sites identified in the Coalition's revised Surface Water Monitoring Plan. Regional Water Board ILRP staff also investigated potential alternative monitoring sites to aid in the review of the Coalition's Surface Water Monitoring Plan.

#### Westlands Water Quality Coalition

On June 2, 2015, Regional Water Board ILRP staff met with the Westlands Water Quality Coalition to discuss salinity, toxicity and metals exceedances the 2014 Annual Monitoring Report, the status of the Coalition's approved Surface Water Quality Management Plan, and grower outreach planned for 2015. The Coalition will report back to staff on measures taken to address exceedances detected in 2014.

#### **Data Management:**

Beginning in May 2015, the Central Valley Regional Data Center's contract expired, and the Data Center will not be able to aid with loading ILRP data to CEDEN until a new contract is executed. Significant impacts include delayed data uploads to CEDEN.

On May 7, 2015, the data management team completed the water quality global checks in preparation for 2014 water quality monitoring data migration to CEDEN. Various coalition water quality data has been reviewed and verified. The data was posted on CEDEN on May 11, 2015 for public access.

Data collected prior to 2009 will continue to be available on the ILRP surface water quality data webpage until those sets are processed and transferred to CEDEN. Regional Water Board Staff is currently processing the Westside and Sacramento Valley Coalition data collected between 2004 and 2008. Once complete, this set will complement the existing data on CEDEN providing all the data submitted by the Westside Coalition since program inception.

On June 15, 2015, the Westside San Joaquin River Coalition provided their semi-annual monitoring data deliverable. After the data management team validates the data, it will be loaded into the CV RDC database replica.

On June 18 and 29, 2015, the data management posted the CEDEN field and chemistry



guidance documents on the Central Valley Water Board's website. ILRP data providers will be transitioning from CVRDC template format to CEDEN format data templates during the next year. To promote the process, Regional Water Board ILRP staff is revising the CVRDC guidance documents for the CEDEN templates. The toxicity guidance document is under construction to be ready by mid-July.

Regional Water Board ILRP staff received USBR Grassland Bypass Project monitoring data for 2013 and 2014. These data are new for the ILRP to process and will require a significant amount of time to be loaded into the CV RDC replica.

Regional Water Board ILRP staff has reviewed the 3rd and 4th quarter Sacramento Valley data deliverable covering the monitoring period July through September 2014 and October through December 2014. Loading to the CV RDC database is planned for July.

#### **Managed Wetlands Workshop:**

On April 15, 2015, a Managed Wetlands Workshop was held at the San Luis National Wildlife Refuge Headquarters near Los Banos, CA to provide a forum for discussion of the regulation of managed wetlands within the Irrigated Lands Program. The workshop consisted of a morning field tour and afternoon presentations by a Wetlands Workgroup Panel. All meeting materials are available online on the Regional Board website.

The Managed Wetlands Workgroup met on 25 June to review comments and questions from the workshop and determine next steps.

#### **Rice Pesticides Program:**

Monitoring for thiobencarb started the last week of April. Exceedances of the thiobencarb performance goal (1.5 µg/L) were observed in two Colusa Basin Drain sites (CBD5 and CBD1), with no detections (minimum detection level of 0.1 µg/L) at the water intakes for West Sacramento and the City of Sacramento. The California Rice Commission initiated additional monitoring upstream of CBD5 that is not required by the Rice Pesticides Program to better characterize the drainage.