San Diego Regional Water Quality Control Board

Executive Officer's Report

April 14, 2010

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SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

EXECUTIVE OFFICER'S REPORT

April 14, 2010

PART A
SAN DIEGO REGION STAFF ACTIVITIES *(Staff Contact)*

1. Executive Officer's Activities *(Dave Gibson)*

In March, I gave presentations about the Regional Board, priorities, and developing issues to several groups including the San Diego County City Managers Association (March 4th), the Association of Environmental Professionals (March 16th), the Lake San Marcos Community Association (March 25th), the South Orange County IRWM Group (March 30th), and the Western Area Counsel Office (April 1st). In addition, I attended and spoke at the March 11th kick-off meeting for the statewide Biological Objectives project and participated in the SCCWRP Commissioners meeting on March 30th. I also participated in the Tijuana River Valley Recovery Team steering Committee and monthly workgroup meetings.

On March 29th, I met with Rear Admiral William D. French, Commander, Navy Region Southwest and his staff and received a tour of Naval Base San Diego during which we discussed storm water and the permitting issues associated with the three Navy facilities around San Diego Bay.

I also met with Mayor Jerry Sanders of the City of San Diego and his staff. Another meeting was held with the City of San Diego Storm Water Department Director Tony Heinrichs and his staff regarding storm water channel maintenance, the storm water program and TMDLs, and aerial deposition. Additionally, I met with the Riverside Municipal Storm Water Copermittees on the Riverside MS4 Permit renewal and Laurie Berman, District Director of Caltrans District 11 on storm water and transportation corridor issues.

On March 23rd, I met with representatives of the San Diego Regional Economic Development Corporation including former Board Member Terese Ghio to discuss current water quality issues and economic development in the region.

On April 5th, I met with Tom Oberbauer, Division Chief, Richard Haas, Asst. Director, and Bobbie Stephenson, Land Use Planner, from the County of San Diego Department of Planning and Land Use regarding the Otay Watershed Special Area Management Plan.

On April 6th, Jimmy Smith and I met with Tom Rosales, the General Manager, and Brennon Flahive, the Environmental Compliance Administrator, of the South

Orange County Wastewater Authority (SOCWA). During that meeting we discussed brine discharge issues, the application of TBELs (Technology Based Effluent Limitations), Marine Life Protection Areas, the upcoming Triennial Review of the San Diego Basin Plan, and potential permit renewal issues including monitoring and reporting.

On April 15th, I will be addressing the American Society of Civil Engineers and on April 21st, I will be speaking at the Law Seminars International Southern California Stormwater Summit with the Executive Officers of Regions 4 and 8. Finally, on April 29th, I will be giving a presentation at the annual meeting of the Society of Environmental Toxicology and Chemistry.

2. Personnel Report *(DiAnne Broussard)*
The Organizational Chart of the California Regional Water Quality Control Board, San Diego Region (Regional Board) can be viewed at http://www.waterboards.ca.gov/sandiego/about_us/org_charts/orgchart.pdf

Appointments
Retired Annuitant Betty Stewart has returned to work as receptionist two days per week. Betty is an Office Technician retired from the Department of Corrections. She will be working at the front desk on Monday and Tuesday each week.

Vacant positions for the State and Regional Boards are posted on the State Board web page at http://www.waterboards.ca.gov/about_us/employment/

3. WateReuse California Annual Conference *(Fisayo Osibodu)*
The annual conference of the WateReuse Association's California Section was recently held in San Diego. The WateReuse Association is a nonprofit organization whose mission is to advance the beneficial and efficient use of water resources. WateReuse Association members include agencies, organizations, and private industries that are associated with the design, management, operation, and use of water recycling facilities and projects. As part of the opening session, San Diego Water Board Chairman David King spoke on the need for more efficient use of local water resources. His remarks supported the theme of the conference to promote policy changes that will encourage desalination, and recycled water development, and help remove impediments to their use. Chairman King included in his discussion the importance of collection and use of storm water, such as rainwater harvesting, as part of local water resource development efforts.

Fisayo Osibodu, Cathryn Henning, and Robert Pierce of the Groundwater Basins Branch attended many of the conference's technical sessions. These sessions presented information on salinity management, indirect potable reuse, planning and sustainability issues related to the use of recycled water, public outreach and education, regulatory policies, legal issues, and innovative water and wastewater

treatment technologies. Included below are summaries of interesting presentations on four local plans to augment San Diego's water supply:

- **City of San Diego's Expansion of its Non-Potable Water Reuse System**
  The City of San Diego (City) is currently conducting a study to identify opportunities to increase recycling of wastewater for potable and non-potable uses. A key goal of the study is to determine the feasibility of using water recycling as a means of disposing of effluent from the Point Loma Wastewater Treatment Plant. The study also identifies potential non-potable recycled water customers (mainly irrigation and cooling tower customers), and provides an evaluation of how many potential customers might connect to an expanded recycled water distribution system. In addition, the study includes a survey to identify additional uses of recycled water (other than for irrigation and cooling towers).

- **Camp Pendleton's Regional Seawater Desalination Project**
  The San Diego County Water Authority (SDCWA) is currently conducting an engineering feasibility study for developing a seawater reverse osmosis desalination facility on the southern coast of Camp Pendleton. The feasibility study discusses site specific evaluations for two sites to locate a desalination facility, seawater intake structures, concentrate discharge pipelines, and water conveyance pipelines. By 2020, the SDCWA aims to have seawater desalination contribute 10 percent to its water supply portfolio, which will help reduce dependence on imported water supplies and diversify its water supply portfolio.

- **City of San Diego's Indirect Potable Reuse/Reservoir Augmentation Demonstration Project**
  The City is proposing to develop a 1 million gallon per day Advanced Water Treatment Demonstration Plant. The primary purpose of the Advanced Water Treatment Demonstration Plant is to explore the feasibility of producing highly treated recycled water to augment raw water supplies at the San Vicente Reservoir. The City proposes to use technologies such as microfiltration, reverse osmosis, and advanced oxidation processes to treat wastewater at its North City Water Reclamation Plant.

- **City of San Diego's Brackish Water Membrane Desalination Project**
  The San Pasqual Valley is one of the first of several small groundwater basins in which the City hopes to develop a groundwater supply. The City initiated several independent projects to investigate the potential for brackish groundwater desalination, develop brine management and reduction alternatives, and study suitability of the San Pasqual Valley basin for future conjunctive use via artificial recharge and extraction.

Written reports on the above four projects and other topics presented at the conference are available for review by contacting Mr. Osibodu at

oosibodu@waterboards.ca.gov. For information about the WateReuse Association, go to http://www.watereuse.org/?assoc.

4. Naval Base Point Loma- Restoration Advisory Board Meeting *(Brian McDaniel)*
On March 4, 2010, Brian McDaniel, of the Groundwater Basins Branch attended the quarterly Restoration Advisory Board (RAB) meeting held for the Naval Base Point Loma (NBPL) facility. The RAB meetings are held periodically for the exchange of information between the Navy and the local community regarding restoration activities. The RAB is designed to facilitate stakeholder participation for the Department of Defense Installation Restoration (IR) Program. Ms. Allison Basche, Navy Project Manager for NBPL, presented a site summary and background of the 30 environmental sites within the IR Program. To date, 11 of the 30 environmental sites have been closed. Ms. Basche also discussed future plans and related funding availability for the remaining 19 open sites within the IR Program. The California Department of Toxics Substances Control released a Fact Sheet to inform the community about groundwater and soil contamination located at Naval Base Point Loma, Old Town Campus. The Fact Sheet is available at:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=37970022
under the activities tab. The next meeting will be held April 24, 2010 at 6:30 PM at the United Portuguese S.E.S., 2818 Avenida de Portugal, San Diego, California, 92106.

5. State Environmental Databases: Geotracker & Envirostor Workshop *(John Anderson)*
On March 24, 2010, the State Water Board and Department of Toxics Substance Control (DTSC) held a workshop in our Board room as a public outreach to stakeholders interested in learning how to obtain information from CalEPA's environmental databases. Approximately 25 people attended the workshop, which covered the following topics:

- How to search for a specific property or area,
- How to find a State contact person,
- How to view documents and analytical data,
- How to find out the status of a project, and
- How to find out about Deed Restricted properties.

This was the second of four State Water Board and DTSC sponsored statewide public workshops on the Geotracker and Envirostor databases. The next workshops will be held in Sacramento (CalEPA Bldg.) on April 6, 2010 and in Oakland (San Francisco Water Board Office) on April 22, 2010. The registration form for the upcoming workshops can be found on our website at:
http://www.waterboards.ca.gov/sandiego/press_room/announcements/docs/Database_Workshop_Registration_2010.doc

6. San Diego Regional Environmental Education Workshop *(Christina Arias)*
On March 4, 2010, Chiara Clemente, Christina Arias, and Laurie Walsh of the Southern and Central Watershed Units attended the San Diego Regional Environmental Education Workshop. This workshop was conducted by the San Diego County Municipal Storm Water Copermittees' Regional Education and Residential Sources Workgroup. These workshops, which occur on a quarterly basis, provide a forum for information exchange for upcoming water conservation and pollution prevention activities designed to engage and educate the public. Copermittees and non-governmental organizations were able to share ideas and success stories with regards to promoting conservation and pollution prevention efforts. The key speaker for the March 4 workshop was Ann Tarte from the Equinox Center, a non-profit group dedicated to researching and advancing best practices and innovative solutions to balance San Diego's regional growth with finite natural resources. Ms. Tarte's talk focused on a review of regional water use, and the Equinox' Center priorities for addressing the region's water challenges. This included researching effective policies and practices for water conservation, water recycling, and seawater desalination.

PART B
SIGNIFICANT REGIONAL WATER QUALITY ISSUES

1. Sanitary Sewer Overflows (SSOs) January - February 2010 *(Christopher Means) (Attachment B-1)*
The following is a summary of the sewage spills occurring during January and February 2010 and reported and certified by February 28, 2010. Sewage Collection Agencies now report Sanitary Sewer Overflows (SSOs) on-line at the State Water Board's CIWQS database pursuant to the requirements of State Water Board Order No. 2006-0003-DWQ (*General Statewide Waste Discharge Requirements for Sewage Collection Agencies*). Reports on sewage spills are available on a real-time basis to the public from the State Water Board's webpage at: https://ciwqs.waterboards.ca.gov/

Public Spills
From January 1 to January 31, 2010, there were 22 SSOs from public systems in the San Diego Region as reported in the on-line State Water Board CIWQS database. These SSOs included 9 events of 1,000 gallons or more with all 9 reaching surface waters, including storm drains. The combined total volume of reported sewage spilled from all publicly-owned collection systems for the month of January 2010 was 51,392 gallons.

