

STATE OF CALIFORNIA  
REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 1-2, 2005

Prepared on November 3, 2005

ITEM NUMBER: 28

SUBJECT: Executive Officer's Report to the Board

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

**WATER QUALITY CERTIFICATIONS**

[Sandy Cheek 805/542-4633]

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

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

Staff will recommend "No Action" when no discharge or adverse impacts are expected. Generally, a project must provide beneficial use and habitat enhancement for no action to be taken by the Regional Board. A chart on the following pages lists applications received from September 1, 2005 to September 30, 2005.

**WATER QUALITY CERTIFICATION APPLICATIONS RECEIVED FROM SEPTEMBER 1, 2005 THROUGH SEPTEMBER 30, 2005**

Applicant	Project	Purpose	Location	County	Receiving Water	Received	Action
Robert Newlon	Newlon Property Pond Relocation, Jensen Road, Paso Robles.	Fill a pond, create a stream channel where the stream currently enters the pond, and install culvert over channel. Cut and fill will total 2350 cubic yards of material. Approximately 1.75 acres will be disturbed during construction.	Paso Robles	San Luis Obispo	Un-named tributary to Jack Creek	13-Sep-05	Pending
LTC James Doty, USAR	Schoonover Airfield Maintenance and Extension	Upgrade/extend Schoonover Airfield, currently rated for C-130 aircraft, to a C-17 rated airfield. Upgrade required to maintain military mission readiness.	Fort Hunter Liggett	Monterey	San Antonio River	20-Sep-05	Pending
Arman Nazemi - County of San Benito	Lone Tree Road Bridge Replacement at Arroyo dos Picachos Creek	This project proposes to replace the existing Lone Tree Road Bridge over Arroyo dos Picachos Creek.	City of Hollister	San Benito	Tributary to Requisita Slough and ultimately into the Pajaro River.	2-Sep-05	Pending
County of San Luis Obispo - Department of Public Works	Tank Farm Road Safety and Operational Improvements Project; ED01 - 361 (300151)	Widen Tank Farm Road at the intersection of Santa Fe Road and to install a new left turn lane.	San Luis Obispo	San Luis Obispo	Acacia Creek (Tributary to San Luis Obispo Creek)	6-Sep-05	Pending
Department of Transportation	Highway 46 Drainage Facility Repair	Repair six drainage facilities along Route at postmiles 5.43 and 5.46 in San Luis Obispo County.	Highway 46 between Highway 1 and Highway 101	San Luis Obispo	Sites drain into Green Valley Creek and Perry Creek before joining Santa Rosa Creek and the Pacific Ocean	8-Sep-05	Pending

Department of Transportation	Cuyama River Bridge Repair	Replacement of small rock slope protection (RSP) material at bridge base with larger four-ton RSP to stabilize the riverbanks. In addition, four-ton RSP will be added along the south side of the west bridge approach to prevent undermining of the bridge.	Cuyama	Santa Barbara	Cuyama River, which flows into the Santa Maria River	8-Sep-05	Pending
JM Development, Inc	Buellton Community Homes, culvert outfall	Install drainage outfall	City of Buellton	Santa Barbara	Zaca Creek	12-Sep-05	Pending
Gary and Mary Ann Collins	Reinforced Concrete Box Culvert Over West Toro Creek	Remove an existing grade crossing and provide a 25-year minimum conveyance structure over West Toro Creek	Montecito	Santa Barbara	West Toro Canyon Creek	19-Sep-05	Pending

## Watershed Reports

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

Storm water staff recently reviewed the County of San Luis Obispo's Storm Water Management Plan (SWMP) to determine if San Luis Obispo Creek nutrient and pathogen TMDL implementation requirements are included in the plan. Staff sent a comment letter at the beginning of November. Staff also reviewed University of California Santa Cruz's second SWMP submittal. Staff plans to meet with the County of Santa Barbara to discuss their third submittal. The current status of the Region's Phase II SWMP review is shown in **Attachment A**.

[See Attachment A]

### Buena Vista Mines, Inc., San Luis Obispo County [Harvey Packard 805/542-4639]

#### Staff Inspections and Site Conditions

Staff conducts regular inspections of the Buena Vista and Klau Mines, approximately twice a year (usually in Spring and late Fall of each year). Staff conducted inspections at both mines sites on May 10<sup>th</sup> and July 27, 2005.

