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

## STAFF REPORT FOR REGULAR MEETING OF JANUARY 31, 2013, FEBRUARY 1, 2013 Prepared on January 8, 2013

**ITEM NUMBER: 22** 

## SUBJECT: Executive Officer's Report to the Board

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This item presents a brief discussion of issues that may interest the Board. Upon request, staff can provide more detailed information about any particular item.

## TECHNICAL/STATUS REPORTS

#### Groundwater Assessment and Protection (GAP) Six-month Update

[Matthew Keeling 805-549-3685]

On May 3, 2012, the Water Board approved the allocation of Guadalupe and PG&E settlement funds for the Groundwater Assessment and Protection (GAP) component of Central Coast Ambient Monitoring Program (CCAMP), the Central Coast Water Board's regionally-scaled water quality monitoring and assessment program. At that time, the Water Board requested staff provide an update of initial implementation actions within approximately six months. The following provides that update, and includes a synopsis of CCAMP-GAP implementation and coordination activities to date and a forecast of planned actions.

<u>Domestic Well Project:</u> In December, Water Board staff secured the services of the U.S. Geological Survey (USGS) to sample 80 to 120 domestic wells within the Pajaro and Salinas Valleys in coordination with the State Water Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program Priority Basin Project – Shallow Aquifer Assessment. The CCAMP-GAP domestic well project is funded via a \$50,000 grant from CCAMP-GAP and \$20,000 in federal matching funds provided by USGS. In preparation of the project, staff discussed the pending project with Santa Cruz, Monterey and San Luis Obispo County environmental health department staff and followed up with an informational letter to the county Board of Supervisors describing the project. Water Board staff will continue to coordinate with the county health departments as the water quality data is generated.

Well sampling activities began in December and will continue through February/March 2013. Domestic wells will be selected for sampling based on a spatially distributed grid pattern and the resulting data will be used by USGS to conduct an unbiased assessment of shallow aquifer conditions. The resulting data may be used to conduct more focused outreach and sampling in areas identified as high risk with regard to nitrate or other drinking water pollutants. Water quality analyses for the CCAMP-GAP portion of the Domestic Well Project are consistent with the monitoring requirements listed in Table 3 "Groundwater Sampling Parameters" for the three (Tiers 1, 2 and 3) monitoring and reporting programs associated with the Central Coast Water Board updated Conditional Waiver of Waste Discharge Requirements (Agricultural Order No. RB3-2012-0011). This will result in consistent regional data between the Domestic Well Project and Ag Order monitoring requirements and facilitate the use of analytical results from the Domestic Well Project to satisfy the Ag Order groundwater monitoring requirements. Arsenic analysis will be conducted in addition to the Table 3 parameters given the prevalence of arsenic in drinking water supply wells regionally and statewide. Water Board staff will provide analytical

results to the well owners and renters along with "A Guide for Private Domestic Well Owners"<sup>1</sup> and supporting information explaining the results and where to go for additional information.

<u>Funding:</u> Water Board staff negotiated an agreement with The Bay Foundation of Morro Bay to manage the CCAMP-GAP endowment and operating funds (i.e. CCAMP-GAP Funds). The basic services provided by The Bay Foundation include managing the fund investment portfolios, providing quarterly financial updates and disbursing funds for project implementation. Water Board staff chose The Bay Foundation to manage CCAMP-GAP funds because of its ongoing effective management of both CCAMP and Low Impact Development (LID) funds. In addition to the financial benefits associated with lower management fees provided by The Bay Foundation manage CCAMP-GAP funds enables more efficient programmatic coordination via a single foundation and potential sharing of available funds with CCAMP. Following ratification of the funding agreement with the Bay Foundation in early December, fund transfer requests were submitted to move the remaining available Guadalupe and PG&E settlement funds from their respective foundations to The Bay Foundation. As of the writing of this status report, the fund transfer requests were still pending.

<u>Regional Monitoring Program Outreach and Development:</u> Water Board staff is engaging in ongoing outreach to and coordination with local agencies/programs implementing drinking and groundwater basin monitoring throughout the Central Coast Region. Since June 2012, staff has met with ten such agencies or districts and has verbal commitments from four agencies/districts to begin uploading regional groundwater monitoring data to the State Water Board's GeoTracker GAMA program database.<sup>2</sup> Data capture from these agencies/districts would include historical and ongoing regional-scale groundwater quality and water surface elevation data from over 100 agency-owned monitoring wells within 11 groundwater basins/subbasins. In support of this effort, Water Board staff has also developed and is pursuing a proposal for the development of a GeoTracker GAMA regional monitoring program module to facilitate the integration and management of existing and future regional monitoring programs and associated data. This proposal is currently undergoing internal management review to be followed by coordination with State Board Executive and GAMA Program staff.

As part of the regional monitoring program effort, staff is also currently coordinating with the Monterey County Environmental Health Department to upgrade its water quality laboratory information management system (LIMS) to make it compatible with the GeoTracker GAMA Electronic Deliverable Format (EDF). This will facilitate the upload to GeoTracker of Monterey County Water Resources Agency regional groundwater monitoring data and county drinking water data for water systems below the public water system threshold of 15 service connections.

Additionally, Water Board staff developed and launched the CCAMP-GAP webpage located at the following link that is accessed from the Central Coast Water Board's home page:

http://www.swrcb.ca.gov/rwqcb3/water\_issues/programs/gap/index.shtml

The CCAMP-GAP webpage contains a brief description of the program, an information portal to groundwater and drinking water related information and programs, and will be used to inform stakeholders of special projects and groundwater related issues. Staff will continue to build on the webpage as CCAMP-GAP evolves and grows.