From February 1 to February 28, 2010, there were 10 SSOs from public systems in the San Diego Region as reported in the on-line at the State Water Board's CIWQS database. These included 1 spill of 1,000 gallons or more, and 2 spills that reached surface waters, including storm drains. The combined total volume of sewage spills, reported from all publicly-owned collection systems for the month of February 2010, was 3,613 gallons.

Reported Private Spills
Twenty five discharges of untreated sewage from private laterals were reported, during January and February 2010, by the collection agencies on-line, pursuant to San Diego Water Board Order No. R9-2007-0005 (*Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*). None of the reported spills were of 1,000 gallons or more and 4 of the spills reached surface waters, including storm drains. The combined total volume of reported sewage discharges, reported from private lateral systems for the months of January and February 2010, was 5,222 gallons.

A total of 3.38 and 2.28 inches of rainfall were recorded at San Diego's Lindbergh Field for January and February 2010, respectively. For comparison, during January and February 2009, 14 and 16 SSOs were reported during a period of time when 0.08 and 4.63 inches of rainfall were recorded at Lindbergh Field, respectively. A total of 32 private lateral sewage discharges were reported during January and February 2009.

Attached are three tables titled:

- "January 2010 - Summary of Public Sanitary Sewer Overflows in Region 9"
- "February 2010 - Summary of Public Sanitary Sewer Overflows in Region 9"
- "January and February 2010 - Summary of Private Lateral Sewage Discharges in Region 9."

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

2. Enforcement Actions for March 2010 *(Jeremy Haas)*
The following is a summary of enforcement actions taken or initiated during the month of March 2010. During this period the San Diego Water Board initiated 24 enforcement actions, including: 3 Notices of Violation with an Investigative Order, 16 Notices of Violation (NOVs), and 5 Staff Enforcement Letters.

A summary of recent regional enforcement actions is provided below, additional information on violations, enforcement actions, and mandatory minimum penalties is available to the public from the following on-line sources:

State Water Board Office of Enforcement webpage at:
http://www.waterboards.ca.gov/water_issues/programs/enforcement/

California Integrated Water Quality System (CIWQS)
http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

State Water Board GeoTracker database:
https://geotracker.waterboards.ca.gov/

Notices of Violation (NOV) with Investigative Order

Caltrans, District 11, State Highway 52 and 67 Connection

NOV No. R9-2010-0036, including an investigative order, was issued to Caltrans, District 11, on March 4, 2010 for violations of State Water Board Order No. 99-06-DWQ, the Caltrans storm water permit. The NOV was issued in response to inspection findings that Caltrans failed to implement and maintain BMPs and prevent prohibited discharges to the MS4. Under authority of Water Code sections 13267 and 13383, the San Diego Water Board required that Caltrans submit a technical report, by March 19, 2010, that contains a status report describing actions taken in response to the NOV.

Hanson Aggregates, San Diego

NOV No. R9-2010-0060, including an investigative order, was issued to Hanson Aggregates on March 11, 2010 for violations of State Water Board Order No. 99-08-DWQ, the statewide construction storm water permit at the Hanson Aggregates facility located at 9225 Camino Santa Fe, San Diego. The NOV was issued in response to inspection findings that Hanson Aggregates failed to implement and maintain BMPs and prevent prohibited discharges. Under authority of Water Code sections 13267 and 13383, the San Diego Water Board required that Hanson Aggregates submit a technical report, by April 12, 2010, that contains a status report and a long-term corrective action plan.

Mr. Jack Eitzen, Fairway Hills Estate, LLC, Murrieta

NOV No. R9-2010-0059, including an investigative order, was issued to Mr. Jack Eitzen on March 24, 2010 for violations of State Water Board Order No. 99-08-DWQ (the statewide construction storm water permit), Water Code section 13260 for failure to file a Report of Waste Discharge (RoWD), Water Code section 13376 for failure to file an application for an individual Clean Water Act section 401 Water Quality Certification, and Water Code section 13050 for failure to comply with Basin Plan Prohibition No. 1 (discharging waste in a manner causing, or threatening to cause, a condition of pollution). The violations were observed during inspections between December 16, 2008 and January 28, 2009 at construction sites known as La Cresta Hillcrest Estates, located at 38500 Via Vista Grande, Murrieta. Under authority of Water Code sections 13267 and 13383, the San Diego Water Board required that Mr. Eitzen submit a technical report, by May 1, 2010, that contains a status report and a time schedule with an implementation and monitoring plan for the restoration of all affected waters of the State on-site.

Notices of Violation (NOV)

Industrial Storm Water Program, Multiple Facilities

NOVs were sent to 12 enrollees of the statewide General Industrial Storm Water Permit Order No. 97-03-DWQ (Order) for failure to submit their 2008-2009

Annual Reports. The Annual Reports were due by July 1, 2009 as required by Section B.14 of the Order. These are the second round of NOVs issued to each affected facility for the same violation. As a result of these notifications and the dischargers' failure to correct the violations, the affected 12 facilities listed below are subject to mandatory minimum penalties pursuant to Water Code Section 13399.33.

NOV	Facility	Location
R9-2010-0039	San Diego Truck Body & Equipment	Spring Valley
R9-2010-0040	Modern Stairway	Spring Valley
R9-2010-0041	Lake Elsinore Unified School District Transportation Facility	Wildomar
R9-2010-0042	Hacienda Auto Wrecking	San Diego
R9-2010-0043	Javo Beverage	Vista
R9-2010-0044	Riveras Iron Works	Vista
R9-2010-0045	Enniss Inc.	Lakeside
R9-2010-0046	Healthy Times	Poway
R9-2010-0047	Transit America Services, Inc.	Camp Pendleton
R9-2010-0048	Russo Tile & Marble, Inc.	El Cajon
R9-2010-0049	City of San Diego, Alvarado Water Treatment Plant	San Diego
R9-2010-0050	Lite Stone Concrete	El Cajon

BBA Partners, LLC. The Heights Development, Poway
NOV No. R9-2010-0014 was issued to BBA Partners, LLC on March 3, 2010 for violations of general statewide construction storm water permit issued as State Water Board Order No. 99-08-DWQ. The Heights Development Project includes construction of a road with utilities for future development of 8 to 10 houses on Valley View Road in Poway. The NOV states that BBA Partners, LLC failed to reduce pollutants in storm water discharges to the best available technology economically achievable and best conventional pollutant control technology performance standard; and allowed discharges of material other than storm water (e.g. sediment) to a separate storm sewer system.

City of Poway, Municipal Storm Water Program
NOV No. R9-2010-0013 was issued to the City of Poway on March 2, 2010 for violations of Order No. R9-2007-0001, the municipal storm water permit for municipalities in San Diego County. The NOV was issued for failing to implement, or require the implementation of, designated minimum BMPs and additional measures necessary to comply with the storm water permit at the Heights Development Project.

City of San Marcos, Municipal Storm Water Program
NOV No. R9-2010-0022 was issued to the City of San Marcos on March 2, 2010 for violations of Order No. R9-2007-0001, the municipal storm water permit for municipalities in San Diego County. The NOV was issued for failing to verify, prior to occupancy, that post-construction treatment best management practices

(BMPs) at priority development projects were installed. The NOV requests a written response by June 30, 2012 verifying that work to install the missing treatment control BMPs is complete.

San Diego Wild Animal Park, Escondido
NOV No. R9-2010-0058 was issued to the San Diego Wild Animal Park on March 2, 2010 for violations of discharge specifications in waste discharge requirements (WDRs) issued by the San Diego Water Board as Order No. 99-04. The NOV cites inaccurate reporting of total coliform values and failure to implement corrective actions in response to multiple violations of total coliform effluent violations that have occurred since April 2005.

Staff Enforcement Letters (SEL)
Conoco Philips, Former 76 Station, San Marcos
An SEL was issued to Stantec Consulting Corporation, representing Conoco Philips, on March 8, 2010 for violations of reporting, monitoring frequencies, and discharge specifications for total dissolved solids, sodium absorption ratio, and zinc in WDRs issued by the San Diego Water Board as Order R9-2008-0138. The SEL requests that the discrepancies be addressed within the next quarterly monitoring report, which is due on April 30, 2010.

H.G. Fenton Company, Fox-Miller Property Project, Carlsbad
An SEL was issued to H.G. Fenton Company on March 16, 2010 for violations of four requirements of Clean Water Act section 401 Water Quality Certification No. 04C-028. The violations include failure to provide a draft or final preservation mechanism for the mitigation site, failure to notify commencement of construction activities, failure to submit an annual mitigation report, and failure to provide the required amount of mitigation. The SEL requests a written response by April 15, 2010 that describes how the violations will be resolved.

All Seasons RV Park and Campground, Escondido
An SEL was issued to All Seasons RV Park and Campground on March 22, 2010 for violations of discharge specifications within WDR Order No. 94-05. Three violations of effluent concentrations for biological oxygen demand, boron, and chloride were cited based on monitoring reports for January to December 2009.

Pulte Home Corporation, Silverhawk III Project, Riverside County
An SEL was issued to Pulte Home Corporation on March 23, 2010 for violating Clean Water Act section 401 Water Quality Certification No. 02C-183 by failing to provide an as-built report for the habitat mitigation site associated with the Silverhawk III development project in unincorporated Riverside County.

Carlsbad Municipal Water District, Carlsbad Water Recycling Facility
An SEL was issued to the Carlsbad Municipal Water District on March 23, 2010 for violations of Discharge Specifications within WDR Order No. 2001-352. Six

monthly and one daily maximum effluent limitations were exceeded for manganese between August 2009 and January 2010.

3. Review of Mandatory Minimum Penalty Effectiveness *(Jeremy Haas)*
The California legislature enacted mandatory minimum penalties (MMPs) in 1999 to ensure a prompt, streamlined enforcement process that creates an effective incentive for dischargers to comply with requirements in National Discharge Elimination System (NPDES) permits. California Water Code section 13385(h) et seq. was amended to require MMPs of $3,000 for certain NPDES discharge and reporting violations. The MMP statutes were revised in 2006 to include violations of general NPDES permits. The implementation of MMPs was expected to result in a substantial increase in compliance by increasing NPDES enforcement and making the process more consistent. Federal facilities are not subject to MMPs.

The San Diego Water Board has issued 30 MMP Orders for a total of $2,460,000 with a median penalty of $12,000 since 2000. Each $3,000 penalty corresponds to one MMP violation. Approximately 50 percent of all non-Federal NPDES violations from 2004 to 2009 were subject to MMPs. Approximately 10 percent of MMP violations have been associated with temporary discharge projects, such as groundwater extraction projects during construction activities. The remaining 90 percent of MMP violations have occurred at facilities with long-term or permanent discharge activities.

