

San Diego
Regional Water Quality
Control Board



Executive Officer's
Report

May 10, 2006

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SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

EXECUTIVE OFFICER'S REPORT

May 10, 2006

PART A

SAN DIEGO REGION STAFF ACTIVITIES *(Staff Contact)*

1. Water Board's All Cleanup Programs Roundtable *(John Anderson)*

On April 4-6, 2006, San Diego hosted the first All Cleanup Programs Roundtable at the Bahia Hotel in Mission Bay. This is the first opportunity since 1987 for staff from all the Regional Board's programs to meet and discuss common issues regarding Public Participation, Regulatory Framework for Cleanup, Environmental Assessment, Vapor Intrusion, and Institutional Controls. In attendance were staff from the State Board and all nine Regional Board's cleanup program staff (Land Disposal, UST, SLIC, and DoD programs). This venue also gave staff an opportunity to meet with their counterparts in other regions and discuss how similar environmental cleanup challenges are handled in other regions. Celeste Cantu joined the Roundtable on the last day to lead an EO/AEO Panel Discussion on the *Future of the Cleanup Programs*. Art Coe represented Region 9 on the panel. Over 200 staff participated and it was a great success.

2. Anza Valley Municipal Advisory Council, Riverside County *(Robert Morris)*

At the invitation of the Anza Valley Municipal Advisory Council, Mr. Bob Morris from the Northern Core Regulatory Unit attended a meeting of approximately forty community residents in April 2006 to discuss water quality issues related to increased development in the area. The recent and projected growth in Anza, located in the upper Santa Margarita watershed, approximately 25 miles east of Temecula in Riverside County has caused residents to be concerned that the capacity of the basin's groundwater aquifer to meet future water supply demands. In response to these concerns, the United States Geological Survey (USGS) has initiated a hydrogeologic study of the aquifer. The purpose of staff's presentation was to emphasize the importance that the study also evaluates the basin's capacity to assimilate discharges of pollutants resulting from additional development.

As an example of the need to consider water quality issues in its planning study, Mr. Morris identified the impacts that nitrates in wastewater discharges from further development might have on their water supply. Based upon current knowledge of the basin's characteristics, the concentration of nitrates in the groundwater would likely exceed drinking water standards in the future unless

the number of new septic systems is restricted in the area or nitrates are removed from the wastewater before being discharged into the aquifer.

The residents had a number of questions regarding the protection of their water supply from potential sources of pollution in discharges resulting from land use changes. In response to their questions, several of the Regional Board regulatory policies and programs were discussed including the Basin Plan, the waiver policy, urban runoff, and groundwater cleanup. The Northern Core Regulatory Unit will continue to provide input to the community on its hydrogeologic investigation and planning studies to assist the community in addressing potential impacts to the groundwater aquifer.

3. Technical Advisory Committee: Mission Bay Landfill (*Brian McDaniel*)

On May 1, 2006, the Regional Board staff received a copy of the Revised Draft Environmental Assessment Report for the Mission Bay Landfill. The report was completed by SCS Engineers on behalf of the City of San Diego and submitted to all Mission Bay Landfill Technical Advisory Committee (TAC) members. The TAC members will further discuss the report in detail during their next meeting on May 12, 2006. The City of San Diego has created a web site (at <http://www.sandiego.gov/citycouncil/cd6/crtk/mblandfill.shtml>) allowing the public, and other interested parties, to follow the work of the Mission Bay TAC.

4. Land Disposal Program: Electronic Reporting Requirements (*Brian McDaniel*)

The Regional Board Land Discharge Unit (LDU) staff has amended Cleanup and Abatement Orders for the Jamacha and the Valley Center Landfills as a means of effectively implementing the statewide electronic reporting requirements for facilities regulated under California Code of Regulations (CCR), Title 27 (discharges of nonhazardous wastes to land) and CCR Title 23, Chapter 15 (discharges of hazardous wastes to land). The amendments modify the Monitoring and Reporting Programs at the waste management units/landfills regulated by Cleanup and Abatement Orders (CAOs). The amendments are designed to:

- a. Implement the State Water Resources Control Board's statewide electronic reporting requirements under section 3890, Title 23, CCR, and
- b. Require that Dischargers continue providing the Regional Board with paper copies of technical and monitoring reports.

The objective of the LDU staff is to require compliance with the applicable electronic reporting requirements for all affected Land Disposal facilities.

5. GIS Committee (*Brian McDaniel*)

On May 3, 2006, California Regional Water Quality Control Board, San Diego Region (Regional Board) staff attended the quarterly GIS Committee teleconference and webex meeting. Committee members included members

from all Regional Boards, OIT and DWQ staff. The current focus for the committee included discussions regarding license maintenance, software, server status and member reports. The purpose of the committee is to assess the Board's needs for Geographic Information Systems (GIS) software, hardware, maintenance, and support and also to improve GIS communication throughout the Regions. The committee is chaired by Fiona Renton, GIS Technical Advisor, Office of Information Technology, State Water Resources Control Board.

6. Geosynthetics Seminar (John Odermatt)

On May 3, 2006, the Regional Board staff (John Odermatt) attended a "Technical Seminar: Design and Construction of Landfills Using Geosynthetics, Latest Developments." Advanced Earth Sciences (AES), who is a contractor for the County of Orange Integrated Waste Management Department, hosted the seminar at the Marriott Hotel in Irvine. The primary presenter was Dr. Robert Koerner, Director of the Geosynthetic Institute and Professor Emeritus from Drexel University. Dr. Koerner' presentation included a number of facility specific examples of geosynthetics in landfill applications and lessons learned from recent problems at landfill facilities. The seminar was well attended by technical staff from the County of Orange Integrated Waste Management Department, County of Orange Solid Waste Local Enforcement Agency (LEA), and technical staff from the Santa Ana Regional Water Board (Region 8).

7. Nitrate in California's Groundwater – 17th Symposium on Groundwater Contaminants, Groundwater Resources Association of California (Charles Cheng)
Charles Cheng fro the Regulation Core Regulatory Unit attended the 17th Symposium on Groundwater Contaminants by the Groundwater Resources Association of California (GRAC), which was held on April 4-5 in Modesto, California. The theme of this symposium was "Nitrate in California's Groundwater – Are We Making Progress?" Participants included regulatory agencies, dischargers, and consultants. The symposium presented compelling evidence that nitrate contamination in the groundwater is arguably the most significant threat to water quality in California. Many shallow aquifers within the State including areas within the San Diego Region have been impacted by nitrate, with recent data showing that nitrate contamination beginning to reach deeper aquifers.

The symposium was mostly focused on monitoring and data interpretation, with limited presentations on remedial technologies. The information presented will be useful in developing the Regional Board programs for addressing sources of nitrates such as onsite wastewater disposal systems, confine animal feeding operations, and land application of biosolids and fertilizers.

8. Personnel Report (David Barker)

As of May 2006 the California Regional Water Quality Control Board (San Diego Regional Board) has an existing authorized staff size of 70 employee positions. Sixty of these positions are comprised of technical staff in the engineering,

engineering geology, and biologist job classifications. Ten of these positions are comprised of staff in administrative office support services and information technology job classifications.

The San Diego Regional Board is currently involved in a major recruitment effort to fill vacancies resulting from recent staff departures as well as the establishment of new vacant positions resulting from budget augmentation with additional federal and state program funds. Six new technical staff employees have reported to work since December 2005. Our current recruitment emphasis is to fill an additional 5 vacancies as follows:

- 1 administrative staff vacancy in Records Management support services.
- 2 technical staff vacancies in the site mitigation and cleanup program.
- 2 technical staff vacancies in the NPDES storm water program.

PART B **SIGNIFICANT REGIONAL WATER QUALITY ISSUES**

1. Sanitary Sewer Overflows (SSO) *(Eric Becker, Charles Cheng, Joann Lim, Melissa Valdovinos, Victor Vasquez) (Attachment B-1)*

From April 1 to April 30, 2006, there were seven sanitary sewer overflows (SSOs) from publicly-owned collection systems reported to the Regional Board office; four of these spills reached surface waters or storm drains, one of which resulted in closure of recreational waters. Of the total number of overflows from public systems, three were 1,000 gallons or more. The combined total volume of reported sewage spilled from all publicly-owned collection systems for the month of April 2006 was 73,982 gallons.

There were also eight sewage overflows from private property reported in April 2006. Three of these spills reached surface waters or storm drains, none of which resulted in closure of recreational waters. None of the overflows from private property was 1,000 gallons or more.

The total rainfall amount for April 2006 recorded at San Diego's Lindbergh Field was 0.88 inches. For comparison, in March 2006, 1.36 inches of rainfall was recorded at Lindbergh Field, and 24 public SSOs were reported. Also for comparison, in April 2005, 0.59 inches of rainfall was recorded at Lindbergh Field, and 21 public SSOs were reported.

Attached is a table titled "Sanitary Sewer Overflow Statistics," updated through April 30, 2006, which contains a summary of all SSOs by fiscal year (FY) from each agency since FY 2001-2002.

It should be noted that the data for spill volume per volume conveyed (GAL/MG) could be easily misinterpreted. For a sewer agency that has a small system size,

but experienced a spill of a few hundred gallons or more, the value may show high. Also, for a sewer agency that has a large system size, a high volume spill event may not result in a high value for this statistic. Hence, these numbers by themselves are not sufficiently representative of the measures being taken by a sewer agency to prevent SSOs, nor can the numbers be compared directly between agencies. The data does represent a different way to review and analyze SSO volume data as it relates to system size.

Additional information about the Regional Board's SSO regulatory program is available at the Regional Board's website at <http://www.waterboards.ca.gov/sandiego/programs/sso.html>.

There was no Notice of Violation (NOV) issued in April for significant overflows.

2. Clean Water Act Section 401 Water Quality Certification Actions Taken in April 2006 *(Chiara Clemente) (Attachment B-2)*

Section 401 of the Clean Water Act requires that any person applying for a federal permit or license which may result in a discharge of pollutants into waters of the United States, must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. The majority of project applications are submitted because generally applicants are also applying for a Section 404 permit from the Army Corps of Engineers, for filling or armoring of creeks and streams. See attached table (B-2).

Public notification of pending 401 Water Quality Certification applications can be found on our web site at:

<http://www.waterboards.ca.gov/sandiego/programs/401cert.html>.

3. Grants Update *(Dave Gibson) (Attachment B-3)*

Status of State Bond Act and federal 319(h) Grant Program Projects

The Regional Board staff is currently managing 30 grant-funded contracts worth approximately \$49 million. Staff is continuing to closely manage these grants to ensure conformance to the grant agreement terms and conditions. Three grant projects have been successfully completed. The Mission Resource Conservation District (RCD) successfully completed the "Santa Margarita Home to Ocean (H2O) - A Citizens Water Quality Monitoring" project, funded with \$54,302 from the federal Clean Water Act section 319(h) Non Point Source Pollution Reduction program. This project implemented a citizen-based water quality monitoring program and to increase public awareness of watershed issues. The Mission RCD also completed the "Upper San Luis Rey Watershed Arundo Control/Riparian Habitat Restoration." This project, funded with \$911,000 from Proposition 13, removed about 40 acres of *Arundo donax* along the San Luis Rey River, and re-vegetate with native plants. The Nature Institute completed its Science and Technology Against Runoff (STAR) project. This project was funded with \$42,000 from the federal 319(h) program to treat runoff

to Rose Creek and Mission Bay through the installation three small detention basins at storm water outfalls to encourage wetland establishment.