<sup>&</sup>lt;sup>1</sup> Informational document compiled (Revised April 2011) by the SWRCB, Division of Water Quality, GAMA Program regarding domestic well use and construction/destruction requirements in California and includes supporting information related to water quality testing and interpretation, treatment, and water quality (well head) protection. <sup>2</sup> Including (asterisk indicates verbal commitments): Santa Cruz County, \*Pajaro Valley Water

<sup>&</sup>lt;sup>2</sup> Including (asterisk indicates verbal commitments): Santa Cruz County, \*Pajaro Valley Water Management Agency (PVWMA), \*Monterey Peninsula Water Management District (MPWMD), Santa Clara Valley Water District (SCVWD), San Luis Obispo County (Public Works and Environmental Health), Santa Barbara County Public Works, \*San Benito County Water District (SBCWD), Monterey County and the \*Monterey County Water Resources Agency (MCWRA)

Salt and Nutrient Management Planning Integration: One of the primary components of the pending Salt and Nutrient Management Plans (SNMPs), as required by State Water Board's Recycled Water Policy (Resolution No. 2009-0011), is the development and implementation of groundwater basin/sub-basin (i.e. regional) monitoring programs. In many cases throughout the region, participating SNMP stakeholders consist of local agencies or private entities that are subject to compliance monitoring requirements pursuant to Central Coast Water Board waste discharge requirements (WDRs or permits, including reclamation requirements and NPDES permits) for municipal or industrial discharges. Consequently, CCAMP-GAP staff is coordinating with Point Source Program (i.e. permitting) staff and external SNMP stakeholders to facilitate the development and implementation of sustainable, consistent, and coordinated regional groundwater monitoring programs in the Central Coast Region that are integrated with WDR/discharge-related compliance monitoring requirements. As part of this effort, CCAMP-GAP staff has prepared an outreach letter to the SNMP lead agencies outlining our expectations and potential opportunities associated with the pending SNMP regional groundwater monitoring programs.

Internal and External Coordination/Outreach: Water Board staff is coordinating with various internal and external programs/stakeholders on a number of regional and statewide groundwater and drinking water quality related fronts.

- Integrated Regional Water Management (IRWM) Planning Staff participated in the development of an internal cross-programmatic IRWM coordination strategy led by our Grants Program lead staff, Katie McNeill. There is currently about \$600 million in available Proposition 84 grant funding statewide as part of the IRWM Round 2 Implementation Project Solicitation grant process. A group of cross-programmatic staff have been tasked with coordinating with IRWM Regional Management Groups, acting as regional liaisons to consistently communicate our regional goals/priorities and help facilitate the selection and implementation of projects that address our highest priorities. In particular, CCAMP-GAP staff is the regional liaison for one of the six ongoing IRWM processes and helped develop a conceptual project proposal addressing drinking water needs of disadvantaged communities for inclusion within the Greater Monterey County IRWM. Participation in these efforts by cross-programmatic staff is ongoing. (See Item 13 of the December 6, 2012 Central Coast Water Board Agenda for more information.)<sup>3</sup>
- Salt and Nutrient Management Planning (SNMP) In conjunction with the IRWM coordination strategy, a group of cross-programmatic staff have also been tasked to participate in the various SNMP stakeholder process.<sup>4</sup> Due to the regional groundwater monitoring component of the pending SNMPs, CCAMP-GAP staff is taking a more active role in this effort. In addition to implementing the integrated WDR and regional monitoring strategy as discussed above, CCAMP-GAP staff is the regional liaison for three of the six ongoing SNMP processes and has developed and given several formal presentations to various stakeholder groups regarding the SNMP process and Central Coast Water Board expectations.
- Drinking Water Issues Staff is participating in the ongoing discussion and development of regional and statewide strategies addressing the symptoms of the nitrate groundwater pollution problem, with emphases on water systems below the public water system threshold of 15 service connections and addressing the needs of disadvantaged communities. In particular, staff continues to participate in the Governor's Drinking Water Stakeholder Group and is engaging in ongoing coordination with local stakeholders regarding drinking water sampling programs for small water systems and disadvantaged

<sup>&</sup>lt;sup>3</sup> <u>http://www.waterboards.ca.gov/centralcoast/board\_info/agendas/2012/december/Item\_13/item\_13.pdf</u>

<sup>&</sup>lt;sup>4</sup> A number of the pending regional SNMP efforts are partially funded as a component of the IRWM program planning efforts and are therefore coordinated/related regional efforts.

community identification/outreach. In addition, staff recently reviewed and provided comments on two internal drafts of the State Water Board's final report/recommendations to the legislature in response to the SBX2-1 UC Davis Nitrate Study.

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- Department of Water Resources Water Plan The Department of Water Resources is currently updating the California Water Plan (update 2013). The plan, updated every five years, "provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California's water future." Staff drafted the regional report for the Central Coast to ensure the findings and recommendations within the plan reflect our most significant water quality problems and are consistent our regional goals/priorities. The review and development of this report is ongoing. Staff is also participating in a topic-based Groundwater Caucus as part of Water Plan update.
- Aquifer Storage and Recovery CCAMP-GAP staff is providing cross-programmatic support to Point Source Permitting staff on the application review and permitting of aquifer storage and recovery projects to help facilitate regional and statewide consistency.
- Healthy Watersheds Assessment Water Board staff is participating in a regional project to translate our vision goals into assessment questions and indicators that will be used to measure and evaluate the overall health of our watersheds and groundwater basins over time and make informed decisions. One of the primary goals of the project is to identify and evaluate relationships between land management, aquatic habitat health, and groundwater quality. (See Item 13 of the December 6, 2012 Central Coast Water Board Agenda for more information.)<sup>5</sup>

Moving Forward: Over the next six months to a year, CCAMP-GAP staff will focus on implementation of the domestic well project and ongoing coordination with regional stakeholders and State Board to pilot the upload of regional monitoring program data to GeoTracker GAMA. In particular, staff will be coordinating with the USGS and GAMA Program on the review and dissemination of domestic well water quality data and may develop a more focused outreach and sampling effort within the Pajaro and Salinas Valleys based on the resulting data. The development and implementation of domestic well sampling projects within other parts of the region is also an ongoing process with an emphasis on the Santa Maria Valley and San Juan Bautista and Hollister basins as high-risk focus areas. Ongoing coordination with local and state agency programs to leverage this priority work will be a crucial component of our efforts given there is a growing regional and statewide discussion regarding the need for regional groundwater monitoring and drinking water program outreach and sampling for water systems below the public water system threshold of 15 service connections with an emphasis on nitrate pollution and disadvantaged communities. Staff will also continue to coordinate with internal and external stakeholders as outlined above on an as needed priority basis. Per the initial CCAMP-GAP Project Proposal and Fiscal Year 2012-2013 Work Plan, Water Board staff will provide annual updates to the Water Board during regularly scheduled public meetings.