What is the Effect of MMPs?
MMPs appear to have the intended effect on NPDES permit holders in the San Diego Region. First, discrete MMP actions have resulted in termination of a large number of previously chronic violations. For instance, approximately 27 percent of non-federal NPDES violations between 2000 and 2009 occurred at just six facilities; and those six permittees responded to MMP Orders, issued in 2008 and 2009, by either terminating the discharge or improving management measures to prevent future violations. Second, the elimination of what had been chronic violations has contributed to a regional downward trend in NPDES violations. Effects on water quality and beneficial uses are unknown because of insufficient receiving water data and analyses.

MMP Orders Have Eliminated the Most Numerous, Chronic Violations
Figure 1 shows that dischargers have responded to 79 percent of all MMP violations by implementing measures to effectively eliminate future violations. Therefore, this data supports the conclusion that MMP actions have prevented a significant amount of violations. These are facilities still in operation that responded to MMP Orders by improving operations to prevent future violations.

As a Result, NPDES Violations Should Decrease Over Time
Figure 2 shows that while violations subject to MMPs increased since 2006, the overall number of non-federal NPDES violations has decreased. Two factors contribute to these trends. First, the 2006 revisions to the MMP statutes to

capture general permits increased the number of facilities subject to MMPs. Second, MMP Orders that inspired operational changes, as portrayed in Figure 1, have reduced the number of violations.

Figure 1. Number of MMP Violations in MMP/ACL Orders (2000-2009). Thatch lines indicate discharge was terminated or permanent compliance measures installed as a result of MMP Order (79% of all MMP violations)

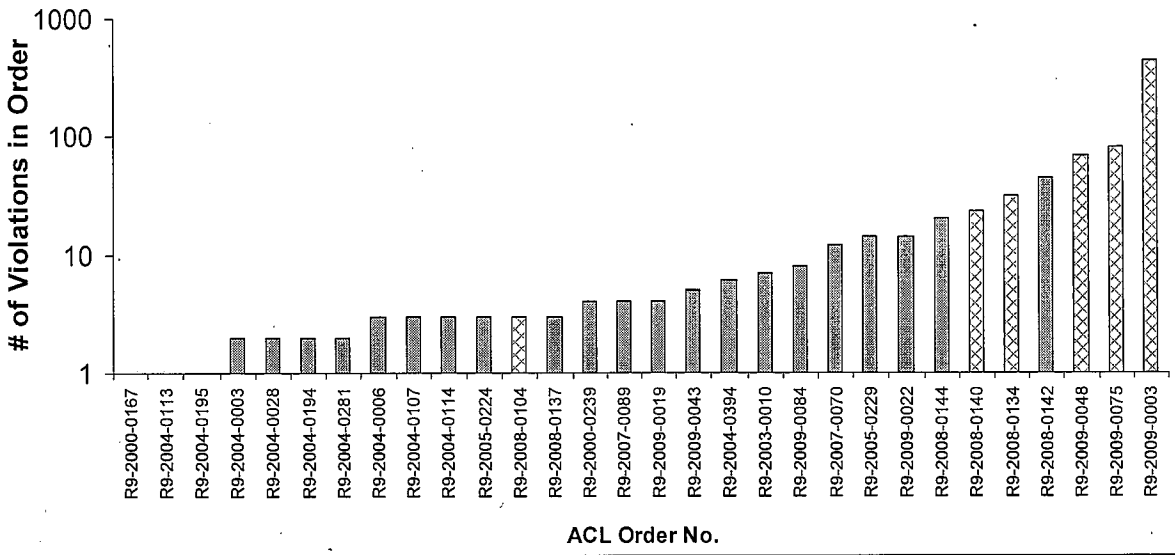
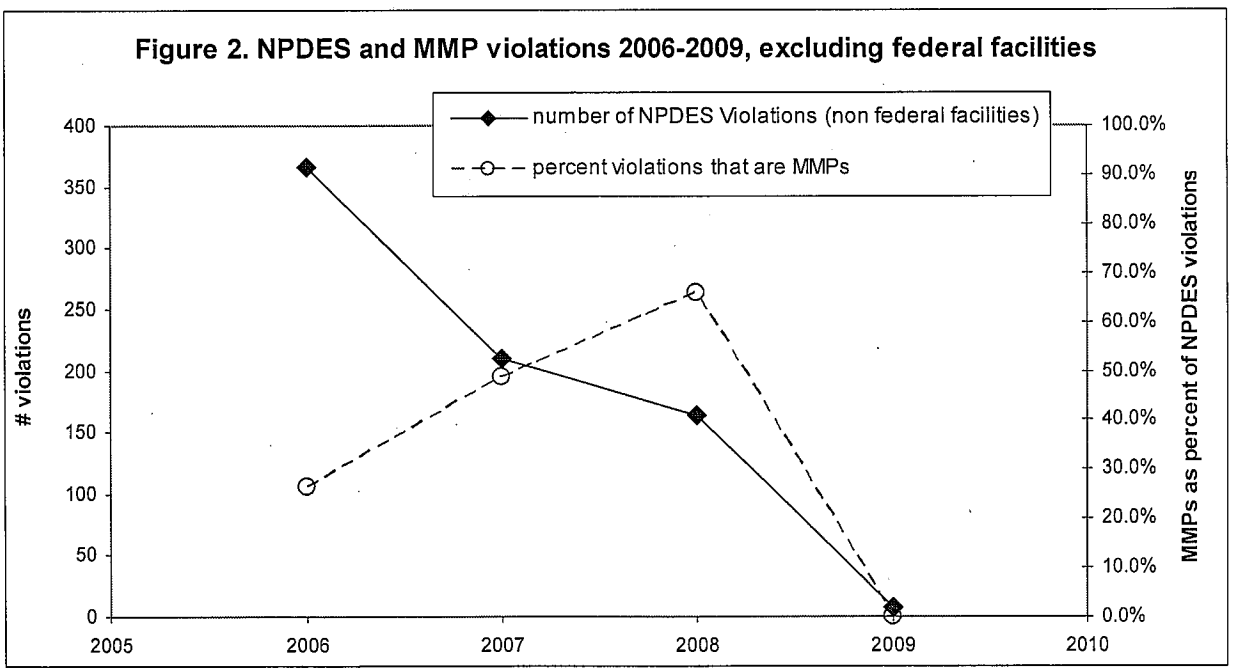


Figure 2. NPDES and MMP violations 2006-2009, excluding federal facilities



4. Grants *(Laurie Walsh) (Attachment B-4)*
California voters approved Propositions 13, 40, and 50 ten years ago, authorizing the State of California to sell general obligation bonds to support drinking water, water quality, flood protection, and water reliability projects throughout the State. The State Water Board and the Department of Water Resources (DWR) were authorized to allocate these funds to local projects throughout California. Most of this funding has been awarded to projects through competitive grant selection processes. The State Water Board Division of Financial Assistance administers the Proposition funded programs in California. The San Diego Water Board participates in the development of grant guidelines, grant selection, and ultimately grant management. In addition, the San Diego Water Board serves a similar role for federal grant dollars administered through the non-point source 319(h) program. While personnel dollars are no longer provided with the grants, participation by the San Diego Water Board is appropriate as it serves to bring additional resources to address water quality issues in the region.

GENERAL

Bond Sales
There were bond sales in March, April, and October 2009. With the October 2009 bond sale, projects previously stopped via Governor's budget letter 08-33 were restarted. Of the stopped projects statewide, 52 projects were eligible for American Recovery and Reinvestment Act (ARRA) funds and the rest were either restarted using 2009 bond money or were terminated at the request of the grantee. The October 2009 bond sale fell short of predictions; therefore restarted projects are only fully funded through the 09/10 fiscal year. This means, even though State Board restarted the Bond projects and they have money for the current fiscal year, additional bonds will have to be sold to finish the projects.

American Recovery and Reinvestment Act (ARRA) Funding
Three out of our regions' 11 grant projects were restarted using ARRA funds. Attachment B-4 compares ARRA fund distribution among all nine Regional Water Boards.

GRANTS WITH ACTIVE SOLICITATION PROCESSES

Clean Water Act (CWA) 319(h) Nonpoint Source (NPS) 2010 Grant Program Guidelines
The California NPS Program is making approximately $4.5 million of CWA Section 319 grant funds available to support the restoration of waters impaired by NPS pollution. Funds are available for projects that either plan or implement actions to restore impaired surface waters by controlling NPS pollution. Implementation projects include on-the-ground NPS pollutant reduction projects that achieve quantifiable water quality benefits identified in TMDLs and that are identified in comprehensive watershed management plans. Funds are also

available for projects that will improve watershed plans by carrying out targeted planning and assessment efforts to achieve water quality goals.

The selection committee met on March 24 and 25, 2010 to review and select projects to be funded based on application criteria. Successful applicants chosen for funding will be notified some time in April 2010. More information is posted at:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/319h/index.shtml

Integrated Regional Water Management (IRWM) Draft Guidelines for Proposition 84 and Proposition 1E
The draft versions of the IRWM Grant Program Guidelines, Planning Grant Proposal Solicitation Package (PSP), Implementation Grant PSP, and Stormwater Flood Management PSP are now available. The public comment period on these draft guidelines closes April 23, 2010. DWR has scheduled meetings to receive public comments. Draft guidelines, meeting dates, and locations can be found on DWRs website at:
http://www.water.ca.gov/irwm/integregio_new10.cfm.

Proposition 84 is also know as The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coast Protection Bond Act of 2006 Chapter 2, and Proposition 1E is also known as the Stormwater Flood Management grants funded by The Disaster Preparedness and Flood Prevention Bond Act of 2006).

Proposition 50 Supplemental IRWM Funding
The Proposition 50 IRWM grant program provides funding for projects that protect communities from drought, protect and improve water quality, and reduce local dependence on imported water. DWR has approximately $7.4 million available in funding to supplement prior Proposition 50 IRWM implementation grants. *Only those grantees who, under prior cycles of the Proposition 50 IRWM implementation grant program received partial grant funding will have an opportunity to compete for this supplemental grant funding.*

The Draft Proposition 50 Supplemental Funding IRWM Guidelines are posted at http://www.water.ca.gov/irwm/integregio_implementation.cfm. For more information on the Proposition 50 Supplemental IRWM grant program, contact Trevor Joseph at (916) 651-9218.

Proposition 84 Local Groundwater Assistance (LGA)
LGA grants provide local public agencies with up to $250,000 to conduct groundwater studies or carry out groundwater monitoring and management activities. Approximately $4.7 million in funding from Proposition 84 is available for the fiscal year 2009-2010 LGA Grant Program.

