

Watershed Coalition

News

INFORMATION FOR CENTRAL VALLEY AGRICULTURE

SUMMER 2005



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PUBLISHED BY

Coalition for Urban/Rural Environmental Stewardship
www.curesworks.org

WITH SUPPORT FROM

Almond Board of California
www.almondboard.com



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Water Board Starts Waiver Enforcement

In its first major enforcement action related to Conditional Waivers for Irrigated Lands, the Central Valley Regional Water Quality Control Board is sending certified letters to growers it suspects are not complying with requirements of the waiver program.

Under the conditional waiver, growers on irrigated lands are required to join a board-approved coalition group, file as an individual waste discharger or file for a waste discharge permit. The majority of farmers have signed up with coalitions but the board is undertaking this effort to ensure all landowners and operators of irrigated land with potential discharges are participating in one option of the program.

Letters of Compliance were mailed to 88 growers in March as the Water Board's first formal action to ensure consistent compliance with the Conditional Waiver program. The board used public information to identify 13 growers in Yolo County, 16 growers in Fresno County and 50 growers in Madera County who may not be participating in the Conditional Waiver Program and have "high potential to discharge directly from their property to a major surface water body."

In June, the Water Board was preparing to send out a second mailing to landowners in Butte, Sutter and Yuba counties who have

not signed up to participate in a watershed coalition.

In addition to identifying growers who are not members of a coalition, the board also is looking at growers' geographical location and topography of their irrigated lands; proximity to major surface waters that have water quality problems; and potential for discharge from their irrigated land to impact water quality.

According to a statement from the Water Board, the letter is part of its effort to gain compliance while also educating growers about the legal requirements of the Irrigated Lands Waiver program.

Growers who receive the letter by certified mail are required to file within 30 days a one-page report that details their property and current efforts to comply with the Porter-Cologne Act. Water Board staff are following up with landowners who do not reply to the letter or claim to have no potential for surface water discharges. It is still uncertain how the Water Board will handle enforcement for those landowners who ultimately do not comply. Under the California Water Code, growers who fail to file those reports could ultimately be subject to administrative civil liabilities, which could result in fines of up to \$1,000 for each day in which the violation occurs.

State Board Adopts Waiver Fees

The State Water Resources Control Board has approved a new fee for farmers of irrigated lands in California. The plan includes a three-tier, acreage-based fee schedule with collections expected to begin as soon as September 2005. State officials expect to collect a total of \$1.9 million annually.

Since its passage in 2003, no state general funds have been allocated to cover the costs of implementing the Irrigated Lands Conditional Waiver. In 2004, the California legislature amended the California Water Code to allow the state and regional water boards to assess up to nearly \$2 million annually in new fees to recover the costs of establishing and implementing the conditional waiver programs statewide.

The money will be used to fund 22 positions to implement agricultural waivers in all regions of California. The new State and Regional Water Board staff will perform a number of tasks including: grower outreach

and education; review waiver applications and monitoring reports, environmental and water quality assessments; perform inspection and evaluation of management practices; follow-up enforcement; and coordinate with other agencies.

Fee collections will be based on a three-tier, acreage-based schedule: Coalition groups that collect and pay fees for landowners (12 cents per acre); members of coalition groups where the group does not collect fees (\$100 per landowner plus 20 cents per acre); or individual growers who are not members of a coalition (\$100 per landowner plus 30 cents per acre.)

The Sacramento Valley Water Quality Coalition and the California Rice Commission will jointly fund one position at the Regional Board and one position in the County Agricultural Commissioner's office through its own negotiated fee schedule. The Central Coast regional coalition also established its own fee schedule.

Rice Growers Get Own Program

Sacramento Valley rice growers have become the first commodity group to be issued their own conditional waiver under the Irrigated Lands Waiver program.

The California Rice Commission has been working with the Regional Water Board to craft a commodity specific waiver program for rice grown in the Sacramento River Basin. The commission is basing its program on its ability to identify irrigation season and storm events that coincide with field draining. That information was available largely due to 20 years of monitoring performed for Ordram and Bolero herbicides in the Rice Pesticides Program.

