CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

20/21 OCTOBER 2005

ITEM: 3

SUBJECT: Executive Officer's Report

DISCUSSION:

ENFORCEMENT

ACLs Issued To Drake Trust for Failure to Implement Cleanup at Humboldt Road Burn Dump, Butte County
An ACL was issued for each of two parcels at the Humboldt Road Burn Dump (HRBD) site near Chico owned partially by the Drake Revocable Trust (Trust). Cleanup was completed this summer for all other parcels at the HRBD site and over 200,000 cubic yards of lead contaminated hazardous materials were removed and placed in disposal cells. The Trust, which had assumed responsibility for cleanup of the 8500 cubic yards of waste on the two parcels, initiated cleanup related actions last spring but did not follow through with actual cleanup. All other responsible parties were able to achieve compliance with the August 14, 2005 cleanup directive. The Trust's failure to cleanup the two parcels under its control violated CAOs issued in 1988 and 2003 and 13267 letters issued this past spring. Although the Trust is not the sole owner of the two parcels (Trust owns 50% controlling interest) and has claimed that the City of Chico is responsible for some of the wastes on their property, the record shows that cleanup was not completed solely because of the Trust's failure to complete the cleanup it started. The other property owners authorized the Trust to cleanup on their behalf and even offered full cost reimbursement. The City never claimed the waste was theirs and the record supports the City's position. The $100,000 and $125,000 ACLs were issued for the Trust's failure to cleanup the hazardous waste during this construction season (completion of such cleanup was possible as wastes were removed from all other nearby parcels). The waste must still be removed and the CAO will continue to list all property owners. (JCP/KLC)

ACL Issued For General Construction Storm Water Permit Violations at Large Plumas County Subdivision Near Portola
On 8 September 2005, the Executive Officer issued an ACL Complaint of $600,000 against the Grizzly Creek Development LLC, for violation of their General Construction Storm Water Permit. The Discharger is developing a 380 unit residential subdivision and golf course near Portola. Their failure to properly implement erosion and sediment control resulted in the discharge of approximately 1.7 million gallons of turbid and sediment laden storm water runoff to Big Grizzly Creek and its tributaries in March of 2005. Big Grizzly Creek is tributary to the Middle Fork of the Feather River, a Federally listed Wild and Scenic river. (RSD)

Canandaigua Wine Company, Mission Bell Winery, Madera County
An NOV was issued to Canandaigua Wine Company, Inc. for violations of WDRs. Violations include exceeding waste loading limits and causing groundwater to exceed the State drinking water MCLs, and the NOV cited a threatened nuisance and evidence of groundwater pollution. A technical report must describe corrective actions. (JWH)

Violations Discovered During Inspection, City of Winters, Yolo County
On 2 September 2005, staff inspected the City of Winters wastewater treatment facility. Several WDRs violations were observed, including failure to monitor effluent flow rates as required, failure to properly operate the disinfection system, total coliform effluent limitation violations, and cattle grazing in the land application area. A Notice of Violation was issued on 27 September 2005 for those violations, as well as other violations revealed by review of the case file and monitoring reports. (ALO)

Notice of Violation, Jessie's Grove Winery, San Joaquin County
On 6 September 2005 a second Notice of Violation (NOV) was issued to Jessie's Grove Winery for submitting an inadequate response to a previous (6 April 2005) NOV. The 6 April 2005 NOV was issued for an incomplete response to a 16 February 2005 Conditional Approval of a groundwater monitoring well installation workplan. The 12 April 2005 Response was inadequate for the following reasons: 1) the Response ignored many of the comments provided by staff in a 6 April 2005 Notice of Violation, 2) the Response did not address installation of a groundwater monitoring well at the stormwater pond (where wastewater might be discharged), and 3) calculations presented in the Response were incorrect and the Discharger's consultant was notified of the errors prior to the Response submittal. The Second NOV allows the Discharger to submit an addendum to the workplan by 17 October 2005, and install groundwater monitoring wells by 14 January 2006 to avoid further enforcement actions. (TRO)

Odor Complaints, California Concentrate, San Joaquin County
On 20 September 2005 staff inspected the California Concentrate wastewater system in response to odor complaints from citizens that live nearby. The objectionable odor condition was confirmed at the wastewater infiltration ponds. The Discharger was instructed to control the odors forthwith. It is noted that this is not the first confirmed odor complaint for this site, and not the first time that the Discharger has been required to improve its treatment system to prevent odors. Staff is evaluating enforcement options. (TRO)

WASTE DISCHARGES TO LAND

Staff Participation in Development of Statewide On-site System Standards
Redding Office staff has developed soil depth and other protective criteria in a "matrix" that may be considered in the proposed on-site system regulations currently being circulated by the SWRCB to comply with AB 885. The current SWRCB version of the proposed regulations appear for the most part to be protective of water quality, but are viewed by many Counties and other stakeholders as unreasonable or unworkable. The matrix was developed to provide minimum criteria that should assure protection of ground and surface waters from bacterial and other pollution and to provide for increased monitoring where complex "alternative systems" are used to reduce separation to useable groundwater. Staff is working closely with SWRCB staff in refining the criteria and has participated in a SWRCB member briefing. (JCP)

Peer Review Results of Wine Institute Study Report
On 31 August, the State Water Resources Control Board released the results of an external scientific peer review of Wine Institute's study, Land Application of Winery Stillage and Non-Stillage Process Water: Study Results and Proposed Guidelines, published in August 2004. Wine Institute commissioned the study to provide the scientific basis and control parameters for effective protection of groundwater quality during the land discharge of winery waste. The study developed loading rates for individual constituents (e.g., nitrogen, BOD). The scientific peer review was critical of the study's methodology and found that the data collected did not support the study's conclusions. State Board has indicated the study provides the basis for further research and pilot demonstration projects. (JLK)

Biosolids Management Seminar Participation, Redding
On 14 September, Anne Olson and Nolan Randall participated in a day-long biosolids management seminar at the California Water Environment Association (CWEA) Northern Regional Conference in Redding. Staff presented an overview of permitting and compliance issues for biosolids land application sites, focusing on the State Board's 2004 General Order. (ALO)

Concrete Wash Water Working Group Meeting, Sacramento
On 7 September, Wendy Wyels, Mark List, and Anne Olson attended the first of several planned working group meetings with members of the Construction Materials Association of California (CMAC). CMAC previously requested that staff delay the Regional Board's consideration of the tentative General Waste Discharge Requirements (WDRs) for temporary storage and/or recycling of concrete wash water in fully enclosed units. In the interim, CMAC plans to conduct industry outreach to educate its members about proper management of concrete wash water at ready mix concrete plants and to conduct technical studies to assess design standards for concrete wash water sumps. The culmination of these efforts will be revision of the tentative General Order, which staff plans to present to the Regional Board for its consideration in Spring 2006. (ALO)

Closure of Geothermal Inc. Facility Nearing Completion
In December 2002, the Regional Board adopted a Cleanup and Abatement Order (CAO) with a three-year schedule to close seven disposal ponds and three trenches at the bankrupt Geothermal Inc. facility in Lake County. The facility formerly accepted liquid and solid wastes produced by geothermal exploration, steam power generation and other geothermal related activities. Several energy companies led by PG&E are conducting the closure work at the 40-acre site. Since construction began in early 2003, the site contractors have evaporated all the contaminated pond water and consolidated the solid waste in four of the former ponds. This year, contractors used thin-film solar evaporators to evaporate the remaining contact rainwater in the last pond. They also removed the remaining solid waste from the pond and the disposal trenches and placed it in the consolidation area. The consolidation area will receive a final cover with a geomembrane layer, a geocomposite drainage layer, and cover soil. Most of the final cover was complete in September. Contractors are also planting poplar and eucalyptus trees at the site to help control groundwater levels. The closure project remains on schedule for completion by the end of 2005 as required by the CAO. (WLB)

WATERSHED ACTIVITIES

Feather River Watershed, Plumas County
The Feather River Coordinated Resource Management Program (FRCRM) recently held a reunion to celebrate 20 years of watershed protection and improvement. The RWQCB is a FRCRM member and has provided much technical and financial assistance to this program via our nonpoint source and watershed grants. As part of this 20-year celebration, the FRCRM has produced a 30-minute video, which chronicles the evolution and activities of the program. It is recommended viewing for those interested in the purpose, approach, and accomplishments of a large, regional watershed management program. For information on the program and the video, contact Gia Martynn at gia@plumascounty.org.