The Draft Proposition 84 LGA Guidelines are posted at http://www.water.ca.gov/lgagrant/. For more information on the LGA, contact Jerry Snow at (916) 651-9264.

State Revolving Fund Project Priority List

The Division of Financial Assistance will be updating the Clean Water State Revolving Fund (CWSRF) Program Project Priority List (PPL) for State Fiscal Year 2010/2011. The CWSRF staff will host workshops throughout the State for the public and water board staff to provide more information about the benefits of the program and development of next year's PPL and Intended Use Plan. Go to http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/savethedate.pdf
for more information, or contact Christine White at cwhite@waterboards.ca.gov or phone (916) 341-5795.

5. Drought and Water Conservation Update *(Robert Pierce)*

California is in a multi-year drought despite recent improvements to the statewide water supply. The latter half of January was extremely wet for California. A series of strong storms brought much needed rain statewide, along with snowfall in the Sierras. As of January 31, 2010, however, key state reservoirs were at only 80 percent of average storage. Current and historical data are compared below:

Percent of Average Precipitation/Storage

	Oct 1, 2006-Sep 30, 2007	Oct 1, 2007-Sep 30, 2008	Oct 1, 2008-Sep 30, 2009	Oct 1, 2009-Jan 31, 2010
Statewide Precipitation	65%	78%	82%	109% to date
San Diego Area Precipitation	39%	73%	83%	142% to date
Key State Reservoirs' Storage	78%	57%	69%	80% to date

On April 1, 2010, the Department of Water Resources (DWR) increased the 2010 State Water Project allocation to 20 percent.

DWR initially approved State Water Project allocations for 5 percent of contractors' requested 4,171,996 acre-feet. Contractors' had requested 100 percent of their long-term allocations. In the 2009 water year from Oct 1, 2008 to September 30, 2009, allocations were increased from 15 to 40 percent as the year's hydrologic conditions became known. The average allocation over the past 10 years has been 68 percent of contractors' requests.

For more information on California's drought and water conservation, see http://www.water.ca.gov/drought/

6. The Cycle of Insanity *(James Smith)*
Assistant Executive Officer James Smith spoke about the merits of Low Impact Development (LID) as part of a panel discussion on March 22, 2010. The audience had gathered to view *The Cycle of Insanity: The Real Story of Water,* a short animated film describing the current usage of water. Surfrider developed the movie and hosted the event at The Loft at the University of California, San Diego. Other panel members included: Philip Anthony, Director of the Orange County Water District; Marilee Kuhlman, Green Gardens Group; and Tom Pankratz, editor of the "Water Desalination Report." The film is publicly available at http://www.knowyourh2o.org/ and hopes to raise awareness of how society as a whole treats this most precious resource.

7. Quality of Life Funding Strategy *(Chiara Clemente)*
The San Diego Water Board has been invited to participate in the development process for SANDAG's Quality of Life Funding Strategy (QLFS). The QLFS is a multi-agency effort focused on prioritizing and securing long-term funding mechanisms for regional quality of life programs that lack an identified, reliable, and sustainable funding stream. For more information, refer to http://www.sandag.org/index.asp?projectid=347&fuseaction=projects.detail.

The four programs currently emphasized in the QLFS consist of habitat conservation, shoreline preservation, water quality enhancement, and transit operations. Each of these programs has a unique working group tasked with developing a prioritization scheme, funding needs, and a recommended funding strategy. Each of the working groups reports to a stakeholder working group and an Ad Hoc Steering Committee, which ultimately reports to SANDAG's Board of Directors.

On March 16, 2010, Chiara Clemente, San Diego Water Board's Central Watershed Unit Supervisor, participated in the third Water Quality Work Group meeting. The work group developed a water quality definition and discussed a framework for prioritization of water quality needs; including funding necessary to comply with existing water quality regulatory requirements. These meetings are scheduled for the third Tuesday of every month.

8. "Urban Estuaries: Where the City Meets the Sea" *(Bruce Posthumus)*
"Urban Estuaries: Where the City Meets the Sea" was the theme of the 2010 joint meeting of the California Estuarine Research Society and the Society of Wetland Scientists (Western Chapter), held at the University of San Diego (USD) on March 8 & 9, 2010 and hosted by the USD Department of Marine Science and Environmental Studies.

Topics of presentations and posters at the meeting included climate change / sea level rise, invasive species, storm water runoff, erosion, sedimentation, copper and other metals, nutrients / eutrophication / macroalgal mats / hypoxia,

eelgrass, threatened and endangered wildlife, habitat use by native fishes, restoration, management, and ecosystem health assessment. Several of the presentations and posters were based on studies that were conducted in estuaries in the San Diego Region. Additional information about the meeting, including the meeting program, is available at http://online.sfsu.edu/~caers/CAERS_2010_meeting.html.

Estuaries are coastal aquatic systems where fresh water from streams and rivers meets and mixes with marine water from the coastal ocean. Estuaries are of special importance as habitat for a variety of fish, wildlife, and plants. In southern California, including the San Diego Region, estuaries provide habitat for recreationally and commercially important species (including California halibut) and for rare, threatened, and endangered species (including California least tern, light-footed clapper-rail, Belding's savannah sparrow, and salt marsh bird's-beak).

A large percentage of the historical estuarine area in Southern California has been lost due to human activities, and the estuaries that remain have been significantly modified and disturbed by and continue to be significantly impacted by a variety of human activities. Human activities - or the results of human activities - that have adversely affected estuaries in the San Diego Region include dredging; filling; construction of dikes, levees, railroads and highways; changes in tidal exchange, circulation, freshwater inflows, salinity, and inputs of sediment and nutrients; introductions of invasive species; and discharges of various wastes / pollutants, including trash. A fact sheet on the status of perennial estuarine wetlands in California, including suggestions for management actions, is available at http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/wetlands/ew_factsheet.pdf.

Estuaries in the San Diego Region include Tijuana Estuary, San Diego Bay (including the mouths of Otay River and Sweetwater River), Famosa Slough, San Diego River Estuary, Mission Bay, Los Peñasquitos Lagoon, San Dieguito Lagoon, San Elijo Lagoon, Batiquitos Lagoon, Agua Hedionda Lagoon, Loma Alta Slough, San Luis Rey River Mouth, and Santa Margarita River Estuary.

9. MOU with Orange County for Bacteria TMDL studies *(Benjamin Tobler)*
On August 29, 2008, the San Diego Water Board and the County of Orange entered into a Memorandum of Understanding (MOU). The purpose of the MOU was to outline the general provisions of the County of Orange's Aliso Creek Dry Weather Model Validation Study (Study) and to insure that the results of this Study, if deemed significant by the San Diego Water Board, were incorporated into the Bacteria I – Beaches and Creeks TMDLs (Bacteria I TMDLs) adopted December 17, 2008. While the Study was being conducted, the Bacteria I TMDLs were revised at the request of the State Water Board, allowing for an early opportunity to incorporate the Study results.

While the Study findings did indicate that slightly lower reductions were required, the study results did not require additional changes or refinements to the Revised Bacteria I – Beaches and Creeks TMDLs (adopted by the San Diego Water Board on February 10, 2010). The County of Orange plans to use the study results and updated model as tools for future BMP planning, and may pursue collecting additional data to improve the model as recommended in the report. The MOU is still valid and provides an essential forum for discussion of future data collection efforts for TMDL projects (including already adopted bacterial indicator TMDLs), and collaborative evaluation of those results by County and the San Diego Water Board.

10. Update- Proposed Campo Regional Landfill *(Brian McDaniel)*
The Campo Indian Band (Campo Band) has proposed a Regional Landfill project to be located on the Campo Indian Reservation, San Diego County. The Bureau of Indian Affairs (BIA) as lead agency has prepared a Draft Supplemental Environmental Impact Statement (DSEIS) for the proposed project. The DSEIS was prepared to address project changes and new circumstances that have occurred since the Final Environmental Impact Statement (FEIS) was prepared in 1992 on a prior landfill proposal. For the next steps in the process, the BIA must approve a lease and sublease and permit the use of reservation land for the construction and operation of the Campo Regional Landfill.

The proposed landfill is opposed by residents in the communities of Boulevard, Campo, Pine Valley, and Tecate. Project opponents have cited concerns related to public health and safety, impacts to property values, and rural quality of life. Opponents have also cited potential impacts to water quality as USEPA designated the Campo/Cottonwood Creek Aquifer as a sole or principal source of drinking water for the communities of Boulevard, Campo, and Pine Valley. The Campo Band has indicated that a cooperative agreement has been signed with the State of California to ensure that Campo Environmental Protection Agency (CEPA) regulations are in full compliance with state regulations for landfills. Public hearings have been scheduled with the BIA to receive oral and written comments on the DSEIS. The DSEIS can be found at http://campodseis.com (http://campodseis.com/). Staff will provide updates in future Executive Officer Reports.

11. Update on Cleanup Activities at the Former Teledyne Ryan Aeronautical Facility and Convair Lagoon *(Tom Alo)*
Since the 1980s, environmental site investigations and cleanup activities have been conducted at the former Teledyne Ryan Aeronautical facility located at 2701 North Harbor Drive in San Diego (Facility). Ryan Aeronautical and its successors (collectively referred to as "TDY") conducted aerospace manufacturing operations at the Facility and chemical releases from these operations have impacted the environment. Most notably, in the early to mid 1980s, polychlorinated biphenyls (PCBs) were found in sediment within the storm

drains beneath the Facility and in the Convair Lagoon area of San Diego Bay. TDY was directed to cleanout specific storm drains and construct a 3-foot thick sand cap in Convair Lagoon to cover the PCBs. Recent investigations, however, have determined that despite various storm drain cleanout efforts, PCBs continue to be found in the storm drains beneath the Facility and on top of the Convair Lagoon sand cap. Additionally, these recent investigations have determined that the soil and groundwater are impacted with PCBs, volatile organic compounds (VOCs), metals, and total petroleum hydrocarbons (TPH).

The Facility consists of a 44-acre parcel with buildings occupying approximately 22 acres. The Facility is currently vacant and all industrial equipment and materials have been removed. The property is held in trust for the State of California by the San Diego Unified Port District (Port District) and the property is currently leased to the San Diego County Regional Airport Authority (Airport Authority). In April or May 2010, the Port will be removing all existing buildings and subsurface structures including all the storm drains and laterals (excluding the City-owned 54-inch and 60-inch storm drains). The Airport Authority plans on redeveloping the property for light industrial and commercial use.