The rice industry waiver program will monitor field runoff at the four drain sites used in the Rice Pesticides Program with one rotating site on the Feather River.

Under the program, monitoring will be phased in over three years and will analyze for pesticides and metals; monitoring for sediment toxicity is limited to once per year unless toxicity is found.

Rice growers in the Sacramento River Basin will automatically be enrolled in the rice conditional waiver program, although growers will have to enroll acreage not planted to rice in the local watershed coalition group. The regional board will receive a single report from those rice growers combining elements of the Rice Pesticides Program and the Conditional Waiver. Management of the ag waiver will be covered under normal operating costs of the California Rice Commission. South of Sacramento, rice growers must still join a coalition group for coverage of all irrigated agricultural acreage.

Survey Shows Grower Awareness of BMPs

Orchard growers in Sacramento Valley are getting the word on Best Management Practices to protect surface water. In a recent CURES/UC Davis survey of 408 orchardists, more than three-fourths of the growers surveyed had been informed of management practices that reduce the potential for pesticides moving from orchards into waterways. Larger orchards with more experienced agricultural operators and higher gross farm income were most likely to have heard about BMPs to reduce potential pesticide runoff.

Nearly 60 percent of growers said that at least some of their orchard blocks drain into a waterway or drainage ditch. Of those, eight out of nine respondents reported there is a grassy or vegetated area between their orchard and the waterway or drainage.

The majority (58 percent) of interviewees knew that OP pesticides have been detected in the Sacramento and Feather River during the dormant spray season. Since the last similar survey of orchardists in 2003, results show growers have become more aware of the potential for runoff and are taking steps to reduce that potential.

The surveys show that orchardists are becoming more aware about strategies to reduce off-site movement of applied pesticides. Since 2003, there has been a significant increase in those who say they base their spray timing on weather/wind forecast, with virtually all respondents saying they now make spray decisions on that basis. More operators are also checking droplet and nozzle size on the spray to reduce drift of pesticides to non-target areas.

Growers are also finding ways to reduce dormant season insecticide applications. The ratio of growers who intentionally provide beneficial insect habitat has increased from 35 percent to 67 percent since 2003. The number of growers who spot treat infested orchards rather than treating the whole orchard has also increased. Most respondents reported they had not applied a dormant spray to their orchard in the past five years. Of those who did apply dormant sprays, pyrethroids were used the most (41 percent) and carbamates were used the least (8 percent).

Orchard Sprayer Calibration Clinics Coming

High tech has come to orchard sprayer calibration under a grant sponsored by the State Water Resources Control Board. This coming fall and winter, the Coalition for Urban/Rural Environmental Stewardship (CURES) will be holding sprayer calibration clinics throughout the Sacramento Valley orchard growing regions. Featured at the clinics will be a high tech calibration instrument that can accurately measure sprayer output per nozzle, output per acre and overall distribution uniformity of the sprayer.

CURES will be working in conjunction with Ken Giles, an agricultural engineer at UC Davis, and various commodity groups, agricultural commissioners, farm suppliers and other groups to organize the sprayer clinics. Growers will be charged a small fee for each calibration, which has the potential to assist growers in more efficiently applying pesticides to orchards. Clinic schedules for 2004-05 will be posted at www.curesworks.org and with project supporters.

Sacramento Valley Coalition Completes Year One Monitoring

The Sacramento Valley Water Quality Coalition's first Annual Monitoring and Reporting Program Plan Report revealed a generally positive water quality picture for the Sacramento Valley based on sampling of discharges from irrigated lands through the 2005 storm season.

Of the 19 sites monitored by the Coalition, including various subwatershed monitoring programs between July 2004 and January 2005, only three sites had violations of water quality objectives for toxicity during storm season testing: Burch Creek at Woodson Road in Tehama County; Pine Creek at Nord-Gianella Road in Butte County; and the Z-Drain in Solano/Yolo County. Retesting of the original samples revealed persistent toxicity only at the Pine Creek site, but mortality to test subjects was minimal.

