STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF OCTOBER 21, 2005

Prepared on September 20, 2005

ITEM NUMBER: 23

SUBJECT: Executive Officer's Report to the Board

Brief discussion of some items of interest to the Board follows. Upon request, staff can provide more detailed information about any particular item.

WATER QUALITY CERTIFICATIONS

[Sandy Cheek 805/542-4633]

In general, staff recommends "Standard Certification" when the applicant proposes adequate mitigation. Measures included in the application must assure that beneficial uses will be protected, and water quality standards will be met.

Conditional Certification is appropriate when a project may adversely impact surface water quality. Conditions allow the project to proceed under an Army Corps permit, while upholding water quality standards.

Staff will recommend "No Action" when no discharge or adverse impacts are expected. Generally, a project must provide beneficial use and habitat enhancement for no action to be taken by the Regional Board. A chart on the following pages lists applications received from August 1, 2005 to August 31, 2005.

WATER QUALITY CERTIFICATION APPLICATIONS RECEIVED FROM AUGUST 1, 2005 THROUGH AUGUST 31, 2005

Applicant	Project	Purpose	Location	County	Receiving Water	Received	Action
City of San Luis Obispo Utilities Department	400 Brizzolara - Ditch Bank Repair and Sanitary Sewer Protection	Remove unauthorized fill material, repair ditch bank over sewer main, and stabilize disturbed soil with filter fabric, riprap, and native grass seed.	San Luis Obispo	San Luis Obispo	Stenner Creek	10-Aug-05	Pending
Dave Alford & Steve Soderstrom - Turri Ranch & Cattle Co.	Warden Creek West Crossing	Replace the existing undersized culverts with a 71" x 47" squashed culvert with a critical dip in the road to provide a protected spillway for larger storm events. The culvert will be 20% buried to provide a natural bottom for improved fish passage.	Los Osos	San Luis Obispo	Warden Creek	15-Aug-05	Pending
Zachary Parker - CalTrans Dictrict 6	State Route 25 Safety & Operational Enhancements Project	Enhance safety on State Route 25 between San Felipe Road and US Route 101 by reducing the potential for cross centerline collisions, improving intersection operations at Wright Road, Briggs Road, Shore Road, Bolsa Road, and Hudner Lane, and reducing the number of access points on State Route 25.	Hollister	San Benito	Un-named wetland area tributary to Pajaro River.	19-Aug-05	Pending
Tim King, c/o Bixby Ranch Company	Cojo Ranch Culvert Repairs	Replace four corrugated metal pipe culverts that have deteriorated over time resulting in diminished structural integrity.	Gaviota Area	Santa Barbara	Pacific Ocean	29-Aug-05	Pending

Watershed Reports

Storm Water Municipal General Permit [Ryan Lodge 805/549-3506]

The City of San Luis Obispo's Storm Water Management Plan (SWMP) was recently reviewed. A review letter will be sent prior to the Board meeting. Staff plan to review San Luis Obispo County's SWMP, and Cal Poly San Luis Obispo's SWMP to determine if San Luis Obispo Creek nutrient and pathogen TMDL implementation requirements are included in the plans. Staff will initiate review of the University of California at Santa Cruz's second SWMP submittal and the County of Santa Barbara's third submittal. The City of Goleta submitted a revised SWMP in the middle of September. The current status of the Region's Phase II SWMP review is shown in **Attachment A.**

[See Attachment A]

Plastics Conference Summary [Ryan Lodge 805/549-3506]

On September 7, 8, and 9, 2005, Water Resource Control Engineer Ryan Lodge attended the Plastics Debris, Rivers to Sea Conference in Redondo Beach. The Conference focused on land based sources of marine debris. The Conference provided information regarding sources, impacts, and potential solutions to plastic debris in surface waters.

Philippe Cousteau, from Earth Echo International, was the keynote speaker on the first day of the conference. Mr. Cousteau discussed the impacts on marine environments from human activities including plastic debris and urged immediate action to reduce human impacts on the marine environment.

Discussion during the first day of the conference included plastic industry efforts to reduce storm water discharges and local approaches to reduce litter. Plastics industry representatives discussed their efforts to eliminate the loss of pellets from the manufacturing process. Pellets are the raw material used by plastics manufacturers and often spill during delivery to manufacturing facilities or during pellet handling at the facilities. Pellets are transported in storm water to streams, rivers and eventually the ocean. The pellets are often mistaken for food and consumed by marine life.