Interim remedial actions have been conducted at the Facility to prevent further discharge of chemicals and/or to prevent possible exposure of these chemicals to human health and the environment. To date, these interim actions consist of:

- Pothole excavations to remove PCB, VOC, and TPH in soil.
- Injecting ferrous sulfate into the groundwater to encourage the reduction of hexavalent chromium.
- Enhanced in-situ bioremediation to encourage the reduction of VOCs in groundwater.
- Removing PCB-impacted sediment in the storm drains beneath the Facility.
- Installing filter socks on all laterals connected to the 60-inch storm drain to prevent further discharge of PCBs from the Facility.
- Sweeping specific areas of the Facility on an annual basis to remove PCB-impacted sediment on the surface.

In consultation with all stakeholders, the San Diego Water Board is currently developing cleanup levels for soil, groundwater, and sediment within the storm drains beneath the Facility.

12. Basin Plan Triennial Review *(Deborah Woodward and Deborah Jayne)*
The San Diego Water Board is committed to carrying out its current Basin Plan triennial review with unprecedented involvement by its regional stakeholders. Stakeholders will be invited to collaborate with the San Diego Water Board to prioritize the many basin planning issues identified during the triennial review public solicitation period. Anyone interested in receiving future updates and noticing relating to the triennial review is encouraged to subscribe to the "Basin Plan Issues" electronic mailing list at:

http://www.waterboards.ca.gov/resources/email_subscriptions/reg9_subscribe.shtml.

The purpose of the Basin Plan triennial review is to identify necessary updates to water quality standards and other elements of the Basin Plan. The last triennial review (2004) identified 62 issues and potential projects. The product of the triennial review is a workplan, adopted by the San Diego Water Board, which serves to guide regional basin planning activities during the upcoming three year period. The workplan includes a prioritized list of issues that will be investigated further and, where appropriate, implemented through adoption of Basin Plan amendments. The number of identified basin planning issues greatly exceeds the available basin planning resources, making it necessary to prioritize basin planning issues based upon the San Diego Water Board's mission and strategic goals.

Triennial Review Advisory Committee
The San Diego Water Board is embarking on a new, stakeholder-involved triennial review process that includes the formation of a Triennial Review Advisory Committee (TRAC). The purpose of the TRAC is to enhance public participation by the regulated community and other stakeholders, and to provide an opportunity for representatives to participate in the prioritization process. Selection of TRAC participants will be initiated by nomination during a public workshop to be held in summer of 2010. Final TRAC membership will be determined at a subsequent meeting.

Triennial Review Process
TRAC members will use a ranking system developed by the San Diego Water Board to prioritize the many basin planning issues. TRAC members will also participate in facilitated meetings to present and discuss their issue prioritization recommendations prior to the San Diego Water Board's development of a draft workplan.

Subsequent to the TRAC meetings, the San Diego Water Board will prepare and release for public comment a draft workplan, a draft staff report, and a draft resolution for adoption of the Triennial Review. An additional public workshop will be scheduled during the public comment period to present and discuss the draft documents. Responses to written public comments will be developed and revised documents will be released for public review. A revised workplan will be presented to the Board for consideration and adoption in late 2010.

Current Status of Triennial Review Process
The ranking process and criteria to be used by TRAC participants to prioritize basin planning issues is undergoing final revisions. A refined list of issues with descriptions to facilitate the ranking process and more effectively prioritize the issues is being compiled. Triennial review project milestones completed to date include: initiating the public solicitation period on October 31, 2008; convening

the first informational public workshop on December 8, 2008; and completing a 70-day public solicitation period on January 9, 2009.

Links to all public notices to date, the San Diego Basin Plan, and the previous triennial review (2004), are provided at: http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/tri_review.shtml.

Prior status reports on the triennial review can be found in the Executive Officer Reports for November 2008, January 2009, and October 2009 available at: http://www.waterboards.ca.gov/sandiego/publications_forms/publications/eoreports.shtml.

13. San Diego County Water Authority Member Agency Manager's Meeting
(J. Smith)

James Smith of the San Diego Water Board recently addressed the Managers of the member agencies of the San Diego County Water Authority at their March 16th meeting. At issue was the recent informal request for water quality data. The San Diego Water Board seeks the data to begin assessment of how the chemistry of imported water is affecting the ability of reservoirs to achieve Water Quality Standards. Numerous local drinking water reservoirs are currently listing on the Clean Water Act Section 303(d) list of impaired water bodies. Imported water may be causing or contributing to the impairment. The data solicitation is the first step in determining the best regulatory approach to address the impairments. Courses of action other than the development of a traditional Total Maximum Daily Load (TMDL) are likely to be pursued and may include the adoption of policies interpreting water quality standards, revisions to water quality objectives and the re-evaluation of appropriate beneficial uses.

Many of the managers expressed numerous concerns during a lively 45-minute discussion. Their apprehensions regarding the data request included the following:

- The Water Quality Control Plan for the San Diego Basin (Basin Plan) contains inappropriate Water Quality Objectives as they relate to reservoirs and certain constituents;
- Certain data is collected for operational needs and should not be used to place a reservoir on an upcoming Section 303(d) list;
- Any collaborative efforts must have defined goals and strive to finish their effort. Staff resources are too important to expend on a process that will not yield a tangible result;

The meeting afforded Mr. Smith the opportunity to not only clarify expectations for the requested data, but to also begin to build relationships that will prove vital moving forward. Water quality and water supply will continue to converge as multiple strategies including dispersed collection and use systems, reduced consumption, and augmentation of aquifers and reservoirs, where appropriate

and feasible, will all be necessary to meet our future water demands. Another meeting will be scheduled to frame the goals and expectations of a yet-to-be formed Technical Advisory Group.

14. State Water Board Once-through Cooling Water Policy Update *(Brian Kelley) (Attachment B-14)*
On March 22, 2010, the State Water Board issued an updated draft Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy) for 19 existing coastal electric power plants (including two nuclear plants) in California that use once-through-cooling water intake systems. A copy of the revised draft Policy showing changes from the previous draft in underline/strikeout text is attached. The Policy would establish requirements, including a time schedule, for the implementation of Clean Water Act Section 316(b) that must be implemented in National Pollutant Discharge Elimination System (NPDES) permits. Clean Water Act Section 316(b) requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact. Three existing power plants in the San Diego Region that would be covered by the Policy are the San Onofre Nuclear Generating Station, the Encina Power Station, and the South Bay Power Plant. The State Water Board will hold a public meeting on May 4, 2010 to consider adoption of the Policy. Written comments on the Policy must be received at the State Water Board by 12:00 noon on April 13, 2010. The draft Policy and draft Final Substitute Environmental Document are available at:
http://www.waterboards.ca.gov/water_issues/programs/npdes/cwa316.shtml

PART C
STATEWIDE ISSUES OF IMPORTANCE TO THE SAN DIEGO REGION

1. Access to Water Quality Monitoring Information *(Bruce Posthumus)*
Senate Bill 1070 (Kehoe, 2006) requires the boards, departments and offices within the California Environmental Protection Agency and the California Resources Agency to integrate and coordinate their water quality and related ecosystem monitoring, assessment, and reporting. SB 1070 also mandated creation of the California Water Quality Monitoring Council (Monitoring Council), the membership of which represents a variety of water quality related interests. The Monitoring Council is charged with developing specific recommendations to improve the coordination and cost-effectiveness of water quality and ecosystem monitoring and assessment, enhance the integration of monitoring data across departments and agencies, and increase public access to monitoring data and assessment information.

In order to improve access to water quality monitoring information, the Monitoring Council is supporting development of a "My Water Quality" website which is intended to provide easy internet access to up-to-date and understandable

information pertinent to questions of interest to the public and decision makers. This website will provide access to information related to each of the following five questions:

- Is it safe to swim in our waters?
- Is it safe to eat fish and shellfish from our waters?
- Are our aquatic ecosystems healthy?
- Is our water safe to drink?
- What stressors and processes affect our water quality?

Although this website is still under development, it now provides access to information related to the first three of these questions. (To date, the only aquatic ecosystems health information accessible through this website is about wetlands). Interested parties are encouraged to provide the Monitoring Council with suggestions to improve the quality of both (a) the information on the "My Water Quality" website and (b) the underlying monitoring and assessment programs that produce the information.

The "My Water Quality" website can be accessed at http://www.waterboards.ca.gov/mywaterquality/.
Information about development of the "My Water Quality" website is available at http://www.waterboards.ca.gov/mywaterquality/contact_us/index.shtml.
Additional information about the Monitoring Council is available at http://www.waterboards.ca.gov/water_issues/programs/monitoring_council/index.shtml.

2. Biological Objectives for California (*Lilian Busse and Deborah Jayne*)
The stated objective of the federal Clean Water Act is "...to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Measurement of the actual biological conditions in a water body provides the most direct, and best, indicator of its biological integrity. Assessment of biological integrity has evolved and continues to do so. In the past, assessment of biological integrity was based largely on comparing concentrations of individual chemical constituents with established benchmarks. More recently, advances in toxicity testing have provided for assessment of biological integrity based on the combined effects of the chemical constituents actually present in a waterbody. Although chemical and toxicity testing are useful for assessing biological integrity, direct measurement of the actual biological conditions in water bodies is even more useful.

Biological Assessments (Bioassessments)
Bioassessments are evaluations of the biological conditions in a water body using data about the biological community (e.g., fish, benthic macroinvertebrates[1] and algae) which inhabits the water body. The health of that biological community reflects the influences to which it has been exposed to

[1] *Benthic macroinvertebrates are animals without a backbone (invertebrates) that are larger than 0.5 millimeter; these animals live in sediment and on rocks, logs, debris, and aquatic plants during some period in their life.*

pollutant / stressors over a period of time. Therefore bioassessments integrate over time and over a variety of different influences, including chemical influences (e.g., toxic pollutants), non-chemical influences (e.g., sedimentation), natural influences (e.g., seasonal variation), and anthropogenic influences (e.g., dredging, filling, and invasive species.)

To date, development of bioassessment methods in California has focused mostly on the use of benthic macroinvertebrates. The long-term strategy will include the use of more than one group of organisms (e.g. both benthic macroinvertebrates *and* algae). The State has developed and used several tools for scoring the results of bioassessment such as the index of biotic integrity (IBI) and the River Invertebrate Prediction and Classification System (RIVPACS). In the last ten years, statewide and regional monitoring programs in California have included bioassessment, and several permits have included requirements for bioassessment as part of the monitoring program.