**Buena Vista Mine:** The large rainfall storm events this winter caused significant erosion along the banks of the former retort pile valley, and former Western Overburden pile. Much vegetation has taken hold site-wide, especially in the old mill building area.

On the May 2005 inspection, staff observed a spring above the old Mahoney adit discharging a considerable volume of water via sheet flow into the main drainage valley. Staff observed other acid mine drainage seeps at multiple locations at the Buena Vista mine. These waters are primarily being captured in the lower sedimentation basin. Some slope slumping on the main mine waste repository and the former Western Overburden pile was also evident.

The former Treatment Plant collection pond breached this winter due to the amount of rainwater that collected in the pond. This water is primarily storm water collected site-wide. Staff

observed water discharging during the May 2005 inspection into the western concrete channel and discharge pipe located at the intersection of Cypress Mtn. and Klau Mine Roads. However, at the time of the July 2005 inspection, site conditions were much drier, with no water leaving the site.

**Klau Mine:** During our May and July 2005 inspections, staff observed orange colored acid mine drainage from the seep located at the intersection of Klau Branch Creek and Cypress Mtn. Road. The discharge and discoloration are much diminished compared with previous years. Staff believes this may be due to the remedial measures installed several years ago. However, several more years of monitoring will be needed to confirm this observation.

#### U.S. EPA Actions

The U.S. EPA held a multi-agency meeting at the Central Coast Water Board office on May 10, 2005, followed by a site visit to both mine sites. U.S. EPA held the meeting to update all the agencies on current site conditions and long-term site remediation goals. Participants included staff from U.S. EPA, the Central Coast Water Board, CA Department of Toxic Substances Control, CA Department of Health Services and the County of San Luis Obispo. U.S. EPA staff indicated that efforts to place both mine sites on the National Priority Site Listing (Superfund List) continue.

Due to the near record rainfall during the winter of 2004-2005 and its effects on the conditions at the mines sites, U.S. EPA received authorization and spent \$545,790 for site stabilization work this past summer. Work accomplished included:

- Repairing the breach at the former Treatment Plant pond
- Improved slope stability on the Main Repository – Newly constructed subsurface drains, benches, and hydroseeded slopes
- Removal of accumulated sediment from four sedimentation basins
- Installed fencing around the Old Mill Building
- Recontouring and hydroseeding on the slope of the former Western Overburden pile

On September 26, 2005, this Water Board received a copy of an Action Memorandum from U.S. EPA requesting approval to spend \$1.425 million (and an additional \$525,000 for indirect costs for a total

of approximately \$2 million). The Action Memorandum calls for remedial actions to mitigate threats to human health and the environment posed by free metallic mercury present on the existing structures, and in the sediments of the Old Mill Building and condensers at the Buena Vista Mine. Water Board, U.S. EPA, DTSC and CA DHS staff inspections have confirmed on various occasions the presence of free mercury (beads of free mercury) residing underneath the remaining old buildings, mills, condensers and retort of the Buena Vista Mine. In a letter received from the CA DHS, they state: "*Because over six million pounds of mercury were extracted in the mill building, it seems likely that a portion of the mercury escaped from the operation. The mercury vapors and particulates that may have escaped the condenser pipes would likely deposit on surfaces in and around the mill works including soils and mill structures. Free mercury may also have been spilled in the mill works over the years.*" U.S. EPA estimates that approximately 100 tons of contaminated sediment exists in and around the mill structure. Mercury may also still be contained in flasks in the retort and adjacent building. The old mill structures are dilapidated and continue to degrade with each passing year, and the Buena Vista Mine is unfenced in many locations, with access and exposure to the public from this free mercury.

The planned 2006 remedial response includes the following:

- Site preparation and mobilization, including grading the entrance to the retort buildings and mobilization of equipment and personnel
- Demolition of dilapidated retort building
- Excavation of the retort building, free mercury and soil surrounding the retort area
- Packaging all waste for transportation and disposal in sealed roll-offs
- Backfill, recontouring, final grading, and revegetating excavated areas

Staff wishes to acknowledge and express its appreciation for the willingness of U.S. EPA to expend additional funds and resources at Buena Vista Mine for immediate benefit to water quality, human health and the environment.