Proposition 40 and Proposition 50 Consolidated Grants Program

The reviews of the concept proposals are complete and competitive applicants have been invited to submit full proposals. Over 470 proposals were submitted and 209 applicants were invited to submit full proposals. In the San Diego region, 27 applicants were selected to submit full proposals out of the 57 that were submitted. SWRCB and Regional Board staff held a workshop on April 28, 2006 at the Regional Board office for the San Diego applicants to assist them in preparing their full proposals and contract-ready scopes of work.

Full proposals for the Ocean Protection Project grant program were due to the State Water Resources Control Board (SWRCB) on May 9, 2006. Full proposals for all other Consolidated Grants programs are due on June 9, 2006. Review teams for the proposals for the Consolidated Grants program have been established for all proposals. The lists of applicants invited to submit full proposals for the Consolidated Grants can be found at:

http://www.waterboards.ca.gov/funding/cg_fullproposals.html.

Proposition 50 Integrated Regional Water Management (IRWM) Grant Program

The SWRCB and Department of Water Resources have approved the Step 2 Call-Back List for the IRWM Implementation Grants. In the San Diego Region, the South Orange County IRWM group was invited to submit a full proposal in Step 2. The San Diego IRWM group's proposal was not competitive, but they will be able to compete for the IRWM funds again in 2007 when the next round of Prop. 50 IRWM funding is available. A second workshop for the Step 2 applicants was held in Sacramento on May 4th and 5th. The workshops provided applicants an opportunity to discuss remaining questions about the application process with both the SWRCB and DWR staff. The Step 2 proposal deadline is June 8, 2006, at 5:00 PM. There will be a reviewer kickoff meeting held on June 13, 2006 at the Cal/EPA Headquarters in Sacramento for all technical reviewers.

Clean Beaches Initiative Grant Program

The SWRCB continues to accept applications for the remaining \$4.8 million in Proposition 40 funds for projects on the Competitive Location List (CLL) and for projects that provide justification for placement on the CLL. The Clean Beaches Task Force will meet on May 30, 2006 to review applications and recommend projects for funding.

Water Recycling Funding Program (WRFPP)

Water Recycling Funding Program staff have completed reviews of the ranked list of projects that was adopted by the SWRCB in April of 2005. The total available Prop 50 funding was \$42,175,000. The ranked list contained Prop 50

construction grant applications, totaling approximately \$59.5 million. Eighteen projects, totaling \$42,159,375, were approved for funding by the SWRCB, four of which are located in the San Diego region. A summary of approved Prop 50 projects is attached (B-3).

Water Recycling Funding Program Staff are also reviewing applications for Proposition 13 Facilities Planning Grants. Applications are accepted on a continuous basis pending available funding. Funding is limited to a 50% match up to a maximum grant of \$75,000 per facilities planning study.

4. Santa Margarita River Modeling and Investigation by the U.S. Bureau of Reclamation *(Julie Chan)*

The U.S. Bureau of Reclamation (USBR) is producing a model of the Santa Margarita River system to investigate nutrient criteria, pollutant loading, total maximum daily loads, and watershed management alternatives. John Robertus, Mike McCann, and Julie Chan attended a meeting in Temecula on Thursday, March 30th at which the USBR provided an overview of the model and outlined a workplan for the investigation of the river system. Also in attendance were representatives of the U.S. Marine Corps, and the cities, counties, water suppliers, and utilities within the watershed. The USBR's workplan is based on the State Water Board's Impaired Water Guidance. The USBR's proposed study coincides with the initial development of a project plan by the San Diego Water Board for total maximum daily loads in the Santa Margarita River Watershed to address the eutrophic conditions in the lagoon, and the phosphorus impairments in the upper river and its tributaries. Whether or not we can utilize the USBR's model in our TMDL project depends on the functionality and transparency of the model. The San Diego Water Board and the USBR will meet on May 15, 2006 to discuss the model in greater technical detail.

5. Navy Point Loma Fuel Farm Leak Update *(Laurie Walsh)*

The US Navy continues their pollution characterization and free product extraction efforts to address the plume of fuel that lies beneath the Point Loma Fuel Farm. The Navy personnel at the Fleet Industrial Supply Center (FISC) and Defense Energy Support Center (DESC) are working with Laurie Walsh of the Site Mitigation and Cleanup Unit in the efforts to define, characterize, and remediate the discharge of fuel to ground water.

From March 31 through April 14, 37,044 gallons of total fluids were extracted on site, resulting in a total of 341 gallons of fuel recovered. This brings the total product recovered to 126,336 gallons. The extent of the plume has not been fully defined and the Navy is planning on installing additional ground water monitoring wells just beyond the federal property line to define the plume. Results of geophysical data will be used to refine locations for placement of additional monitoring wells and soil gas/vapor monitoring points downgradient of the fuel farm on private property. The Navy is beginning the process of securing

necessary approval from property owners to allow the DESC contractor to install off-site wells.

Laurie Walsh has been working with the Navy on submittal of electronic data to the State Board's Geotracker Website. Although not completely populated yet, there are soil and ground water data, maps, workplans and reports online for access by interested parties. Additionally, Laurie has uploaded the most recent Fact Sheet dated April 20, 2006 to Geotracker as part of the public notification efforts for this release. Additionally, the next public meeting held on this issue is scheduled for July 6, 2006 at 6:00 pm at the Portuguese SES Hall, Point Loma at 2818 Avenida de Portugal. Laurie Walsh and John Anderson have discussed the status of the site with representatives from Dianne Feinstein's office, Susan Davis' office, the United States Library of Congress, members of the La Playa Community, and reporters from the Union Tribune.

6. Aliso Creek Golf Course (*Jeremy Haas*)

During the Public Forum at the April 12, 2006 Regional Board meeting, Ms. Penny Elia expressed concern that the proposed redevelopment of a golf course near the mouth of Aliso Creek could result in a degradation of water quality. Ms. Elia requested information about the Board's consideration of the proposed redevelopment. Ms. Elia has previously raised similar concerns to Jeremy Haas of the Northern Watershed Unit. The site is currently known as the Aliso Creek Inn and Golf Course and is located approximately 100 yards east of Coast Highway. It was purchased in 2005 by the Athens Group, who has proposed conceptual redevelopment plans (see: <http://www.alisocreekinnupdate.com/Main.php?pg=newsFact>). In November 2005 representatives from the Athens Group met with Jeremy Haas to discuss a conceptual redevelopment plan, the Regional Board's permitting process, and water quality monitoring options. As Ms. Elia reported, the conceptual plan would raise portions of the creek's confined floodplain to increase the area suitable for structures associated with the redevelopment plans. The filling-in of part of the existing floodplain could restrict the riparian corridor's habitat value, water quality filtration ability, and flood control capacity. Downstream beneficial uses could be negatively affected without appropriate mitigation measures. Such mitigation measures may be prescribed when the City of Laguna Beach approves the final plans (e.g., via the California Environmental Quality Act). The Regional Board can require appropriate mitigation measures through waste discharge requirements, or, similarly, through conditions within a Clean Water Act Section 401 Water Quality Certification if the final redevelopment plans require a federal permit.

7. Mar Vista Development, City of Laguna Beach (*Jeremy Haas*)

At the April 12, 2006 Regional Board meeting, the Board requested an update on the investigation into complaints about an active construction site in the City of Laguna Beach known as the Mar Vista Development site. The project, located at 31401 Mar Vista Avenue, involves grading and construction of a single-family

residence on approximately one-acre of hillside. A description of the complaints was provided to the Board in the April 2006 Executive Officer report, and Jeremy Haas of the Northern Watershed Protection Unit described the status of his investigation at the April 2006 Board meeting. Briefly, one issue is whether the total site plans include an acre or more of soil disturbance. If the site is larger than an acre, it would be subject to the statewide construction stormwater NPDES permit requirements (State Board Order No. 99-08-DWQ). A second issue is whether the City of Laguna Beach approved post-construction stormwater best management practices consistent with its obligations under the municipal stormwater NPDES permit requirements (Regional Board Order No. R9-2002-01). The following is an updated summary of our investigation into the complaints.

Construction NPDES: The City has verified that the amount of grading authorized by the City and actually occurring on-site is less than one acre. There may be additional plans, however, to expose more area to provide water utilities to the site. The developer has not provided information on any additional area needed for water utilities. Based on resource constraints and the relatively low threat to water quality from this project compared to other construction sites, the Northern Watershed Unit does not plan on committing significant time to this issue. The developer is aware of the NPDES requirements and the potential liability for non-compliance.

Municipal NPDES: Following a review of the post-construction stormwater management plan approved by the City, Jeremy Haas asked the City to provide supporting information. The City subsequently requested that same information from the developer. The City reports that it has been in recent contact with the developer and expects to receive the requested information in mid-May 2006. A response from the City is expected shortly thereafter, at which time the Northern Watershed Unit will evaluate whether the City is meeting the Municipal NPDES requirements.

8. LSP South Bay, LLC: New Operator of South Bay Power Plant (*Michael McCann*)

Effective May 4, 2006 the operator of the South Bay Power Plant, Duke Energy South Bay LLC, has changed its name to LSP South Bay, LLC. This name change is required because of an equity sale involving a holding company. The name change, however, does not result in any change in ownership, equipment, operator or operation of the South Bay Power Plant facility. Where appropriate, the new operator's name will appear with reference to the former operator's name. The facility is regulated by Order No. R9-2004-0154 that serves as a NPDES permit for the cooling water discharge to south San Diego Bay.

9. Proposed Gregory Canyon Landfill (*Carol Tamaki and John Odermatt*)

This item is provided to update the Regional Board on recent events relating to the proposed Gregory Canyon Landfill.

Final Superior Court Ruling on existing Environmental Impact Report (EIR)

On December 21, 2005, Superior Court Judge Michael Anello issued final ruling (Minute Order after Law and Motion Hearing) identifying deficiencies in several parts of the existing Environmental Impact Report (EIR) prepared for the proposed project (also see Executive Office Report for February 2006 at http://www.waterboards.ca.gov/sandiego/eo_report/reports/Feb-08-06%20eoreport.pdf).

CEQA Process and Status of EIR

On May 4, 2006, the Local Enforcement Agency (LEA) received the revised Administrative Screen-check, Revised Partial Draft EIR for the proposed Gregory Canyon Landfill. The County staff plans to review/comment and then the document and edit it in preparation for the Public-review/comment period. The County LEA does not have a projected date for release of the revised EIR document to the public. When the revised EIR is released to the public, the County LEA staff anticipates posting it on the web, making it available at libraries, County offices and they plan to convene a public meeting as well.

In January 2006, the Gregory Canyon Limited (GCL) representatives indicated to the Regional Board staff that they hope to complete the required revisions to the EIR document, including the required public participation process, sometime in May 2006. However, the more recent information provided by the County LEA seems to indicate they will be unlikely to meet that schedule projected by the GCL representatives.

Public Participation Requirements in CCR Title 27

The Regional Board staff has not yet identified the specific procedures the Board should follow to provide a fair opportunity for all parties, and interested persons, to fully participate in the Board's proceedings. This topic will be further discussed with the Board's legal counsel in the future. Title 27, California Code of Regulations, section 21730 requires that the Regional Board provide at least 45-days public notice before any Regional Board meeting to consider adoption of tentative waste discharge requirements for any Municipal Solid Waste (Class III) Landfill. In addition, the Regional Board is required to make copies of the agenda package (including the tentative Order) available to the public not less than 30-days before any meeting at which the Regional Board members would consider this issue.

