STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MAY 4-5, 2011

Prepared on April 5, 2011

ITEM NUMBER: 22

SUBJECT: Executive Officer's Report to the Board

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.

WATER QUALITY CERTIFICATIONS

[Kim Sanders 805/542-4771]

The tables on the following pages list applications received and certifications issued from February 9, 2011 – March 30, 2011.

Date Receiving Total Applicant **Project Title Project Purpose** Location County Status Received Water Acreage Repair an exposed pipeline by installing a permanent Unnamed PG&E articulating ground mat agricultural Line 187 ERCON Unincorporated, Under staff Patricia 2/10/11 system (ERCON mat) 0.028 Monterev ditch. Mat Project near San Lucas review Sanchez directly over the exposed Salinas section of pipe within the River drainage channel. Salinas Actions necessary to Valley Solid Crazy Horse complete the planned Tembladero Under staff Waste 2/16/11 Sanitary Landfill Salinas Monterey 1.48 closure of the Crazy Horse Slough review Authority -Closure Project Sanitary Landfill. David Meza Replacement of a San Mateo deteriorated culvert and County, Unnamed **Pigeon Point Road** the removal of Department drainage to Under staff 2/22/11 Maintenance accumulated sediment Unincorporated San Mateo 0.005 of Public Pacific review from a drainage along Project Works - Mark Ocean Pigeon Point Road in San Chow Mateo County. Establish a hydrologic Oly Chadmar connection between the project site and the limited Santa Under staff General Devereux 3/3/11 Haskell's Landing Goleta 0.32 Barbara Partnership urban runoff currently Creek review Chuck Lande being discharged to the north. Removal and offsite disposal of surface and Carpinteria Oil and Complete Chevron Env. shallow solids containing Unnamed Gas Processing application Management chlorinated pesticides and Santa drainage to 3/8/11 Facility Soil Carpinteria 0.118 received, Company metals from several areas Barbara Pacific Remediation/ review has Rich Hill at and adjacent to the Ocean **Restoration Project** not begun. Carpinteria Oil and Gas Processing Facility.

401 Water Quality Certification Applications Received February 9, 2011 – March 30, 2011.

| California Department of Fish and Game - Jeffrey Single | 3/14/11 | Moss Landing Wildlife Area Phase II Project | Maximize habitat variety and quality for nesting and foraging birds at the Moss Landing Wildlife Area. Provide additional opportunities for wildlife viewing, improve public access, and create access compliant with the Americans with Disabilities Act. | Moss Landing | Monterey | Elkhorn Slough | 31.336 | Under staff review |
|---|---------|--|--|-----------------|--------------------|--|--------|-----------------------|
| City of San Luis Obispo - Freddy Otte | 3/23/11 | City of San Luis Obispo Sediment Removal Project | Remove sediment from under Marsh Street bridge and within Prefumo Creek at Los Osos Valley Road. The goal is to restore conveyance capacity under the existing bridge and within the existing flood control channel to prevent flooding and property damage. | San Luis Obispo | San Luis Obispo | San Luis Obispo Creek, Prefumo Creek | 0.83 | Under staff review |

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

| Applicant | Date Certified | Project Title | Project Purpose | Location | County | Receiving Water | Total Acreage |
|--|-------------------|--|--|------------------|--------------------|--------------------------|------------------|
| PXP - Candace Salway | 2/14/2011 | WDR - PXP Produced Water Reclamation Facility | Enhance the recovery of oil reserves by constructing a water reclamation facility that will treat produced water and discharge it to Pismo Creek. | Arroyo Grande | San Luis Obispo | Unnamed State wetland | 0.09 |
| ALBA - Brett Melone | 2/25/2011 | Triple M Wetlands | To improve water quality on the Triple M Ranch and in the Elkhorn Slough Watershed, restore diverse native plant communities to increase biodiversity and ecological integrity and diversify the habitat, improve habitat for threatened and endangered species, and to reconnect the creek to the floodplain. | Royal Oaks | Monterey | Carneros Creek | 17 |
| Troesh Materials - Steven M. Troesh | 3/28/2011 | Diamond Rock Sand and Gravel Mine and Aggregate Processing Facility | Operation of a new sand and gravel mine and aggregate processing facility. | Cuyama Valley | Santa Barbara | Cuyama River | 85 |

401 Water Quality Certifications Issued February 9, 2011 – March 30, 2011. ^[1] Total Acreage includes both temporary and permanent impacts to riparian, streambed, and/or wetland environments within federal jurisdiction.

