

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF MARCH 24-25, 2005**

Prepared on February 22, 2005

**ITEM NUMBER: 32**

**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.

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.

**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.

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 January 1, 2005 to January 31, 2005.

**WATER QUALITY CERTIFICATION APPLICATIONS RECEIVED FROM JANUARY 1, 2005 THROUGH JANUARY 31, 2005**

County	Date Received	Applicant	Project Description	Receiving Water	Project Location	Action Taken/ Certification Date
Santa Barbara	1/10/05	Maureen Spencer, County of Santa Barbara	The purpose of the project is to remove sediment from multiple Santa Barbara County creeks due to recent storm events.	San Pedro, San Jose, Los Carneros, San Ysidro, Tecolotito, and Las Vegas Creeks	Santa Barbara	Conditionally Certified 1/14/05
Monterey	1/13/05	Patrick Whisler	The purpose of the project is to install three bridges to replace wet crossings, which will allow year-round access to Whisler/Wilson parcel.	San Jose Creek	San Jose Canyon, Carmel	Pending
Monterey	1/18/05	Tom Moss, California Department of Parks and Recreation	The purpose of the project is to remove an old roadway, convert to trail and relocate the channel of Redwood Creek to its historic location.	Unnamed tributary to Pacific Ocean	Julia Pfeiffer Burns State Park	Pending

## Watershed Reports

Las Palmas Ranch Wastewater Treatment Plant, Salinas, Monterey County [Martin Fletcher 805/549-3694]

At the February Board meeting in Salinas, the Board had a discussion of recent unauthorized disposal to the Salinas River of treated wastewater from Las Palmas Ranch on River Road near Salinas. This item provides background and more information on recent activities.

Lack of disposal capacity has been a problem for the last several years at Las Palmas Ranch. In a letter dated October 2, 2003, Regional Board staff summarized a September 3, 2003 meeting attended by Regional Board staff, county staff, CalAm and other stakeholders, and outlined the situation as follows:

- There is a long-term need to expand the irrigation area and distribution system to fully utilize the reclaimed water produced by the Las Palmas Ranch wastewater treatment plant.
- The subdivision agreement between Monterey County and the developer (Las Palmas Ranch Development) requires the developer to design, permit, and install the irrigation system.
- Although the County sold the wastewater treatment plant to CalAm, it still retains permit responsibilities for the irrigation areas and disposal of reclaimed water at the Las Palmas Ranch Development. The County does not have adequate agreements in place with the various homeowners associations and is therefore not in responsible charge of the irrigation systems.
- CalAm does not want responsibility for the overall discharge of the reclaimed water, unless they have appropriate control and authority over discharge areas with appropriate funding to do it. CalAm would prefer a single point of contact to receive and be responsible for the discharge of reclaimed water.
- Both the Regional Board and the Department of Health Services expect that a single operator, agency, or entity (Master User) will

have the authority to use and properly manage the reclaimed water at the Las Palmas Ranch Development. Potentially the user permit holder could be CSA 72, CalAm, or a master homeowners association.

- The homeowners associations want the reclaimed water at no cost and feel the developer is responsible for ensuring that there is adequate disposal area and infrastructure.
- The Public Utilities Commission requires that CalAm provide all reclaimed water to the homeowners associations. There is no legal mechanism or agreement in place to ensure proper management of reclaimed water provided. Regional Board staff have emphasized that the associations or any master user will not be able to discharge or irrigate with the water unless permitted to do so by the Regional Board. Regional Board staff believes that it is in the homeowner's association's best interest to cooperate with the County to develop agreements for a single authorized Master User to facilitate the permit process and ensure proper long-term water use management.
- The developer agreed to help establish the appropriate legal entity for the permitting, acceptance, usage, and management of the reclaimed water.
- The developer agreed to pay appropriate fees for the review of the various documents by the regulatory agencies.
- The County will take the lead in setting up meetings with the various homeowners associations and the promulgation of standard agreements for the use of reclaimed water.
- The Regional Board expects to separate the current requirements into two orders, one for the Producer and one for the Master User. Although the Regional Board is responsible for drafting the new requirements, the report of waste discharge applications and specifically the new irrigation areas need to be reviewed by the State Department of Health Services. Their comments will be incorporated into the waste discharge requirements developed for the Las Palmas

Ranch Wastewater Treatment Plant and authorized Master User of the reclaimed water. The current report of waste discharge application is incomplete. Regional Board staff is currently waiting for the development of a single authorized Master User to take responsibility for use of the reclaimed water.