<sup>&</sup>lt;sup>5</sup> <u>http://www.waterboards.ca.gov/centralcoast/board\_info/agendas/2012/december/Item\_13/item\_13.pdf</u>

#### Post Construction Requirements and Stormwater Phase II Permit for Municipalities [Phillip Hammer/549-3882]

At the December 6, 2012 Central Coast Water Board meeting, Board members received comments from the County of Santa Barbara (County) and Craig Steward of Penfield & Smith Engineers regarding the Central Coast Water Board's Post-Construction Requirements. The Post-Construction Requirements stipulate how municipalities require new development and redevelopment projects to manage stormwater runoff, and were previously adopted by the Central Coast Water Board on September 6, 2012.

The comments at the December 6, 2012 Central Coast Water Board meeting focused on the perceived impracticability of the stormwater retention portion of the Post-Construction Requirements. In particular, the commenters found that the required method for calculating the volume of stormwater to be retained on site, which included the use of a "1.963 multiplier," resulted in the need to capture and retain impracticable volumes of stormwater runoff. The County also claimed this aspect of the Post-Construction Requirements was not adequately vetted. In addition, the commenters were concerned that State Water Resources Control Board (State Water Board) staff's recent inclusion of the Central Coast Water Board Post-Construction Requirements into the Draft Phase II Municipal Stormwater Permit (Draft Permit) as an attachment would make it difficult to improve the requirements in the future.

As a result of these comments, the Central Coast Water Board directed staff to work with stakeholders to resolve their issues and report back to the Central Coast Water Board on progress made.

# Summary of Previous Efforts by Central Coast Water Board Staff to Resolve Post-Construction Requirement Issues

Central Coast Water Board staff implemented an extensive stakeholder involvement process in bringing the Post-Construction Requirements to adoption. The requirements questioned by commenters at the December 6, 2012 Board meeting were vetted during that process. The majority of the stormwater retention portion of the Post-Construction Requirements was available for public review and comment during two comment periods lasting 53 and 21 days, respectively. The "1.963 multiplier" component of the Post-Construction Requirements was available for public review and comment over the second 21-day period, since it was inserted into the Post-Construction Requirements in response to comments made by stakeholders during the first comment period. In addition, the retention requirements in general, and the "1.963 multiplier" specifically, were commented and deliberated upon during the oral comment period of the Post-Construction Requirements adoption hearing. After digesting written and oral testimony from stakeholders and Central Coast Water Board staff, Central Coast Water Board members voted unanimously to adopt the Post-Construction Requirements, including the "1.963 multiplier," on September 6, 2012.

At the time of adoption, the Central Coast Water Board directed staff to implement a process for working with municipalities to identify and resolve implementation issues associated with the Post-Construction Requirements. In response to this direction, Central Coast Water Board staff reconvened the Joint Effort Review Team (JERT), a group of stakeholders involved in reviewing work products during development of the Post-Construction Requirements. The reconvened JERT initially met on November 1, 2012 and preliminarily identified implementation aspects of Post-Construction Requirements that could benefit from additional refinement. Specifically, the JERT formed a subcommittee, including Central Coast Water Board staff and municipal stakeholders, to develop guidance for implementation of Attachment D of the Post-Construction

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Requirements, which houses the contested "1.963 multiplier." This subcommittee's initial meeting was scheduled for December 12, 2012 and subcommittee members were corresponding and circulating draft proposals for the scope of their work in advance of their meeting. As such, prior to the Central Coast Water Board December 6, 2012 meeting, Central Coast Water Board staff was already actively working to address the issues raised by the commenters at that meeting.

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Central Coast Water Board Staff Efforts in Response to Central Coast Water Board Direction at the December 6, 2012 Meeting

In response to Central Coast Water Board direction at its December 6, 2012 meeting, Central Coast Water Board staff held an additional meeting with the JERT on short notice on December 12, 2012. This teleconference meeting was organized quickly in order to take advantage of the still-open comment period on the State Water Board's Draft Permit. As mentioned previously, State Water Board staff had recently added the Central Coast Water Board Post-Construction Requirements to the Draft Permit as an attachment. Commenting on the Draft Permit was an opportunity to potentially modify the Post-Construction Requirements, should the JERT agree upon an approach for resolving any outstanding issues.

Since resolution of the "1.963 multiplier" issue is complex and highly technical, and the comment period for the Draft Permit was rapidly closing, Central Coast Water Board staff decided to propose to the JERT an interim solution, rather than attempt to solve the complex technical issue during the three working days that remained in the Draft Permit comment period. Central Coast Water Board staff proposed to the JERT that the group request the State Water Board modify the Post-Construction Requirements to allow municipalities to develop alternatives to the "1.963 multiplier" approach, for approval by the Central Coast Water Board Executive Officer. While the JERT members did not necessarily oppose this approach, several stated that they preferred that the State Water Board remove the Post-Construction Requirements from the Draft Permit entirely, since they felt that other portions of the Post-Construction Requirements also needed improvement.