Local government efforts to reduce litter include the City of San Juan Capistrano's Bag-2-Bag recycling program. The City has implemented the first curbside plastic bag-recycling program in the country. The program allows residents to place bags in their existing curbside recycling containers. The bags will be recycled into plastic bags again. This is a unique program in that most bag recycling occurs at retail locations, and most plastic bags are recycled into other products such as plastic lumber.

William McDonough, co-author of the book *Cradle to Cradle*, was the keynote speaker on day two of the conference. Mr. McDonough discussed the overall impact of human activities on the environment and promoted sustainable design practices as part of the solution to the marine debris problem. He emphasized designing products to be 100% recyclable; preferably back into their original products.

Topics discussed on day two of the conference included whether plastic pellets absorb organic pollutants in the marine environment, trends in solid waste source reduction, and developing education and outreach programs. There is evidence that plastic pellets in the ocean-adsorbed chemicals such as PCBs, DDEs, and PAHs in much higher concentrations than are in the surrounding environment. There is currently no data showing that these chemicals are passed to marine organisms when the pellets are consumed, although it would seem inevitable. Solid waste source reduction trends include everything from community bans on materials such as polystyrene, to increased beverage deposits to encouraging recycling. Public education and outreach programs were discussed with emphasis on knowing your target audience, and getting the most out of available resources.

The last day of the conference included a site visit to view end of pipe treatment devices for trash. The treatment systems consisted of in-street vortex systems and end of pipe screening structures in the Los Angeles area.

Cleanup Reports

Underground Tanks Summary Report dated September 13, 2005 [Burton Chadwick 805/542-4786]

[See Attachment B]

Regional Monitoring

Regional Monitoring Report [Karen Worcester 805/549-3333]

The Central Coast Ambient Monitoring Program (CCAMP) will be participating in an external peer review for the Surface Water Ambient Monitoring Program in October. The Scientific Planning and Review Committee (SPARC) is a group of eminent scientists from both in and out of state who will evaluate the statewide program as well as each regional program. The statewide review will be held on October 5 – 7 in Riverside; we are preparing regional presentations for this event. We will then schedule a subset of the review panel to conduct a more detailed regional review later in the fall. After visiting all regions and also evaluating our data management and quality assurance programs, the SPARC will make recommendations, which State Board management has determined will be binding. One potential outcome is that SWAMP funds will be utilized to implement a single state-wide monitoring effort, rather than multiple regional efforts, as now occurs. Though this would make for a more unified overall program, we have concerns that such a decision would impact our own monitoring program, which has a great deal of utility for our Region.

Marine Monitoring Activities

At the September Board meeting, Board member Monica Hunter inquired about our agency involvement in monitoring and assessment activities related to near shore waters and marine protected areas. We have summarized below information on several Central Coast programs that contribute to our understanding of marine water quality.

Two major efforts are underway to improve near shore oceanographic research and water quality monitoring. The Central and Northern California Ocean Observing System (CeNCOOS) is one of eleven Integrated Ocean Observing Systems (IOOS) nationwide. CeNCOOS is a collaboration of 55 partner agencies and organizations (including our own) ranging from the central coast to the northern California border. Its several goals include 1) detecting and forecasting oceanic components of climate variability, 2) facilitating safe and efficient marine operations, 3) ensuring national security, 4) managing resources for sustainable use, 5) preserving and restoring healthy marine ecosystems, 6) mitigating natural hazards, and 7) ensuring public health. The IOOS programs intend to develop a national "backbone" of ocean sensors, that collect a standard suite of variables on a large spatial scale. CeNCOOS and other regional organizations will additionally collect variables of regional importance on a smaller spatial scale. It is anticipated that the eleven regional associations will require approximately $310 million per year of sustaining funding. If passed, current legislation will provide funding for the IOOS programs through the National Oceanographic and Atmospheric Administration, starting in 2007. Meanwhile, the many partner organizations are working toward more coordinated ocean monitoring, and it is estimated that all activities underway represent approximately $8 million annually in research and monitoring. More information on CeNCOOS can be found at http://www.cencoos.org.