Scheduling an Agenda Item for consideration by the Regional Board

The Regional Board cannot take an action adopting waste discharge requirements for the proposed Gregory Canyon Landfill until the CEQA process is completed and the EIR is properly certified by the lead agency. However, the staff is working on the tentative Order and draft agenda item with the goal of scheduling a Public Hearing on this item before the Regional Board during the meeting November 8, 2006.

In the interim, the Regional Board staff is continuing to move forward with the development of a tentative Order and supporting technical information regarding the proposed project. However, in view of the status of the CEQA document and the uncertainties with when a certified EIR will be available, the Regional Board staff cannot be certain that the future agenda item will be scheduled for the November meeting.

The Regional Board continues to maintain a web site and an email list (currently 92 subscribers to our State Board LYRIS list) to keep the public informed about developments regarding the proposed Gregory Canyon Landfill project. The web page is available at http://www.waterboards.ca.gov/sandiego/programs/units/ldu/Canyon%20Project/gregory_canyon_landfill.html.

10. Status of Supplemental Environmental Project (SEP) Metropolitan Transportation Development Board *(Vicente Rodriguez)*

On September 14, 2005, the Regional Board approved funding a \$50,000 SEP as part of a \$150,000 settlement of civil liability (ACL Order No. R9-2005-0173) with the MTS (formerly referred to as the Metropolitan Transit Development Board) for violation of SWRCB Order No. 99 08 DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity at its Mission Valley East Light Rail Transit Project in San Diego. At the time the settlement was approved, the MTS had not proposed a SEP. Consequently, the settlement called for MTS to propose SEPs for consideration by the Regional Board at subsequent Board meeting.

On April 6, 2006, the MTS notified the Regional Board they proposed the following three SEPs for funding from the \$50,000:

Name of Proposal	Project Proponent	Amount of Funding
Mission Valley Preserve Restoration Activities	San Diego Park Foundation	\$16,500
Volunteers in Action Stewardship Trailer	San Diego Park Foundation	\$16,500
Material and Equipment for River Restoration Kit.	Lakeside River Park Conservancy	\$17,000
Total		\$50,000

This matter will come before the Regional Board on June 14, 2006 for final selection of SEP funding. Additional information regarding the projects will be forwarded to the Regional Board in advance of the meeting.

11. Poway Landfill (*Kelly Dorsey*)

On May 4, 2006 Regional Board staff met with the San Diego County Department of Public Works (DPW) to discuss recent events relating to the Poway Landfill investigation. Since the April Executive Officer's Report, DPW has continued to investigate the benzene and solvent vapors found near the landfill. Currently, the off-site investigation has culminated with the installation and sampling of all off-property soil vapor monitoring probes. As part of the vapor investigation, DPW is checking the efficiency of the landfill gas extraction system within the waste at the landfill. Additionally, three new ground water monitoring wells were installed to ensure delineation of the ground water pollution. The Regional Board is expecting a report with the investigation findings by the end of June 2006.

12. Status of Compliance with Cleanup and Abatement Order R9-2005-0279 Town & Country Hotel, Mission Valley, San Diego (*Frank Melbourn and Mike Porter*)

On May 2, 2006, the Regional Board issued Notice of Violation (NOV) No. R9-2006-0066 to Atlas Hotels, Inc. and American Asphalt & Concrete, Inc. (Dischargers) for failing to completely comply with Cleanup and Abatement Order No. R9-2005-0279. The NOV alleges two violations of the CAO:

- Failure to comply with Directive No. 1 of CAO. This directive required the dischargers to cleanup the waste and abate the effects of the discharge of waste to waters of the state by January 12, 2006. On March 22, 2006, the Regional Board observed the continued existence of waste buried by the Dischargers along the banks of the San Diego River.
- Failure to comply with Directive No. 4 of CAO. This directive required the dischargers to submit a cleanup and abatement report by January 12, 2006. On January 12, 2006 the Dischargers did submit copies of its Notice of Intent to comply with the construction storm water permit as well as its Storm Water Pollution Prevention Plan (SWPPP). However, that information failed to adequately satisfy the requirements of the Directive.

The CAO was issued on December 15, 2005, after the Regional Board identified that soil and earthen waste been discharged into and along the San Diego River as a result of a parking lot expansion project at the Town and Country Hotel and Resort at 500 Hotel Circle North, in Hotel Circle area of Mission Valley, San Diego CA. The CAO named the following parties as responsible for cleanup and abatement: Mr. Terry Brown, Atlas Hotel Management LLC and Town and Country Hotel LLC as owner and operator of the Resort and Convention center, and American Asphalt & Concrete Inc as responsible for construction of the parking area adjacent to the river.

Regional Board is attempting to coordinate with the City of San Diego, Army Corps of Engineers, and California Department of Fish and Game to resolve the violations

13. Status Report: City of San Diego Convention Center Groundwater Dewatering (Vicente Rodriguez)

In December 2005 the Executive Officer reported that the City of San Diego had requested an extension to January 2006 to implement a Remedial Action Work Plan to achieve compliance with effluent limitations in the discharge of groundwater from beneath the convention center to San Diego Bay. The Plan called for either adding additional treatment to the existing system or to find other disposal options, such as reuse of the water or discharging to the sanitary sewer system.

As of May 2006, the City of San Diego had not begun implementation of the Remedial Action Work Plan. However, the City has apparently hired a consultant, Montgomery Watson Harza (WMH), to develop a time schedule to implement the plan, which will be submitted by June 15, 2006. The funding for this work was approved by the City Council and although the initial task is to establish the compliance time schedule for submission to the Regional Board, the scope also includes recommendations for treatment processes, including the potential to reuse the water.

Background

The City of San Diego discharges approximately 300,000 to 400,000 gallons per day of groundwater extracted from beneath the convention center parking structure in accordance with effluent limitations contained in Waste Discharge Requirements Order No. R9-2003-0050.

Since January 1, 2000, the City of San Diego has reported approximately 80 violations of effluent limitations, including toxicity and heavy metals. The Regional Board has assessed the City of San Diego \$72,000 in Mandatory Minimum Penalties (MMP) for 24 of the violations. Of the remaining violations, approximately 25 are subject to MMP and the remainder to discretionary liability. The potential maximum liability for these violations could reach \$500,000. In March and December 2003, the Regional Board issued Cease and Desist Order No. R9-2003-0086 (CDO), which required the City of San Diego to submit a plan to achieve compliance with discharge requirements by either adding a treatment system or finding other disposal options. The CDO requires the City of San Diego to perform accelerated monitoring when violations are first detected and to implement their plan when violations of a similar type persist over a specified time.

14. Clean Water Act Section 316 (b) Rules (*Charles Cheng*) (*Attachment B-14*)

Two recent articles in the San Diego Union-Tribune (*Attachment B-14*) called attention to the impingement/entrainment issue related to power plants' cooling water intake and the potential complication of that issue provided by coastal desalination plants that use power plants' returning cooling water to generate drinking water. In the San Diego Region, there are three electric generating plants, the South Bay Power Plant by Duke Energy, the Encina Power Station by Cabrillo Power, and the San Onofre Nuclear Generating Station (SONGS) by Southern California Edison that are being required under CWA Section 316(b) to address this issue. Also at this time, the San Diego County Water Authority and Poseidon Resources Corporation are each developing project proposals for a desalination plant at the Encina Power Station.

As noted in the articles, the withdrawal of cooling water removes numerous aquatic organisms including fish, fish larvae and eggs, crustaceans, shellfish, sea turtles, marine mammals, and many other forms of aquatic life from waters of the U.S. Most impacts are to early life stages of fish and shellfish. CWA Section 316(b) requires USEPA to ensure that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. For many years this provision has been implemented without federal standards in place, on a resource-intensive, site-by-site basis. Following settlement of a lawsuit, USEPA began developing national standards in three phases: Phase I for new facilities, Phase II for existing electric generating plants that use large amounts of cooling water, and Phase III for electric generating plants using smaller amounts of cooling water and for manufacturers. Phase I and II requirements have been promulgated in 40 CFR 125, Subparts I and J, respectively. Phase III requirements were proposed by USEPA on November 1, 2004 and have not been finalized.

Phase II Rule, published in the Federal Register on July 9, 2004 and became effective on September 7, 2004, established national performance standards (40CFR 125.94(b)). The dischargers must reduce impingement mortality for, and entrainment of, all life stages of fish and shellfish by 80 to 95 percent and 60 to 90 percent respectively, from the calculation baselines. The dischargers must select and implement compliance alternatives for establishing best technology available for minimizing adverse environmental impact at their facilities, such as closed-cycle recirculating system, reducing maximum through-screen design intake velocity to 0.5 ft/s or less, design and construction technologies, operational measures, and/or restoration measures.

Depending on the compliance alternatives selected, the dischargers are required to submit Proposal for Information Collection (PIC), Comprehensive Demonstration Study (CDS), Design and Construction Technology Plan, Technology Installation and Operation Plan, Verification Monitoring Plan, and Restoration Plan. All three plants have submitted their PICs to the Regional

Board for review and comments. These documents include a description of the proposed and/or implemented compliance alternatives, any historical studies, and sampling plan for any new studies to develop a scientific estimate of impingement and entrainment at their sites.

By January 9, 2008, the dischargers are required to submit to the Regional Board a Comprehensive Demonstration Study to characterize impingement mortality and entrainment, to describe the operation of the power plant cooling water intake structure, and to confirm that the technologies, operational measures, and/or restoration measures selected and installed, or planned for installation, will meet the applicable requirements of 40 CFR 125.94. The CDS will form the basis for the Regional Board's determination of specific requirements for inclusion in the dischargers' NPDES permits.

15. Project POWER (*Dave Gibson*)

Dave Gibson attended the March 20-21, 2005 Project POWER (Protecting Our Wetlands with Educators and Regulators) workshop with staff from the San Diego Zoological Society. The Project POWER program was funded through a US EPA National Leadership grant to the NY State Department of Environmental Conservation and New York Aquarium-Wildlife Conservation Society. The purpose of the workshop was to develop effective public education programs that improve public understanding and acceptance of wetlands and the laws and regulations that protect them.

The San Diego Project POWER Team is developing a wetlands public education program to be conducted at the San Diego Wild Animal Park. The goal of the San Diego Project POWER education program is to foster local stewardship to protect inland and coastal wetlands in San Diego. The program will initially target local interest groups and members of the public. Future workshops will be expanded to include representatives of homeowners associations, realtor and building industry organizations, and civic and sporting groups. The emphasis of the workshops will be on the values and importance of wetlands and the regulatory and community tools to protect them. The first public training will take place by October 2006.

16. Paperless Document Management System (*David Barker*)

The State Water Resources Control Board and the Regional Water Quality Control Boards maintain enormous quantities of data, technical reports, correspondence, and other information on waste discharges, surface and ground water quality, and other events that occur in California's watersheds affecting water quality. Most of this material is maintained in paper form in many tens of thousands of paper file volumes. The San Diego Water Board for example currently has in excess of 27,000 defined public records spanning the last 56 years. Each public record represents a file folder with varying quantities of information in paper or microfiche form. In terms of linear distance, the San

Diego Water Board public record holdings are now approaching 0.5 miles of paper and microfiche.

Speed and ease of access to relevant and complete information is absolutely essential for the State and Regional Water Boards to accomplish their mission of protecting beneficial uses. The current organization of agency files and data in paper form and the lack of computer automated document management and retrieval systems significantly limit the State and Regional Water Boards ability to gather and analyze decision critical information in a timely manner. This in turn significantly compromises the State and Regional Water Boards ability to effectively respond to water quality events and trends occurring in the California's watersheds. The ability to effectively respond to demands for complete information from dischargers, the public, and other governmental agencies is also hampered.