Joint Regional Board/Department of Pesticide Regulation Presentation to San Joaquin Valley Agricultural Commissioners
On 21 September, Joe Karkoski of the Regional Board and Marshall Lee of the Department of Pesticide Regulation (DPR) made a joint presentation to the San Joaquin Valley section of the County Agricultural Commissioners (representing nine counties). The purpose of the presentation was to make the Commissioners aware of Regional Board Basin Planning activities and complimentary efforts by DPR. Joe discussed TMDL/Basin Planning efforts to address diazinon and chlorpyrifos runoff. Joe also discussed future Basin Planning efforts to address other pesticides that pose a potential risk to surface water quality. Marshall discussed the status of DPR's regulatory efforts to address diazinon and chlorpyrifos runoff, as well as DPR's pending dormant spray regulations. DPR is also engaged in a number of management practice research efforts and monitoring of pyrethroid runoff. (JK)

Draft TMDL Technical Report for Methylmercury in the Delta
The draft TMDL technical report for methylmercury in the Sacramento-San Joaquin Delta Estuary was released to the public on 26 August 2005. The report contains a technical analysis of methyl and total mercury sources and recommends a methylmercury fish tissue target that is protective of wildlife and humans who consume Delta fish. The report also describes the statistically significant mathematical linkage between water and fish methylmercury levels, which predicts the aqueous methylmercury concentration that corresponds to the numeric fish tissue target. The aqueous methylmercury concentration is used to estimate the amount of methylmercury reduction needed in various Delta sub regions and tributary watersheds to achieve the fish tissue target in the Delta. The report also provides a preliminary review of potential methylmercury and total mercury control options. The report does not formally propose regulations. Staff requested that informal comments for this draft report be submitted by 31 October 2005 so that Staff can consider the comments while preparing the proposed Basin Plan amendment draft staff report, which will be available this winter. The proposed Basin Plan amendment report will have a formal comment period. The TMDL report and other documents supporting the proposed Basin Plan amendment are posted to the Central Valley Water Board's web site: http://www.waterboards.ca.gov/centralvalley/programs/tmdl/deltahg.html. (MLW/MMM)

GENERAL

Fish Kill at Lake Isabella, Kern County
In August 2005, US Forest Service (USFS) reported some fish dying at Lake Isabella. Working cooperatively with USFS staff sampled the lake in two occasions. On 24 August Fresno Regional Water Board staff sampled 9 locations of the lake for coliform bacteria and field parameters. On 31 August 2005, a significant number of dead fish and aquatic birds were observed. At the suggestion of the Department of Fish and Game, water samples were collected and shipped overnight to Syracuse University for algal toxin analyses. On 2 September 2005, a news release was issued by Kern County Health outlining preventative health measures. As of 21 September, sample results of algal toxin analyses were still pending. The problem may abate itself with the colder fall temperatures and increased wind. (ALT)

SPILLS

Stockton Regional Wastewater Control Facility, San Joaquin County
On 20 September 2005, the City of Stockton's wastewater treatment plant received a power surge from a lightening strike. The surge knocked out the facility power and the 800 Kv backup generator came on. The surge also tripped some power panels, and this caused the failure of three pumps that transfer secondary effluent to ponds across the San Joaquin River. The operations personnel tried to manually open the emergency gravity flow line, however the valve would only partially open. This caused the secondary clarifiers to flood and overflow into the facility's stormwater collection system and onto Navy Drive, which then flowed to the Port of Stockton's storm water conveyance ditch. It appears at this time that the ditch contained the spill. The City pumped the wastewater back the facility head works for treatment. Areas that were inundated with wastewater were disinfected with Ca(OH)2 (quicklime). Staff will review a 5-day report of the incident and determine if additional action is needed. (GWL)

Tuolumne Utilities District, Tuolumne County
The District reported that on 3 September, 3,000 gallons of sewage spilled from a collection system manhole and discharged to Sonora Creek. The spill was caused by a grease blockage. The District unplugged the collection line and vacuumed and disinfected the immediate area, and notified the County Health Department. The District also posted signs along the creek where there is public access. The District plans to flush the collection lines in this area more often and asked the Health Department to step up the policing of restaurant grease traps. The District discharged fresh water diverted from a nearby surface water supply to the creek in the vicinity of the spill area to dilute the waste constituents. The District sampled the creek for bacteriological contamination three days after the spill. Results are pending. Staff will review the spill incident report and determine the need for further action. (HA)

Lakeshore Resort Spills Effluent Wastewater Near Huntington Lake, Fresno County
The United States Forest Service reported that on 31 July an unknown quantity of sewage spilled to Huntington Lake from the Lakeshore Resort's sewage collection system. Staff inspected the spill area and the Resort's WWTF and determined the spill resulted from a break in a pipeline that conveys effluent from the Resort's WWTF, which is near the lake, uphill to an effluent disposal pond. Staff estimated the spill volume as a minimum of 700 gallons. The Resort staff did not report the spill to Regional Board. Staff also documented evidence of WWTF operation and maintenance deficiencies. Formal enforcement is pending. (HA)

Liberty Packing Company, Tomato Processing Plant, Merced County
On 5 August, the Discharger reported to the Office of Emergency Services a spill of 4500 gallons of 25% hydrochloric acid. A valve failure during the installation of a new acid storage tank resulted in acid spilling to the Plant's wastewater stream, which is discharged to land near the Plant for treatment and disposal. The Discharger did not report the spill to the Regional Board. The wastewater flow rate on day of the spill was about 2.1 mgd. Immediately following the spill, the Discharger diluted the wastewater flow with freshwater for about five hours. Following dilution, wastewater monitored at two discharge points had a pH of 1.3 and 3.9. The Discharger indicated that the low pH discharge did not adversely impact disposal area soils due to the soils' naturally high pH. Staff is determining the need for further action in response to the Discharger's failure to report the spill to the Regional Board. (JKW)

Raw Sewage Spills, Ironhouse Sanitary District, Contra Costa
Approximately 100 gallons of raw sewage overflowed from a manhole on 2 September and approximately 200 gallons of raw sewage was spilled to land due to a ruptured force main on 16 September in Oakley. Although there was no discharge to surface waters in either case, the Discharger did not notify either the State Office of Emergency Services or the Contra Costa Environmental Health Department. The written spill reports were timely, but lacked sufficient detail for staff to determine whether response and cleanup actions were appropriate and consistent with the Discharger's Sanitary Overflow Response Plan. On 26 September 2005, staff issued a Notice of Violation requiring a revised spill report for each incident. (ALO)

Raw Sewage Spill, City of Winters, Yolo County
Approximately 4,850 gallons of raw sewage was released to Putah Creek in the City of Winters due to a ruptured sewer force main on 29 August 2005. The force main was broken by a contractor, causing approximately 850 gallons of raw sewage to flow into the creek via the nearby storm drain before the pumping station was shut down. City crews responded to the spill with a vacuum truck contractor, and misidentification of a sewer manhole resulted in the cleanup contractor discharging approximately 4,000 gallons of sewage directly into the storm drain. The City coordinated with Regional Board staff and the Yolo County Environmental Health Department to post warning signs along the creek banks and perform coliform testing in the creek. The State Office of Emergency Services was not notified until 6 September 2005, nine days after the spill. A Notice of Violation was issued on 26 September 2005. Staff is evaluating additional enforcement actions. (ALO)

Notice of Violation, Sewer Overflows, Lake County Sanitation District Southeast Regional Wastewater System, Lake County
On 31 August 2005, Lake County Sanitation District (Discharger) was issued a Notice of Violation (NOV) for two separate sewage spills from the Southeast Wastewater System totaling approximately 51,581 gallons. Both of the spills occurred from two manholes located at the corner of Burns Valley Road and Turner Avenue in Clearlake and discharged into an adjacent dry drainage ditch where they were confined. The Discharger stated that the spills were the result of high temperatures causing electrical control panel fans to fail, resulting in the shutdown of power to the wet well pump at Lift Station No.1. The Discharger notified Regional Board staff and contracted with pumper trucks to assist in the sewage cleanup and removal. The contaminated areas were disinfected per Lake County Environmental Health Department direction. The Discharger indicated that to prevent future recurrence, the evaporative cooler at Lift Station No. 1 would be replaced with an air conditioner, the internal fans for the controller units had been replaced, and the operational programming to the Supervisory Control and Data Acquisition (SCADA)

system had been modified to allow the lead pump to remain on to assist the lag pump. The NOV required the Discharger to submit a report showing that the evaporative cooler has been replaced. (GJC)

Sewer Overflow, Penn Valley Wastewater Treatment Facility, Nevada County
On 31 August 2005, Nevada County Sanitation District No. 1 (Discharger) was issued a Notice of Violation (NOV) for a sewage spill estimated at approximately 1,000 gallons that occurred on 12 July 2005 from the Penn Valley Wastewater Treatment Facility. The spill report indicated that the sewage overflowed from the pump station dry well into a roadside ditch. The spill was the result of a 9 July 2005 power failure at the pump station, a damaged auto-dialer, and the standby generator running out of fuel after approximately 40 hours of run time. The report also identified that a vacuum truck was used to remove the standing wastewater from the roadside ditch and that the spill area was treated with a bleach solution. Spill notification was provided to the Nevada County Environmental Health Department, Regional Board, Department of Fish and Game, and Office of Emergency Service. Due to the close proximity of the spill to a Nevada Irrigation District raw water ditch, two samples were collected and analyzed for fecal coliform and ammonia. The NOV required the Discharger to submit a report describing proposed measures to prevent future spills and identifying necessary upgrades to the pump station. (GJC)

Fish Kill in Marsh Creek, Contra Costa County
On 14 and 15 September 2005, Regional Board and Department of Fish and Game staff found approximately 500 dead fish in Marsh Creek, Contra Costa County. Marsh Creek flows through Brentwood and Oakley, emptying out at Big Break in the Delta. The dead fish were found just downstream from the Brentwood Wastewater Treatment Plant and the East Contra Costa Irrigation District discharge points into Marsh Creek. The Department of Fish and Game warden received an anonymous complaint of nearby magnicide use and that a cherry orchard was sprayed for pesticides earlier that week. Magnicide, and organochlorine pesticides samples were both non-detect. Most of the analysis results from water samples taken by Regional Board and DFG staff are still pending, including fish tissue analysis results. The City of Brentwood Wastewater Treatment Plant monitored the creek downstream of their discharge on the evening of September 14 for pH, chlorine residual and dissolved oxygen, and did not find any problems. On the morning of September 15, the City conducted toxicity testing of its effluent and a sample of creek water downstream and the results came back with 100% survival in the effluent and 95 % survival in the creek water. Furthermore, review of a USGS flow gauge upstream of the treatment plant indicated that there was an unusual surge of flow on September 13. Staff will continue to investigate and evaluate appropriate enforcement if the cause of the kill can be identified (CMP/RJ).