The letter commented on a request by the County to utilize four temporary emergency spray fields and stated that Regional Board staff would conditionally not recommend formal enforcement action for controlled discharge to the temporary emergency disposal areas. The Regional Board letter also required formation of a single legal entity by December 12, 2003. Regional Board staff has extended this deadline informally numerous times as a result of negotiating difficulties and claims by the homeowner's associations that formation of the legal entity was close. These claims have proven false though, and the county has found itself in an emergency situation requiring an unpermitted discharge.

On November 17, 2004, the County submitted a revised Report of Waste Discharge (ROWD) discharge application. The ROWD includes existing approved irrigation areas, proposed irrigation areas, and native land buffer areas that according to the County's water balance will handle disposal of all recycled wastewater from the Las Palmas Ranch WWTP. Unfortunately, The Regional Board cannot adopt new waste discharge requirements until a single legal entity is formed that is responsible for a majority of recycled wastewater disposal.

On January 28, 2005, the Monterey County Department of Public Works notified Regional Board staff by phone that they were taking emergency action to protect the Las Palmas Ranch wastewater treatment plant from elevated levels of recycled tertiary disinfected wastewater in the irrigation holding ponds. The County followed up the phone call with a letter dated February 4, 2005, and an email dated February 8, 2005, that outlined the steps they were taking. Pond levels were such that treated water was beginning to flow back into the wastewater treatment plant and threatened to compromise ongoing treatment of domestic wastewater.

In an email dated February 11, 2005), Bob Taylor, an individual homeowner and current president of

Master Association #2, commented on the current situation at Las Palmas Ranch. The email listed several issues holding up the formation of the legal entity.

On February 24, 2005, Regional Board staff issued a Notice of Violation (NOV) to the Monterey County Department of Public Works regarding the unpermitted discharge. The NOV outlined the possible administrative civil liability that may result from the violation and requested additional information from the County regarding potential impacts of and events preceding the unpermitted discharge. The letter also requires the County to address the comments made in Bob Taylor's February 11<sup>th</sup> email. Regional Board staff will review the need for additional enforcement action, including administrative civil liability, based on the County's response to the NOV.

Regional Board staff has notified the County that we expect to take an increased role in working towards a solution and development of a legal entity; specifically, we are interested in facilitating future meetings to that end.

#### Onsite Wastewater Treatment Systems [Harvey Packard 805/542-4639]

At the February 11, 2005 meeting, the Board raised several questions regarding regulation of septic systems. This report responds to those questions.

#### **Mound Systems**

Mound systems are designed for use in areas with high groundwater or soils that are either very tight or very pervious. The mound is made of soil with properties engineered to provide proper filtration and treatment of the septic tank effluent. The mound system provides physical treatment (straining of particulates), but no treatment for nitrogen or bacteria reduction. With proper soils, compaction, biochemical oxygen demand (BOD) loading, and effluent distribution, the effluent will percolate uniformly and not form channels.

#### **Pathogen Removal**

Standard on-site sewage treatment systems remove pathogens by filtration and absorption within the soil column beneath the leach field. Typically bacteria concentrations are reduced to insignificant

level within the first 15 feet of unsaturated soils. Alternative disposal systems, including mound systems and shallow, pressure-dosed systems, remove pathogens (reduction of bacteria from  $1 \times 10^8$  to  $1 \times 10^6$  mpn/mL) by providing sufficiently deep soil when groundwater is too shallow to comply with the Basin Plan prohibition.