There is now a great potential for the State and Regional Water Boards to address these issues in part and realize enormous gains in effectiveness under a new document management system currently under development by the State Water Board for gradual implementation on a statewide basis. The system is being billed as the "Paperless Office Document Management System" and will significantly automate the process of electronically routing incoming and outgoing State and Water Board documents along a defined business process path for document review, processing, approval, archiving and retrieval. The "System" will significantly change how State and Regional Water Board documents are managed and will significantly reduce the need to store documents in paper form. Over time with implementation of the "System" most State and Regional Water Board document will be stored in electronic format only, using far less space and with much greater security. Documents will be indexed, secured, and readily retrievable on most office PC desktop workstations using a keyword, phrase or numeric query for rapid on-screen review.

The Paperless Office Document Management System is currently under development for pilot testing at the San Diego, San Francisco Bay and Central Coast Regional Water Boards in that order. The projected launch date for San Diego Regional Water Board pilot testing of the system is September 2006. Additional reports will be provided to the Board as development and implementation of the new document management system progresses.

17. Chollas Creek Metals TMDLs Remanded Back to San Diego Water Board
(Julie Chan)

The Chollas Creek Metals TMDLs were remanded back to the San Diego Water Board because the Board failed to allow comments on changes to the environmental impact determinations in the Environmental Checklist after the hearing and close of the public comment period. According to the Office of the Chief Counsel, the State Water Board CEQA Implementation Regulations [23 CCR 3779(b)] could be interpreted to require comments on CEQA issues up to the moment of adoption, even if scheduled opportunities for public comment

have expired. The Water Boards CEQA working group will be proposing amendments to this section of the regulations to ameliorate this condition. At the State Board meeting on May 2, 2006, the State Board chair, Tam Dodoc, clarified that the remand was to correct the procedural problem described above. Ms. Dodoc specifically commented that she had no problem with the length of the 10-year Compliance Period, or with the use of the California Toxics Rule for TMDL numeric targets. Vice Chair, Gerald Secundy, concurred. Both of these issues were contested by dischargers at the State Board meeting.

18. Foothill South SR-241 Toll Road Extension, Orange County (*Jeremy Haas*)
(Attachment B-18)

The Regional Board has previously asked for periodic updates on the proposed project to construct a southerly extension of State Route 241, which is a toll road also known as the Foothill Transportation Corridor, located in Orange County. The southerly toll road extension is also referred to as the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) and as the Foothill Transportation Corridor-South (FTC-South). The Foothill/Eastern Transportation Corridor Agency (TCA), a Joint Powers Authority, is the project sponsor. The planned toll road extension is approximately 16 miles long plus approximately 0.8 miles of improvements on Interstate 5. The proposed roadway includes four general-purpose travel lanes, two in each direction, for the entire length of the corridor. Two additional lanes could be added in the future if traffic conditions warrant.

On February 23, 2006 the TCA approved an Environmental Impact Report (EIR) for the proposed project and the proposed alignment alternative. The approved alternative would connect Interstate 5 at San Onofre Beach State with the existing SR-241 at Oso Parkway in the Coto de Caza area of Orange County (see attachment). The alignment crosses and/or otherwise affects portions of the following watercourses: Canada Gobernadora Creek, San Juan Creek, Christianitos Creek, San Mateo Creek, and San Onofre Creek. An aerial map of the alignment is available on the TCA web page at:
http://www.tcagencies.com/home/SOCTIIP%20Alignments%2011x17_Rev_A.pdf

In March 2006 the California Attorney General, the state's Native American Heritage Commission, and a group of environmental organizations filed separate lawsuits in San Diego Superior Court challenging the approval of the EIR. As anticipated in the June 2004 Executive Officer report to the Regional Board, resource limitations prevented the submittal of comments on the draft EIR to the TCA.

The EIR identifies planned discharges of fill into 6.27 acres (approximately 4,100 linear feet) of waters of the U.S. and into an additional 1.68 acres (5,181 linear feet) of non-federal waters of the State. The EIR also identifies temporary fill to 9.44 acres of federal waters. The TCA, therefore, will be required to submit both an application for Clean Water Act Section 401 Water Quality Certification (401 Certification) for discharges of fill to federal waters and a Report of Waste

Discharge (ROWD) for proposed discharges to non-federal waters of the State. On February 23, 2006, the Regional Board notified the TCA of the requirement to submit an ROWD. Neither a 401 Certification application nor an ROWD has yet been received, and TCA has not indicated when it plans to submit them.

Although the Executive Officer has the authority to take action on requests for 401 Certification, the Board most likely will be asked to consider a combined Order for 401 Certification and waste discharge requirements.

19. Status of Cleanup of Concrete Slurry in De Luz Creek near Temecula, Riverside County *(Eric Becker)*

The Northern Watershed Protection Unit continues to monitor the progress of cleanup operations along De Luz Creek near the San Diego/Riverside County line. This cleanup is being done in response to a Cleanup and Abatement Order that was issued in November 2005 to Multiple Concrete Enterprises Inc., Michael & Milan Lubanko, LUBCO Inc., and Tabatha and Keri Lubanko for discharging approximately 170,000 gallons of concrete slurry to the creek.

The responsible parties have removed all concrete slurry material from the site that realistically could be removed and transported it to an approved location for disposal. Vegetation, which was impacted during cleanup activities, is currently being restored. A final report documenting the impacts of the discharge and subsequent cleanup/restoration activities will be submitted in the near future, fulfilling the Cleanup and Abatement Order requirements.

20. Fish Kill at South Carlsbad Beach *(Bob Morris) (Attachment B-20)*

Cabrillo Power I LLC reported to the Regional Water Board that heat treatment of the intake tunnels at the Encina Power Plant during the night of April 30th/May 1st caused a fish kill resulting in hundreds of dead fish washing up onto the beach in south Carlsbad. Cabrillo Power cleaned up the Beach area that morning.

Periodic heat treatment operations are necessary at the power plant to remove encrusting organisms that attach themselves to the tunnel walls, traveling screens, and other parts of the cooling water system. If not removed, the encrusting organisms grow and accumulate at a rate of approximately 1000 cubic yards over a 6-month period. These accumulations restrict the flow of cooling water to and through the condensers, causing a rise in the condenser operating temperature and the cooling water discharge temperature.

Heat treatments are conducted at five to eight week intervals, by restricting the flow of cooling water from the Agua Hedionda Lagoon and recirculating the condenser discharge water through the conveyance tunnels and condensers until the inlet temperature is increased to the effective treatment temperature. The temperature is raised to 105°F and maintained (heat soak) for approximately two hours.

Because the cooling water continues to circulate and the generating units continue to operate, the post-condenser temperature in the discharge channel can reach 120°F. To maintain the optimal treatment temperature of 105°F during the heat soak phase, additional lagoon water is blended into the cooling water system and a corresponding volume of water is discharged to the Pacific Ocean. The total time for heat treatment, including temperature buildup and cool-down is approximately seven to nine hours. Because the cooling water discharge is restricted during the heat treatment in order to recirculate the heated effluent, the plant's discharge flow rate is reduced to approximately 7 to 45 percent of its full flow rate during normal operations.

The number of fish found on the beach was unusual. As discussed in a May 8th letter (see Attachment B-20) from Cabrillo Power regarding the incident, the beach was inspected at 4:30 AM after completion of the heat treatment operation to ensure removal of any dead fish. Later that morning, a representative of the US Fish & Wildlife Service counted over 500 dead fish, most in the size range of 6 to 12 inches but some as large as 18 or more inches. Cabrillo Power suspects that the second release of fish was due to a stalled tide in the tunnels. The Regional Board may reconsider the requirement for the heat treatment thermal discharge when reissuing the NPDES permit to Cabrillo Power, which is scheduled for August 9, 2006.

PART C

STATEWIDE ISSUES OF IMPORTANCE TO THE SAN DIEGO REGION

1. Development of Sediment Quality Objectives (SQO) for California Bays and Estuaries *(Alan Monji)*

In 1989, the California Water Code (CWC) was amended to require the State Water Resources Control Board (State Water Board) to develop SQOs as part of a comprehensive program to protect existing and future beneficial water uses within California's enclosed bays and estuaries. The State Water Board prepared a conceptual approach in 1991 to develop SQOs; however, this conceptual approach was never implemented because available resources were focused at that time on the identification of hot spots throughout coastal waters, bays, and estuaries and the development of cleanup plans. In 1999, a lawsuit was filed against the State Water Board for failing, among other things, to adopt SQOs in accordance with the CWC. The Court agreed with the petitioners, and the State Water Board was mandated to develop SQOs under the following time schedule:

- By June 30, 2003, the State Water Board must adopt a scoping document and/or any necessary revisions to the 1991 work plan.
- By August 5, 2005, the State Water Board must circulate draft proposed objectives to the public.

- By February 28, 2007, the State Water Board must adopt proposed objectives and implementation policy and submit to the Office of Administrative Law.
- Hold public workshops annually to report on the status of the program and future efforts.

For the past three years, the State Water Board has been developing SQOs for embayments with the assistance of scientists from the Southern California Coastal Water Research Project (SCCWRP), San Francisco Estuary Institute (SFEI), Moss Landing Marine Laboratories (MLML), Marine Pollution Studies Laboratory at Granite Canyon (MPSL), and scientists from other agencies and organizations.

A Scientific Steering Committee (SSC) was established to assist in the design of studies, data analysis, and development of a strategy for SQO implementation. Key agencies serving on the SSC are: the National Oceanic and Atmospheric Administration (NOAA), U.S. Army Corps of Engineers, Washington Department of Ecology (WDOE), South Carolina Marine Resources Research Institute, and the U.S. Environmental Protection Agency (U.S. EPA).

In addition, two committees were formed to assist in the SQO development process and public outreach. The first committee is the Sediment Quality Advisory Committee. The members of this committee represent a wide range of public interest groups including industries that use the bays and coastal waters for business, dischargers, and environmental groups. Since January 2005, this committee has met every 6-8 weeks to receive updates from State Water Board staff and the technical leader.

The other committee formed was the Agency Coordination Committee. The purpose of this committee is to ensure that the proposed implementation policy does not conflict with other established water quality and resource protection programs. Participating agencies include U.S. EPA, U.S. Fish and Wildlife Service, NOAA, California Department of Fish and Game (DFG), California Coastal Commission, Office of Environmental Health Hazard Assessment (OEHHA), Department of Toxic Substances Control (DTSC), Department of Pesticide Regulation (DPR), and coastal Regional Water Quality Control Boards. This committee meets every 6-8 weeks to receive updates from State Water Board staff and the technical leader.

San Diego Water Board staff participates in the Agency Coordination Committee meetings and public workshops. The development of SQOs is of particular interest for San Diego Bay TMDLs and contaminated sediment cleanup projects.

At the February 2006 SSC meeting, it was announced that the draft SQO policy document would be ready for public release in August 2006. This document was originally scheduled for release in August 2005 but a 12-month extension was

requested and extension granted by the litigants. The submission date of the final adopted policy to the Office of Administrative Law has also been pushed back to February 2008.