Update on DeLaveaga Disc Golf Course, Santa Cruz County [Peter von Langen 805/549-3688]

The Regional Water Board directed staff to provide an update on erosion problems at the DeLaveaga Disc Golf course, and to consider options for addressing the problems. DeLaveaga Disc Golf Course is located in the upper Arana Gulch Watershed in DeLaveaga Park, the most widely used park operated by the City of Santa Cruz (City). During the 2004/2005 rainy season, at least one member of the public expressed concerns regarding erosion at the DeLaveaga Disc Golf Course.

Controlling erosion at the DeLaveaga Disc Golf Course is identified as a priority in the *Arana Gulch Watershed Enhancement Plan* prepared for the Arana Gulch Watershed Alliance. The Arana Gulch Watershed Alliance is a collaborative stakeholder group dedicated to restoring, protecting, and enhancing fish and wildlife habitat, water quality, and natural resources throughout the watershed. For more information on the Arana Gulch Watershed Alliance, please visit the following website:

<http://www.aranagulch.org/>

On October 7, 2005, Central Coast Water Board staff and Mr. Steve Hammack, City Superintendent of Parks, inspected the DeLaveaga Disc Golf Course. During the inspection and in subsequent correspondence, Mr. Hammack described management measures that the City implemented since the rainy season of 2004/2005. Mr. Hammack also described current and long-term measures the City will undertake to reduce and prevent further erosion, and restore the property.

**Measures Undertaken at DeLaveaga Disc Golf Course Since Rainy Season 2004/05**

Mr. Hammack described how the City has developed an outstanding working relationship with representatives of the DeLaveaga Disc Golf Course Club. According to Mr. Hammack, this relationship increases environmental awareness among disc golfers and leads to further collaboration on erosion control and restoration projects within the DeLaveaga Disc Golf Course. For example, the City and Club members coordinated to plant numerous native trees and reestablished vegetation on several acres of the golf course since last spring.

Some of the erosion problems on the disc golf course resulted from members of the public illegally driving off-road vehicles. Club members now actively deter off-road vehicle drivers from entering the site. The City has also installed a heavy-duty gate on the service road to the "Top of the Mountain" trail, and installed numerous log barriers along the perimeter of the disc golf course, roadway, and parking lot. These actions appear to have stopped further excursions of off-road vehicles on to DeLaveaga Disc Golf Course.

In addition, the City has recently finalized an Integrated Watershed Restoration Program (IWRP) grant agreement (through the California Coastal Conservancy). The IWRP project will fund the design of long-term erosion control and restoration projects on a portion of the DeLaveaga Disc Golf Course (gully and playing area in the vicinity of the parking lot). During the inspection, Water Board staff met staff from Balance Hydrologics, the consultant funded to work on the first phase of the IWRP project.

#### **Current Measures Undertaken in Preparation for the Rainy Season**

The City is undertaking several actions in the near-term to reduce erosion at the DeLaveaga Disc Golf Course. The City has placed straw waddles and pea gravel along the unpaved parking lot to prevent sediment from being carried off-site by storm water runoff. The City is also implementing demonstration restoration projects by mulching and distributing native seed mix within several acres of disturbed areas. The City expects to take measures within the next several weeks to improve several acres, including hardpan areas, above the parking lot and the disturbed meadow in the fairway of hole thirteen. Additionally, the City had initial site visits with consultants for the IWRP project; the first phase of the IWRP project (that will identify a conceptual solution), will be completed in early 2006.

#### Long Term Measures

The City is coordinating with DeLaveaga Disc Golf Course representatives on future restoration projects and will continue the second phase of the IWRP project. The second phase will include preparation of environmental documents, construction drawings for the project site, and permitting. At this point, the IWRP grant does not

include implementation funds, but the City is actively exploring funding sources, including grant programs and private donations. Water Board staff will continue to monitor the progress of erosion control measures at the DeLaveaga Disc Golf Course.

### **Cleanup Reports**

Santa Ynez Airport Landfill, Santa Barbara County [Hector Hernandez 805/542-4641]

#### **Summary**

As directed during the October 21, 2005 Central Coast Water Board meeting in Santa Barbara, Water Board staff is providing the following as a status update on developments concerning the Santa Ynez Airport Landfill. As a result of numerous public concerns voiced during the October 21, 2005 Water Board meeting, Water Board Chairman Jeffrey Young asked Mrs. Jan Crosby and Mr. Steve Pappas to submit a letter to the Water Board addressing all of their concerns related to the Santa Ynez Airport Landfill. Mr. Young directed Water Board staff to prepare a written response and forward copies of the letters to the Water Board members for consideration prior to the December Water Board meeting. Provided timely submittal of the written concerns, the public will have an opportunity to address the Water Board concerning the written response from Water Board staff and any other outstanding issues.