The latest draft of the AB 885 regulations requires owners of properties that have both a septic system and a domestic well to test the domestic well for the presence of coliform at least every five years. Conventional systems on large parcels in favorable conditions are exempt from this requirement. In addition, the Basin Plan prohibits the installation of soil absorption system within 100 feet of a domestic water supply well in an unconfined aquifer.

### Detection of Failing Systems

Failed septic systems can degrade groundwater and cause unhealthy and nuisance conditions on the ground surface. Most failures are indicated by surfacing effluent, which can show up as a gray liquid or unusually lush plant growth. Few regulatory or permitting agencies have active programs to monitor or inspect standard septic systems. However, most oversight agencies do inspect mound and other alternative systems during construction to verify proper installation. Most failures that come to the attention of agencies are found by permit applications for replacement or repair of septic systems or complaints from neighbors. The draft AB 885 regulations contain additional monitoring and permitting requirements that will enable agencies to manage systems more effectively.

It is possible that local agencies could have permitted new developments using individual disposal systems in areas not suitable for such use, where the unsuitability only comes to light after the fact, for example, due to rising groundwater in a wet winter. The Santa Margarita area in San Luis Obispo County is an example of an area that needs more oversight by both the Regional Board and the County. We have received complaints from the public about systems being installed in this area without proper oversight. Since most local agencies don't have inspection programs, they would probably only hear about these situations through public complaints. Some permitting agencies do require copies of septic tank pumping records from septage haulers; areas

of widespread disposal system failures could be identified through analysis of these records.

The Basin Plan currently recommends that permitting agencies prepare and implement wastewater management plans to identify areas where poor conditions or increasing urbanization could lead to degradation of water quality or nuisance conditions. The plans should specify design, installation, and monitoring requirements, including the formation of septic tank maintenance districts if appropriate, applicable to the area. The Basin Plan recommends wastewater management plans for the following areas specifically: San Martin, San Lorenzo Valley, Carmel Valley, Carmel Highlands, Prunedale, El Toro, Shandon, Templeton, Santa Margarita/Garden Farms, Los Osos/Baywood Park, Arroyo Grande, Nipomo, Upper Santa Ynez Valley, and Los Olivos/Ballard. Staff recommends that the Regional Board require development and implementation of wastewater management plans for these areas as we revise memorandums of understanding with permitting agencies, as discussed below.

### Future Regulation

Assembly Bill 885 added section 13291 to the Water Code. This section requires the State Board to "adopt regulations or standards for the permitting and operation" of individual onsite sewage treatment systems by January 1, 2004. State Board has issued several drafts of the regulations and is working to adopt final regulations. In the meantime, pursuant to Water Code section 13269(b)(2), the Regional Board's general waiver for septic systems expired on June 30, 2004. Section 13269 also states that "Any waiver for onsite sewage treatment systems adopted or renewed after June 30, 2004, shall be consistent with the applicable regulations or standards" adopted pursuant to section 13291.

When the AB 885 regulations are final, staff will draft a new general permit for septic systems for Regional Board review. At that time staff will bring to the Board reviewed and revised memorandums of understanding between the Regional Boards and the permitting agencies (typically county health departments) that will implement the regulations.

In the interim, standard septic systems that are approved and permitted by local permitting agencies will not have regulatory coverage through

the regional board. However, as the permitting agencies forward applications for alternative and engineered systems, staff will propose individual regulation for Board review and adoption.

California Utilities Services, Salinas, Monterey County [Scott Phillips 805/549-3550]

Public comments presented to the Board at the February 11, 2005 Board meeting raised some questions about flow rates and plant operation at the California Utility Services (CUS) wastewater treatment plant in Monterey County. CUS operates a small wastewater treatment plant which discharges to land via large spray fields adjacent to the Salinas River. Regional Board staff inspected the treatment and disposal facilities in August 2004 and noted some shortcomings in housekeeping and record organization, and subsequently led three follow-up inspections of the facility. None of the inspections revealed threats to water quality or violations of waste discharge specifications. Though there have been fluctuations in the volumes of water discharged from this facility, staff has no evidence that the facility is treating wastewater at or above its permitted monthly average flow rate of 300,000 gallons per day. Both volumetric measurements and intermittent influent flow monitoring show the plant operating at flows between 235,000 and 275,000 gallons per day.