For the past three years, the State Water Board effort has focused on developing SQOs for embayments only. Additional funding was allocated to the SQO program in 2005 that will allow development of SQOs for the California Delta and other estuaries. On April 13, 2006, the State Water Board held its first public meeting in Sacramento for Delta stakeholders regarding the State Water Board's plan to develop SQOs for the California Delta estuary and other estuarine habitats on the coast. The Delta stakeholder group is a supplement to the already existing SQO stakeholder group.

The proposed schedule for the development of Delta estuary SQOs is as follows:

- Develop work plan by June 2006.
- Fieldwork and data collection in 2007.
- Circulate draft objectives for estuaries in 2010.

This effort will include sampling approximately 100 stations within the Delta and may include 30 or more additional sampling stations from northern and southern California estuaries. Other State and Federal agencies may assist in supplementing the data pool by sampling additional estuary stations.

The most recent Agency Coordination meeting took place on April 18, 2006 at the San Diego Water Board's office. Presentations were given by Chris Beegan, State Water Board and Steve Bay, SCCWRP. Topics at the meeting included a program update, technical update of guidance from the SSC, and a brief discussion on dredge materials. People attending this meeting include representatives from Regional Water Board staff from Region 4 and 9, DFG, and SFEI.

For more information on SQO process, go the State Water Board Website at <http://www.waterboards.ca.gov/bptcp/sediment.html>.

2. *Caulerpa taxifolia* Eradication and Prevention Activities (Chiara Clemente, Lesley Dobalian & Bruce Posthumus)

Fall 2005 surveys of the sites of the two known California infestations of the destructive, invasive, non-native seaweed *Caulerpa taxifolia* did not find any evidence of *Caulerpa*. Periodic surveys have been conducted without finding *Caulerpa* in Agua Hedionda Lagoon (in the San Diego region) since September 2002 or in Huntington Harbour (in the Santa Ana region) since November 2002. Based on the results of these surveys, the Southern California *Caulerpa* Action Team (SCCAT), which directs efforts to find, eradicate, and prevent infestations of *Caulerpa* in California, is now preparing a report recommending that the

Department of Fish and Game make the determination that the infestations have been eradicated.

Surveys of other southern California coastal waters will continue to determine if there are other, currently unknown, infestations.

Outreach and education efforts directed towards preventing new infestations and encouraging reporting of possible infestations will also continue.

Caulerpa is a "living pollutant" capable of growing, spreading, and causing ongoing and increasing damage to the ecosystems of coastal waters. It has infested large areas of the Mediterranean Sea, with serious adverse effects on natural ecosystems. In mid-2000, infestations were found in two coastal embayments in southern California, Agua Hedionda Lagoon and Huntington Harbour. These are the only known infestations in the western hemisphere. The Mediterranean infestation and both southern California infestations are believed to have resulted from aquarium releases.

SCCAT was formed and began eradication efforts shortly after the first *Caulerpa* infestation was discovered in California. The Steering Committee of SCCAT consists of representatives of the Department of Fish and Game, National Marine Fisheries Service, U.S. Department of Agriculture, SARWQCB, and SDRWQCB. SDRWQCB has been a principal participant in SCCAT from the beginning. Much of the funding for eradication and prevention work has come from grants provided by the State Water Resources Control Board at the request of, or with the support, of the SDRWQCB.

3. California Supreme Court Upholds Water Boards' Win in Los Angeles River Trash TMDL Case (Julie Chan)

The California Supreme Court refused to hear claims on April 19, 2006, by a coalition of 21 cities that challenged the Los Angeles River Trash TMDL, letting the California Court of Appeal decision stand. The San Diego-based Court of Appeal threw out 9 of 10 challenges to the Los Angeles Water Board's landmark Trash TMDL, and required the Board to improve its environmental analysis under the California Environmental Quality Act.

The Court of Appeal had found that the State and Los Angeles Water Boards had considered the costs, scientific, and technical issues associated with the trash reduction program. Among others, the California Supreme Court rejected the cities' claims that a more-detailed cost-benefit analysis was required before the Water Boards could order the cities to reduce trash going to the river from sewers, that the zero trash program is not achievable, and that a scientific "assimilative capacity study" is a prerequisite to determining that garbage harms the aesthetic values of the waterbody.

The Court of Appeal decision requires the Los Angeles Water Board to revise the environmental document accompanying the Trash TMDL. The Los Angeles Water Board must analyze potential issues with air and soil based on how the cities and county anticipate complying with the TMDL.

4. Scripps ASBS Natural Water Quality Committee (*Peter Michael*)

An advisory committee called the Natural Water Quality Committee was established under Order R9 2005-0008 to recommend a monitoring approach to address discharges into the Area of Special Biological Significance (ASBS) at the Scripps Institution of Oceanography and to other ASBS throughout California. The Natural Water Quality Committee was established in 2005 to enable compliance with the 2005 California Ocean Plan.

ASBS exist throughout coastal waters of California and discharges of pollutants are generally prohibited into these areas. The San Diego Region has four: (a) the La Jolla ASBS at La Jolla Shores, (b) the adjacent San Diego-Scripps ASBS near Scripps Pier, (c) the Heisler Park ASBS at Laguna Beach, and (d) the Irvine Coast ASBS north of Laguna Beach. Because the University of California Scripps Institution of Oceanography discharges storm water and laboratory aquarium water across the beach, the State Water Board issued an exception under State Water Board Resolution 2004-052, and the San Diego Regional Board based its NPDES permit on the conditions in that exception. Essentially, the Regional Board permit requires that elevated copper in the laboratory aquarium water discharge be eliminated, dry weather urban flows be eliminated, and constituents in storm water runoff be controlled to ensure maintenance of natural water quality.

The mission of the Natural Water Quality Committee is to evaluate the UC Scripps Monitoring Data, advise the Regional Board regarding impacts of Scripps' discharges to ASBS, and to answer the questions: is natural water quality being altered and is the marine aquatic life beneficial use in the ASBS being protected? To answer these main questions, four ancillary questions to be addressed are: (a) Are water quality objectives and permit limits being met? (b) What are impacts to marine species and communities? (c) What would ambient marine water quality be like without waste discharges, and d) how does effluent impact that water quality?

Committee members include Dr. Steven Murray, California State University, Fullerton; Dr. Andrew Dickson, UC San Diego Scripps Institution of Oceanography; Dr. Burton Jones, University of Southern California; Peter Michael, San Diego Regional Water Board; Richard Gossett, Director, CRG Marine Laboratories; Dr. Steve Weisberg, Director, SCCWRP; and Chairman Dominic Gregorio, State Water Board Division of Water Quality.

The Committee met in October 2005 and again on April 28, 2006. At the April meeting presentations were made by Scripps scientists on (a) the ability of

satellite imagery to detect and measure turbidity, grain size, and currents; (b) a proposed shoreline bioaccumulation investigation; (c) the fate of the plume from Los Penasquitos Lagoon to the north of the ASBS; and (d) water chemistry in seawater within the ASBS.

There was also a discussion about possible chemical interferences of copper, chlorine, and TCDD (dioxin) at the very low concentrations encountered. These constituents may or may not cause California Toxics Rule water quality objectives to be exceeded in seawater pumped from the ocean into Scripps labs. The next committee meeting will be scheduled by the State Water Board.

SANITARY SEWER OVERFLOW STATISTICS (Updated through April 30, 2006)

SEWAGE COLLECTION AGENCY	SYSTEM SIZE ^B		NO. OF SEWAGE SPILLS [LISTED BY FISCAL YEAR (FY) - JULY 1 THROUGH, JUNE 30]					SPILLS PER 100 MILES (LISTED BY FY)					SPILL VOLUME 2005-06 ^A	
	Miles	MGD	01-02	02-03	03-04	04-05	05-06 ^A	01-02	02-03	03-04	04-05	05-06 ^A	GAL	GAL/MG ^C
ORANGE COUNTY:														
EL TORO WD	55	2.2	3	1	3	3	2	5.5	1.8	5.5	5.5	3.7	13,506	19.9
EMERALD BAY SERVICE DISTRICT	6	0.09	0	0	0	1	0	0.0	0.0	0.0	16.7	0.0	0	0.0
IRVINE RANCH WD	36	2.0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0.0
LAGUNA BEACH, CITY OF	95	2.4	10	27	8	11	5	10.5	28.4	8.4	12.6	5.3	700	1.0
MOULTON NIGUEL WD	530	13.0	2	1	2	5	1	0.4	0.2	0.4	0.9	0.2	400	0.1
SAN CLEMENTE, CITY OF	179	4.5	6	7	2	5	2	3.3	3.9	1.1	2.8	1.1	475	0.3
SAN JUAN CAPISTRANO, CITY OF	100	3.4	0	0	1	2	0	0.0	0.0	1.0	2.0	0.0	0	0.0
SANTA MARGARITA WD	546	10.7	12	4	5	6	3	2.2	0.7	0.9	1.1	0.5	4,125	1.3
SOUTH COAST.CWD	132	4.0	5	8	7	4	3	3.8	6.1	5.3	3.0	2.3	80,720	67.0
TRABUCO CANYON WD	43	0.72	0	0	1	3	0	0.0	0.0	2.3	7.0	0.0	0	0.0
RIVERSIDE COUNTY:														
EASTERN MWD	421	9.5	1	3	7	0	0	0.2	0.7	1.7	0.0	0.0	0	0.0
ELSINORE VALLEY MWD	80	2.0	0	0	1	3	1	0.0	0.0	1.3	3.8	1.3	348	0.6
MURRIETA MWD	25	0.5	0	0	1	0	0	0	0	4.0	0.0	0.0	0	0.0
RANCHO CA WD	71	2.9	2	0	1	2	1	2.8	0.0	1.4	2.8	1.4	1,125	1.3
SAN DIEGO COUNTY:														
BUENA SANITARY DISTRICT	84	1.9	0	2	1	2	3	0.0	2.4	1.2	2.4	3.6	9,750	17.2
CARLSBAD MWD	214	7.2	15	6	6	12	7	7.0	2.8	2.8	4.7	3.3	1,344	0.6
CHULA VISTA, CITY OF	400	16.0	6	3	1	7	4	1.5	0.8	0.3	1.3	1.0	555	0.1
CORONADO, CITY OF	53	3.8	5	2	5	0	0	9.4	3.8	9.4	0.0	0.0	0	0.0
DEL MAR, CITY OF	30	1.1	2	7	1	0	2	6.7	23.4	3.3	0.0	6.7	7,250	21.1
EL CAJON, CITY OF	198	9.1	2	3	0	3	0	1.0	1.5	0.0	1.5	0.0	0	0.0
ENCINITAS, CITY OF	118	4.1	2	6	1	5	0	1.7	5.1	0.8	4.2	0.0	0	0.0
ESCONDIDO, CITY OF	350	10.8	14	3	2	4	3	4.0	0.9	0.6	1.1	0.9	4,768	1.4
FAIRBANKS RANCH COMM SERV DIST	15	0.21	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0.0
FALLBROOK PUBLIC UTILITY DIST	72	2.0	17	22	9	10	6	23.6	30.6	12.5	13.9	8.3	6,635	10.9
IMPERIAL BEACH, CITY OF	84	2.2	1	14	2	8	2	1.2	16.7	2.4	9.5	2.4	425	0.6
LA MESA, CITY OF	155	5.8	12	3	4	3	0	7.7	1.9	2.6	1.9	0.0	0	0.0
LEMON GROVE, CITY OF	69	2.4	9	4	4	3	0	13.0	5.8	5.8	4.3	0.0	0	0.0