In light of State Water Board staff's previous legal decision to include the Post-Construction Requirements in the Draft Permit as an attachment, Central Coast Water Board staff determined that rather than pursue the removal of the Post-Construction Requirements from the Draft Permit, as advocated by some members of the JERT, the best course was to pursue the interim solution Central Coast Water Board staff originally proposed to the JERT. As discussed above, this interim solution allows municipalities to develop alternatives to the "1.963 multiplier" approach, to be approved by the Central Coast Water Board staff submitted to the State Water Board a comment letter requesting modification to the Post-Construction Requirements allowing municipalities to develop alternatives to the "1.963 multiplier" approach. Central Coast Water Board staff submitted to the State Water Board a comment letter requesting modification to the Post-Construction Requirements allowing municipalities to develop alternatives to the "1.963 multiplier" approach. Central Coast Water Board staff's comment letter is included in this Executive Officer Report as Attachment 1.

### Ongoing Central Coast Water Board Staff Efforts to Resolve Post-Construction Requirement Issues

Central Coast Water Board staff plans to continue working to resolve the "1.963 multiplier" issue. Through the JERT subcommittee, staff will work to develop an acceptable technical solution to the issue. Concurrently, staff will work within the State Water Board's process for adoption of the Draft Permit to ensure that the Draft Permit does not preclude any technical solution arrived upon by the JERT subcommittee.

## Morro Bay-Cayucos Wastewater Treatment Plant Update

Katie DiSimone, <u>Katie.disimone@waterboards.ca.gov</u> Sheila Soderberg, <u>Sheila.Soderberg@waterboards.ca.gov</u>

In December 2008, the Central Coast Water Board adopted Waste Discharge Requirements Order No. R3-2008-0065 and reissued National Pollutant Discharge Elimination System (NPDES) Permit CA0047881 for the City of Morro Bay and the Cayucos Sanitary District's (JPA) wastewater treatment plant (WWTP). The JPA operates the WWTP in accordance with the Board's permit and USEPA-approved Clean Water Act (CWA) section 301(h) modified discharge permit and has a peak seasonal dry weather flow of 2.36 million gallons per day (mgd). Also in December 2008, the Central Coast Water Board and JPA entered into a settlement agreement, included as Attachment 2, which includes a time schedule to upgrade the JPA's WWTP to meet full secondary treatment standards by March 31, 2014. The parties voluntarily entered into the agreement, as it was unlikely that the USEPA would grant future CWA 301(h) waivers for this facility.

In 2009 and until 2011, the JPA developed a project plan and made progress to meet the settlement agreement schedule. In early 2011, the City approved a coastal development permit (CDP) to upgrade the WWTP in its existing location. The proposed project includes partial demolition of the existing WWTP, increasing the elevation of the existing site, and rebuilding the WWTP to meet secondary treatment standards. As part of the project, the JPA planned to reclaim a portion of the treated wastewater for irrigation within the City of Morro Bay and Cayucos, with a majority of treated wastewater disposed of via the existing outfall.

The City's CDP was appealed to the California Coastal Commission by 11 parties. In March 2011, the Commission found that the appeals raised substantial Local Coastal Program (LCP) and Coast Act conformance issues and the Coastal Commission took jurisdiction over the CDP for the WWTP project.

In a letter to Central Coast Water Board staff dated February 23, 2011, the JPA identified significant delays in implementing the WWTP upgrade. The Executive Officer, in a letter dated March 24, 2011, stated that the Coastal Commission's 2011 de novo permitting decision resulted in a "force majeure event beyond the control of the JPA or its agents pursuant to paragraph C.1 of the Settlement Agreement."

Since 2011, the JPA prepared additional information about the proposed project, including an analysis of alternative siting and design options, working closely with Coastal Commission staff. However, the JPA and Coastal Commission staff have not resolved all issues related to the project. In the staff report for the project scheduled to be discussed at the Coastal Commission's January 10, 2013 meeting, California Coastal Commission staff recommends that the Commission deny the project because of the following issues:

- A new WWTP is not an allowed use under the LCP's zoning at its existing location. The existing WWTP is a non-conforming use and therefore inconsistent with the LCP. At a minimum, approval of a new WWTP at the proposed location would require the LCP to be modified. Because the existing site is located in a prime visitor-serving redevelopment opportunity for the City, Coastal Commission staff's position is that an LCP amendment would not be appropriate.
- 2) The WWTP site is located in a tsunami run-up zone in an area that would also be inundated in a 100-year storm event through flooding (associated with Morro Creek). To mitigate this, the JPA plans to elevate the existing site by 7.5 feet by adding approximately 35,000 cubic yards of fill material. Coastal Commission staff's position is

that siting a large infrastructure project in a flood zone is not consistent with the LCP. Coastal Commission staff notes that in a 100-year flooding event, the WWTP would be an island, in a tsunami, it would be under water, neither of which conservatively minimizes hazard risk as required by the LCP.

- 3) The WWTP project would produce tertiary treated water. However, only a small portion of the reclaimed water would be reused and the majority of the treated wastewater discharged to the Pacific Ocean. Holistically, the LCP requires protection and enhancement, where feasible, of the Morro and Chorro groundwater basins, as well as coastal streams, wetlands, and related freshwater resources. Coastal Commission staff's position is that more water should be reclaimed, as the JPA relies heavily on their water supply from the State Water Project.
- 4) The WWTP is located within an LCP-designated sensitive view area between Highway 1 and Morro Rock. The LCP requires the scenic and visual qualities of the coast to be protected and where feasible, enhanced. The new WWTP is proposed in the same location, but elevated, which is problematic from a visual perspective.