CEQA REPORTING

City of Madera WWTP Expansion, Madera County
The City of Madera prepared a Mitigated Negative Declaration for a project to increase the treatment and disposal capacity of the City's wastewater treatment plant (WWTP) from 7.0 mgd to 10.1 mgd. The City plans to continue its practice of disposing of effluent by percolation and evaporation. The expanded WWTP features oxidation ditch technology, biological nitrogen removal, and mechanical sludge dewatering. On 2 September, staff provided comments on the document and indicated it lacked sufficient technical information for staff to concur with the City's determination that the project will not significantly impact groundwater. Staff recommended the document include a technical supplement prepared by a qualified registered professional that evaluates the extent to which the discharge from an expanded WWTP may degrade groundwater. (SJK)

Madera Ranch Quarry and Reclamation Project, Madera County
Staff commented on a draft EIR for a proposed quarry project in Madera County. About 130 acres of the project's 540 acres will be quarried to a maximum depth of 570 feet below ground surface. Staff indicated that dewatering during quarry operation will impact gaining streams and springs throughout the project vicinity and severely impact the neighboring water supply wells. During post operation, the lake formed in the quarry pit could overflow and discharge to surface waterways and discharge waste constituents originating from quarry operation. Staff further indicated that the draft EIR overestimated the project's water supply and did not provide sufficient technical information to evaluate the proposed discharge of process wastewater from rock crushing, aggregate washing, and mining activities, as well as the project's impact on groundwater. (HA)

Santa Nella Community Water District Water Supply and Wastewater Master Plan, Merced County
On 12 September, staff provided comments on the Santa Nella Community Water District's Notice of Preparation of a Draft EIR for the District's Water Supply and Wastewater Master Plan. The Plan addresses the District's construction and operation of a new surface water treatment plant to treat up to 9 mgd of surface water and a new wastewater treatment facility to treat up to 2.5 mgd of wastewater. Municipal wastewater will be treated via an oxidation ditch technology followed by chlorine disinfection, and disposed of via recycling on pasture crops or discharged to jurisdictional wetlands. Staff recommended the District describe the expected impacts to receiving water quality from

the new facilities and their discharges, and identify specific mitigation measures and a program of monitoring to ensure the mitigation measures are effective. Staff further recommended the District evaluate its proposed use of chlorine to disinfect WWTF effluent, as the District's source water already contains trihalomethanes above the maximum contaminant level. (JKW)

Draft Initial Study and Mitigated Negative Declaration, Woodcreek North Well Project, Placer County
On 29 August 2005, staff provided comments to a Draft Initial Study and Mitigated Negative Declaration for the City of Roseville's proposed Woodcreek North Well and Pump Station. The project consists of constructing a well to be used to obtain information on groundwater conditions to support future expansion and development of the City's Aquifer Storage and Recovery (ASR) Program. Because the ASR project involves the injection of treated surface or drinking water into an aquifer, staff noted that either Waste Discharge Requirements (WDRs) or a Resolution Order waiving WDRs must be adopted by the Regional Board prior to project initiation. (GJC)

Revised Draft Environmental Impact Report, Deer Creek Part 2, Nevada County
On 8 September 2005, staff provided comments to a Revised Draft Environmental Impact Report for a proposed subdivision approximately one mile east of Nevada City. The project consists of subdividing 580 acres of land into a residential subdivision consisting of 193 clustered lots ranging in size from approximately 0.5 acres to approximately two acres and one 422 acre lot for sustained timber harvest. The sewage generated from the development will be treated and disposed of by either individual septic tank/leachfield systems within each lot or alternatively, using individual septic tanks connected to a common leachfield. Staff indicated that the California Water Code requires the submittal of a Report of Waste Discharge (RWD) prior to the initiation of any discharge of wastewater. In addition, staff identified that an RWD must be submitted for individual onsite septic systems for any residential subdivision of over 100 single family equivalent units, and for any development where septic tank effluent is disposed to a community leachfield or common disposal systems. (GJC)

GRANTS & FUNDING

Integrated Regional Water Management Grant Program (Irwm) Update
The Integrated Regional Water Management (IRWM) Grant Program has two components, a Planning grant and an Implementation grant. The preliminary evaluation results for the Planning Grants were posted on the Department of Water Resources (DWR) and State Water Board websites on 16 September. A public meeting was held to accept comments on the evaluation results on 23 September. Public comments will be accepted until 30 September. After the public comment period, a recommended funding list will be developed and presented at the State Water Board Workshop on 5 October. Final approval of the grant awards by DWR and the State Water Board is expected on October 20, 2005.

Step 1 applications for the Implementation Grants were due 14 July 2005. Within Region 5 there were a total of 18 grant applications requesting over $372 million dollars in grant funding. Region 5 staff are participating as technical reviewers on eight implementation applications that focus on water quality issues. Funding amount requests for the eight applications being reviewed by staff range from $1.5 million to $49.9 million. Staff time to review these proposals is ranging from 10 to 24 hours depending on the complexity of the application. Following the technical reviews there will be DWR and State Water Board senior level, then management level reviews prior to the development of a call back list for the Step 2 full proposals. Call back for the Step 2 full proposals is expected in December 2005. (PDB)

2005-06 Consolidated Grants Program Update
Staff continues to work with the State Water Board's Division of Financial Assistance on the development of the 2005-06 Consolidated Grants Program. Staff are attending weekly meetings and reviewing and providing comments on drafts of the concept proposal questionnaire, concept proposal review criteria, and grant program guidelines.

Program Guidelines will be posted on the State Board website through November 2005 for public comment. Following the public comment period the program guidelines will be presented at the January 2006 State Board meeting for adoption. Once the program guidelines have been adopted the State Board will announce the request for Concept Proposals in January/February 2006. (PDB)

Dairy Water Quality Grant Program Update
The Dairy Water Quality Grant Program (DWQGP) is being administered through State Water Resources Control Board. There will be $5 million available on a competitive basis to public agencies, nonprofit organization, and dairy operators. The bulk of the available funding is expected to fund on-farm infrastructure projects that are designed to prevent or reduce dairy generated waste from entering surface or ground waters. Grant applications where due to State Board on 3 October 2005. Staff is working with State Board to review proposals within our Region. (PDB)

FUTURE BOARD ACTIVITIES

Future Board Activities
The following are significant Board meeting actions anticipated for the next few months. This is not a complete listing of all Board meeting items. This listing is tentative and subject to change for many reasons. The listing is intended to give a longer-range view of planned Regional Board activities.

December 2005

- Irrigated Lands Conditional Waiver Program Adoption Hearing
- Irrigated Lands De Minimis Waiver Information Item
- Delta Methylmercury TMDL Workshop
- Enforcement
    - Hilmar Cheese New WDRs and C&D, Merced County
    - Humboldt Road Burn Dump ACL Hearing, Butte County
    - Jesse M. Lange Distributors ACL Settlement Order, Butte County
    - Linkside Place ACL Hearing, Butte County
    - Malaga CSD MMP, Fresno County
    - Rancho Murietta C&D Order, Sacramento County
    - Sacramento Rendering WDR and C&D, Sacramento County
- Permits/WDRs/Water Quality Certifications
    - Brentwood Wastewater Treatment Plant, Contra Costa County
    - Cedar Ridge, Amador County
    - Dark Horse WWTP, Nevada County
    - French Camp Recreational Vehicle Park, San Joaquin County
    - Glenn Oaks Mobile Home Park, Placer County
    - Hidden Valley Sand & Gravel, Lake County
    - Manteca Pretreatment Program Approval, San Joaquin County
    - Port of Stockton Dredging WQ Certification, San Joaquin County
    - Saddle Creek Golf Course, Calaveras County
    - Stanislaus County Reuse of Sold Food Processing Waste Waiver
    - Steele Canyon Landfill, Napa County
    - Tracy Wastewater Treatment Plant NPDES Permit, San Joaquin Co

January 2006

- San Joaquin River Salinity Standards Workshop
- Permits/WDRs
- Barrel 10 Winery, San Joaquin County
- City of Angles WWTP,
- Euhlers Estate Winery, San Joaquin County
- Turlock WWTP, Stanislaus County
- Union Mine Landfill, El Dorado County
- Union Mine Septage Disposal, El Dorado County
- Vacaville Easterly WWTP, Solano County

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Thomas R. Pinkos
Executive Officer
20/21 October 2005

Addenda that follow:

1. Completed Site Cleanups (UST)
2. Public Outreach
3. Irrigated Lands Conditional Waiver Program

Addendum 1

COMPLETED SITE CLEANUPS

No Further Action Required - Underground Storage Tanks (UST)
Following are sites where Board staff determined that investigation and remediation work may be discontinued and that no further action is required. Further, any residual hydrocarbons remaining do not pose a threat to human health and safety or anticipated future beneficial uses of water. This determination is based on site-specific information provided by the responsible party, and that the information provided was accurate and representative of site conditions. Article 11, Division 3, Chapter 16, Title 23 of the California Code of Regulations requires public notification when the Board determines that corrective actions have been completed and that no further action is required at a leaking underground storage tank site. This document serves to provide public notification.

For more information regarding a site, the appropriate office personnel should be contacted: Fresno (559) 445-5116, Redding (530) 224-4845, and Sacramento (916) 464-3291.