Chemistry tests reveal Diazinon is likely to have caused toxicity in the Burch Creek sample. Diazinon and chlorpyrifos were detected as a likely cause of toxicity in the Pine Creek sample, however, the toxic impacts were to algal species rather than the more sensitive water flea, which sug-

gests that an herbicide or non-pesticide toxicant, such as trace metals or organics, may have been the cause of toxicity in the initial sample. Each of the locations originally showing toxicity were re-sampled to determine the duration of the toxicant and toxicity was again indicated in the Burch Creek sample.

Causes of exceedances of water quality objectives for pH, dissolved oxygen, coliform and bacteria observed prior to January 2005 are still being investigated, however environmental conditions and non-agricultural sources are said to be probable causes for many observed exceedances.

The Sacramento Coalition is working with 10 subwatershed groups to communicate with growers and wetlands managers in affected areas to help better prepare them to address the toxicity issues if they continue.

Sampling at 12 coalition sites during a second storm event in March indicated that no toxicity was detected at any of those sites.

Delta Coalition Adds Sites

The San Joaquin County and Delta Water Quality Coalition has expanded its number of monitoring sites in response to requests by the Regional Water Board. During the 2005 winter and irrigation seasons, the coalition will sample 12 agricultural drains and waterways compared to six sites in 2004. Due to a funding carryover from 2004, the coalition will be able to maintain its membership dues at \$1 per acre.

During irrigation sampling in 2004, the coalition performed analysis of samples taken in August and September. In that analysis, 43 toxicity tests were performed, 14 tests for coliform bacteria, 140 field and lab physical measurements and 144 analyses for pesticides. The tests revealed that five samples exceeded the irrigated land program limits and were toxic to algae. Follow up samples were taken and the lab could not determine the cause of toxicity.

Storm water sampling in winter 2004/05 was performed on 12 sites with 84 tests

done for toxicity, 24 tests for coliform, 280 field and lab physical measurements and 144 analyses for pesticides. There were seven samples toxic to algae, three toxic to the water flea and two toxic to fathead minnows (all indicator species). The sites showing toxicity were re-sampled showing two slight exceedances of organophosphate compounds but the material causing the exceedance could not be determined.

The 2005 irrigation season sampling began in March and will continue monthly through August. The coalition is currently planning outreach programs for growers in subwatersheds where water quality problems were detected.

Discussions are also continuing with growers in Calaveras County who have expressed interest in seeking conditional waiver coverage under the Delta Coalition's Notice of Intent to Comply. For information contact John Meek at 209-472-7127 ext 125 or jmeek@jmeek.com.

Kings River Running Clean

Monitoring results from the first year of sampling on the lower Kings River show no toxicity or detections of water quality problems. Water and sediment sampling was initiated summer 2004 and continued in winter 2005 by the Kings River Conservation District, a member of the South San Joaquin Water Quality Coalition.

Sampling was performed at three sites along the Kings River: at Manning Ave. bridge; Lemoore and James Weirs and the Jackson Ave. bridge. Each monitoring site is in the midst of intensive orchard and row crop plantings.

Despite below average flows in the river during the summer sampling events, no toxicity or exceedances of water quality standards were detected. In winter 2005 when rainfall was at near record levels in the watershed, sampling analysis again showed no toxicity or pesticide detections. According to the KRCD, the results are consistent with independent water monitoring performed over the last 30 years on more than 137 sites along the Kings River.

Westside Grant to Assist In Settling Pond Construction

West Stanislaus County farmers will have the opportunity to receive 80% cost-share support for installing sediment settling basins and irrigation return systems under a recently approved grant from the State Water Resources Control Board.

The \$890,000 grant, funded through Proposition 50, will be managed by the Coalition for Urban/Rural Environmental Stewardship (CURES) in conjunction with West Stanislaus Resource Conservation District, Del Puerto Irrigation District, Paterson Irrigation District and Central California Irrigation Districts. Project activities are expected to begin in early 2006.

Sediment settling basins are a common management measure in the Central Valley that reduce sediment in irrigation water. They are used to collect, trap and store sediment which in turn decreases the off-site sediment load. Sediment basins are approved by the Natural Resources Conservation Service (NRCS) as an effective mitigation practice to reduce the off-site movement of pesticides and nutrients. Tailwater recirculation systems are a proven practice to reduce or eliminate irrigation drainage from fields. These systems collect return flows at the bottom of a field, typically in a sediment basin, then pump and rout the water back to the top of the field for reapplication.