Coastal Commission staff recommends that the WWTP be relocated to an inland property currently available for purchase, located outside of City of Morro Bay limits off of Highway 41. The JPA reports have stated repeatedly that the cost to purchase this new property, install pump stations, and relocate the WWTP facility at a new location would be cost-prohibitive and not the preferred project alternative. On December 21, 2012, the Executive Officer sent a letter to the Coastal Commission stating that Central Coast Water Board staff is willing to discuss the timing of plant upgrades with the JPA. Central Coast Water Board staff agreed not to recommend enforcement of the settlement agreement schedule for treatment plant upgrade delays due to the Coastal Commission's decision or the JPA's decision to unilaterally review the WWTP location.

At a special meeting on January 3, 2013, the newly seated majority of the Morro Bay City Council approved (in a 3-2 vote) a resolution urging the Coastal Commission to deny the City's CDP to keep the WWTP at its existing location. This vote represents a change from the long-standing City position that the preferred project alternative is at the existing location.

In a special meeting on January 7, 2013, the Cayucos Sanitary District approved (in a 4-1 vote) a resolution requesting the Coastal Commission withdraw the application for the CDP (rather than denying the application). Additionally, Cayucos approved (in a 4-1 vote) a letter requesting that the Morro Bay City Council rescind their resolution and instead request that Morro Bay join Cayucos' request to withdraw the application. Morro Bay City Council would still have time in advance of the January 10, 2013 Coastal Commission meeting to consider this request. The item could be added to the agenda for the regularly scheduled Morro Bay City Council meeting January 8, 2013, if Council agrees by a 4/5<sup>th</sup> majority to do so.

At the time this update was written, it appears that the JPA's long-standing commitment to complete the project at its current location has dissolved. Central Coast Water Board staff can provide an oral update regarding developments occurring after writing of this report.

## Los Osos Dewatering Update

[David LaCaro 805/549-3892]

San Luis Obispo County has begun construction of the sewage collection system for the Los Osos Water Recycling Facility. Previously, the Board has heard from staff, County staff, and the public about the potential lack of disposal capacity at the Mid-Town and Broderson sites for water generated by construction dewatering. The County explained that the individual contractors (ARB, Inc. and W.A. Rasic Construction) would be developing specific dewatering plans that would identify dewatering activities that comply with the existing General Stormwater NPDES Construction Permit (General Permit). Staff received initial engineering dewatering procedures on November 6, 2012 (refer to attachments 1 and 2).

Water Board staff provided coverage to the County under the General Permit on May 27, 2011 (see attachment 3). The stormwater permit allows the County to dispose of pumped groundwater to Morro Bay. However, disposal to the Broderson leachfields, the Mid-Town retention basin, or other basins is not covered under the stormwater permit. Water Board staff sent a letter on December 3, 2012, requiring that the County apply for coverage under the *General Waiver of Waste Discharge Requirements for Specific Types of Discharges* (General Waiver), Resolution No. R3-2008-0010 (refer to attachment 4). We expect the County to develop and implement a salinity monitoring program to evaluate the encountered groundwater and allow the contractor to route the water to the appropriate disposal location. Our conditions of coverage under the General Waiver will require that the discharge salinity not exceed that of underlying groundwater.

The stormwater permit enrollment letter of May 27, 2011, includes conditions on discharges to Morro Bay. The enrollment requires that the County minimize the discharges by first using land disposal methods such as dust control, infiltration, and percolation. The letter also includes conditions to limit bacteria, turbidity, pH, nitrate, and ammonia in discharges to Morro Bay.

Water Board staff visited the construction areas to inspect construction activities associated with the installation of the collection system on November 2, 2012. Staff met with the onsite Qualified Stormwater Pollution Prevention Plan Practitioner (QSP) to discuss management practices and dewatering activities. Although no dewatering was occurring during the site visit, the QSP indicated that saturated soil was encountered and that dewatering would be occurring in the near future. Staff also inspected the site on December 13, 2012.

### Emerging Contaminants and Bacteria Issues

[Harvey Packard 805/542-4639]

#### Contaminants of Emerging Concern and Antibiotic-Resistant Pathogens

At the December 6, 2012 Water Board meeting, Dr. Edo McGowan discussed contaminants of emerging concern (CECs) and antibiotic-resistant pathogens. The Board requested a follow-up discussion from staff regarding efforts by state and federal agencies to address these topics.

## Contaminants of Emerging Concern

CEC's are a group of chemicals, such as pharmaceuticals, current use pesticides, and industrial chemicals, that represent a challenging problem for regulators to address, owing to limited scientific knowledge about their sources, fates, and effects. In accordance with the provisions of the Recycled Water Policy, the State Water Board, coordinating with the Southern California Coastal Water Research Project, established a CEC advisory panel to address questions about regulating CECs with respect to the use of recycled water. The panel's primary charge was to provide guidance for developing monitoring programs that assess potential CEC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. The panel was asked to address the following questions:

- 1. What are the appropriate constituents to be monitored in recycled water, and what are the applicable monitoring methods and detection limits?
- 2. What toxicological information is available for these constituents?
- 3. Would the constituent list change based on level of treatment? If so, how?
- 4. What are the possible indicators (i.e. surrogates) that represent a suite of CECs?
- 5. What levels of CECs should trigger enhanced monitoring in recycled, ground or surface waters?

Six panel members were chosen for their expertise in the following fields: biochemistry, analytical chemistry, civil engineering, epidemiology/risk assessment, ecotoxicology, and human health toxicology. This panel reviewed the scientific literature regarding CECs in recycled water, and met periodically between May 2009 and May 2010 to discuss how to answer the key questions. Following the release of their draft report in the spring of 2010, the panel collected comments from stakeholders, including public interest groups and environmental organizations, and refined their recommendations. A final report was issued to the State Water Board for its consideration in June 2010. Prior to adoption, findings and recommended actions were considered by State Water Board staff with input from the public and the California Department of Public Health.