SACRAMENTO OFFICE
Amador County
Sutter Creek Fire Station, 11600 Highway 49, Cleanup And Abatement Order 5-01-712, Sutter Creek - In August 1997, Two Underground Storage Tanks (USTs) one 1,000-gallon gasoline, and one 500-gallon diesel were removed. After an investigation, minor groundwater pollution has been identified in the former UST basin although the extent of fuel hydrocarbons appears to be limited to the immediate area around the former USTs. There are no domestic wells within 2000 feet of the site. Any minimal amounts of residual fuel hydrocarbons remaining in the shallow subsurface is unlikely to pose any significant threat to water quality, public health, or the environment or hamper any anticipated future beneficial use of water. (KTL)

Sutter County
Bulkley Property, 5001 Ensley Road, Knights Landing - In April 1995 two underground gasoline storage tanks (UST), and their ancillary piping and dispenser, were removed from the site. During removal, odors and staining were noted on the northeast wall at approximately 7 feet bgs in the open excavation. Soil samples from the visually impacted zone confirmed an unauthorized release. The pit was overexcavated to a depth of approximately 10 -12 feet bgs. Additional soil and groundwater sampling conducted in 1995 and 2005 in and around the former UST pit resulted in all samples being non-detect for all analytes. The nearby domestic supply well was sampled and found not impacted. Excavated soil was aerated and approved for reuse on-site. This site does not pose a threat to human health and safety or to water quality. (JIM)

Rouse Estate, 10980 Garden Highway, Yuba City - This site is an agricultural site bounded by prune and walnut orchards. In June 1998 one 550-gallon gasoline underground storage tank (UST) and fuel dispenser was removed from the site. One soil sample and groundwater sample were collected from within the excavation. Analysis of the soil sample identified TPH-g at 14,000 mg/kg, benzene at 26 mg/kg, toluene at 530 mg/kg, ethylbenzene at 200 mg/kg, and total xylenes at 1600 mg/kg. Analysis of the groundwater sample identified TPH-g at 17,000 ug/l, benzene at 49 ug/l, toluene at 30 ug/l, total xylenes at 3,500 ug/l, and MTBE at 5.9 ug/l. In June 2004 six soil borings were advanced approximately five feet below ground surface (bgs) within and adjacent to the former UST excavation. Groundwater samples collected from all six borings indicated no impacts to groundwater beneath the site from previously identified constituents of concern (COCs). No groundwater monitoring wells were installed at this site. On 17 June 2005, the on-site domestic water well was sampled and analyzed for COCs. Analytical data indicated no COCs in the sample from the well. The source of the contamination and majority of impacted soil was removed between 1998 and 2000. Multiple sampling events have indicated that the residual contamination continues to degrade by natural attenuation. This site poses no threat to human health and safety or water quality. (BK)

Yolo County
Former Exxon No. 7-3948, 900 Jefferson Boulevard, (Formerly, 901 Park Boulevard), West Sacramento - A service station was built on site in 1966. In July 1986 the gasoline USTs and a used oil UST were removed from the site and the station demolished. No petroleum hydrocarbons were detected beneath the former used oil UST, but gasoline hydrocarbons were detected in water at the bottom of the former gasoline USTs pit. Six monitoring wells were installed in 1986 through 1988, but quarterly groundwater sampling showed the gasoline hydrocarbons detected at the bottom of the USTs pit was from a small spill during the USTs removal. In our 22 December 1989 letter to Exxon, RWQCB staff concurred with Yolo County Environmental Health Services that closure of the site was appropriate. During a September 2004 site visit, wellheads were observed on the property and we requested ExxonMobil to sample the wells. Groundwater sampling confirmed earlier results and the wells were destroyed in May 2005. A No Further Action Required letter was issued 23 August 2005. (DFS)

Local Agency UST Closures with Concurrence of Board Staff Review

Sacramento County
Horning Property, 9020 Elk Grove Blvd, Elk Grove
Stop and Shop, 3907 Stockton Blvd, Sacramento
Caltrans Fruitridge Maintenance Station, 5521 34th Street, Sacramento

San Joaquin County
Keith's Chevron, 25651 N. Hwy 99, Acampo

Stanislaus County
Bondander Pontiac, 300 Golden State Blvd, Turlock
Chevron #9-0883, 815 Kansas Ave, Modesto
Empire Liquors, 5018 Yosemite Ave, Empire

Local Agency UST Closures Independent of Board Staff Review

Madera County
Lucky Seven Mini Mart, 37019 Ave 12, Madera

PUBLIC OUTREACH

Addendum 2

On 17 August, Karen Larsen and Dan Little, along with CALFED representatives attended a boat tour of the Sac San Joaquin Delta with Contra Costa County Public Works staff. The purpose was to observe the County's work on their Prop 13 grant. The grant implements recreational and boating marina programs to enhance and protect the Delta water quality. The scope of work includes a monitoring program, a public education and outreach program, and marina pilot program to implement best management practices.

On 22 August, Guy Chetelat attended the Butte County RCD capacity building and watersheds strategy meeting in Oroville.

On 25 August, Karen Larsen attended an internal agency meeting to discuss comments on the Department of Water Resources (DWR) draft Pelagic Organism Decline Action Plan. Agencies that participated in the meeting include the DWR, the California Bay-Delta Authority, the Department of Fish and Game, and the US Fish and Wildlife Service. The Action Plan describes current and planned activities the agencies are conducting to address the pelagic organism decline in the Delta and will be submitted to the Governor once it is final.

On 1 September, Guy Chetelat participated in a technical advisory meeting for the Churn and Stillwater Watersheds Assessment (Prop 13 funded) in Redding.

On 7 and 8 September, Karen Larsen and Stephanie Fong made presentations at the Sacramento River Watershed Program and Water Board Surface Water Ambient Monitoring Program's (SWAMP) monitoring, quality assurance, and data management training. Participants in the training learned about developing monitoring plans, SWAMP compatible quality assurance project plans, and SWAMP data management.

On 7 September, Dennis Heiman attended the bimonthly meeting of the Board of Directors of the Sacramento River Watershed Program.

On 9 September, Guy Chetelat participated in the Chico Urban Streams Alliance (Prop 13 funded) meeting in Chico.

On 9 September Chris Foe and Karen Larsen attended the Delta Pelagic Organism Decline contaminants work team meeting. The group discussed current work on contaminants in the Delta and the development of white papers describing contaminant issues including pyrethroid insecticides, aquatic herbicides, and Microcystis algae blooms.

On 12 September, Dennis Heiman attended the monthly meeting of the Feather River CRM Management Committee.

On 12 September, Robert Holmes attended a site visit and tour of the North Yuba Watershed Abandoned Mine Reclamation and Restoration Project near Downieville. A CalFed Watershed grant was awarded to Sierra County to reclaim and restore abandoned mine sites that have potential water quality issues in the North Yuba watershed.

On 13 September, Dennis Heiman, participated in the Interagency Watershed Advisory Team which is advisory to the CALFED Watershed Program.

On 13 September, Karen Larsen and Holly Grover attended the Central Valley Drinking Water Policy Workgroup meeting to discuss organic carbon and nutrients conceptual modeling. Representatives attending include CBDA, California Urban Water Agencies, Metropolitan Water District, and consultants.

On 14 September, Marty Hartzell presented the revised Conditional Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities to Professional Foresters at a California Licensed Foresters Association breakfast meeting in Auburn. The presentation included an update to the Timber Harvest Waiver approved by the Board on 28 April 2005 and a review of monitoring requirements for all timber harvesting operations conducted in 2005 and future years.

On 14 September, Guy Chetelat participated in the Churn and Stillwater watersheds stakeholder meeting in Anderson.

On 15 September, Dannas Berchtold gave a presentation at a construction pre-wet season workshop sponsored by the City of Lincoln and Placer County Resource Conservation District. The class was held in the City of Lincoln and covered construction storm water best management practices, erosion and sediment control implementation, enforcement, and emerging storm water issues affecting the development industry.

On 16 September, Dennis Heiman and Guy Chetelat attended the monthly meeting of the CALFED Watershed Program Subcommittee.

On 19 September, Rich Muhl in conjunction with the County of Sacramento presented a pre-season SWPPP training class to 40 contractors, builders, developers, consultants, and municipal staff from the southern Sacramento County area. The class covered enforcement, stormwater management emerging issues, the top 20 storm water management problems commonly observed on construction sites, hydromodification, and post construction BMPs.

On 20 September, Rich Muhl, in conjunction with the County of Sacramento presented a pre-season SWPPP training class to 100 contractors, builders, developers, consultants, and municipal staff from the northern Sacramento County area. The class covered enforcement, stormwater management emerging issues, the top 20 storm water management problems commonly observed on construction sites, hydromodification, and post construction BMPs.

On 21 September, Dannas Berchtold and Rich Muhl presented a SWPPP training class to 50 contractors, developers, municipal and county staff from Woodland, Davis, West Sacramento, Vacaville, UC Davis, and Yolo County. The class which was held in Davis covered enforcement, stormwater management emerging issues, the top 20 storm water management problems commonly observed on construction sites, Water Board expectations, hydromodification, and post construction BMPs.

On 21 September Lori Webber attended the Colusa County RCD's 2006 Environmental Quality Incentives Program (EQIP) Local Workgroup Meeting. The group discussed local ranking criteria and management practices for EQIP funded projects.

On 22 September, Rich Muhl presented a SWPPP training class to 45 superintendents and assistant-superintendents from Centex Homes northern California division. The class covered the top 20 storm water management problems commonly observed on construction sites, top 10 ways to stay out of trouble, and the Regional Boards expectations for effective storm water management on construction sites.