As of November 1, 2005, Water Board staff has not been contacted by Mrs. Crosby, Mr. Pappas, or other members of the public concerning any issues related to the Santa Ynez Airport Landfill. Staff will continue to keep the Water Board apprised of any new developments concerning this landfill site and associated issues.

**Background** - The following sections provide background information regarding the location and history of the landfill.

**Location** - The landfill is located in the south-central portion of Santa Barbara County [REDACTED]. The landfill is located approximately one mile southeast of the community of Santa Ynez in an undeveloped, open space setting approximately 500 feet south of State Highway 246. The land is leased by the County of

Santa Barbara to the Santa Ynez Airport Authority (SYAA) and operated by the SYAA. The landfill is located within a 124.74-acre parcel that also contains the Santa Ynez Airport, County of Santa Barbara Fire Department Station #32, and a building used by the United States Forest Service. The landfill is located east of the Santa Barbara County Fire Department Station #32 which is at 906 Airport Road, Santa Ynez, California 93460. The landfill does not have a street address.

**Description** - The landfill site is comprised of three separate waste filled trenches [REDACTED] C, Figure 3), occupies a total area of approximately 1.6 acres, and is estimated to contain an in-place volume of 43,565 cubic yards of waste material. Landfilling activities consisted of trench and fill method of waste disposal. Following the completion of waste disposal operations, the trenches were covered with several feet of soil. Trenches B-1 and B-2 are surrounded on the north and east by a vineyard, on the west by an area being used to stockpile soil, and on the south by open space and the easterly end of the airport runway. Trench B-3 is surrounded on the north by an area being used to stockpile soil, on the east and west by open space, and on the south by the airport runway. There are no temporary or permanent structures located within the landfill boundary. Several structures are located within 1,000 feet of the perimeter of the landfill. These structures are a United States Forest Service building, a County Fire Station, and the Gainey Winery Administration building.

The Landfill was operated by Santa Barbara County as a municipal solid waste landfill and accepted residential, commercial and agriculture waste material generated in the Santa Ynez Valley during an approximately 11-month period, between 1969 and 1970. Land disposal operations at the landfill began after closure of the Ballard Canyon Landfill and ceased when land disposal operations were shifted to the Foxen Canyon Landfill. Thus, it can be reasonably assumed that these three landfill sites accepted similar waste material (i.e., municipal solid waste). The landfill became inactive prior to the promulgation of the Title 27 landfill regulations and has never been issued individual WDRs by the Regional Board; however, the site is enrolled under the General Closure Order.

**Groundwater Monitoring, Degradation and Remediation** - The principal aquifer beneath the site is unconfined. Groundwater has been measured between 52 and 79 feet below ground surface in monitoring wells around the landfill. Groundwater elevations in site wells indicate a relatively consistent flow direction to the north to northwest. Groundwater-monitoring requirements were established through the issuance of a Monitoring and Reporting Program (MRP) in April 2003. The present water quality monitoring system consists of eight groundwater-monitoring wells, which are sampled on a semiannual basis.

Volatile organic compounds (VOCs) have been detected in down-gradient and side-gradient monitoring wells. Down-gradient impacts were first identified in 1998, when groundwater monitoring was implemented. Concentrations of VOC detections range from trace to above the constituents' established maximum contaminant levels (MCLs). The existing groundwater plume extends approximately 500 feet beyond the northern-most boundary of the waste trenches. There are no known water supply or irrigation wells directly down gradient from the landfill. Existing groundwater pollution is attributed to landfill gas migration and or the infiltration of leachate to underlying groundwater.

**Corrective Measures** - Following the County's decision not to clean close the Santa Ynez Airport Landfill, the County submitted a groundwater remediation and capping proposal, which Water Board staff has approved. The approved remediation plan includes a phased approach. Phase I of the proposed remediation consists of three tasks: 1) Installation of a landfill gas extraction system, 2) Installation of a vapor recovery system, and 3) Installation of an air sparging system. The County applied for, and received a 50% matching grant from the California Integrated Waste Management Board for the landfill gas extraction system. The County has confirmed that Tasks 1 and 2 were completed prior to October 21, 2005 Water Board meeting. In accordance with the approved remediation plan, Task 3 will be implemented only if necessary, based on the effectiveness of the first two tasks. Phase II includes the installation of a final cover system. The timing for completion of the Phase II portion of the corrective measures will depend on the SYAA's plans for development near the landfill area. The County is working closely with

the SYAA to determine the timing for implementing Phase II activities. Staff intends to inform the Water Board as soon as Phase II activities are scheduled for implementation.