Toxicity Perplexes East San Joaquin Coalition

State of the art technology sometimes creates more questions than answers. Such was the case in September 2004 when water analysis performed by the East San Joaquin Water Quality Coalition (ESJWQC) found toxicity to test organisms in water samples taken in the Merced River at the Southern Pacific Railroad bridge. Follow up tests, called Toxicity Identification Evaluation (TIE), could not identify a pesticide or any other potential cause of the toxicity. The Merced River site is frequently used as an illegal trash dump and is also believed to be a dump-site for outlaw production of methamphetamines.

Then in samples taken in March 2005 at the Highline Canal and highway 99 just south of Turlock, toxicity to test organisms was again found. This time, repeat tests performed days after the initial tests showed the toxicity had disappeared from the sample.

In all these instances, results were reported to the Water Board as "unknown toxicity." Such results frustrate the efforts of the coalition to identify and solve identified water quality problems in regional waterways.

In other coalition sampling last summer, chemical analysis from Duck Slough at Gurr Road showed high levels of Total Dissolved Solids (TDS) and low level detections of esfenvalerate, chlorpyrifos and trifluralin. Sediment sampling at the site also showed toxicity to test organisms. High levels of TDS, electrical conductivity (EC) and e. coli bacteria were found at August Road Drain at Crows Landing Road as well as detections of diazinon. High levels of e. coli bacteria, often caused by runoff from dairies or other large animal facilities, were found at Dutchman's Creek and Gurr Road.

The ESJWQC has scheduled grower outreach meetings for late summer/fall to discuss monitoring results from summer 2005 sampling and potential best management practices to implement to correct the problems. Those tentative meeting dates are August 4 in Madera, October 5 in Merced and November 9 in Modesto. The coalition Board of Directors will meet on the morning of each event followed at 1 pm by informational meetings. Check the coalition website for meeting locations (www.esjcoalition.org) or call 209-522-7278. Also available on request are copies of a 30 minute public television program featuring coalition board members discussing coalition activities and water quality issues.

DeltaKeeper Loses Ag Waiver Challenge

Environmental group DeltaKeeper has lost its bid to have the Irrigated Lands Waiver Program and coalition group efforts thrown out in lieu of placing individual farmers under waste discharge permits. Sacramento County Judge Judy Hersher upheld an earlier tentative order on a consolidated DeltaKeeper and Farm Bureau lawsuit related to the Central Valley conditional waiver, ruling the Regional Board's actions to adopt the waiver is appropriate and within its discretion as granted by the state. As a result, the waiver as currently adopted will stand with some minor revisions.

DeltaKeeper had challenged the Conditional Waivers program on the grounds that noncompliance could threaten water quality in the state's protected waterways. In her opinion, Judge Hersher noted that "DeltaKeeper's objections are based upon speculation and not upon facts and their comments are not substantial evidence that the Waiver may result in potentially significant impacts."

Farm Bureau Wins Concessions

In the same lawsuit where DeltaKeeper challenges to the Irrigated Lands Waiver were thrown out, the court is requiring the Water Board to rewrite provision challenged by the California Farm Bureau Federation. The judge's ruling ensures that Water Board staff cannot access private property without prior consent of landowners or obtaining a warrant. The judge also supported the contention made by Farm Bureau that farmers do not have to give public access to information related to pesticide and fertilizer applications, allowing this information to be considered "trade secrets." The court ruled that "the waiver cannot foreclose or limit" a farmer's rights to data privacy; "it must follow the procedure set forth in the statute (CA Water Code) to protect that trade secret."

Map of Central Valley Monitoring Sites

Order a wall poster size map of the Central Valley showing color GIS mapping of crops and water monitoring sites funded by the Central Valley Coalitions and the Regional Water Board. The 25"x 45" map is available for \$30 at www.curesworks.org or by mailing a check or money order to CURES Maps, 1508 Tollhouse Rd., Suite D, Clovis, CA 93611.