On 22 September, Dave Carlson gave a presentation on Mandatory Minimum Penalties at the general meeting of the Central Valley Clean Water Association held at the City of Yuba City's wastewater treatment facility.

On 22 September, Dannas Berchtold was a guest speaker at a City of Roseville construction inspectors meeting. Dannas discussed the coordination between City inspectors and Regional Board staff regarding Phase II construction program implementation and enforcement, and answered questions about emerging storm water issues affecting the development industry.

On 23 September, Jim Pedri participated in the annual Water Education Foundation Northern California Tour by presenting a discussion of water quality issues affecting the Sacramento River watershed with emphasis on the Iron Mountain mine and other abandoned mine cleanups.

On 23 September Karen Larsen attended the California Bay-Delta Authority Drinking Water Quality Subcommittee meeting. The meeting focused on regional planning directed at improving drinking water quality.

On 28 September, Richard McHenry and Amy Simpson met with collection system, wastewater treatment plant, and stormwater compliance staff for the City of Woodland at their request to discuss Regional Board and OES sanitary sewer overflow (SSO) response and reporting requirements. Prior to the meeting, City staff gave Regional Board staff a brief tour of the initial construction for tertiary filtration at the City's wastewater treatment facility.

On 28 September, Rich Muhl presented a SWPPP training class to 50 contractors, engineers, and County staff from both Calaveras and Amador Counties. The class held in the Murphys covered SWPPP requirements, common storm water management problems, storm water management BMPs, and Regional Board expectations.

On 28 September, Rich Muhl participated in a SWPPP training class sponsored by Thunder Mountain. The class was held in Stockton and was attended by 55 contractors, builders and agency staff. The class covered enforcement, storm water management emerging issues, the top 20 storm water management problems commonly observed on construction sites, Water Board expectations, hydromodification, and post construction BMPs.

On 28 September Karen Larsen met with the Central Valley Clean Water Association's special projects committee to discuss data needs for the Central Valley Drinking Water Policy.

On 28 September Holly Grover met with Roger Fujii, USGS, to discuss overviews of their current carbon projects and research in the Delta and Central Valley.

On 28 September, Dennis Heiman attended the CA Watershed Forum, which was held for the purpose of developing a statewide watershed strategy.

On 28 September, Jim Pedri met with concerned citizens in Plumas County to review installation of a new controversial water diversion on Jamison Creek.

On 29 September, Guy Chetelat participated in the Tehama County Westside Watersheds Enhancement (319 funded) technical advisory meeting in Red Bluff.

On 29 September, staff from the mercury TMDL unit held a public CEQA scoping meeting in Stockton. The purpose of the CEQA scoping meeting was to obtain public input regarding the possible significant environmental impacts from development of a Basin Plan amendment for the control of methylmercury and mercury in the Delta and its tributaries. The meeting provided participants an overview of the Delta methylmercury TMDL and potential alternatives for new objectives for mercury in fish tissue and alternatives to reduce methylmercury and mercury from sources such as NPDES and MS4 facilities and wetlands. The public was given the opportunity through various mechanisms (facilitated sessions during scoping and informal written comments) to provide feedback on the scope of the project (the Basin Plan amendment) and environmental impacts.

On 29 September Holly Grover attended CBDA's Central Valley Drinking Water Policy Monitoring Plan Development meeting. Items discussed include priority constituents, prioritized list of Delta monitoring, data needed to use DICU/DSM2 modeling, and regression equations.

Addendum 3

Irrigated Lands Conditional Waiver Program
October 2005

Proposed De Minimis Conditional Waiver

Over the past two years, rural counties, small growers and other interested parties have expressed a number of comments and concerns to Central Valley Water Board staff about their need to be involved in the Program due to their possible minimal threat to water quality. The current Program does not set a lower limit on the size or type of operation to which the requirements apply.

In 2003, staff began working on a draft of a De Minimis Conditional Waiver (formerly called Low Threat Waiver) to address operations that may have a minimal threat to water quality. However, Water Board staff did not have sufficient data or information to determine what types of operations pose a minimal threat, or what the eligibility criteria and conditions should be for such a Conditional Waiver. The information also was insufficient to support the required CEQA evaluation.

In 2005, Central Valley Water Board staff resumed work on the proposed De Minimis Conditional Waiver by holding listening sessions and planning several more with the agricultural community, County representatives, and other interested parties in different parts of the Central Valley Region to discuss ideas and issues that should be considered in the proposal. Staff met with representatives and interested parties from the Counties of Napa, Nevada, Plumas, Sierra, and El Dorado, the Pit River and Goose Lake areas, and the Department of Fish and Game and other agencies and interested parties about managed wetlands. Staff still plans to meet with representatives in Amador, Placer, Lake, Calaveras, and Mariposa Counties. Staff has heard some good ideas during these meetings regarding possible eligibility criteria and waiver conditions.

Following is a list of criteria and conditions that have been proposed by interested parties, along with a brief description of each. Staff tentatively plans to circulate a De Minimis Conditional Waiver proposal for public comment in Winter 2005 and schedule an Information Item at a future Board Meeting.

Possible Criteria

- Crop type - For example, some vineyards have drip irrigation and cover crops that are grown between rows, as well as use management practices. There are training opportunities for vineyard owners/operators and collaborative efforts to take place amongst the vineyard operators. Similar situations might exist for other crop types.
- Irrigation practices - For example, the drip irrigation method results in very little evaporation or runoff, saving water by directing it more precisely. Other irrigation practices could result in efficient use of water and minimal runoff.
- Geographic area – Some counties or watershed areas have specific requirements that can minimize threats to water quality.
- Crop diversity - With low crop diversity in an area, specific well-established management practices are used to protect water quality and to limit chemical use.
- Chemical use - The information would come from the Agricultural Commissioners Pesticide Use Reports. With monoculture crops, chemicals may be used infrequently and not on a regular schedule, thus possibly reducing the potential threat to water quality.
- Growing season - The availability of water and the weather conditions of an area sometimes limit the growing season, thereby reducing the total volume of runoff during the irrigation season.

Possible Conditions

- Require Farms Plans to address water quality improvement and protection.
- Require implementation of management practices to protect water quality, such as vegetation strips, silt fences, hay bales, tailwater ponds and/or return systems, and others. Natural Resources Conservation Service's Conservation Plans implement conservation measures, evaluate sustainability, and make recommendations for stream restoration and farming practices, and may be expanded to more specifically address water quality issues. These plans would be required to be public information.
- Require training workshops for growers conducted by local Resource Conservation Districts, Agricultural Commissioners, University of California Cooperative Extension, Water Board staff and others.

Currently, staff is drafting criteria for what types of discharges should not be covered by a De Minimis Conditional Waiver and reviewing conditional waivers proposed or adopted by other Regional Water Boards that address lower threat or De Minimis agricultural discharges.

Environmental Impact Report
The contract was executed in July between the Central Valley Water Board and Jones and Stokes Associates (JSA). Data and information are being gathered for the Existing Conditions Report for surface water and groundwater. A meeting was held on 26 July 2005 to discuss the format for the Existing Conditions Report, and the contractor and its subcontractors are moving forward to complete this critical report. Staff met again with the JSA on 3 October 2005 to discuss the status of the draft Existing Condition Report, and delays in completing various sections of the report. It appears that the draft report may be delayed up to 6 weeks. Staff will continue to hold weekly communication meetings with JSA to ensure the contract requirements are being met in a timely manner. Subject to additional delays, the draft Existing Conditions Report will be available in late 2005 for public review, and several public meetings will be scheduled in different areas of the Central Valley Region to receive public comments. Public comments will then be reviewed and considered prior to finalizing the Existing Conditions Report. Once this report is completed, JSA will develop the draft long-term regulatory program for irrigated lands for public circulation and comment.

Memorandum of Understanding With Agricultural Commissioners of Butte and Glenn Counties
A MOU was signed on 29 June 2005 between the Central Valley Water Board, the State Water Board, the Department of Pesticide Regulation, the Glenn County Agricultural Commissioner, and the Butte County Agricultural Commissioner. The MOU is an agreement between the parties for the Agricultural Commissioners to perform activities to assist and support the Water Board's Program. The MOU specifies activities to be performed by a half of a staff person per year for the two-year pilot program. Draft contracts between the Central Valley Water Board and the Butte and Glenn Counties have been reviewed by all parties involved and transmitted to the State Water Board for funding and execution. Funding for these contracts was not provided by fees paid by growers in the Conditional Waiver Program, as directed by the State Water Board motion that adopted the Agricultural Waiver Fee Schedule and that directed staff to enter into the MOU. Draft copies of the contracts have also been transmitted to Butte and Glenn Counties for review and approval by their respective Boards of Supervisors.

Annual Monitoring Report Reviews

A. Introduction
The June 2005 Staff Informational Report for the Monitoring and Assessment Unit of the Irrigated Lands Conditional Waiver Program included a summary of the some of the findings from the preliminary review of the first Annual Monitoring Reports (Annual Reports), which were to have been submitted as of 1 April 2005. This October Information Report provides additional findings now that the Annual Report reviews are nearly completed.

Lead staff have been assigned to each coalition or water district so that they can focus on a smaller number of cases, and become more familiar with the details of the Coalition or Individual Monitoring and Reporting Program Plans (MRP Plans), the watershed(s) characteristics and the land uses within the boundaries of the coalition, the water district system, or the farm. Assignment of lead staff also affords the opportunity to promote a greater amount of direct communication and a cooperative process.