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	Miles	MGD	01-02	02-03	03-04	04-05	05-06 ^A	01-02	02-03	03-04	04-05	05-06 ^A	GAL	GAL/MG ^C
SAN DIEGO COUNTY (continued):														
LEUCADIA CWD	185	4.2	5	6	1	6	3	2.7	3.2	0.5	2.7	1.6	1,500	1.2
NATIONAL CITY, CITY OF	97	5.1	0	1	2	1	4	0.0	1.0	2.1	1.0	4.1	3,300	2.1
OCEANSIDE, CITY OF, WTR UTIL DEP	446	13.0	17	23	22	13	7	3.8	5.2	4.9	3.1	1.6	3,050	0.8
OLIVENHAIN MWD	16	0.39	1	2	0	3	0	6.3	12.5	0.0	18.8	0.0	0	0.0
OTAY MWD	86	1.4	0	3	1	0	0	0.0	3.5	1.2	0.0	0.0	0	0.0
PADRE DAM MWD	150	5.1	4	3	3	1	1	2.7	2.0	2.0	0.7	0.7	1,200	0.8
PAUMA VALLEY COMM SERVICE DIS	8	0.07	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0	0.0
POWAY, CITY OF	170	4.0	1	5	3	0	4	0.6	2.9	1.8	0.0	2.4	3,250	2.7
RAINBOW MWD	54	0.74	2	2	6	2	0	3.7	3.7	11.1	3.7	0.0	0	0.0
RAMONA MWD	83	1.3	5	2	2	4	4	6.0	2.4	2.4	3.6	4.8	87,650	222.0
RANCHO SANTA FE COMM SERV DIST	52	0.44	1	1	0	2	0	1.9	1.9	0.0	3.9	0.0	0	0.0
SAN DIEGO CO, PUBLIC WORKS	380	11.0	4	11	2	2	3	1.1	2.9	0.5	0.5	0.8	33,900	10.2
SAN DIEGO, CITY OF, MWWD	2,894	170	226	193	115	122	71	7.8	6.7	4.0	3.3	2.5	165,168	3.2
SOLANA BEACH, CITY OF	52	1.2	2	1	6	1	1	3.8	1.9	11.5	0.0	1.9	2,400	6.5
USMC BASE, CAMP PENDLETON	194	3.1	18	23	14	12	12	9.3	11.9	7.2	5.2	6.2	58,670	63.3
US NAVY	123	4.0	24	12	11	13	10	19.5	9.8	9.0	10.6	8.1	20,270	16.7
VALLECITOS WD	202	6.1	4	5	4	6	7	2.0	2.5	2.0	2.5	3.5	2,032	1.1
VALLEY CENTER MWD	48	0.32	0	3	1	1	0	0.0	6.3	2.1	2.1	0.0	0	0.0
VISTA, CITY OF	198	6.5	4	4	7	9	4	2.0	2.0	3.5	4.6	2.0	3,525	1.8
WHISPERING PALMS COMM SERV DIS	17	0.26	1	1	0	0	0	5.8	5.8	0.0	0.0	0.0	0	0.0
REGION 9 TOTAL	9615	363	445	427	275	266	176						518,041	
AVERAGE ¹								4.6	4.4	2.9	2.8	1.8		10
STANDARD DEVIATION ²								5.0	7.0	3.4	4.4	2.3		34
MEDIAN ³								2.4	2.4	2.0	2.5	0.9		1

^A Includes available preliminary data for July 1, 2004 through April 30, 2006, and may not include all spills less than 1,000 gallons that did not enter surface waters or storm drains during this period.

^B As of June 2003.

^C Volume of spills for the period in gallons divided by the amount conveyed for the period in million gallons.

^D Included with Eastern Municipal Water District

¹ The average is the sum of all values divided by the number of values.

² In a normally distributed set of values, 68% of the values are within one standard deviation either above or below the average value.

³ The median is the middle value in a set; half the values are above the median, and half are below the median.

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION ACTIONS
FOR THE PERIOD OF APRIL 1, 2006 THROUGH APRIL 30, 2006

DATE	APPLICANT	PROJECT TITLE	PROJECT DESCRIPTION	WATERBODY	IMPACT (Acres) ¹	MITIGATION	CERTIFICATION ACTION ²
4/4/2006	City of San Clemente	Segunda Deshecha Canada (M02) Urban Runoff Treatment Facility	Diversion of dry weather flows from the M02 Channel to an adjacent wet well and pump station which will pump flows to pressure filters located at the City's Water Reclamation Plant. This will help with water quality which flows into ocean/surf area.	Pacific Ocean	Streambed (P) 0.01 acre	None	Low-Impact Certification
4/11/2006	Ocean Institute, Dana Point	Ocean Institute Dock Replacement	This project involves replacing the existing 10X145-Foot dock with a 300-foot dock that is 27 feet wide in the middle and 12' wide at the ends.	Pacific Ocean	Open Water (P) 0.001 acre	None	Low-Impact Certification
4/13/2006	City of San Diego	Watson Creek Culvert Replacement Project	Proposed project is the removal of an existing Arizona type concrete crossing and replacing it with a concrete box culvert	Watson Creek	Wetlands (T) 0.006 Streambed (T) 0.001	Creation of 0.002 acre and Restoration of 0.001 of streambed	Certified by Default
4/21/2006	City of Laguna Beach	City of Laguna Beach Urban Runoff Diversion Project	This project will divert bacteria and pollutants to the sewer system during dry weather. Project will include: Removal of existing concrete ramps located	Orange County Flood Control Channel 102	Wetlands (P) 0.023 Wetlands (T) 0.023	Restoration of 10 acres of Wetlands	Low-Impact Certification

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION ACTIONS
FOR THE PERIOD OF APRIL 1, 2006 THROUGH APRIL 30, 2006

DATE	APPLICANT	PROJECT TITLE	PROJECT DESCRIPTION	WATERBODY	IMPACT (Acres) ¹	MITIGATION	CERTIFICATION ACTION ²
			within the channel at the invert drop; Construction of Diversion Channel & construction of outlet pipes to the proposed CDS unit located in the City's parking lot.				
4/25/2006	Artisan Communities LLC, Oceanside	Rancho Allegre	Re-subdivision of the eastern half of Rancho Allegre on approximately 70 acres. 33 single family lots on the 117 acre site ranging in size from two to six acres with associated driveways fire clearing and a private access road off of Ranger and Yucca Roads	Unnamed drainages to San Luis Rey River	Wetlands (P) 0.01 acre Streambed (P) 0.01 acre	Create 0.01 acre Wetlands and 0.01 acre Streambed; Enhance 0.02 acre Wetlands	Certified by Default
4/27/2006	Barbara Murakami, D.R. Horton, Coto de Caza	Repair of Gabion Structures within Tract 15198 (Stone Cliff)	Repair Gabion Structures initially damaged during the 1998 El Nino Storms within Wagon Wheel Canyon	Wagon Wheel Creek	Wetlands (T) 0.12 acre	Restoration of 0.12 acre Wetlands	Technically-Conditioned Certification
4/27/2006	David Rowland, Otay Mesa	Otay Mesa Vehicle Transfer Facility	Develop 40 acre of agricultural land into automobile transfer and storage facility.	Unnamed tributary to Otay River	Wetland (P) 0.02 acre	Creation of 0.06 acre of wetlands	Technically-Conditioned Certification

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION ACTIONS
 FOR THE PERIOD OF APRIL 1, 2006 THROUGH APRIL 30, 2006

DATE	APPLICANT	PROJECT TITLE	PROJECT DESCRIPTION	WATERBODY	IMPACT (Acres) ¹	MITIGATION	CERTIFICATION ACTION ²
4/27/2006	Port of San Diego	Fish Enhancement Structures – Borrow Pit South San Diego Bay	Create fish habitat on floor of San Diego Bay near a former borrow pit.	San Diego Bay	Open Water (Bay Floor) (P) 0.10 acre	None – self mitigating	Low-Impact Certification

1. Wetland refers to vegetated waters of the U.S. and streambed refers to unvegetated waters of the U.S. (P) = permanent impacts. (T) = temporary impacts.
2. Low impact certification is issued to projects that have minimal potential to adversely impact water quality. Technically conditioned certification is issued to projects that have the potential to adversely impact water quality, but by complying with technical conditions, will have minimal impacts. Denials are issued when the project will adversely impact water quality and suitable mitigation measures are not proposed or possible. Certified by default refers to projects that may proceed due to the lack of an action by the Regional Board within specified regulatory timelines. Withdrawn refers to projects that the applicant or Regional Board have withdrawn due to procedural problems that have not been corrected within one year.

Water Recycling Funding Program
 Proposition 50
 Project Funding Summary

Project Number	Agency	Project Name	Grant Amount
3206-030	City of American Canyon	American Canyon Recycled Water Program	\$2,500,367
3407-030	City of Long Beach	Long Beach Recycled Water System Expansion Phase 2	\$3,185,500
3212-030	City of Palo Alto	Mountain View/Moffett Area Water Recycling Facility Project	\$3,802,475
3916-030	City of San Diego	South Bay Water Reclamation Plant Piping, Storage and Pump Station	\$496,161
3211-030	City of San Leandro	City of San Leandro Recycled Water Project	\$181,700
3508-030	City of Willows	City of Willows Wastewater Treatment Plant Improvements	\$681,030
3217-030	Delta Diablo Sanitation District	Pittsburg Golf Course and Urban Landscape Recycled Water Project	\$883,775
3820-030	Eastern Municipal Water District	Temecula Valley Effluent Pipeline	\$4,000,000
3821-030	Eastern Municipal Water District	Eastern Municipal Water District Recycled Water System Pressurization and Expansion	\$2,936,468
3824-030	Elsinore Valley Municipal Water District	Elsinore Valley Municipal Water District Wildomar Recycled Water Project	\$4,000,000
3813-030	Inland Empire Utilities Agency	Regional Recycled Water Distribution System Phase - 2	\$4,000,000
3222-030	Napa Sanitation District	Napa State Hospital Recycled Water Pipeline	\$3,164,065
3207-030	North Coast County Water District	Pacifica Water Recycling Project	\$1,351,250
3907-030	Olivenhain Municipal Water District	Northwest Quadrant Recycled Water Program	\$1,076,400
3914-030	Otay Water District	Recycled Water 30-inch Transmission Main, 450-1 Reservoir, and 680-1 Pump Station	\$4,000,000
3911-030	Santa Margarita Water District	RW Program Expansion Group 3 Facilities	\$2,029,716
3224-030	South County Regional Wastewater Authority	South Santa Clara County Recycled Water Service Expansion	\$2,225,250
3414-030	Upper San Gabriel Valley Municipal Water District	San Gabriel Valley Water Recycling Project Phase IIA	\$1,645,218
		Sub Total of Grant Funded Projects =	\$42,159,375
		Initial Balance =	\$42,175,000
		Balance Remaining =	\$15,625

Seawater intake spurs outcry

Power plants' toll on marine life has state panels set to consider legislation

By Terry Rodgers
STAFF WRITER

April 14, 2006

Each day, the 21 power plants along California's coast pull in nearly 17 billion gallons of seawater.

The ocean water is used as a kind of radiator fluid to help cool the systems that generate 40 percent of the state's electricity. But the practice has killed billions of fish eggs, larvae and other marine life. Such depletion of the ocean food chain – 80 square miles of coastal habitat are affected daily – has gone on for decades.

After the seawater cycles through the systems, it's expelled back into the ocean. This warm and murky mixture inhibits the growth of kelp and eelgrass, both crucial habitats for fish living near the shore.