Biological Objectives (Bio-objectives)

In general, results of water quality monitoring are compared to the appropriate water quality standards to evaluate whether beneficial uses are protected. Water quality *standards*[2] define the goals for a water body, or a portion thereof, by (1) designating the use or uses to be made of the water (beneficial uses); (2) setting water quality *objectives*[2] necessary to protect those uses; and (3) preventing degradation of water quality (antidegradation policy). Water quality objectives may be expressed as narrative descriptions[3] or as numeric values[4]. *Narrative* objectives are relatively easy to establish, but express goals in conceptual terms that are subject to interpretation. In contrast, *numeric* objectives are very difficult to establish, but express goals in concrete, unambiguous terms that are not subject to interpretation. In California, narrative and numeric water quality objectives have been established for chemical constituents and for toxicity. Some narrative bio-objectives have also been established. Numeric bio-objectives, however, have not yet been established.

The State Water Resources Control Board (State Water Board) is currently leading an effort to develop bio-objectives for waters in California. The steering committee for the development of bio-objectives was established in 2009 and includes staff from USEPA, State Water Board, Department of Fish and Game (DFG), Southern California Coastal Water Research Project (SCCWRP), and Lahontan and San Diego Water Boards. The State Water Board and SCCWRP jointly convened kick-off meetings on March 8, 2010 (in Sacramento) and March 11, 2010 (in Costa Mesa) to inform stakeholders about plans to develop bio-objectives. At these meetings, a process was outlined to develop bio-objectives

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[2] *Note that "water quality objectives" are part of but not the same as "water quality standards."*

[3] *e.g., "Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses."*

[4] *e.g., "Dissolved oxygen levels shall not be less than 6.0 mg/l."*

for perennial streams and rivers using benthic macroinvertebrates by the summer of 2013.

The longer range goal is to develop statewide bio-objectives for other types of water bodies (e.g., ephemeral streams, and estuaries) and to use other indicators (e.g., algae). These bio-objectives will likely be in the form of a *narrative* objective[5] that will be applied statewide with a detailed implementation plan that, where possible, will set regionally appropriate *numeric* objectives (e.g., based on different IBI scores in different parts of the State).

Bioassessments, Bio-objectives, and the San Diego Water Board
The San Diego Water Board has a long history of conducting bioassessments. One of the largest data sets in California regarding biological conditions in streams is for the San Diego Region. DFG has developed the Southern California IBI based on data collected in the San Diego Region. Several San Diego Water Board permits (e.g., municipal storm water permits) also require discharges to conduct bioassessments.

Dr. Lilian Busse of the San Diego Water Board has technical expertise in bioassessment, and is a member of the statewide steering committee for development of bio-objectives. David Gibson, the San Diego Water Board Executive Officer, has long advocated for and is committed to the development of statewide bio-objectives. In the event that statewide bio-objectives are not developed, the Executive Officer plans to recommend development of bio-objectives for the San Diego Region.

Additional information can be found on the State Water Board Bio-objectives webpage:
http://www.waterboards.ca.gov/plans_policies/biological_objective.shtml

[5] *e.g., "Waters shall be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities."*

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

Significant NPDES Permits, WDRs, and Actions of the San Diego Water Board

April 14, 2010

APPENDED TO EXECUTIVE OFFICER'S REPORT

DATE OF REPORT
April 14, 2010

TENTATIVE SCHEDULE
SIGNIFICANT NPDES PERMITS, WDRS, AND ACTIONS
OF THE SAN DIEGO WATER BOARD

Action Agenda Item	Action Type	Draft Complete	Public Review & Comment	Consent Item
May 12, 2010 Regional Board Meeting *San Diego Water Board Office*				
Administrative Civil Liability against County of Riverside Municipal Storm Water Program (*Christina Arias)*	Administrative Civil Liability	85%	50%	Yes
US Navy, Naval Base Coronado NPDES Permit Amendment for Steam Condensate Discharges *(Vicente Rodriguez)*	NPDES Permit Revision	75%	0%	Yes
Request for Cleanup and Abatement Account Funding for Lake San Marcos *(C. Clemente)*	Adoption of Resolution			Yes
Dynegy South Bay LLC, South Bay Power Plant Discharge to San Diego Bay *(Brian Kelley & David Barker)*	NPDES Permit Rescission	100%	50%	No
Agriculture Waiver Status Report *(Peter Peuron)*	Information Item	NA	NA	NA
Camp Pendleton - Update on Cleanup Efforts *(C. Prowell)*	Information Item	NA	NA	NA
June 9, 2010 Regional Board Meeting *San Diego Water Board Office*				
City of Escondido Recycled Water Project (*Robert Pierce*)	WDR Revision	0%	0%	Yes
Amendment to Order No. R9-2006-0065 to change the name of the discharger *(B. Kelley)*	NPDES Permit Amendment	0%	0%	Yes
Hydromodification Management Plan, SD MS4 Permit Requirement *(C. Arias)*	Adoption Consideration, Permit Amendment	80%	0%	0%
Sea World - Mission Bay *(M. Mata)*	NPDES Permit Reissuance	0%	0%	No
San Elijo JPA Ocean Outfall *(Schwall & Confrancesco)*	NPDES Permit Reissuance	0%	0%	No
City of Escondido Ocean Outfall *(Schwall & Confranceso)*	NPDES Permit Reissuance	0%	0%	No
Presentation on past, current, and upcoming San Diego Bay sediment cleanup projects.	Information Item	NA	NA	NA
NPDES General Permit Hydrostatic Testing and Potable Water Discharge *(Michelle Mata)*	NPDES Permit Reissuance	95%	85%	No

DATE OF REPORT
April 14, 2010

TENTATIVE SCHEDULE
SIGNIFICANT NPDES PERMITS, WDRS, AND ACTIONS
OF THE SAN DIEGO WATER BOARD

Action Agenda Item	Action Type	Draft Complete	Public Review & Comment	Consent Item
August 11, 2010 Regional Board Meeting ***San Diego Water Board Office***				
Initial Hearing -Riverside County MS4 Permit *(Ben Neill)*	NPDES Permit Reissuance	0%	0%	No
NPDES General De Minimis Discharges Permit - San Diego Region *(Schwall & Cofrancesco)*	NPDES Permit Adoption	0%	0%	No
Carlsbad Energy Center, LLS Power, Agua Hedionda Lagoon Seawater Intake and Brine Discharge To Pacific Ocean *(Michelle Mata)*	NPDES Permit New	50%	0%	No
Resolution to request CAA funds *(Becker)*	Resolution	0%	0%	No
UCSD Scripps *(Brian Kelley)*	NPDES Permit Reissuance	0%	0%	No
401 Water Quality Certification No. 09C-074 *(M. Porter)*	Certification Adoption			No

January 2010 - Summary of Public Sanitary Sewer Overflows in Region 9												
Responsible Agency	Collection System	Total Number of SSO locations	Total Vol of SSOs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Pressure Sewer	Miles of Gravity Sewer	Miles of Laterals	Total Number of SSO locations per 100 miles of Sewer	Tot Vol of SSOs Reaching Surface Water per 100 miles of Sewer
Category 1 SSO												
AC/S Environmental Security, MCB Camp Pendleton	Usmc Base, Camp Pendleton CS	3	6,500	500	6,000	7	92	32	104	80	1.3	2,777.70
Chula Vista City	City Of Chula Vista CS	1	400	350	100	87	25	2.6	488	0	0.2	20.3
Leucadia Wastewater District	Leucadia Wastewater District CS	1	1,300	1,300	0	100	0	11.4	191	0	0.4	0
National City, City of	City Of National City CS	1	1,500	100	1,400	6	93	1	96.9	0	1	1,430.00
Oceanside PWD	La Salina WWTP, Oceanside Otfl CS	2	22,550	49	0	0	0	40	450	0	0.4	0
San Diego City	San Diego City CS	7	17,490	4,275	6,050	24	34	145	3,002.00	2,000.00	0.1	117.5
San Diego County	County Of San Diego CS	1	900	0	0	0	0	4	371	0	0.2	0
Category 2 SSO												
Encinitas City	City Of Encinitas CS	1	42	15	n/a	35	n/a	4	120	0	0.8	n/a
Imperial Beach, City of	City Of Imperial Beach CS	1	15	0	n/a	0	n/a	4.4	39.5	0.3	2.2	n/a
Laguna Beach City	City Of Laguna Beach CS	1	100	100	n/a	100	n/a	4.5	95	0	1	n/a
Padre Dam Municipal Water District	Padre Dam CS	1	5	5	n/a	100	n/a	5	161	0	0.6	n/a
Ramona MWD	San Vicente Treatment Plant CS	1	250	0	n/a	0	n/a	1	40	21	1.6	n/a
San Diego City	San Diego City CS	1	340	340	n/a	100	n/a	145	3,002.00	2,000.00	0	n/a
	TOTALS	22	51392	7034	13550			399.9	8160.4	4101.3		

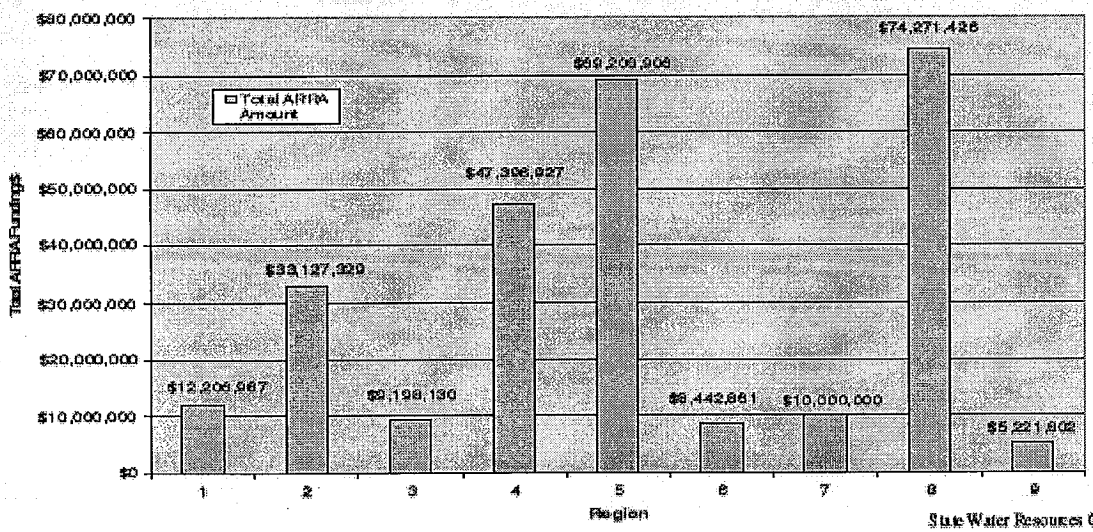
February 2010 - Summary of Public Sanitary Sewer Overflows in Region 9												
Responsible Agency	Collection System	Total Number of SSO locations	Total Vol of SSOs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Pressure Sewer	Miles of Gravity Sewer	Miles of Laterals	Total Number of SSO locations per 100 miles of Sewer	Tot Vol of SSOs Reaching Surface Water per 100 miles of Sewer
Category 1 SSO												
AC/S Environmental Security, MCB Camp Pendleton	Usmc Base, Camp Pendleton CS	1	7,500	0	7,500	0	100	32	104	80	0.4	3,472.20
Carlsbad MWD	Carlsbad MWD CS	1	1,000	0	1,000	0	100	4.8	282	0	0.3	348.6
Laguna Beach City	City Of Laguna Beach CS	1	400	0	400	0	100	4.5	95	0	1	402
Oceanside PWD	La Salina WWTP, Oceanside Otfl CS	1	625	0	625	0	100	40	450	0	0.2	127.5
San Diego City	San Diego City CS	1	570	375	0	65	0	145	3,002.00	2,000.00	0	0
Category 2 SSO												
Chula Vista City	City Of Chula Vista CS	1	30	30	n/a	100	n/a	2.6	488	0	0.2	n/a
San Diego City	San Diego City CS	4	958	25	n/a	2	n/a	145	3,002.00	2,000.00	0	n/a
UC San Diego	University Of California, San Diego CS	1	30	30	n/a	100	n/a	2	25	3	3.3	n/a
	TOTALS	11	11113	460	9525			375.9	7448	4083		