In direct response to the Board's question, staff has confirmed that CUS uses Soil Control Lab for all outside analytical work (chlorine residual, nitrogen products, and bacterial testing). This is a large, certified Lab in Watsonville, which also performs analytical services for many other dischargers in the region (including Monterey Regional WWTP, City of Watsonville, and Santa Cruz). Staff has found no connection between the owner of the lab and the owner of California Utility Services. Operators on Duty, a third party sampling and delivery service, collects samples for CUS and delivers them to the lab. We have not found any evidence indicating a conflict of interest in the sampling or analysis of the CUS WWTP effluent.

CUS is scheduled to submit a Report of Waste Discharge by March 30, 2005. Upon its receipt, staff will review all public and Board member concerns regarding the plant's treatment and

disposal capacities and evaluate the extent of WDR modification necessary.

Collection Systems Tributary to the Goleta Sanitary District, Santa Barbara County [Todd Stanley 805/542-4769]

On December 2, 2004, the Regional Board adopted Waste Discharge Requirements Order No. R3-2004-0130 for Wastewater Collection Systems Tributary to the Goleta Sanitary District. The Order names as Permittees the Goleta West Sanitary District, the University of California at Santa Barbara, the Santa Barbara Municipal Airport, and the County of Santa Barbara. The Board directed staff to meet with the Permittees before the March 2005 meeting to determine whether the Order required any changes.

On February 1, 2005, staff met with the Permittees and Goleta Sanitary District personnel to discuss the Order. On March 1, 2005, the Executive Officer issued a revised Attachment No. 1 to the Order's Monitoring and Reporting Program (see **Attachment No. 1** to this report, in underline and ~~strikeout~~), which includes the elements of each agency's pending Wastewater Collection System Management Plan.

Staff recommended several minor language changes and two deletions. Staff deleted Element No. III.E because pretreatment authorities are implemented through the Goleta Sanitary District's pretreatment program. Staff also deleted Element VII.G because all Permittees present at the February 1<sup>st</sup> meeting (all but the County of Santa Barbara) agreed that circumstances where aerating an imminent spill are not foreseeable within the affected service areas, and containment and capture of spills will always be maximized. The removal of this language does not preclude the Permittees from utilizing such an approach if circumstances arise that may make it an appropriate response measure.

Staff intends to recommend similar minor revisions to Attachment No. 1 of Monitoring and Reporting Program No. R3-2004-0129 for the Goleta Sanitary District.

Staff is waiting for the agencies to supply additional information regarding their ability to access parts of the collection system during wet

weather. Staff will review this information and work with the agencies to determine if future revisions to the waste discharge requirements will be needed.

Storm Water Management Plan Adoption Status  
[Jennifer Bitting 805/549-3334]

**General Permit**

Phase II Regulations required designated small Municipal Separate Storm Sewer Systems (MS4s) to obtain coverage under a State Board issued general permit by March 10, 2003. Due to delays that resulted from a Ninth Circuit Court decision, the permit was not adopted until April 30, 2003. The adopted permit set new dates by which the MS4s are required to submit a Notice of Intent to comply with the terms of the permit.

A small MS4 is defined as any unpermitted MS4 located in an "urbanized area" (an area with a population of 50,000 and a population density of 1,000/square mile) or an "urban cluster" (an area with a population of 10,000 and a population density of 1,000/square mile), as defined by the Bureau of the Census. A small MS4 could be designated to be covered by the Phase II program in either of two ways:

1. Automatic Nationwide Designation. The Storm Water Phase II Regulations require automatic nationwide coverage of all small MS4s that are located within the boundaries of an urbanized area as determined by the Bureau of the Census based on data from the latest Census. Attachment 1 of the permit is a list of automatically designated MS4s.
2. Designation by the Regional Board. Operators of small MS4s located in an urban cluster, as defined by the Bureau of the Census, could be designated if the Regional Board determines that storm water discharges from the small MS4 into a local water body cause, or have the potential to cause, a threat to water quality. Regional Board staff used the following criteria to recommend additional small MS4s for designation:
  - a. Discharge to a 303d listed water body;
  - b. High growth;
  - c. High tourism;

- d. Discharge to a Marine Sanctuary

Attachment 1 of the permit is a list of MS4s designated due to the automatic nationwide designation criteria. These MS4s were required by the permit to submit a complete application for permit coverage by August 8, 2003.