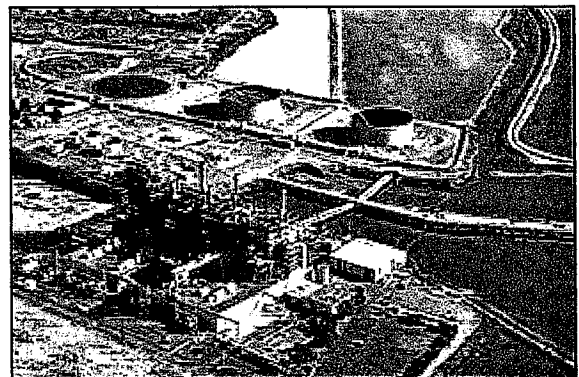
The power industry says the loss of marine life is insignificant and that retrofitting plants would be too expensive.

However, a majority of scientists agree that using seawater for cooling power plants is damaging the coastal ecosystem, especially at bays and estuaries, which are critical nursery habitats for fish.

The practice, known as “once-through cooling,” represents “the single greatest and unaddressed environmental issue associated with power plant operation in the state,” said Jim McKinney, an environmental policy specialist for the California Energy Commission.

After years of rancor, the simmering controversy is about to reach a full boil.

On Monday, the State Lands Commission will consider a resolution to deny new leases for power plants that use once-through cooling.



SEAN M. HAFEEY / Union-Tribune

The South Bay Power Plant in Chula Vista is among the 21 coastal power plants in California that use ocean water as a coolant. Duke Energy has said the South Bay plant will switch to an alternative cooling method when the facility is upgraded.

Three days later, Gov. Arnold Schwarzenegger's year-old Ocean Protection Council will examine the issue and possibly recommend legislation to address environmentalists' concerns.

The commission's resolution mirrors federal regulations issued in 2001 that essentially banned once-through cooling for new power plants. Debates similar to those in California are playing out from coast to coast.

The commission is the landlord of the state's tidelands, where 10 power plants operate, including the Encina Power Station in Carlsbad and the San Onofre Nuclear Generating Station at the northern end of Camp Pendleton.

It works with a host of state agencies that regulate discharges from coastal power plants, such as the Energy Commission, Coastal Commission and Water Resources Control Board.

The board's staff is drafting a proposed set of state regulations for once-through cooling.

"We're not going to recommend a blanket elimination of once-through cooling, but we want to have the impacts reduced to an acceptable level," said Dominic Gregorio, the board's senior environmental scientist.

The South Bay Power Plant in Chula Vista is on a bayfront site owned by the San Diego Unified Port District. It also uses once-through cooling, but Duke Energy recently said it intends to switch to an alternative approach when that facility is upgraded.

Methods more modern than once-through cooling include "dry cooling," in which giant fans blow air to prevent overheating, and closed-cycle "wet" systems in which the water used for cooling is recycled.

If the State Lands Commission approves the resolution, it may also affect California's next generation of coastal desalination plants. Nineteen such facilities are planned along the state's coast, including several that would be built next to power plants and use their existing seawater intake systems.

"This is an issue with multibillion-dollar implications," said Warner Chabot, vice president of The Ocean Conservancy, a national environmental group that opposes the once-through cooling process.

The politics involved are high-stakes, too. Steve Westly, chairman of the State Lands Commission, is running for governor. He and fellow Democrat and state Treasurer Phil Angelides, who also wants to be governor, are competing for endorsements from environmental groups.

Destructive cycle

Traditionally, fishermen have fought environmentalists on such issues as marine reserves, where fishing is banned. But they have joined hands with the “greens” to oppose once-through cooling.

“This issue has brought together the most diverse group . . . of any issue I’ve worked on in 12 years,” said Linda Sheehan of the California Coastkeeper Alliance.

Scientists, environmentalists and fishing groups said that in general, seawater-based cooling systems harm marine life in three ways.

First, fish are sucked into an intake pipe and pinned against screens that typically have holes three-eighths of an inch in size.

Next, marine organisms small enough to pass through the screens are killed by pumps, water pressure and heat as they undergo more parts of the once-through cooling process.

The power plant then expels the heated seawater, which has become murky because it contains the dead marine organisms’ remains. This discharge impedes the development of native vegetation along the coastal ocean floor.

On its end, the power industry sharply disagrees with its opponents’ assessment of how much once-through cooling harms marine life.

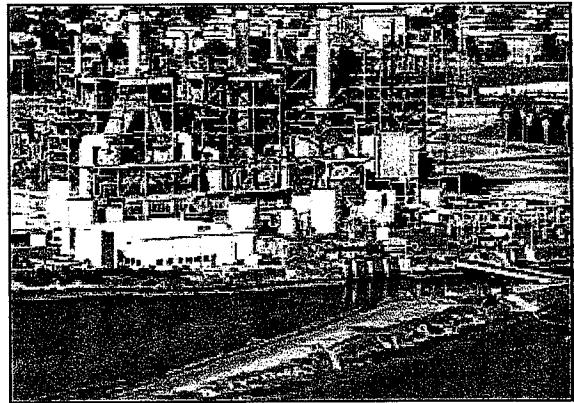
“I could see moving all of our power plants inland if we had widespread, convincing evidence that coastal plants are impacting (the ocean), but that’s just not the case,” said David Kay, manager of environmental projects for Southern California Edison, which owns the San Onofre facility.

The amount of small fish and eggs being killed is tiny when compared with the coast zone’s total marine life, the power companies contend.

“It’s a flea bite,” Kay said.

Most studies on the impact of once-through cooling were done in the 1960s and ’70s by power companies nationwide. But a 2005 analysis completed for the state Energy Commission said those industry studies are unreliable.

That report concluded: “Once-through cooling is contributing to declining fisheries and



SEAN M. HAFHEY / Union-Tribune

One scientist said “once-through cooling,” used at facilities like the South Bay Power Plant, can kill millions of small fish and larvae a day.

the degradation of estuaries, bay and coastal waters. These (power) plants indiscriminately 'fish' the water in these habitats by killing the eggs, larvae and adults when water drawn from the natural environment flows through the plant."

Recent research has documented sizable damage to ocean life, said Michael Foster, co-author of the Energy Commission report and a marine biologist in Moss Landing. California's coastal power plants kill up to 50 million small fish and larvae per day, he estimated.

"Seawater is not just water," Foster said. "It's actually a community of living organisms, some of which spend their whole lives in that water and some of which produce eggs and larvae that grow up in that water."

A random scoop of 300,000 gallons of coastline seawater contains an average of 500 marine species, ranging from great white sharks to plankton the size of a grain of sand, Foster said.

He acknowledged, though, that it's difficult to separate the adverse effects of power plants from other forces changing the populations of ocean species. Those factors include global warming and contaminated urban runoff.

Costs and benefits

The power industry contends that it's too costly to retrofit California's coastal power plants, many of which are antiquated. A few lack space for upgrades. Inland power plants use dry-cooling or closed-cycle wet systems.

Capital costs to retrofit the 21 power plants with ocean-friendly cooling systems are estimated at \$2 billion to \$2.5 billion, according to the power industry.

If those costs were passed along to ratepayers, a homeowner's average power bill would increase by about 1 percent, said Michael Powers of Powers Engineering, a San Diego consulting firm.

Alternative cooling systems that don't harm the ocean are economically and technically feasible, Powers said.

But there is a trade-off in plant efficiency.

Plants that convert from a once-through seawater system to dry cooling typically experience a 2.5 percent loss in plant efficiency due to the electricity needed to power huge fans, Powers said.

Facilities that convert to closed-cycle wet systems lose 1 percent or less of plant efficiency, he said. Powers believes any state-imposed plan to phase out once-through

cooling would do ratepayers a favor by forcing inefficient and obsolete plants to either modernize or shut down.

“Most of these units will be falling apart by 2020 anyway,” Powers said.

Some states have already adopted a tougher stand against once-through cooling.

New York, for example, has told owners of the Indian Point nuclear plant in Buchanan to install closed-cycle cooling towers the next time they renew their operating permit.

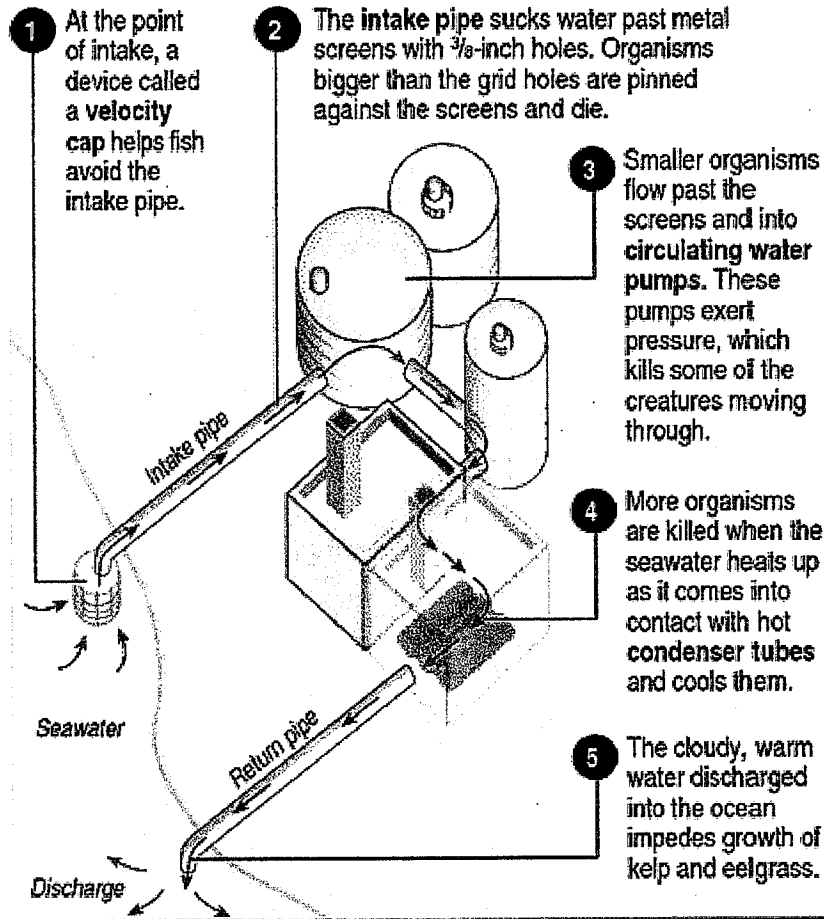
The push to reduce the environmental impacts from once-through cooling is being driven by the U.S. Environmental Protection Agency's latest interpretation of the federal Clean Water Act. The EPA has put power-plant operators on notice that they must reduce their damage to marine life by 2008. The regulations offer five paths for plant owners to achieve compliance.

Environmentalists said the EPA rules are too loosely written and won't motivate companies to invest in alternative cooling systems. Some companies will be able to comply merely by hiring consultants to generate reports showing that their plants have a negligible impact on the ocean, conservationists and other critics of the rules have asserted.

■ Terry Rodgers: (619) 542-4566; terry.rodgers@uniontrib.com

Seawater cooling systems

California's 21 coastal power plants use almost 17 billion gallons of seawater daily to cool their systems. The process kills a variety of marine creatures and plants. A look at the cooling process:



SOURCES: Southern California Edison; Associated Press illustrations

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Desalination debate

Carlsbad board to air environmental report

By **Michael Burge**
STAFF WRITER

April 29, 2006

CARLSBAD – The city's Planning Commission will weigh in next week on one of the major environmental challenges facing the state: turning ocean water into drinking water.