January and February 2010 - Summary of Private Lateral Sewage Discharges in Region 9										
Reporting Agency	Collection System	Total Number of PLSD locations	Total Vol of PLSDs (gal)	Total Vol Recovered (gal)	Total Vol Reaching Surface Water	Percent Recovered	Percent Reaching Surface Water	Miles of Private Lateral	Total Number of PLSD locations per 100 miles of Sewer	Tot Vol of PLSDs Reaching Surface Water per 100 miles of Sewer
Category 1 PLSD										
Carlsbad MWD	Carlsbad MWD CS	1	50	0	50	0	100	124	0.8	40.3
Chula Vista City	City Of Chula Vista CS	2	1,100	600	0	54	0	0	0	0
El Cajon, City of	City Of El Cajon CS	1	200	100	100	50	50	189	0.5	52.9
Imperial Beach, City of	City Of Imperial Beach CS	1	900	4	900	0	100	103	0.9	876.3
Moulton Niguel Water District	Moulton Niguel Water District CS	1	275	200	75	72	27	500	0.2	15
San Diego City	San Diego City CS	4	1,265	820	0	64	0	4,049.00	0.1	0
Category 2 PLSD										
Carlsbad MWD	Carlsbad MWD CS	4	42	72	0	171	0	124	3.2	0
El Cajon, City of	City Of El Cajon CS	1	50	50	0	100	0	189	0.5	0
Imperial Beach, City of	City Of Imperial Beach CS	1	30	30	0	100	0	103	0.9	0
Laguna Beach City	City Of Laguna Beach CS	1	10	10	0	100	0	102	0.9	0
San Diego City	San Diego City CS	5	772	772	0	100	0	4,049.00	0.2	0
Vallecitos Water District	Meadowlark CS	3	528	527	0	99	0	298	1	0
	TOTAL	**25**	**5222**	**3185**	**1125**			**9830**		

ARRA FUNDING AWARDED BY REGIONAL BOARD JURISDICTION

Regional Board	Total Number of Projects	Total SRF Amount	Total ARRA Amount	Loan @ 1% Interest (ARRA)	Loan @ 0% Interest	Stopped Grants	Disadvantaged Community (DAC) Wastewater Grants	Urban Stormwater Grants	Total Principal Forgiveness
1	10	$12,206,987	$12,206,987	$0	$0	$4,719,546	$7,487,441	$0	$12,206,987
2	18	$54,651,610	$33,127,329	$9,068,177	$5,910,046	$6,606,946	$0	$11,542,160	$16,149,106
3	12	$21,180,040	$9,198,130	$0	$0	$5,756,545	$0	$3,441,585	$9,198,130
4	17	$57,515,198	$47,396,927	$0	$0	$14,143,494	$16,991,271	$16,262,162	$47,396,927
5	23	$165,118,517	$89,208,906	$7,854,698	$0	$1,392,451	$51,775,537	$8,186,220	$61,354,206
6	7	$8,442,861	$8,442,861	$0	$0	$2,267,861	$0	$6,175,000	$8,442,861
7	1	$24,595,000	$10,000,000	$0	$0	$0	$10,000,000	$0	$10,000,000
8	16	$139,777,715	$74,271,426	$11,443,527	$54,089,954	$7,137,259	$1,370,686	$230,000	$8,737,945
9	4	$5,221,802	$5,221,802	$0	$0	$4,176,802	$0	$1,045,000	$5,221,802
TOTAL	109	$505,909,730	$269,074,368	$28,366,402	$60,000,000	$46,200,904	$87,624,935	$46,852,127	$180,707,966

TOTAL ARRA FUNDS AWARDED BY REGION



State Water Resources Control Board, March 24, 2010

Attachment B-4

STATEWIDE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

DRAFT

1. Introduction

A. Clean Water Act Section 316(b) requires that the location, design, construction and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact. Section 316(b) is implemented through National Pollutant Discharge Elimination System (NPDES) permits, issued pursuant to Clean Water Act Section 402, which authorize the point source discharge of pollutants to navigable waters.

B. The State Water Resources Control Board (State Water Board) is designated as the state water pollution control agency for all purposes stated in the Clean Water Act.

C. The State Water Board and Regional Water Quality Control Boards (Regional Water Boards) (collectively Water Boards) are authorized to issue NPDES permits to point source dischargers in California.

D. Currently, there are no applicable nationwide standards implementing Section 316(b) for *existing power plants**[1]. Consequently, the Water Boards must implement Section 316(b) on a case-by-case basis, using best professional judgment.

E. The State Water Board is responsible for adopting state policy for water quality control, which may consist of water quality principles, guidelines, and objectives deemed essential for water quality control.

F. This Policy establishes ~~uniform~~ requirements for the implementation of §Section 316(b), using best professional judgment in determining BTA for cooling water intake structures at existing coastal and estuarine power plants that must be implemented in NPDES permits.

G. The intent of this Policy is to ensure that the beneficial uses of the State's coastal and estuarine waters are protected while also ensuring that the electrical power needs essential for the welfare of the citizens of the State are met. The State Water Board recognizes it is necessary to develop replacement infrastructure to maintain electric reliability in order to implement this Policy and in developing this policy considered costs, including costs of compliance, consistent with state and federal law.

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[1] An asterisk indicates that the term is defined in Section 5 of the Policy.

H. During the development of this Policy, State Water Board staff has met regularly with representatives from the California Energy Commission (CEC), California Public Utilities Commission (CPUC), California Coastal Commission (CCC), California State Lands Commission (SLC), California Air Resources Board (ARB), and California Independent System Operator (CAISO) to develop realistic implementation plans and schedules for this Policy that will not cause disruption in the State's electrical power supply. The compliance dates for this Policy were developed considering a report produced by the energy agencies (CEC, CPUC, and CAISO), titled "Implementation of OTC Mitigation Through Energy Infrastructure Planning and Procurement Changes", and the accompanying table, titled "Draft Infrastructure Replacement Milestones and Compliance Dates for Existing Power Plants in California Using Once Through Cooling", included in the Substitute Environmental Document for this Policy. The energy agencies' approach seeks to address the replacement, repowering, or retirement of power plants currently using OTC that (1) maintains reliability of the electric system; (2) meets California's environmental policy goals; and (3) achieves these goals through effective long-term planning for transmission, generation and demand resources. The energy agencies have stated that the dates specified in their report may require periodic updates.

I. To prevent disruption in the State's electrical power supply when the Policy is implemented, the State Water Board will convene a Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS), which will include representatives from the CEC, CPUC, CAISO, CCC, SLC, ARB, and State Water Board. SACCWIS will review implementation plans and schedules submitted by dischargers pursuant to this Policy, and advise the State Water Board on the implementation of this Policy to ensure that the implementation schedule takes into account local area and grid reliability, including permitting constraints. The State Water Board recognizes the compliance dates in this Policy may require amendment based on, among other factors, the need to maintain reliability of the electric system as determined by the energy agencies included in the SACCWIS, acting according to their individual or shared responsibilities. The State Water Board retains the final authority over changes to the adopted policy.

J. While the CEC, CPUC and CAISO each have various planning or permitting responsibilities important to this effort, the approach relies upon use of competitive procurement and forward contracting mechanisms implemented by the CPUC in order to identify low cost solutions for most OTC power plants. The CPUC has authority to order the investor-owned utilities (IOUs) to procure new or repowered fossil-fueled generation for system and/or local reliability in the Long-Term Procurement Plan (LTPP) proceeding. In response to the Policy, the CPUC anticipates modifying its LTPP proceeding and procurement processes to require the IOUs to assess replacement infrastructure needs and conduct targeted requests for offers (RFOs) to acquire replacement, repowered or otherwise compliant generation capacity. LTPP proceedings are conducted on a biennial

cycle and plans are normally approved in odd-numbered years. The next cycle, the 2010 LTPP, is estimated to result in a decision by 2011. The subsequent cycle, the 2012 LTPP, would in turn result in a decision by 2013. Once authorized to procure by a CPUC LTPP decision, the IOUs need approximately 18 months to issue an RFO, sign contracts, and submit applications to the CPUC for approval. Approval by the CPUC takes approximately nine months. If the contract involves a facility already licensed through the CEC generation permitting process, then financing and construction can begin. A typical generation permitting timeline is 12 months, but specific issues such as ability to obtain air permits can delay the process. IOUs often give preference to RFO bids with permits already (or nearly) in place. From contract approval, construction usually takes three years, if generation permits are approved, or approximately five years, if generation permits are pending or other barriers present delays. In total, starting from the initiation of an LTPP proceeding (2010 LTPP or 2012 LTPP), seven years are expected to elapse, before replacement infrastructure is operational. Due to the number of plants affected, efforts to replace or repower OTC power plants would need to be phased.

K. Because the Los Angeles region presents a more complex and challenging set of issues, it is anticipated that more time would be needed to study and implement replacement infrastructure solutions. Therefore, total elapsed time is expected to begin in 2010 and end in 2017 for the Greater Bay Area and San Diego regions, which would be addressed beginning in the 2010 LTPP. For the Los Angeles region, which would be addressed beginning in the 2012 LTPP, total elapsed time is expected to begin in 2012 and end in 2020. A transmission solution is expected to have approximately the same timeframe, but could be delayed by greater potential for significant local opposition. In order to assure that repowering or *new power plant** development in the Los Angeles basin addresses unique permitting challenges, the SACCWIS will assist the State Water Board in evaluating ~~compliance~~schedules for power plants not under the jurisdiction of the CPUC or operating within the CAISO Balancing Authority Area.