Underground Tanks Summary Report dated November 7, 2005 [Burton Chadwick 805/542-4786]

[See Attachment D]

## Regional Reports

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

CCAMP is conducting regular monthly monitoring at thirty-three coastal confluence sites and thirty sites in the Pajaro and north coast watershed rotation area. January marks the first time in two years that we will be conducting watershed rotation monitoring. It is also the first time we have included flow monitoring as a regular component of our monthly sampling. This has meant a new field intensive effort that is keeping our three-person field crew very busy.

A statewide Surface Water Ambient Monitoring Program (SWAMP) bioassessment subcommittee has been evaluating sampling protocols for benthic invertebrate monitoring and is making recommendations to change the state standard protocols. This has involved intensive studies to understand how the various protocols compare and to develop mechanisms to incorporate old data with more recent data collected with new protocols. There has been considerable evaluation of protocols for higher gradient riffle-pool habitat, but work is needed to develop parallel protocols for lower gradient systems. These include the lower ends of our larger watersheds where the agricultural waiver monitoring program will be conducted. We have submitted a small grant proposal to U.S. EPA to conduct protocol comparisons in low-gradient systems. Work will be conducted side-by-side with existing sampling efforts (such as that of CCAMP or the Cooperative Monitoring Program for Agriculture). Karen Worcester has been invited to attend a conference on bioassessment in the arid west in Phoenix in February, with funding provided by U.S. EPA. This conference will help us to move forward in

our efforts to develop biocriteria and tiered aquatic life uses.

CCAMP staff has been aiding U.C. Davis researchers in analysis of protozoal and bacterial data from coastal California. In particular, we have provided assistance in modeling flow and precipitation outputs associated with mussel monitoring sites in areas ranging from Bodega Bay south to Morro Bay. One paper has been submitted for publication in the International Journal for Parasitology; another is still in development.

## Data Management and Monitoring Program Development for the Agricultural Waiver Program

The web-based registration system for the Ag Waiver program was launched in early December following a week-long intensive "beta-testing" effort on the part of staff. The data entry system provides forms for Notice of Intent, Ranch Information, and Management Practice Reporting. We have also proceeded with design of a web-based monitoring data reporting system that incorporates required data elements of the Surface Water Ambient Monitoring Program and the California Integrated Water Quality System.

The CCAMP team has spent a number of days recently working with the new monitoring team hired by Central Coast Water Quality Preservation Inc., the new non-profit formed to support the Cooperative Monitoring Program for Agriculture. The consulting team includes Larry Walker and Associates and Pacific Ecorisk. CCAMP staff met with the team and representatives from the agricultural industry to review field and analytical protocols, data management procedures and quality assurance requirements to ensure that the new Cooperative Monitoring Program is compatible with CCAMP and SWAMP. Mary Adams, CCAMP field coordinator, has taken the consultant team and local agriculturalists on field visits to all proposed sites to discuss access, flow monitoring, and other sampling considerations. Participants reached agreement on the final site list; the Quality Assurance Program Plan will be amended to include this list and will be finalized. Monitoring will begin in the second half of January.



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

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

- Aptos and Valencia Creek Pathogen TMDLs- Data Collection and Analysis Reports
- Carbonera Creek Pathogen TMDL- Data Collection and Analysis Report
- Corralitos Creek Pathogen TMDL- Data Collection and Analysis Report
- Monterey Harbor Lead TMDL- TMDL Project Report or Delisting Proposal
- Salinas River Nutrient TMDL- Final Project Report
- Salinas River Pesticides TMDLs -Final Project Report
- Salinas River Pathogens TMDL- Data Collection and Analysis Report
- San Lorenzo River Estuary TMDL- Preliminary Project Report
- Soquel Lagoon Pathogens TMDL- Preliminary Project Report
- Watsonville Sloughs Pathogen TMDL - Draft Basin Plan Amendment