Connecticut-based Poseidon Resources Inc. is proposing to build a 50-million-gallon-a-day ocean-water desalination plant on the grounds of the Encina Power Station, at the foot of Cannon Road.

The plant would rank as the state's largest, along with a similar plant proposed by Poseidon in Huntington Beach.

The state Coastal Commission has cast a skeptical eye on the project, criticizing the environmental impact report that the Planning Commission will discuss when it meets at 6 p.m. Wednesday at City Hall, 1200 Carlsbad Village Drive.

Poseidon's \$270 million Carlsbad plant would tap the stream of water from the adjacent Agua Hedionda Lagoon, which the Encina Power Station uses to cool its electrical generators.

Coastal Commission staff members and a number of environmental groups have challenged several aspects of Poseidon's environmental impact report, calling it inadequate and asking the city to revise and recirculate it.

The argument reflects a larger state debate on the merits and drawbacks of desalinating ocean water to produce drinking water.

Poseidon's proposal is to siphon off 100 million of the 586 million gallons a day of cooling water that exit the power plant. It would run that water through filters to remove solids, then force it under pressure through reverse osmosis membranes, which allow nothing larger than a water molecule to pass.

The result would be 50 million gallons of drinking water a day.

The 50 million gallons of untreated water would be returned to the ocean twice as salty as when it came out. It would be added to the same cooling water stream that it was originally drawn from, to dilute the salt.

Tom Luster, of the Coastal Commission's energy and ocean resources unit, wrote the city in December to say the environmental report “does not adequately address the significant environmental and social impact associated with what would be the largest coastal desalination facility in the U.S.”

One of his criticisms is the amount of fish and larvae killed as part of desalination.

The power plant already affects fish, trapping them against screens leading into the power station, where they die and drop to the ocean floor. Smaller organisms, such as tiny fish and larvae, pass through the screens and are crushed or cooked in the power station's cooling process.

Nearly all the fish larvae – 97.6 percent – that pass through the screens are killed, according to a technical study on the intake effects.

Todd Cardiff, a local Surfrider Foundation representative, says the project marries a desalination plant to a power station with a cooling method the federal and state governments are cracking down on.

The U.S. Environmental Protection Agency has issued new regulations for power plants that kill marine life during the cooling process. Encina is in the process of meeting the new regulations.

The state Lands Commission said earlier this month it will not approve new power station leases that use the cooling method, called “once-through cooling.”

“Having the desalination plant take that water kills anything that survives the trip through the power plant, so you have 100 percent mortality for everything sucked through the intake,” said Cardiff, who also acts as the Surfrider Foundation's legal counsel.

Luster and environmental groups have argued that the city's environmental review must take into account the organisms killed by the power station. They also cite the possibility that the 52-year-old Encina Power Station may cease operation in the near future.

City staff and Poseidon disagree with that point, contending that a shutdown is speculative and beyond what the state requires an environmental study to analyze.

Peter MacLaggan, a Poseidon vice president, said the desalination plant would use only 3 percent of the power station's electrical production, so would not make or break the plant economically.

MacLaggan also took issue with the question of how much marine life would be killed by the desalination plant. He said if the state does not use desalinated seawater as a source, it would continue to tap the Colorado River and water drawn from Northern California through the San Joaquin and Sacramento river deltas.

“If you look at . . . pumps in the delta, (fish kill) is far more acute than what you have here,” MacLaggan said.

City staff members said the environmental impact report includes a summary of how many marine organisms would be killed by desalination, separate from the power plant, and that the numbers are insignificant compared with the fish species' total populations.

Besides the policy debate over the pluses and minuses of desalination, the Planning Commission will take up specific benefits the city expects to gain from the proposal.

Those include an easement and parking for a fishing beach on the shore of Agua Hedionda Lagoon next to Carlsbad Boulevard; deeding the bluffs across Carlsbad Boulevard from the power station to the city; and giving the city a quarter-acre parking lot near the south entrance of the power station.

The proposal also would restrict the deed to a 2-acre beach on the lagoon's north shore, limiting development to marine research, aquaculture, a fish hatchery and trails. The owner now has no such restriction.

The city's planning staff also predicts the project will generate \$2.4 million a year in increased property tax

revenue and \$2.9 million a year in increased business tax revenue.

The city also has an agreement to buy 10 million to 25 million gallons of water a day from the desalination plant at a price no higher than it would pay the San Diego County Water Authority, which supplies water to local water districts.

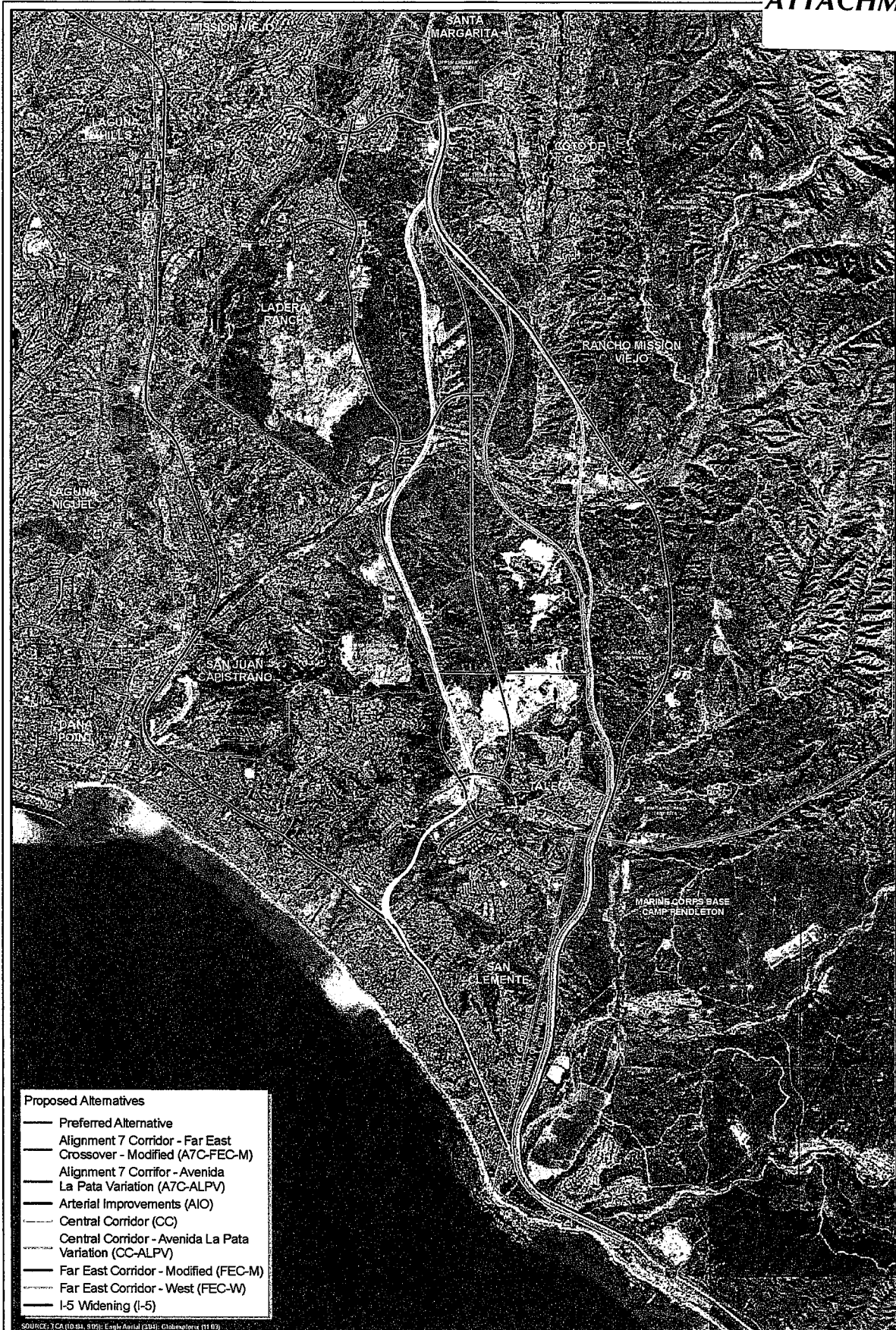
■Michael Burge: (760) 476-8230; michael.burge@uniontrib.com

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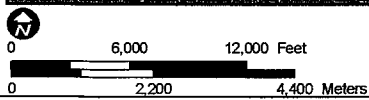
Find this article at:

http://www.signonsandiego.com/uniontrib/20060429/news_1mi29desal.html

Check the box to include the list of links referenced in the article.



- Proposed Alternatives**
- Preferred Alternative
 - - - Alignment 7 Corridor - Far East Crossover - Modified (A7C-FEC-M)
 - · · Alignment 7 Corridor - Avenida La Pata Variation (A7C-ALPV)
 - Arterial Improvements (AIO)
 - - - Central Corridor (CC)
 - · · Central Corridor - Avenida La Pata Variation (CC-ALPV)
 - - - Far East Corridor - Modified (FEC-M)
 - · · Far East Corridor - West (FEC-W)
 - I-5 Widening (I-5)



Alignments of the Build Alternative

Encina Power Station
4600 Carlsbad Boulevard
Carlsbad, CA 92008-4301

Main: (760) 268-4000
Fax: (760) 268-4026

CABRILLO POWER I LLC

May 8, 2006

Mr. Bob Morris
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

RE: NPDES PERMIT NO. CA0001350, ORDER NO. 2000-03; ENCINA POWER STATION

Dear Mr. Morris,

On April 21, 2006 you were notified of the pending cooling water tunnel heat treatment at Encina Power Station (EPS). This heat treatment occurred on April 30, 2006 beginning at 2100 and ending at 0400 on May 1, 2006.

At 11:13 on May 1, 2006 an anonymous report was made to the California Governor's Office of Emergency Services (OES) reporting a fish kill. At 1320 this OES report was amended by EPS to reflect the heat treatment activity. Other agencies notified by EPS were the San Diego Regional Water Quality Control Board, the California Department of Fish and Game, National Marine Fisheries, and the City of Carlsbad. A company officer met on the scene with the State Department of Parks and Recreation and a California Department of Fish and Game warden to discuss the procedure. EPS personnel cleaned up the fish.

As described in the NPDES Permit 0001350, Order 2000-03, the heat treatment process heats up the seawater inside the EPS cooling water tunnels to remove encrusting organisms such as mussels, which if not removed would clog the cooling system and prevent the safe, efficient, and reliable operation of the power generating units. Fish that have taken up residence in the tunnels can also succumb to the elevated temperatures. The heat treatment process likely affected the fish discovered on the beach the morning of May 1. As the procedure exclusively uses elevated temperature to remove fouling organisms, no hazardous materials were used or released. Standard EPS procedure is to inspect the beach after a heat treatment to ensure no dead fish are found. This was done at approximately 0430 on May 1. It is suspected that the second release of fish was due to a stalled tide in the tunnels. When this tide changed, the additional fish were flushed from the system.

Encina Power Station regrets any concerns this occurrence may have caused. EPS is currently complying with federally mandated requirements to significantly reduce fish impacts at EPS and is studying control technology and operational changes that would reduce the taking of fish by EPS.

If you have any questions, please call Ms. Shcila Henika, P.E. at (760) 268-4018.

Sincerely,



Keith S. Richards
President
Cabrillo Power I LLC

cc: California Dept. of Fish & Game, San Diego Office
T. Hemig R. Craft J. Carter J. Paul K. Miles S. Henika File