The panel produced several products to guide the state's recycled water management approaches. First, they developed a framework for prioritizing and selecting CECs for recycled water monitoring programs. This framework was then applied to recommend a short list of monitoring parameters, including both health-based indicators (i.e., toxicologically relevant CECs) and performance-based indicators (i.e., CECs with representative physicochemical properties and structures tested to demonstrate a capacity for removal by a particular water treatment process). The list also incorporates CECs from multiple source classes (e.g., pharmaceuticals, personal care products, food additives, hormones). Four health-based and five performance-based indicators were identified for recycled water used for groundwater recharge, while only three surrogate parameters were recommended for monitoring water used for landscape irrigation (turbidity, chlorine residual, and total coliform bacteria). The panel additionally developed guidance for interpreting and responding to monitoring results.

Lastly, they recommended several key areas for future efforts. To overcome the limitations associated with measuring individual chemicals, the panel recommended use of bioanalytical screening tools and use of molecular and genetic techniques to test for different classes of toxicological effects. Other recommended future activities included (a) improving the recycled water CEC database through a comprehensive review of literature and occurrence studies outside California and (b) providing programmatic support for data management, application of the selection framework, and periodic review of the original monitoring recommendations.

The State Water Board has not taken action on the panel's recommendations. State Water Board reports that the State Water Board will like have a hearing on proposed monitoring recommendations in February 2013.

Many of the questions to be addressed by the panel regarding CECs in recycled water are also relevant to the ambient environment. The David and Lucile Packard Foundation has partnered with SCCWRP to support a second panel that will provide the State with recommendations on how to best limit the impact of CECs on our oceans, estuaries and wetlands. More recently, the State Water Board expanded the panel's charge to also provide guidance on appropriate monitoring and management strategies for CECs in California's freshwater ecosystems.

This panel will address the following questions:

1. What are the relative CEC contributions of wastewater and stormwater discharges released into inland freshwater and coastal aquatic systems\*?

2. What specific CECs, if any, are most appropriate for monitoring in discharges to inland freshwater and coastal aquatic systems and what are the applicable monitoring methods and detection limits?

3. How are these priority constituents affected by the chemistry, biology, and physics of wastewater treatment processes, discharge into and transport by streams, rivers and estuaries, and mixing and dilution with receiving inland, coastal, and ocean waters?

4. What approaches should be used to assess the biological effects of CECs on sentinel species in inland freshwater and coastal aquatic systems?

5. What is the appropriate design (e.g. media, frequency, locations) for a CEC monitoring and biological effects assessment program given current monitoring methods, and what level of effects will be detectable with such a monitoring program? How does the sensitivity of the monitoring and assessment program vary with investment?

6. What concentrations of CECs or levels of biological effects should trigger further actions and what options should be considered for further actions?

\* Inland freshwater systems refer to surface waters including streams, rivers, lakes and reservoirs. Coastal aquatic systems are the territorial marine waters of the State as defined by California law, i.e., those extending up to three miles offshore. This question also refers to releases outside three miles that impact state waters or any ground and surface waters (fresh, brackish, or saline) within state boundaries that are hydrologically connected to the coastal ocean.

Seven panel members were chosen for their expertise in the following fields: biochemistry, analytical chemistry, civil engineering, coastal/marine resources, epidemiology/risk assessment, ecotoxicology, and human health toxicology. This panel will review the scientific literature regarding CECs in aquatic systems, and hold several meetings to discuss how to answer the key questions. The project also allows for some additional data collection and analysis as needed to assist the expert panel in filling any data gaps. The knowledge gleaned through this effort will be synthesized into written recommendations for the management community.

#### Antibiotic-Resistant Pathogens

SCCWRP reports that one of the issues addressed by the panel discussed above, as raised previously by E. McGowan for the proposed use of recycled water in the State, was the discharge and occurrence of antibiotics and the development of and potential impacts associated with antibiotic resistance (ABR) in receiving water environments. The panel performed an assessment based on existing occurrence and effects based data, and concluded that most of the antibiotics for which data existed did not pose a credible risk in receiving waters. Triclosan, an antimicrobial agent used in many consumer products, was identified by the panel for monitoring in receiving waters based on its potential to induce ABR. Furthermore, the recommended monitoring for triclosan was limited to one of three case scenarios—an inland waterway that receives most/all of its in stream flow as treated effluent—as dilution in embayments or in the ocean was concluded to represent a low risk. Lastly, the panel acknowledged the paucity of information on this topic, and made several recommendations, including the need to gather more occurrence data on antibiotics, to develop better monitoring and assessment tools for ABR and to convene an expert panel to focus on this topic. This is documented in their final report, which was released to the public earlier this year.

State Water Board staff reports that they plan on hiring a Sea Grant Fellow for 2013 who will be assigned to work a portion of her time with our CEC staff to focus on this topic from an ocean surface water perspective. State Water Board staff is also working with SCCWRP to develop a monitoring plan and will establish an advisory group to assist with that effort.

# San Luis Obispo Creek Municipal (MUN) Beneficial Use De-designation update

Katie DiSimone, <u>Katie.disimone@waterboards.ca.gov</u> Sheila Soderberg, <u>Sheila.Soderberg@waterboards.ca.gov</u>

The City of San Luis Obispo's Water Reclamation Facility (WRF) is permitted to discharge a peak seasonal dry weather flow of 5.1 million gallons per day (mgd) to San Luis Obispo Creek. The City provides sewerage and treatment service to the City, California Polytechnic State University, and the San Luis Obispo County Airport. In March 2005, the Central Coast Water Board modified Waste Discharge Requirements Order No. R3-2002-0043 and National Pollutant Discharge Elimination System (NPDES) Permit CA0049224 for the City's WRF. The permit was modified to include interim and final effluent limitations, as well as a compliance schedule, for selenium, cyanide, and trihalomethanes (bromoform, dichlorobromethane. and chlorodibromomethane or collectively "THMs"). THMs are associated with the use of chlorine for wastewater disinfection, and the City currently cannot meet THM effluent limits using their existing chlorine-based disinfection process. The modified permit's effluent limitations are consistent with the California Toxics Rule and protective of San Luis Obispo Creek's municipal, industrial, and domestic supply (MUN) designated beneficial uses.