Attachment 2 of the permit is a list of MS4s designated by the Regional Board. On November 1, 2002, this list was presented to the Board for comment. These MS4s were required by the permit to submit a complete application for permit coverage by October 27, 2003.

**Attachment A (attached)** shows the status of the MS4 permit applications for all MS4s listed in Attachment 1 and Attachment 2 of the permit.

**Cleanup Reports**

Underground Tanks Summary Report dated  
February 23, 2005 [Burton Chadwick  
805/5424786]

[See Attachment No. 2]

**Regionwide Reports**

Regionwide Monitoring and Planning [Karen  
Worcester 805/549-3333]

CCAMP is conducting regular monthly conventional water quality and flow monitoring at thirty-three coastal confluence sites and thirty sites in the Pajaro and north coast watershed rotation area. Benthic invertebrate sampling will be conducted at most of the sixty-three sites, excluding those in lagoon type habitats. In addition, the field crew has been training for new benthic invertebrate assessment protocols to be implemented in March. We will be learning methodologies employed by the Western Environmental Monitoring and Assessment Program WEMAP) and the U.S. Forest Service, and will be converting to these approaches as the new state-wide standard for the Surface Water Ambient Monitoring Program. Methods comparison has been completed and historic data will be converted to a compatible format using a Monte Carlo simulation approach.

CCAMP staff attended a workshop on Tiered Aquatic Life Uses (TALU) in the Arid West the week of February 7<sup>th</sup>. This workshop was designed by EPA to receive input from scientists throughout the West working on bioassessment as a monitoring and regulatory tool. Tiered Aquatic Life Uses have been developed and applied in the Eastern United States. A biological condition gradient is established and waterbodies are evaluated and categorized accordingly into a "Tier" (and in some cases regulated) based on level of human disturbance. Application of TALU as a regulatory tool in the West is complicated by climate, hydrology, geology and other factors that contribute to highly variable flow regimes and in-stream habitat conditions. The workshop coordinators will compile input from participants and adapt the method for implementation in western States.

CCAMP staff also received training on multivariate and multi-metric approaches to benthic invertebrate data analysis. CCAMP has already been applying some of the techniques in looking at relationships between stressors and benthic assemblages, and this workshop added several new multivariate approaches to our toolkit.

Data Management – We have recently modified CCAMP data management tools so that we can scan our database for exceedance of water quality criteria based on the new 303(d) listing guidance. This incorporates use of a binomial distribution to determine the appropriateness of listing or delisting for both toxic and conventional pollutants. A scan of our entire dataset has been provided to Surface Water Ambient Monitoring Program staff for their use in developing 303(d) listing recommendations. Our scanning system accommodates site-specific, waterbody-specific, and Basin Plan water quality objectives, as well as statewide and national standards set forth in the 303(d) policy. We have also provided State Board staff with templates for other Regions to use to enter their own Basin Plan standards. This would allow the State Board to utilize our scanning tool to develop listing recommendations for other Regions more efficiently.

The website is undergoing a significant update that utilizes internet mapping systems from a number of existing agency websites to provide better geographic detail, both in terms of site location

and surrounding spatial information. It also will display assessment information based on the new 303(d) listing guidance and 305(b) requirements, using CCAMP monitoring data.

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

Staff has recently completed or will soon complete the following TMDL reports:

- Pajaro River Sediment TMDL- Final Preliminary Project Report and draft Basin Plan Amendment documents (including Final Project Report),
- Pajaro River Nutrient TMDL- Final Preliminary Project Report.
- Salinas River Watershed Area Pesticides TMDLs –Final Preliminary Project Report.
- Watsonville Sloughs Pathogen TMDL - Final Preliminary Project Report.
- San Luis Obispo Creek Nutrients TMDL- Draft Basin Plan Amendment.
- Chorro Creek Nutrients TMDL- Draft Basin Plan Amendment.