Conditional Waiver Gets a Tune-Up

The Central Valley Regional Water Board is in the process of "tuning up" the Irrigated Lands Waiver to clarify regulatory requirements. Proposed modifications are part of a required review of the current conditional waiver program, which is set to expire on December 31, 2005.

Draft modifications were presented at the Regional Board's January meeting and public comments on the revisions were due by June 17, 2005. The Board is scheduled to decide on those changes as early as August 2005. Among the issues addressed in the tune-up are extending the waiver (water board staff proposal is for an 18 month extension; agriculture coalitions are requesting 5 years); requiring management practice data gathering and implementation only when water sampling shows exceedance of standards; clarifying how those exceedances will be handled; clarification on methods and frequency for monitoring; and revised language on reporting requirements for watershed evaluations. For information on the proposed changes, go to www.waterboards.ca.gov/centralvalley/programs/irrigatedlands.

Web Site Simplifies ESA Compliance

A new state website will help growers identify which pesticides are restricted in their area due to endangered species concerns. The Department of Pesticide Regulation's PRESCRIBE (Pesticide Regulation Endangered Species Custom Real-time Internet Bulletin Engine) website enables growers and pesticide applicators to quickly and easily identify habitat for endangered animals and plants to within a square mile where they plan to make a pesticide application, and determine potential restrictions on certain pesticides within that habitat area.

Once species and pesticides have been identified, PRESCRIBE lists protective measures for each species and pesticide combination. Custom instructions are brief enough to attach to a pesticide user permit, sales receipt or work order. The single page report advises applicators on required precautions in applying pesticides within the specified area. PRESCRIBE can also search for 30,000 pesticides by brand name.

In *Watershed Coalition News*, we ask experts to answer frequently asked questions related to agricultural water quality. This month Danny Merkley, Agricultural Coordinator for the State Water Resources Control Board and fifth generation California farmer, talks about the new State fees.

Why a new fee on irrigated agriculture?

The state legislature directed that no state general fund dollars be used for Irrigated Lands Waivers being adopted throughout California. Without fees to support the conditional waiver programs, irrigated agriculture would be vulnerable to more rigorous regulatory options. It is imperative that agriculture work with the State and Regional Water Boards to make this program succeed and to give everyone time to develop a practical program with realistic management practices to protect water quality and agriculture.

Is the fee program permanent?

All State Water Board fees are reviewed annually and this will be no exception. Fees will be adjusted to reflect the program workload each year. With some tens of thousands of growers and more than 9 million acres involved, the State Water Board does not expect to collect the full \$1.9 million authorized by the Legislature in the first few years.

What does the California Water Code require the State Board to consider when establishing fees for agricultural waivers?

California Water Code section 13269(a)(4)(C) requires the State Water Board to consider: the size of farm operations; any compliance costs; any costs associated with water quality monitoring; and participation in a watershed management program approved by the respective regional water board.

Where will county agricultural commissioners fit in?

A Memorandum of Understanding for a pilot project in Sacramento Valley may prove to be a template to define ag commissioner roles and responsibilities, while building a true partnership for others to follow in the future to protect water quality and the agricultural industry. Tremendous progress has been made in the last six weeks in building a relationship between the agricultural industry, county agricultural commissioners, the Water Boards, and the Department of Pesticide Regulation.

Contact Mr. Merkley at (916) 341-5501, or dmerkley@waterboards.ca.gov.

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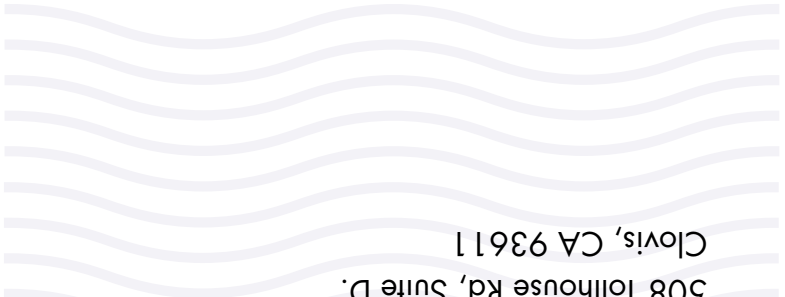
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