In September 2005, the Central Coast Water Board adopted Resolution No. R3-2005-0106 amending the Central Coast Basin Plan to include the San Luis Obispo Creek Total Maximum Daily Load (TMDL) and Implementation Plan for nitrate. The TMDL established a numeric target of 10 milligrams per liter (mg/L) nitrate as nitrogen for San Luis Obispo Creek, based on MUN designation of beneficial uses for the creek. Additionally, the TMDL states that "the target date to achieve the TMDL is during or before the year 2012." The TMDL requires that the City's NPDES permit incorporate a monthly average nitrate concentration not to exceed 10 mg/L in its subsequent permit reissuance, originally scheduled for 2007. That requirement could have been affected if the Board removed or revised the MUN beneficial use designation for the creek.

In early 2006, the City requested the Central Coast Water Board to remove the MUN beneficial use designation from San Luis Obispo Creek. The City stated that the MUN beneficial uses have never been and are currently not being attained in San Luis Obispo Creek. Furthermore, the City stated that future MUN uses are prohibited due to the Department of Public Heath, Drinking Water Branch's prohibition to divert and use surface water for domestic consumption. In addition, the National Marine *Fisheries Service* requires that the City maintain certain discharge levels year-round from the WRF to support the local steelhead population.

In September 2006, the City submitted a draft Use Attainability Analysis (UAA) in support of the request to remove the MUN designation. Upon review of the UAA and other information provided by the City, Central Coast Water Board staff responded in a letter dated March 16, 2009. The letter explained that "dedesignation" would not be considered at the time, but that staff would be willing to consider other alternatives that may be capable of protecting water quality objectives for the creek and were consistent with State Board policies.

In March 2010, at the request of the City, the Central Coast Water Board adopted a time schedule order (TSO) to protect it from mandatory penalties for violations of the modified permit limits until the WRF upgrades were completed or an alternative regulatory strategy to address MUN-based effluent limits was adopted. The TSO provided deadlines for the City to develop and present an alternative regulatory strategy, such as site-specific objectives. This City was still investigating MUN dedesignation at this time as well. The TSO allows until March 2015 for the City to comply with the final effluent limitations for THMs.

At its May 4-5, 2011 meeting, Central Coast Water Board staff provided the Board with an update regarding the City's request to remove the MUN beneficial use designation or

development of an alternative site-specific objective for THM. Although Central Coast Water Board staff initially asked for Board direction, the City asked that the matter be postponed until outstanding data gaps were filled, particularly after getting a better understanding of groundwater and surface water interaction. In addition, both City and Central Coast Water Board staff were concerned that although San Miguelito Mutual Water Company was aware of the City's request, other private well owners throughout the San Luis Obispo Groundwater Basin had not been involved in stakeholder discussions.

Since the May 2011 Board meeting, Central Coast Water Board and City staff have met and evaluated multiple strategies to address the City's pending NPDES effluent limitations for THMs and nitrate. On January 4, 2012, the City held a public workshop in Avila Beach to receive local, state, and federal stakeholder input on the City's desire to remove the MUN beneficial use or develop a THMs site-specific objective for THMs. In subsequent meetings with Central Coast Water Board and City staff, it became apparent to all parties that development of site-specific objective was approved by the Central Coast Water Board, State Water Board, and ultimately USEPA, the City would not be provided relief from effluent limits, which would subject them to ongoing mandatory minimum penalties. Central Coast Water Board staff also expressed that development of a site-specific objective for THMs was inappropriate, as other wastewater treatment facilities throughout the Central Coast Region were changing disinfection processes via facility upgrades and thus all other upgraded facilities were able to meet THM effluent limits.

With regards to nitrate effluent limits, the 10 mg/L nitrate limit is reliably achievable with available technologies being used within the Central Coast Region. Since the City agreed through the stakeholder process and meetings to not pursue dedesignation of MUN beneficial uses, the 10 mg/L nitrate limit from the adopted TMDL will be incorporated into the City's next NPDES permit.

In December 2012, the City provided the following update to the Central Coast Water Board:

The City of San Luis Obispo is committed to fulfilling its role in protecting the beneficial uses of San Luis Obispo Creek. After careful review of input from local, state, and federal stakeholders at the January 4, 2012, public workshop in Avila Beach and subsequent discussions with the Central Coast Water Board, State Water Board, and EPA staffs, the City has decided to follow the CCWB's recommendation to move forward with renewal of its effluent permit with municipal drinking water standards rather than pursue de-designation or site specific objectives.

As described at the January workshop, the City's stewardship role carries a dual challenge. Requirements from the National Marine Fisheries Service for steelhead require that the City maintain discharge levels from its Water Reclamation Facility to support the steelhead population. Meanwhile, the state designation of the surface water as an "existing and anticipated beneficial use" municipal drinking water (even though County Public Health does not currently permit anyone to draw water from the creek for drinking water purposes) establishes high standards for treatment of the water.

The City is proud that its existing operation of the Water Reclamation Facility has served the dual stewardship challenges well. "We are pleased that steelhead populations have increased and appearance of the creek has improved," commented Carrie Mattingly, Director of the City's Utilities Department. "We also note that there is no evidence that the City's existing release of treated effluent has impaired the quality of groundwater drawn from wells in the downstream aquifer for drinking water or agricultural uses."