The California Center for Integrative Coastal Observation, Research and Education (CI-CORE) was initiated by the California State University system in 2001. CI-CORE is highly coordinated with the CeNCOOS program and many of its researchers participate on CeNCOOS subcommittees. Karen Worcester participates on the multi-stakeholder advisory council to this group. CI-CORE is focused on providing timely and relevant data to scientists and agencies for policy development and evaluation. It relies on ocean observing systems to provide near real-time data via the internet. Program goals involve 1) development of monitoring infrastructure covering near shore areas from the 100 m isobath shoreward to integrate into national and international ocean monitoring efforts, 2) conducting research on problems affecting the economic and environmental well-being of California, 3) developing models to predict change in coastal environments, 4) enhancing management

capability of regulatory and resources management agencies for sustainable use of the coastal zone, and 5) enhancing public awareness of the importance of coastal management. To date, in-situ water quality monitoring equipment has been installed through six campuses up and down the state, including Moss Landing Marine Labs and Cal Poly State University. CI-CORE is also conducting high resolution seafloor mapping and hyperspectral imaging with web-based delivery of datasets and products. More information about this program can be found at http://cicore.mlml.calstate.edu/ and http://www.marine.calpoly.edu/cicore/default.shtml.

The Central Coast Long-term Environmental Assessment Program (CCLEAN) is a regional marine monitoring effort in the Monterey Bay area, formed by five marine dischargers in coordination with the CCAMP program. This program has reconfigured receiving water monitoring programs to assess water quality impacts in the ambient environment of Monterey Bay. This program has several components. It is assessing loadings of contaminants from rivers and streams and from effluent discharges into Monterey Bay. It tracks impacts of these contaminants through bioaccumulation sampling along the shoreline, and through sediment chemistry and benthic assemblage monitoring in near shore waters. CCLEAN is also collaborating with CDFG researchers to investigate the role of organic pollutants in sea otter mortality. CCLEAN annual reports are available online at http://www.cclean.org.

The Central Coast Regional Board has provided funding through the Guadalupe settlement for shoreline monitoring for bioaccumulated pollutants in sand crabs. This work was done by UC Santa Barbara and the California Department of Fish and Game, and extended throughout beaches up and down the Region's coast. This program has shown that several problem areas still exist along the coast for DDT and other priority organics and that these pollutants can actually be detected in a concentration gradient moving away from river mouths (specifically at the Santa Maria River). Project results show sand crabs to be excellent monitoring tools; CDFG's Oil Spill Prevention and Response (OSPR) team is pursuing additional research into sand crab metabolism of petroleum-related chemicals in the interest of better monitoring associated with oil spills. The final report for the sand crab study is available at http://www.swrcb.ca.gov/swamp/docs/sandcrab.pdf.

The Central Coast Regional Board has funded several projects on pathogen-related mortality in the California sea otter. There are several diseases impacting the otter that appear to be land-based in origin. CCAMP staff has collaborated on related studies with CDFG and UC Davis pathologists. For example, we have provided models on fresh water influence in the near shore environment to allow for risk assessment studies of several disease-causing organisms. One of these studies identified Morro Bay and Elkhorn Slough as "hot spot" areas for infection of *Toxoplasma gondii* in sea otters; this disease is commonly associated with cat feces. The study also found positive relationships between incidence of disease and volume of freshwater outflow from rivers. More recent studies have implicated shellfish as a possible mechanism for disease transmission to otters, as they have been shown to uptake disease-causing cysts of protozoal organisms. Additional information on sea otter mortality and disease, and a list of related publications can be found at http://www.seaotterresearch.org/.

Total Maximum Daily Load Program [Lisa Horowitz McCann 805/549-3132]

Staff will continue work on the following TMDL tasks or reports:

- Aptos and Valencia Creek Pathogen- Data Collection and Analysis Reports
- Carbonera Creek Pathogen TMDL- Data Collection and Analysis Report
- Corralitos Creek Pathogen TMDL- Data Collection and Analysis Report
- Monterey Harbor Lead TMDL- TMDL Project Report or Delisting Proposal
- Pajaro River Nutrient TMDL- Final Project Report, Staff Report and Resolution
- Pajaro River Sediment TMDL- Draft Basin Plan Amendment
- Salinas River Nutrient TMDL- Final Project Report
- Salinas River Pesticides TMDLs –Final Project Report
- Salinas River Pathogens TMDL- Data Collection and Analysis Report

- Watsonville Sloughs Pathogen TMDL - Draft Basin Plan Amendment

All of the projects listed above are progressing towards development and/or approval of a TMDL or a delisting proposal. The following few paragraphs provide some detail about the status of the Monterey Harbor Lead TMDL, the Salinas River Pathogen TMDL and the San Luis Obispo Creek Pathogen TMDL.