Some coalitions and water districts have further promoted this cooperative approach by inviting lead staff to tour their monitoring sites, boundaries and distribution systems. Tours that have taken place include Westside Water Quality Coalition, the South San Joaquin & Delta Water Quality Coalition, San Luis Water District Coalition and five Irrigation Districts that have filed as Individual Dischargers (Modesto, Turlock, Merced, Oakdale and South San Joaquin).

The tours that have been provided to lead staff, as well as consistent and prompt communications from Coalitions and individual dischargers are indicative of the cooperative approach that is so essential to the success of the Conditional Waiver Program as it currently exists. Central Valley Water Board staff have been completing the review of the Annual Reports since the summary was presented in the June 2005 Staff Informational Report. The results of the reviews document water quality problems that exist in water bodies monitored by all coalitions, and deficiencies to a greater or lesser extent in all Annual Reports. However, program successes are more likely to occur with those dischargers that remain engaged in cooperative communications with the Central Valley Water Board lead staff. Westside Water Quality Coalition is an example of an entity that does provide this attention to detail, efficient communication with lead staff, and appears to take a proactive approach in dealing with water quality problems with members of their Coalition and program staff.

The results from the first year of irrigated lands monitoring and the reviews of the Annual Reports have prompted the need for various changes in the 2003 Monitoring and Reporting Program (MRP). Some of these more urgent changes that affect monitoring and reporting protocol were made in the revised Coalition Group MRP, Order No. R5-2005-0833, issued 15 August 2005. The changes were largely clarifications for certain procedures that were considered to be the original intent of the 2003 MRP, such as timing and content of communications when water quality objectives are exceeded, when a toxicity test dilution series should be conducted, as well as re-sampling to determine persistence of the problem in the environment (sometimes referred to as duration). Order No. R5-2005-0833 also established an acceptable 'trigger' for Toxicity Identification Evaluation of sample that will help determine the cause of toxicity. All of these changes are part of what is being expected from the

Coalitions for current monitoring, and will be part of the review of the next monitoring reports that are due on 31 December 2005.

Reviews of the Annual Reports that were conducted by staff have been provided to the five water districts that have filed as Individual Dischargers. All Coalition groups have been mailed their completed Annual Report reviews, with the exception of Goose Lake Coalition, which will be discussed below.

B. General Comments on Annual Reports

Annual Reports were due on 1 April 2005, which is the end of storm water monitoring for some, and can be the beginning of irrigation season monitoring for others. This made it difficult for Coalitions to submit complete seasonal information, for the Central Valley Water Board lead staff to evaluate data effectively. In some cases, data from one storm event was submitted on 1 April 2005, but data from the other was not, due to the timing of the laboratory turn around on results and the ability of the coalitions to enter the data in the Annual Report. Future monitoring reports are required to be submitted semi-annually, which will eliminate this problem. Dormant season monitoring will be submitted on 30 June, and irrigation season monitoring on 31 December.

Ensuring some level of consistency across coalitions in the monitoring and reporting efforts is a reasonable objective to achieve the goal of understanding the effects of irrigated agriculture on the Central Valley Region as a whole.

One measure of consistency and effectiveness is the number irrigated acres per monitoring site. Caution is necessary in using these statistics, as differences caused by topography, sediment type, crop types, pesticide use, climate and other characteristics will also influence the number of monitoring sites necessary for effective watershed evaluations. For example, information from locations that consist of flat terrain, dry weather, and sandy soil may be effective from fewer monitoring sites than locations that have varied topography and heavy rainfall which promote higher runoff potential.

Number of Acres/Monitoring Site information for the Program is difficult for staff to evaluate, due to the fact that reports regarding the number of irrigated acres that is within each Coalition has been fluctuating, depending on a variety of factors. Nonetheless, there is value in providing a preliminary evaluation of this information with respect to the consistency and effectiveness of the coalition monitoring. Table 1 below provides a list of the number of irrigated acres per monitoring site for each, based on the best available information provided to Central Valley Water Board staff as of July 2005.

Table 1

Coalition Name	No. Monitoring Sites	Irrigated Acres	No. Acres/site
Southern San Joaquin WQC	16	4,400,000	275,000
Sacramento Valley WQC	14	2,145,000	153,214
Westlands Water District	4	600,000	150,000
East San Joaquin WQC	12	1,250,000	104,167
California Rice Commission*	5	500,000	100,000
San Joaquin Co. & Delta	12	558,575	46,548
Westside San Joaquin WQC	19	460,482	24,236
Root Creek Coalition	4	28,600	7,150
Goose Lake Coalition	Unknown	7,314	NA

*CRC samples 5 sites per year, although 6 sites are identified in MRP
Sacramento Valley site number is based on compliance sites only.

The information presented in this table indicates that there are significant differences in the number of monitoring sites per acres irrigated across coalitions. How much of this is a function of physical characteristics of the coalition area, and how much indicates a need to expand the individual monitoring program remains to be resolved. It is fair to assume, however, that this information does indicate the need to further evaluate the coalition MRP Plans, and that some modifications and adjustments are appropriate.

Monitoring results from the first Annual Reports from all coalitions also indicate areas that require follow-up based on results for toxicity and/or pesticides and other measurements in the water bodies. It is important that coalitions work closely with lead staff to determine the necessary changes including additional monitoring sites to their MRP Plans.

Finally, it is a requirement of the Conditional Waiver that all major drainages be part of baseline monitoring. At least 20% of the intermediate drainages must be monitored during the first year and the second 20% the second year, etc. However, the Central Valley Water Board has yet to receive any information that would indicate an effort to identify and monitor additional

drainages based on the 20%/year criteria. For this reason, a request for a list that identifies these drainages has been made in some of the Annual Report review letters to the coalitions. This is one of the main reasons why staff is proposing that Coalition Groups develop with direct consultation with staff watershed specific long term monitoring strategies for the next 5 to 10 years.

C. Coalition Group Annual Report Summaries

Westside Water Quality Coalition

The Westside Coalition's Annual Report was submitted timely, under appropriate cover letter and with all of the major required components. Central Valley Water Board staff acknowledge that the Westside Coalition has been cooperative in implementing the monitoring program, and proactive in identifying water quality issues, possible solutions and management practices, and program issues that may require clarification or improvement.

There are some concerns and recommendations noted in the staff review of the Annual Report such as incomplete monitoring for all 303(d) constituents, lowering of laboratory quantitation limits, and the need to submit a report for exceedances of all water quality parameters.

The Westside Coalition has continued to monitor the same 19 locations identified in their MRP Plan and Annual Report. Additional monitoring from other Central Valley Water Board programs, such as the UC Davis Phase II investigation and the Surface Water Ambient Monitoring Program (SWAMP) have taken place within the Westside Coalition boundaries. Information from all three monitoring efforts provides evidence of several serious water quality problems associated with sediment, pesticides, bacteriological parameters as well as general toxicity.

The Westside Coalition has been provided with the monitoring results from the UC Davis and SWAMP programs to supplement their coalition monitoring information, and they have notified Central Valley Water Board staff that they are in the process of evaluating activities to address the indicated water quality problems.

Staff believes that the Westside Coalition is a good example of a functional coalition, in that they have provided monitoring information sufficient to adequately evaluate watershed conditions, water quality issues, the potential impacts from agricultural discharges and current and potential coalition-implemented practices that may improve water quality. The fact that implementation strategies are underway for water quality improvement related to specifically identified problems, suggests that the coalition approach for the Conditional Waiver Program has a substantial chance of measured success.

San Joaquin & Delta Water Quality Coalition

The San Joaquin & Delta Water Quality Coalition (SJ&D Coalition) submitted their Annual Report on the required date of 1 April 2005. Staff review of the Annual Report indicates that the SJ&D Coalition has fulfilled the requirements for the first year monitoring with some exceptions. Not all of the appropriate documentation was included in the report such as raw data sheets for toxicity and bacteriological analyses, and communication reports need to be submitted for all water quality exceedances, include pH, DO, coliform and pesticides that have associated Basin Plan Objectives.

Monitoring and reporting aspects meet the requirements of the MRP to a large extent, but it is time to begin the appropriate follow-up where water quality objectives have been exceeded. Follow-up did occur with respect to resampling, but other aspects of identifying the source of the problem(s) and implementing management practices have not occurred – or at least have not been reported by the SJ&D Coalition.

Staff has also recommended that the SJ&D Coalition pursue source identification and follow-up monitoring for the Mokelumne River at Bruella Road monitoring site, which had indicated multiple instances of toxicity during irrigation and storm season monitoring. The Central Valley Water Board's UCD Phase II study has nine monitoring sites within the SJ&D Coalition boundaries two of which have resulted in detections of pesticides at toxic levels and multiple instances of detectable pesticides. Reports for toxicity and pesticides from the UCD study have been provided to the SJ&D Coalition. The SJ&D Coalition will need to report on specific approaches that will identify sources and resolve problems identified through both the coalition and the UCD monitoring efforts.

East San Joaquin Water Quality Coalition

The East San Joaquin Water Quality Coalition (ESJ Coalition) submitted their Annual Report on the required date of 1 April 2005. Staff review of the Annual Report indicates that the ESJ Coalition has fulfilled the requirements for the first year monitoring and analytical reporting with some administrative exceptions. These exceptions include the submittal of raw data sheets for some analyses, quality control sampling at the required frequency, and communication reports for exceedances of water quality objectives beyond toxicity.

Monitoring and reporting aspects meet the Conditional Waiver requirements of the MRP to a large extent, although the ESJ Coalition will need to begin source identification, management practice implementation and other appropriate follow-up where water quality objectives have been exceeded.