STATUS REPORTS Regional Monitoring and Assessment [Karen Worcester 805-549-3333]

The U.C. Davis Marine Pollution Studies Laboratory and the U.S. Geological Survey recently completed a grant funded project on the status of three of our central coast lagoons, located at the lower ends of the Salinas, Pajaro, and Santa Maria rivers. Lagoons are essentially small estuaries, where fresh water mixes with salt and creates unique habitat areas. The focus of the study was to:

- 1. Characterize the occurrence of pesticides in estuary water, sediment, fish and sand crab tissue.
- 2. Qualitatively compare the suites of pesticides detected in the estuaries with those found in key adjacent tributaries that convey agricultural runoff into the estuaries.
- 3. Determine the magnitude of biological effects in the estuaries and investigate relationships between pesticide occurrence and biological effects.
- 4. Link estuary condition with agricultural pesticide usage, management practice implementation, and effectiveness of individual practices, and share information with growers, resource conservation districts and others.

Pajaro Estuary – Water column toxicity was common in the Pajaro estuary, with 55% of irrigation season samples and 25% of storm water samples toxic to amphipods. Diazinon, chlorpyrifos and malathion were commonly detected in water samples. Forty-two percent of sediment samples were toxic to amphipods, though typically at low levels. At least part of this toxicity was attributable to bifenthrin (a pyrethroid pesticide). Benthic communities were highly impacted (due to presence of a pollution tolerant polychaete species, the absence of sensitive species, low overall abundance, and low diversity). DDT metabolites were present in fish and sand crab tissue. In addition, several current use fungicides, including azoxystrobin, and boscalid were found. No reference levels are available for these chemicals. No organophosphates or pyrethroids were found in fish tissue.

Salinas Estuary – The Salinas estuary was the least impacted of the three estuaries studied. Few of the water or sediment samples were toxic (17% in water and 12.5% in sediment), but benthic communities were still highly impacted. When toxicity was detected it was typically associated with chlorpyrifos. More toxicity was observed upstream at Blanco Drain and the Salinas River at Davis Road, typically associated with chlorpyrifos in water, and chlorpyrifos, bifenthrin, cypermethrin and cyhalothrin in sediment. Sand crab tissue had detections of DDT metabolites, at levels higher than in the Pajaro and comparable to the Santa Maria estuary. DDE and two fungicides, azoxystrobin and pyraclostrobin were also present in fish tissue.

Santa Maria Estuary – The Santa Maria estuary was the most severely impacted estuary in this study. The majority of water and sediment samples were toxic, with chlorpyrifos and pyrethroid pesticides associated with toxicity. Benthic invertebrates at all stations were highly impacted. This study attributes impacts primarily to flows from Orcutt Creek, which was also highly toxic to both sediment and water from the same pesticides that were measured in the estuary. Sand crabs and fish tissue had detections of a number of different fungicides, herbicides, and pesticides, at higher levels than in the other two estuaries. Sand crabs had elevated levels of DDT, as well as bifenthrin, cyfluthrin, diazinon, chlorpyrifos, azoxystrobin, pyraclostrobin, and boscalid. Thirteen currently applied chemicals, as well as DDT and its

breakdown products, were detected in fish. Chlorpyrifos, diazinon, and bifenthrin were detected in all fish collected, as were the fungicides azoxystrobin and pyraclostrobin.

This study highlights the poor condition of these important ecological resources. Lagoons serve as habitat for several threatened species, and are unique habitats because of their location at the interface of fresh and salt water. The study identifies chemicals at levels that likely affect salmonid functions, and may impair predator avoidance and homing behaviors in these threatened fish. Because of the heavy use of estuaries by birds, elevated chemicals can be a problem due to direct effects on birds or through indirect foraging on contaminated food items.

The report includes a summary of the status of management practices affecting pesticide transport in the project watersheds and includes several specific recommendations related to management practice implementation, including developing a standardized reporting approach, developing a regionalized approach to monitoring of practice implementation, continuing to provide support for on-farm educational monitoring and expert outreach, and targeting of grant funding to achieve these outcomes.