Monterey Harbor Lead TMDL

Staff is evaluating whether to propose delisting Monterey Harbor for Lead or prepare a TMDL. The source of lead in the harbor originates from a slag pile deposited on shore, and then removed, by the Union Pacific Railroad (UPPR) several years ago. The Executive Officer required UPPR to report on current lead conditions during TMDL investigations. UPPR submitted a report to the Water Board on lead in sediment in Monterey Harbor in September 2004. The UPPR also conducted additional studies of lead in sediment in Monterey Harbor and submitted another report in May 2005. The reports suggest Monterey Harbor could be delisted for lead.

Staff will determine if lead in Monterey Bay is adversely impacting or may adversely impact beneficial uses. Water quality objectives are currently being met in the water column. Levels of lead in sediment and tissue have decreased over time. No objectives exist for sediment or shellfish tissue. Staff is questioning whether the concentrations or forms of lead in the sediment and tissue pose health threats to aquatic or marine wildlife. Staff will prepare a report with the conclusions of this evaluation on or before December 31, 2005.

Salinas River Pathogen TMDL

Staff has been sampling monthly since November 9, 2004, in the Salinas River Watershed for the Salinas River Pathogen TMDL. We analyzed these samples with IDEXX's Colilert-18 method for *E. coli* and total coliform. This method is less expensive than sending the samples to the lab and yields accurate results. Typically, most of the samples collected each month exceed the numeric objective of 235 MPN/100 mL for *E. coli*.

Our staff is coordinating with the Department of Health Services and the U.S. Department of Agriculture to determine the sources of coliform via continuing field monitoring and analyses. Staff is also evaluating data collected by the City of Salinas, facilities with Waste Discharge Requirements, and a confined animal facility. Some of these data exceed either the numeric water quality objective of 200 MPN/100 mL fecal coliform for waters with recreational uses or the numeric water quality objective of 235 MPN/100 mL for *E. coli*. Staff suspects animals on grazed lands or in small, unpermitted confined facilities may be a key source of coliform.

A source analysis report for this TMDL will be completed on or before June 30, 2006.

San Luis Obispo Creek Pathogen TMDL

The San Luis Obispo Creek Pathogen TMDL was approved by the Office of Administrative Law (OAL) on July 25, 2005; this date is the official effective date of the TMDL and Implementation Plan. Staff notified the responsible parties who must begin implementing actions to meet assigned load allocations—the City of San Luis Obispo, Cal Poly State University, and the County of San Luis Obispo. These parties must implement, monitor and/or report on their activities to reduce coliform loading within one year from the effective date of the TMDL. The Water Board will rely on the City's discharge permits for the Wastewater Reclamation Facility and for storm water, Cal Poly's Waste Discharge Requirements and storm water discharge permit, and the County's storm water discharge permit, to reduce fecal coliform loading. Water Board staff will conduct a review every three years, beginning July 25, 2008 (three years after TMDL approval by the Office of Administrative Law). Water Board staff will utilize annual reports, as well as other available information, to review water quality data and implementation efforts of responsible parties and progress being made towards achieving the allocations and the numeric target of the TMDL. The U.S. EPA approved the TMDL on September 23, 2005.

Administrative Reports

Presentations and Training [Roger Briggs 805/549-3140]

Burton Chadwick, Senior Engineering Geologist, completed the second week of a two-week mandatory training course for new supervisors.

The course, Basic Supervision (409B), was taught by CPS Human Resource Services from August 22 through 26, 2005, in Fresno.

Wei Liu, Engineering Geologist, attended the "Petroleum Hydrocarbons and Organic Chemicals in Ground Water Conference" sponsored by the National Ground Water Association on August 18-19 in Costa Mesa.

Carol Kolb, Sanitary Engineering Associate, attended TRIAD Training on June 20-22, 2005 at the DTSC Cypress Office. The training was sponsored by the US Air Force, US Army Corps of Engineers, and USEPA to help fast track cleanup work at DoD/DoE sites. The focus was on using field screening technologies to expedite investigation work. On August 23 & 24, 2005, Carol attended planning meetings with the Air Force, DTSC, and consultants (at Vandenberg AFB) to implement the TRIAD process at numerous sites.

On September 7, 8, and 9, 2005, Water Resource Control Engineer Ryan Lodge attended the Plastics Debris, Rivers to Sea Conference in Redondo Beach. The Conference focused on land based sources of marine debris. The Conference provided information regarding sources, impacts, and potential solutions to plastic debris in surface waters. See more detailed summary provided in previous section of this report.

During the week of September 19th, nearly all staff attended writing training, taught in our conference room.

ATTACHMENTS

A. Phase II Municipal Storm Water Permit Status
B. Underground Tanks Summary Report

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