Central Valley Water Board staff has recommended that the ESJ Coalition pursue source identification and follow-up monitoring for three of their monitoring sites, which have multiple instances of toxicity as well as exceedances of pesticides, solids and bacteriological parameters during the 2004 irrigation season. The Central Valley Water Board's UCD Phase II study has two monitoring sites within the ESJ Coalition boundaries. Reports for toxicity from the UCD study have been provided to the ESJ Coalition. The ESJ Coalition will need to report on specific approaches that will identify sources and resolve problems identified through both the coalition and the UCD monitoring efforts.

California Rice Commission

California Rice Commission (Rice Coalition) is unique in that it is the only single-commodity coalition, and it complies under a rice-specific MRP approved by the Central Valley Water Board as Order No. R5-2004-0839. Some of the Rice Coalition monitoring and reporting requirements, and therefore some of the Annual Report review information, is slightly different than that of the other coalitions. For example, the Rice Coalition is required to submit a monitoring report once per year on 31 December, although their first annual report was submitted on 1 April 2005. Other differences include that the Rice Coalition monitors two non-irrigation season events rather than during storm events as do other coalitions; it conducts edge-of-field studies, and; it is not required to monitor additional drainages at a rate of 20% per year. Rice Coalition does have six established monitoring sites, five of which are monitored each year.

The basis for non-irrigation season rather than storm event monitoring is based on the premise that the rice fields in the Sacramento Valley hold rainwater during the winter. Non-irrigation season monitoring is conducted in October when fields are flooded and in February/March when rice fields are drained at the end of winter. Another distinction from the Coalition MRP is that a significant component of the Rice Coalition's monitoring focuses on edge of field studies funded through a Proposition 50 Calfed Drinking Water grant. The edge-of-field studies are looking at a variety of constituents, such as organic carbon, nutrients, sediment and *E.Coli*. The advantage to edge of field monitoring is that it will more quickly determine the amount of these constituents contributed by a typical rice field in comparison with intermediate or major drainages, which likely would have contributions from a variety of land uses and crop types.

Communications with the Rice Coalition are frequent and their prompt response is appreciated by Central Valley Water Board staff. In general, the Rice Coalition is quick to respond to concerns that are raised by staff for requirements such as Communication Reports when toxicity occurs. However, the Rice Coalition has yet to implement consistent reporting when exceedances of other water quality objectives occur.

In June 2005, Regional Board staff met with the Coalition to discuss the preliminary findings of the Annual Report, and the meeting included a discussion regarding the necessity of collecting sufficient sample to conduct a toxicity identification evaluation and dilutions series on samples that indicate toxicity at the trigger levels. To date, the Coalition has not complied with this, and a meeting is scheduled for the first week in October to discuss this matter with them again.

Southern San Joaquin Valley Water Quality Coalition

The June 2005 Staff Information Report indicated that the Southern San Joaquin Valley Water Quality Coalition (SSJV Coalition) submitted four separate Annual Reports (one for each sub-watershed) on 1 April 2005.

It is worth repeating that four separate and distinct Annual Reports for each Sub watershed was submitted and that the SSJ Coalition seems to function largely as four separate coalitions in many respects. The commonalities for the four Sub watersheds are that they all are tributaries to the Tulare Lake Basin, and represent a relatively contiguous geographical area in the Region. However, the differences in the way that the sub watersheds are managed have made it necessary for Central Valley Water Board staff to conduct four separate reviews, and to hold four separate meetings with each group in order to discuss their reports. It would greatly streamline the communications with the SSJV Coalition, and ensure consistency of monitoring performance if the four sub watersheds could unify their monitoring and reporting process.

The four sub watersheds in the SSJV Coalition are the Kern River, the Kaweah River, the Kings River and Tulare River sub-watersheds, and in the spirit of unifying the assessment of the data, the following can be said about all four sub watershed Annual Reports:

The SSJV Coalition Annual Report submittals were timely, data was well organized, and the submittal of multiple copies of each sub watershed report helped facilitate efficient review by Central Valley Water Board staff in the absence of electronic submittals. The Central Valley Water Board staff reviews of the Annual Reports indicates that not all of the appropriate documentation was included in the reports, including detail maps with the features identified in the Conditional Waiver MRP, pesticide use information, completed chain of custody forms, and communication reports when water quality objectives were

exceeded. Other missing information that relate to one or more of the sub watersheds include missing GPS coordinates for monitoring sites, missing field sheets, laboratory reports, raw data sheets for some analyses, insufficient quality control sample collection, and quantitation limits from the laboratories that need to be lowered.

In some cases, sub-watershed coalitions are going to need to provide documentation that there is an absence of runoff during storm events, especially under the conditions that occurred in 2005 with average runoff exceeding 200% for the month of January alone in certain locations. This documentation can be in the form of flow gauge measurements, field notes in monitoring staff log books, or photo documentation.

The Central Valley Water Board's UCD Phase II study has several monitoring sites within the SSJV Coalition boundaries. Reports for toxicity from the UCD study have been provided to the SSJV Coalition. The SSJV Coalition will need to report on specific approaches that will identify sources and resolve problems identified through the SSJV Coalition, the Central Valley Water Board SWAMP, and the UCD monitoring efforts.

Sacramento Valley Water Quality Coalition

The Annual Report from the Sacramento Valley Water Quality Coalition (Sac Coalition) was submitted on the required date of 1 April 2005. Central Valley Water Board staff appreciates the complicated process for producing an Annual Report for a coalition the size of Sac Coalition, and it is important to acknowledge the timeliness of the report submittal.

The staff review of all 2004 Annual Reports has been thorough, and review of the Sac Coalition report was particularly time-consuming due to a number of factors. These include the fact that the Sac Coalition had only a Conditionally-approved MRP Plan, and not all the documents for final approval had been completed as required. The Sac Coalition included monitoring data from a number of supplemental sites listed in their MRP Plan, but also added data from a few additional sites, the identification for which remains unclear. Some of the data were tabulated, and some were found only in the appendices of the report. Other documentation that is supportive of laboratory data review was missing in many cases, such as field logs, laboratory data sheets, raw data sheets for all supplemental sites and chain of custody for two compliance sites. Different monitoring parameters were used for different monitoring sites, and there were several 303(d) listed water bodies for which some of the 303(d) listed contaminants were not monitored, which is a requirement of the Conditional Waiver MRP.

The Sac Coalition will need to change their approach for conducting toxicity identification, follow-up monitoring, submittal of exceedances reports, quality control sample collection/documentation, and will need to provide various documents that have been identified for them in the Annual Report review letter from the Central Valley Water Board.

The completeness of monitoring with respect to the Sac Coalition size is a concern. Although only two other coalitions have more compliance monitoring sites than Sac Coalition, the number of acres represented per compliance monitoring site is about six times greater than Westside Coalition, for example. The variations in watershed characteristics that exist with the Sac Coalition boundary as compared to the Westside Coalition suggests that a much lower ratio of acres per monitoring site is warranted. The Central Valley Water Board staff has asked the Sac Coalition to continue monitoring at eleven of their supplemental monitoring sites, and to conduct the necessary activities to identify sources of toxicity at three of their compliance sites.

The Central Valley Water Board's Phase II monitoring study that is being conducted by UC Davis has several monitoring sites within the Sac Coalition boundaries. Results that indicate toxicity in these monitoring locations have been provided to the Sac Coalition. The data that comes both from the Sac Coalition monitoring and the Phase II monitoring indicate the existence of several serious water quality problems associated with toxicity, pesticides, bacteriological parameters and general water quality parameters such as dissolved oxygen and conductivity. The Sac Coalition will need to report on specific approaches that will identify sources and resolve these problems.

Root Creek Watershed Coalition

The Annual Report submitted on 1 April 2005 by Root Creek Watershed Coalition (RC Coalition) was 'provisional', as described in the June Staff Information Report. The 'provisional' designation was an apparent indication of 'incompleteness' although the final version submitted on 23 June 2005 was still missing substantive material. Documents that were missing from the RC Coalition Annual Report include complete chain of custody forms, pesticide use information, and results for storm water sediment monitoring.

The RC Coalition did conduct some toxicity monitoring, although there was no follow-up when toxicity occurred, such as re-sampling, toxicity identification or dilution series. Other analyses were simply missing, including sediment toxicity. The Coalition also needs to collect sufficient sample with each sampling event, in order to run a dilution series and/or a toxicity identification on the very same sample aliquot if sufficient toxicity is indicated.

Another concern is that the RC Coalition uses a trigger of three consecutive days of rainfall before it will conduct storm water monitoring. This creates a situation where the necessity for any storm water monitoring may not occur at all. Staff have requested that a new trigger be developed and proposed.

The RC Coalition monitored at four sites during the first storm season, although two of them were 'background' samples that are not affected by irrigation practices within the Coalition Boundary. The RC Coalition would like to discontinue monitoring at these sites, which will cut their monitoring by 50%. Central Valley Water Board staff agrees that monitoring at these two 'background sites' is not appropriate, although identification of different monitoring sites may be necessary.

Westlands Discharge Coalition

The June Staff Information Report did not provide a preliminary review for the Westlands Discharge Coalition (WD Coalition) because their Annual Report had not yet been submitted. Although the report was three months late, it was nonetheless missing information. These included pesticide use information, field and laboratory monitoring documentation such as chain of custody, field logs, laboratory reports, etc. The WD Coalition also failed to monitor for many significant parameters, including toxicity of both water column and sediment, and other general parameters required by the Conditional Waiver MRP.