All of the projects listed above are progressing towards development and/or approval of a TMDL or a delisting proposal. The following few paragraphs provide some detail about the status of the TMDLs currently being developed for impairments in Santa Cruz County- Aptos and Valencia Creek Pathogen TMDLs, Carbonera Creek Pathogen TMDL, Corralitos Creek Pathogen TMDL, San Lorenzo River Estuary Pathogen TMDL, Soquel Lagoon Pathogen TMDL and Watsonville Sloughs Pathogen TMDL. San Lorenzo River and Lompico Creek are also identified as impaired by pathogens on the 303(d) List of Impaired Waters but staff determined that the levels of bacteria in these waterbodies are generally below water quality objectives and only occasionally exceed standards. Staff is tracking existing implementation efforts and water quality data on an annual basis and expects the bacteria levels in San Lorenzo River and Lompico Creek to meet water quality objectives with the next two to three years.

**Aptos and Valencia Creek Pathogen TMDLs, San Lorenzo River Estuary Pathogen TMDL and Soquel Lagoon Pathogen TMDL**

The County of Santa Cruz Environmental Health Department (Health Department) collected data and information to support TMDL development and implementation. The Health Department received a Proposition 13 Grant to study bacteria beach impairment in Santa Cruz County. Data collection included both water quality sampling for bacteria indicators and genetic analysis for source identification. The final grant project report and additional sampling data indicate bacteria sources include sewage spills and leaks from municipal and private lines; storm drain discharges from sewage spills, illegal recreational vehicle discharges, homeless encampments, pet waste, garbage, decaying vegetation, and organic fertilizer; occasional septic system failure; livestock holding areas; and birds and other wildlife.

Originally, the grant project proposed to focus on all of the above waters except Valencia Creek since these other waters contribute significant bacteria to beaches. Since there was limited bacteria data available for Valencia Creek, staff requested the Health Department to also perform data collection for Valencia Creek. The Health Department performed bacteria collection and analysis from September 2004 through September 2005.

The pathogen TMDLs for San Lorenzo River Estuary and Soquel Lagoon will be set to protect recreational beneficial uses. Staff has determined that shellfish harvesting in the San Lorenzo River Estuary and the Soquel Lagoon has not occurred historically and conditions in these waterbodies prevent the use from being attained. Therefore, staff plans to propose removal of the beneficial use for shellfish harvesting in these waterbodies in parallel with proposing the TMDLs.

Staff will complete the preliminary project reports for the San Lorenzo River Estuary and Soquel Lagoon Pathogen TMDLs and a "Data Collection and Analysis Report" for Valencia Creek by December 31, 2005.

**Carbonera Creek Pathogen TMDL and Corralitos Creek Pathogen TMDL**

Staff surveyed the land uses and possible sources of bacteria in these smaller watersheds last year and concluded the predominant source was the urbanized areas- the City of Scotts Valley in the Carbonera Creek watershed and the City of

afternoon session was a field demonstration of various turbidity collection methods and equipment.

These trainings presented topics and new information highly relevant to Ms. Dyer's work in the Timber Harvest Program.

On October 20, 2005, Staff Services Analyst, Sandy Cheek, attended advanced California Integrated Water Quality System (CIWQS) training given by the Division of Water Quality and the Office of Information Technology.

On November 3, 2005, Sandy Cheek offered a water quality presentation on the effects of non-point source pollution to the Gifted and Talented Education (GATE) classes at Shell Beach Elementary School.

Several staff attended a "brown bag lunch" presentation by three of our student assistants, Eileen Mick, Tricia Compas, and Aaron Hope, who are also members of the "Engineers Without Boarders" club, on their club project to build a water filtration system for drinking water for a school in northern Thailand.

On October 20, 2005, Roger Briggs attended a presentation at the American Society of Civil Engineers meeting in Pismo Beach on San Luis Obispo County's IRWM project (Integrated Regional Water Management), which incorporates Low Impact Design requirements. IRWM Plan goals and objectives were initially developed in the following five areas of water management:

- Water Supply;
- Water Quality;
- Ecosystem Preservation and Restoration;
- Groundwater Monitoring and Management, and
- Flood Management.

## ATTACHMENTS

- A. Phase II Municipal Storm Water Permit Status
- B. Figure 1 – Site Location Map
- C. Figure 3 – Well Location Map
- D. Underground Tanks Summary Report

H/EO rpt DEC05/ch