Consistent with this history of stewardship and public safety, the City has decided not to pursue de-designation of San Luis Obispo Creek for municipal drinking water standards. "Our

discussions with state and federal regulators indicated that the process for de-designation or site specific objectives would be long and arduous with low prospects for success," Mattingly noted. "Our Council strongly supports continued stewardship and advised us to proceed with renewal of the effluent permit to satisfy the municipal drinking water standards for the surface water. We look forward to working collaboratively with the Central Coast Water Board in order to accomplish this in the most cost-effective way for utility rate payers."

In the year ahead, Central Coast Water Board staff will work with the City and revise its outdated waste discharge requirements order and reissue the NPDES permit.

# WATER QUALITY CERTIFICATIONS

[Kim Sanders 805/542-4771]

The tables on the following pages list applications received and certifications issued from October 31, 2012 – December 19, 2012.

# 401 Water Quality Certification Applications Received October 31, 2012 – December 19, 2012.

Applicant	Date Received	Project Title	Project Purpose	Location	County	Receiving Water	Total Impact <sup>1</sup>	Status
ERG Operating Company- Phillip Sorbet	11/5/2012	Foxen Petroleum Pipeline Project	To create a pipeline as an alternative to trucking of oil by installing two 8" buried pipelines.	Five locations in unin- corporated Santa Barbara County	Santa Barbara	Five ephemeral drainages to Sisquoc River	0.025 acre	Application under review
Patricia Garrett	11/8/2012	Garrett Driveway and Pond Restoration Project	To remove and install a replacement bridge and driveway, and restore a historic pond.	Carmel	Monterey	San Jose Creek	0.17 acre	Incomplete application
Anthony Riboli	12/3/2012	Almond Drive Culvert Project	To provide access to a currently inaccessible property by creating a twenty foot wide road at a stream crossing.	Templeton	San Luis Obispo	Unnamed tributary to Huerhuero Creek	.0055 acre	Incomplete application
City of Monterey- Steve Scheiblauer	12/6/2012	City of Monterey Waterfront Structures Maintenance Project	To perform preventative and as- needed maintenance to city owned waterfront structures over a 5 year period.	Monterey	Monterey	Monterey Harbor	Varies annually	Incomplete application

<sup>11</sup> Total Impact includes both temporary and permanent impacts to riparian, streambed, and/or wetland environments within federal jurisdiction.

401 Water Quali	ty Certifications Issued October 31, 2012 – December 19, 2012.
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Applicant	Date Certified	Project Title	Project Purpose	Location	County	Receiving Water	Total Impact <sup>1</sup>
City of Paso Robles - Christopher Alakel	11/13/2012	Salinas River Underflow Enhancement Project	To place a small, rubberized containment pool structure in the Salinas River.	Paso Robles	San Luis Obispo	Salinas River	0.09 acre
City of Goleta- Rosemary Gaglione	11/14/2012	San Jose Creek Capacity Improvement Project with Fish Passage	To remove and replace the entire existing concrete channel with an improved design that eliminates a flood hazard and allows for fish passage.	Goleta	Santa Barbara	San Jose Creek	2.36 acres
Stow Company- David Van Horne	11/14/2012	Stow Ranch Bank Stabilization Project	To stabilize a section of the San Pedro Creek bank, protecting the existing adjacent bridge and riparian habitat from further erosion.	Goleta	Santa Barbara	San Pedro Creek	0.021 acre
City of Santa Barbara- George Johnson	11/19/2012	Mission Creek Fish Passage Project (Lower Caltrans Channel)	To facilitate upstream steelhead migration by retrofitting the existing concrete channel with a low flow fish passage.	Santa Barbara	Santa Barbara	Mission Creek	0.83 acre
Cooper Chase Construction	11/27/2012	Fort Hunter Liggett Multi-Purpose Machine Gun Range Project	To add target features to the existing firing range to create a multi-purpose machine gun range in training area 22 on Fort Hunter Liggett.	Fort Hunter Liggett	Monterey	San Antonio River	0.087 acre
California Department of Transportation- Paul Holmes, and Santa Barbara Co. Flood Control District- Maureen Spencer	12/7/2012	Las Vegas-San Pedro Creeks Capacity Improvement Project	To increase the capacity of both Las Vegas and San Pedro Creek by replacing existing culverts.	Goleta	Santa Barbara	Las Vegas Creek, San Pedro Creek	1.64 acres
Port San Luis Harbor District - Loch A. Deizler	12/17/2012	Port San Luis Maintenance Dredging Project	To perform maintenance dredging of existing basins on an as-needed basis to provide safe boater access.	Avila Beach	San Luis Obispo	San Luis Bay	Varies annually
San Benito County Department of Public Works- Arman Nazemi	12/18/2012	Miller's Low Water Crossing at Coalinga Road Project	To repair and perform maintenance on existing concrete low water crossing; removal of gravel deposit and unplugging of culverts.	Unincorporated San Benito County	San Benito	Laguna Creek	0.07 acre
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<sup>[1]</sup> Total Impact includes both temporary and permanent impacts to riparian, streambed, and/or wetland environments within federal jurisdiction.

## Groundwater Protection Section Case Closures

[Two tables are provided in the EO Report: Table 3 lists the closure performance for the Underground Tank and Site Cleanup Programs at approximately the one-half point through the current fiscal year, November 9, 2012 through January 6, 2013. Table 4 lists the individual sites closed since the start of the fiscal year.]

#### General Order and Waiver Enrollments

[One table is provided in the EO Report: Table 5 lists the enrollments under various State-wide and Central Coast Region general orders and waivers. The table also includes enrollment dates and the staff contact for each enrollee.

# **ATTACHMENTS**

- Attachment 1: Central Coast Water Board December 17, 2012 Comment Letter to State Water Resources Control Board on November 16, 2012 Draft Phase II Municipal Stormwater Permit
- Attachment 2: Settlement Agreement dated December 2008
- Attachment 3: Groundwater Section, Case Closure Performance Scoreboard
- Attachment 4: Groundwater Case Closures

Attachment 5: General Waiver/General Order Enrollment Table