These findings are the first in our Region to identify these chemicals as being a potential problem in the environment. Some of the highest water concentrations of chemicals measured in this study were of these "novel" chemicals. This report has been forwarded to the Department of Pesticide Regulation with attention called to findings, particularly the new detection of fungicides in fish tissue and water. DPA staff has indicated they will include these chemicals in upcoming surveys in our Region. The EPA Pesticide Fact Sheet on Azoxystrobin (http://www.epa.gov/opprd001/factsheets/azoxystr.pdf) states that this fungicide is very highly toxic to estuarine fish and invertebrates. The Material Safety Data Sheet (MSS) for this chemical (<u>http://www.cdms.net/LDat/mp9NC001.pdf</u>) states that it is of "low bioaccumulation risk".

The MSS for pyraclostrobin (<u>http://www.greenbook.net/Docs/Msds/M90836.pdf</u>) states it shows acute and prolonged toxicity to fish and is not readily biodegradable. The EPA Fact Sheet on Boscalid (<u>http://www.epa.gov/opprd001/factsheets/boscalid.pdf</u>) describes it as an essentially stable chemical that binds to sediments and biodegrades very slowly in aquatic systems. It also states that Boscalid is expected to accumulate in fish tissues at moderate levels, though it should depurate from tissues when fish are no longer exposed to the compound.

ADMINISTRATIVE REPORTS

Budget Update

I have been keeping you apprized of the State budget situation and how it affects our operations in the Central Coast Region. Recall that we have had three days of furloughs per month for basically all technical positions in the office (non administrative and non supervisory). These furloughs were a substantial reduction in work hours (as well as pay reductions for employees). Since our last Board meeting, the State reached labor agreements with the unions representing State employees in several Bargaining Units, which include our technical staff. The following information is provided regarding the Furlough Program and Personal Leave Program 2010/2011 for these Bargaining Unit employees.

FURLOUGH PROGRAM

Effective April 1, 2011, the Furlough Program that began August 2010 will end for represented employees.

PERSONAL LEAVE PROGRAM (PLP 2010/2011)

• Effective April 1, 2011, employees will be credited with PLP 2010/2011 on the first day of each pay period for 12 consecutive pay periods in the manner outlined below:

<u>Full-Time Employees</u> shall have a reduction in pay equal to 4.62% and eight (8) hours of leave will be credited to the employee's PLP 2010/2011 leave balance.

This means that employees will be reduced in work time and pay by one day per month rather than three days per month. These agreements are between the State and union leaders, and are subject to ratification by the members.

Staffing

Office Technician Sherry Kuykendall decided to retire, effective April 4, 2011. We wish her well in retirement and future endeavors. We are still "overstaffed" compared to our reduced budget, by about one personnel year (PY). Consequently, we cannot hire a replacement for Sherry, even if the hiring freeze is lifted. Our already depleted admin staff is now even more thin. Also, with the added cost of paying for the reduction in furlough time, we may go further in the hole, and owe more positions to the waterboards organization.

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

29th Annual Salmonid Restoration Conference

Central Coast Water Board staff David Innis participated in the Salmonid Restoration Foundation Conference's Stormwater Pollution Runoff and Water Quality Workshop in San Luis Obispo on March 24, 2011. Mr. Innis provided a presentation entitled, "A Tool Kit for Water Quality Protection." The 30 minute talk focused on how Central Coast Water Board staff implement municipal, construction, and industrial stormwater permits and how the permits may apply to the work conducted by the salmonid restoration community. The workshop also included presentations by municipal representatives regarding their experiences implementing municipal stormwater programs, as well as presentations on such diverse topics as Integrated Regional Water Management Programs, Morro Bay first flush stormwater monitoring results, and use of vegetated biofilters. The audience was mainly comprised of governmental agency staff, non-profit organization staff, engineers, consultants, and conservation project field staff.

Conservation and Restoration Seminar Series at UCSB's Cheadle Center for Biodiversity & Ecological Restoration

On February 28, 2011, Dominic Roques was the guest speaker for the Conservation and Restoration Seminar Series at UCSB's Cheadle Center for Biodiversity & Ecological Restoration. The seminar is a weekly series for undergraduates, graduates, and community members. Seminars feature guest lectures by research scientists, land managers, policy analysts, and community leaders, as well as tours of local restoration projects. Mr. Roques spoke about how the Central Coast Water Board uses its permitting processes and policies to protect the Central Coast's wetlands, rivers, and ocean from various impacts.