Staff also have concerns regarding the trigger that the WD Coalition uses for storm water monitoring, which is three days of rainfall before sampling will be initiated. Consistent rainfall for three days straight seldom occurs in the WD Coalition area, making it almost unnecessary for the WD Coalition to conduct storm water monitoring. Staff have requested that a new trigger be developed and proposed.

There are multiple compliance issues manifested in the monitoring and reporting conducted (or lack thereof) by the WD Coalition that need to be addressed. Information available to the Central Valley Water Board indicates that the Westlands Water District did not function as required during the first year of monitoring. The WD Coalition has indicated that the lack of monitoring that occurred during the first year was a result of prolonged health issues of its lead staff person who had no backup during the first year. The WD Coalition has indicated this problem has been corrected and will not occur again.

Goose Lake Coalition

The June staff report provided information that Goose Lake Coalition received a Notice of Applicability from the Central Valley Water Board on 14 April 2005 and their designated submittal dates of an MRP Plan on 15 April 2005, and Annual Report on 1 June 2005 had not been met. To date, these documents have not been received. The Goose Lake Coalition reportedly hired a staff person in July 2005 to be responsible for day-to-day communications with the Central Valley Water Board and development of all plans and reports. As a result, communications with the Goose Lake Coalition are more prompt. However, the potential for Goose Lake to function as a viable Coalition with a sufficient funding mechanism remains questionable, and firm commitments for submittal of required reports has not occurred.

On 10 August 2005, the Coalition did send a letter to the Regional Board Executive Officer that stated that they "did not know how long it will take to develop the MRP Plan, but that they would 'ask' staff to submit the plan by 31 December 2005." There were no estimates made for the timing of a subsequent monitoring report. Staff is considering various alternatives regarding Goose Lake, which might include discontinuation of the Coalition's NOA, and transmittal of 13267 letters to all irrigated lands owners and operators in the Goose Lake watershed.

D. Individual Discharger Annual Report Summaries

Five individual dischargers were the only ones that were required to submit Annual Reports by the 1 April 2005 date. These individual dischargers are all irrigation districts, including Modesto, Turlock, Merced, Oakdale and South San Joaquin (Districts). All five Districts had previously submitted a Monitoring and Reporting Program Plan, and other documents required for compliance with the Conditional Waiver for Individual Dischargers, including the Annual Report that arrived on or before the required submittal date.

A Central Valley Water Board staff member has been assigned to the Districts, similar to the lead staff assignments to the coalitions. In this way, the staff member can develop familiarity and expertise with the District's systems and promote a cooperative approach to program compliance. The review of the five Annual Reports has been completed and draft comments have been provided to Districts. In some cases, Central Valley Water Board meetings were held to discuss the findings. It is anticipated that the final review will be provided to the Districts by mid October.

The Districts have been very cooperative and have extended the opportunity for Central Valley Water Board staff to visit their facilities and to gain familiarity with their systems. Although some minor improvements can be made to monitoring and reporting procedures, the Districts are generally compliant with the MRP Plans that they submitted to the Central Valley Water Board for approval.

The Central Valley Water Board has concerns about the applicability of the Conditional Waiver MRP for Individual Dischargers to water districts, and is in the process of developing a water-district specific MRP. For this reason, the MRP Plans submitted by the Districts have not yet been approved, and reviews of their Annual Reports should be considered to be indicative of their performance only for the circumstances under which they were monitoring.

The San Joaquin River Group Authority (represented by the five Districts) has been awarded funding from Proposition 13 Nonpoint Source Pollution Control Grant Program called the East San Joaquin Water Quality Framework. The monitoring for this project includes 48 water quality monitoring sites throughout the Districts' systems. Monitoring parameters will include the constituents that are required by the MRP for Individual Dischargers as well as for coalitions including toxicity, pesticides, nutrients and general water quality parameters. This is a proactive approach that the Districts have taken that will help them manage any additional monitoring requirements that may be the result of a water-district specific MRP for the Conditional Waiver Program.

E. Summary

Although the summaries regarding the Annual Reports do indicate that there are significant differences in the performance and reporting issues of the different coalitions, it should be noted that the effort to submit the report in a timely fashion did occur for most. There are real examples of good performance from some coalitions that indicate that there is potential for success with the coalition approach for the Conditional Waiver Program. However, the fact that there are problems with compliance means that significant effort on the part of staff will be necessary for some time – either to work in a diligent fashion to bring the coalitions up to the monitoring and reporting standards, or to work through the compliance issues and through various levels of enforcement.

Conditional Waiver Program monitoring results from coalitions and individual dischargers has provided evidence of serious water quality concerns related to irrigated lands, making tracking of sources and implementation of management practices necessary in many areas throughout the Central Valley Region. Central Valley Water Board staff is beginning to take into account all available monitoring data from the Coalition Groups, individual dischargers as well as, UCD Phase I and II studies, the Surface Water Ambient Monitoring Program and TMDL Programs for their continuing assessment of the impacts of irrigated lands on water quality. Critical information will include changes over time in water quality that may occur with implementation of management practices by coalition groups or individual dischargers. Development of this type of comprehensive assessment of the effectiveness of the coalition approach for the Program will continue to consume the majority of staff resources. Additional staff resources are vital to ensure valid performance measures can be assessed to determine the effectiveness of the program.

II. Investigation Of Water Quality In Agricultural Drains – Status Report

The Phase II conducted for the Central Valley Water Board by UC Davis John Muir Institute and the State Department of Fish and Game is continuing. The study will include data from sample locations throughout the Central Valley Region from two irrigation seasons (2004 and 2005), and from two storm seasons (2004/05 and 2005/06). The study includes three-species testing for water column toxicity using fathead minnow (*Pimphales promelas*), the arthropod *Ceriodaphnia dubia* and the green algae *Selenastrum capricornutum*, and also includes sediment toxicity testing using the species *Hyalella azteca*. Additionally, toxicity identification evaluations (TIEs) for samples exhibiting toxicity and a comprehensive suite of chemical analyses are being conducted. Sampling began in July 2004 (first irrigation season), continued with storm season samples collected in December 2004 and January 2005, and continued during the 2005 irrigation season with samples collected from June through August. Sample locations have included sites in 15 different counties and six Coalition areas. Sampling will continue during storm events in winter of 2005/2006.

During irrigation season sampling, sites were sampled at two-week intervals, up to five times each. During storm sampling, sites were sampled up to three times a day during rain events. To date, 262 samples have been analyzed for water column toxicity from 60 locations. Of these, four samples were marginally toxic to fathead minnows (not enough to perform TIE; 20% mortality was the highest observed), and 26 samples (10%) were significantly toxic to Ceriodaphnia. Toxicity to algae (significantly reduced growth) was observed in about 30% of the samples from the 2004 irrigation season and 2004/2005 storm season. Algae toxicity results from the 2005 irrigation season have not been completely compiled.

In 25 of the 26 samples that were toxic to Ceriodaphnia to date, organophosphate pesticides were determined to be the primary cause of toxicity. This was determined through TIEs, chemical analysis, and the use of available LC50 data for Ceriodaphnia. It is important to note that just 8 organophosphate insecticides and 2 carbamate insecticides, alone or in combination, seem to have accounted for virtually all the toxicity to Ceriodaphnia observed in the study so far. These compounds are the organophosphates Chlorpyrifos, Diazinon, Dimethoate, Disulfoton, Malathion, Dichlorvos, Parathion-methyl, and Azinphos-methyl, and the carbamates Methomyl and Carbaryl. The study suggests that adequate control of this relatively small group of products would greatly reduce or possibly eliminate toxicity to the test species in field samples.

The toxicity results for algae are more difficult to interpret, and analysis of these results will continue. Test samples often exhibit enhanced growth when compared to control samples. Significantly reduced growth indicates the presence of a toxicant, and grossly toxic samples (e.g. 97% reduced growth) were subjected to TIEs. Grossly toxic samples were often characterized by the presence of herbicides, such as Diuron or Simazine, but the presence of herbicides, alone or in combination, along with the presence of abundant nutrients (phophorus and nitrogen-containing compounds) and their effects on algal growth deserves additional study.

Ninety-four samples have been analyzed for sediment toxicity, and 19 (20%) caused significant mortality to Hyalella. Chemical analysis and further research has determined that the pyrethroid insecticides Esfenvalerate, Bifenthrin, lambda-Cyhalothrin, and Cypermethrin are the primary causes of toxicity in all of the samples observed to be toxic to Hyalella in the study to date. Pyrethroids adhere strongly to particulate matter and are seldom detected in the water column, but have been detected frequently in sediments from agricultural drains.

Several pesticides were frequently detected in water samples; examples include: Chlorpyrifos (37% of irrigation samples, 40% of storm samples), Diazinon (16% of irrigation samples, 70% storm of storm samples), diuron (18% of irrigation samples), simazine (65% of storm samples, 3 % of irrigation samples). Results for some general chemistry parameters such as pH, electrical conductivity, dissolved solids and turbidity sometimes exceeded water quality objectives, but were not associated with toxic samples. Further analysis of the general chemistry and metals concentrations of samples will be included in forthcoming reports from UC Davis. Additionally, the spatial distribution of samples with detected pesticides will be compared to pesticide use patterns, to gain an understanding of the correlation between pesticide use and the presence of pesticides in runoff, on a regional basis.

Two quarterly status reports detailing the results of analysis are currently on the Irrigated Lands website. 2005 irrigation season sampling is now complete, and evaluation of all the data is continuing. When this evaluation is completed the results will be post on the Program's website. As additional status reports from UC Davis are received quarterly, the information will be posted to the Program's website.