We are still recruiting to fill vacancies in the Watershed Assessment Unit. Lisa Horowitz McCann, supervisor of that unit, is conducting interviews with candidates who have expressed interest in the positions.

At state level, Lisa is developing the TMDL Program Workplan for fiscal year 2005-2006. She also will be participating in a collaborative decision-making training and process to develop methods for allocating TMDL Program staff and contract resources amongst regions and the State Board.

### Administrative Reports

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

On January 25-27, 2005, Engineering Geologist, Tom Sayles, attended a training course on Contaminant Chemistry conducted by the Northwest Environmental Training Center. The course was a review of fundamental chemistry and included discussions in contaminant chemistry,

transport mechanisms, and solubility and precipitation of contaminants. The contaminants of concern included petroleum hydrocarbons, metals, and chlorinated hydrocarbons. The course work included discussions in chemical principles and transport mechanisms for the contaminants of concern.

On February 3, 2005 Engineering Geologist, Corey Walsh, attended training on groundwater capture zone analyses for pump and treat systems conducted by the USEPA. A six step approach was described and includes: review of site conceptual model; define target capture zone; interpret groundwater levels; perform capture zone calculations; evaluate system effect on groundwater concentrations; and interpret actual capture zone compared to target capture zone. The US EPA guidance document "A Systematic Approach for Evaluation of Capture Zone at Pump and Treat System" is due to be released in May 2005.

Senior Engineering Geologist, Burton Chadwick, completed week one of a two-week mandatory training course for new supervisors. The course, Basic Supervision (409A), was taught by CPS Human Resource Services from February 14 through 18, 2005 in Sacramento.

Diane Kukol, Engineering Geologist, will attend a United States Environmental Protection Agency-sponsored training class entitled *Long-Term Groundwater Monitoring Optimization* in Sacramento on March 30, 2005. Ms. Kukol, oversees the Unocal San Luis Obispo Tank Farm and Guadalupe Oil Field cleanup projects, where long-term groundwater monitoring will most likely be required.

Sheila Soderberg, Senior Engineering Geologist, completed Supervisor's Training in Sacramento the week of March 7, 2005.

Engineering Geologist, Dominic Roques, attended the Rangeland Water Quality Conference in Woodland, California on February 23-24, 2005. The University of California, US Department of Agriculture, US Bureau of Land Management, Natural Resource Conservation Service (NRCS) and the Society for Range Management sponsored the conference. Fifteen scientists and resource managers from academia and state agencies made 20 presentations on topics covering sediment, pathogens, nutrients and other water quality issues. From the extensive information presented, and

made available on compact disk, Mr. Roques derived a few key "take home" messages: 1) Rangelands often provide extensive ecosystem services, including water quality protection, that are not readily apparent to the majority of Californians living in urban areas. It is from an awareness of this broad suite of ecosystem services that Regional Board staff is most likely to clarify goals, priorities, and expected outcomes relative to water quality regulation on rangelands. 2) Regional Board staff will benefit greatly from acknowledging and respecting the important roles of UC Cooperative Extension and NRCS researchers and extension specialists. The combined roles of research and extension education place these agencies in a position of understanding the problems and assisting ranchers in solving them. 3) Acknowledging their role is especially important since much of the current research suggests that simple assumptions about, for example, the water quality effects of grazing, are inaccurate. 4) The Ranch Water Quality Short Course, upon which the Agriculture Water Quality Short Course was modeled, may be the single most effective contribution to water quality the Regional Board can promote region-wide.

## ATTACHMENTS

1. Revised Attachment No. 1 to Waste Discharge Requirements Order No. R3-2004-0130 Monitoring and Reporting Program.
  - A. Status of the MS4 Permit Applications for all MS4s Listed in Attachment 1 and Attachment 2 of the Permit.
2. Underground Tanks Summary Report dated February 23, 2005.

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