L. The Global Warming Solutions Act of 2006 requires California to reduce greenhouse gas emissions to 1990 levels by 2020 and then to maintain those reductions. California presently has two *nuclear-fueled power plants** that provide approximately 4,600 megawatts of baseload electricity and do not emit greenhouse gases during energy generation. Energy generation by facilities that do not emit greenhouse gases will be critical to meeting the mandates of the Global Warming Solutions Act and emerging national and international greenhouse gas reduction requirements. The *nuclear-fueled power plants** are entering into United States Nuclear Regulatory Commission (Commission) license renewal proceedings unique to the nuclear power industry and relicensing may extend the plants operating lives to approximately 2045. Unlike older era fossil-fueled plants, if the *nuclear-fueled power plants** undergo modernization as part of relicensing or cooling structure upgrades, that modernization will not reduce greenhouse gas emissions, and in fact, extended downtime during modernization may result in

short-term increases in greenhouse gases as other greenhouse gas emitting facilities provide makeup power. In recognition of these considerations and others, this Policy requires special studies for the *nuclear-fueled power plants** to address their unique issues, and to evaluate appropriate requirements for those plants.

M. ~~L.~~ To conserve the State's scarce water resources, the State Water Board encourages the use of recycled water for cooling water in lieu of marine, estuarine or fresh water.

N. Nothing in this Policy precludes the authority of Regional Water Boards to regulate discharges from *existing power plants** through NPDES permits, consistent with water quality standards.

2. Requirements for *Existing Power Plants**

A. Compliance Alternatives. An owner or operator of an *existing power plant** must comply with either Track 1 or Track 2, below.

(1) Track 1. An owner or operator of an *existing power plant** must reduce *intake flow rate** at each unit, at a minimum, to a level commensurate with that which can be attained by a *closed-cycle wet cooling system**. A minimum 93 percent reduction in *intake flow rate** for each unit is required for Track 1 compliance, compared to the unit's design *intake flow rate**. The through-screen intake velocity must not exceed 0.5 foot per second. The installation of closed cycle dry cooling systems meets the intent and minimum reduction requirements of this compliance alternative.

(2) Track 2. ~~If an~~ The owner or operator of an *existing power plant** ~~demonstrates to the Regional Water Boards' satisfaction that compliance with Track 1 is *not feasible*, the owner or operator~~ must reduce impingement mortality and entrainment of marine life for the facility, as a whole, to a comparable level to that which would be achieved under Track 1, using operational or structural controls, or both. ~~For the purposes of this policy, a "comparable level" is a level that achieves at least 90 percent of the reduction in impingement mortality and entrainment required under Track 1.~~

(a) Compliance for impingement mortality shall be determined either:

~~(1)~~(i) For plants relying solely on reductions in velocity, by monthly verification of through-screen intake velocity not to exceed 0.5 foot per second, or

~~(2) by~~ (ii) By monitoring required in Section 4.A, below. For measured reductions determined by monitoring, the owner or operator must reduce impingement mortality to a comparable level to that which would be achieved under Track 1. A "comparable level" is a level that

achieves at least 90 percent of the reduction in impingement mortality required under Track 1.

(b) Compliance for entrainment shall be determined ~~by measured reduction in entrainment determined by monitoring required in Section 4.B. below.~~ either:

(i) For plants relying solely on reductions in flow, by recording and reporting reductions in terms of monthly flow, in which case a minimum of 93% reduction in terms of design flow must be met, or

(ii) For plants relying in whole or in part on other control technologies (e.g., including but not limited to screens or re-location of intake structures), by measured reductions in entrainment determined by monitoring required in Section 4.B. below. The owner or operator must reduce entrainment to a comparable level to that which would be achieved under Track 1. "A comparable level" is a level that achieves at least 90 percent of the reduction in entrainment required under Track 1. If screens are employed to reduce entrainment, compliance shall be determined based on *ichthyoplankton**, and on the crustacean phyllosoma and megalops larvae, and squid paralarvae fractions of *meroplankton**.

(c) Technology-based improvements that are specifically designed to reduce impingement mortality and/or entrainment and were implemented prior to [the effective date of the Policy] may be counted towards meeting Track 2 requirements.

(d) The owner or operator of an *existing power plant** with *combined-cycle power-generating units** installed prior to [the effective date of the Policy] may choose one of the following compliance options:

(i) ~~(a) Reductions~~The owner or operator may count prior reductions in impingement mortality and entrainment resulting from the replacement of steam turbine power-generating units with *combined-cycle power-generating units**, ~~installed prior to [the effective date of the Policy], may also be counted~~ towards meeting Track 2 requirements~~.~~ for the entire power plant where those units are located. Reductions in entrainment shall be based on reductions in intake flows, calculated as the difference between:

1. the maximum permitted discharge (expressed as million gallons per day (MGD)) for the entire power plant as identified in the plant's prior NPDES permit that authorized the steam turbine power-generating units which were subsequently replaced with the *combined-cycle power-generating units** and

2. the maximum permitted discharge (expressed as MGD) for the entire power plant, including the combined-cycle units, as identified in the plant's NPDES permit authorizing the *combined-cycle power-generating units**.

The owner or operator may also count as prior entrainment reductions any permitted discharges from the *combined-cycle power-generating units** for which the CEC and/or a Regional Water Board imposed mandatory mitigation requirements (such as expenditures of substantial funds for habitat restoration or enhancement) based upon substantial evidence in the record of the prior proceeding showing that the CEC and/or Regional Water Board required mitigation after a BTA determination for the *combined-cycle power-generating units** and required the mitigation to further offset the entrainment impacts of the permitted intake cooling water.

(ii) For *combined-cycle power-generating units** only, and not the facility as a whole, the owner or operator may be deemed in compliance by:

1. Reducing the through-screen intake velocity to a maximum of 0.5 foot per second, and
2. Complying with the immediate and interim requirements described in Section 2.C, below, for the life of the *combined-cycle power-generating units**.

B. Final Compliance Dates

(1) *Existing power plants** shall comply with Section 2.A, above, as soon as possible, but no later than, the dates shown in Table 1, contained in Section 3.E, below.

(2) Based on the need for continued operation of an *existing power plant** to maintain the reliability of the electric system, a final compliance date may be suspended under the following circumstances:

(a) **Suspension of Final Compliance Date for Less Than 90 Days for *Existing Power Plants** Within CAISO Jurisdiction.** If CAISO determines that continued operation of an *existing power plant** is necessary to maintain the reliability of the electric system in the short-term, CAISO shall provide written notification to the State Water Board, the Regional Water Board with jurisdiction over the *existing power plant**, and the SACCWIS. If the Executive Directors of the CEC and CPUC do not object in writing within 10 days to CAISO's written notification, the notification provided pursuant to this paragraph will suspend the final compliance date for the shorter of 90 days or the time CAISO determines necessary to maintain reliability. In the event either CEC or CPUC objects

as provided in this paragraph, then the State Water Board shall hold a hearing as expeditiously as possible to determine whether to suspend the compliance date in accordance with paragraph (d).

(b) **Suspension of Final Compliance Date for Longer Than 90 Days for *Existing Power Plants** Within CAISO Jurisdiction.** If CAISO determines that continued operation of an *existing power plant** is necessary to maintain the reliability of the electric system, CAISO shall provide written notification to the State Water Board, the Regional Water Board with jurisdiction over the *existing power plant**, and the SACCWIS. If the Executive Directors of the CEC and CPUC do not object in writing within 10 days to CAISO's determination, the notification provided pursuant to this paragraph will suspend the final compliance date for 90 days. During the 90-day time suspension or within 90 days of receiving a written notification from CAISO, the State Water Board shall conduct a hearing in accordance with paragraph (d) to determine whether to suspend the final compliance date for more than the original 90 days pending, if necessary, full evaluation of amendments to final compliance dates contained in the policy.

(c) **Suspension of Final Compliance Date for *Existing Power Plants** Within Los Angeles Department of Water and Power (LADWP) Service Area.** If the LADWP Commission determines, through a public process, that continued operation of an *existing power plant** operated by LADWP is necessary to maintain the reliability of the electric system in the short-term, LADWP shall provide written notification to the State Water Board, the Regional Water Board with jurisdiction over the *existing power plant**, and the SACCWIS. Within 45 days of receiving a written notice from LADWP, the State Water Board shall conduct a hearing in accordance with paragraph (d) to determine whether to suspend the final compliance date. In considering whether to suspend or amend the final compliance dates the State Board shall consult with the CAISO.

(d) **State Water Board Hearings on Suspension of Final Compliance Dates.** In considering whether to suspend or amend the final compliance dates, the State Water Board shall implement the recommendations of the CAISO unless the State Water Board finds that there is compelling evidence not to follow a recommendation and makes a finding of overriding considerations.

~~(2) Based on the need for continued operation of an existing power plant to maintain the reliability of the electric system as annually determined by the CAISO, CEC or CPUC acting according to their individual or shared responsibilities, and communicated to the State Water Board as a formal action of the CAISO or state agency, the State Water Board shall hold a hearing to consider suspension of a compliance date applicable to an existing~~

~~power plant pending full evaluation of amendments to final compliance dates contained in the policy.~~

C. Immediate and Interim Requirements

(1) No later than [one year after the effective date of this Policy], the owner or operator of an *existing power plant** with an *offshore intake** shall install large organism exclusion devices having a distance between exclusion bars of no greater than nine inches, or install other exclusion devices, deemed equivalent by the Regional Water Board.

(2) No later than [one year after the effective date of this Policy], the owner or operator of an *existing power plant** unit that is not directly engaging in *power-generating activities**, or *critical system maintenance**, shall cease intake flows, unless the owner or operator demonstrates to the Regional Water Board that a reduced minimum flow is necessary for operations.

(3) The owner or operator of an *existing power plant** must implement measures to mitigate the interim impingement and entrainment impacts resulting from the cooling water intake structure(s), commencing [five years after the effective date of this Policy] and continuing up to and until the owner or operator achieves final compliance. The owner or operator must include in the implementation plan described in Section 3.A below, the specific measures that will be undertaken to comply with this requirement. An owner or operator may comply with this requirement by:

(a) Demonstrating to the ~~Regional~~State Water Board's satisfaction that the owner or operator is compensating for the interim impingement and entrainment impacts through existing mitigation efforts, including any projects that are required by state or federal permits as of [the effective date of this Policy], or

(b) Demonstrating to the ~~Regional~~State Water Board's satisfaction that the interim impacts are compensated for by the owner or operator~~'s participation in funding through a third party of~~ providing funding to the California Coastal Conservancy which will work with the California Ocean Protection Council to fund an appropriate *mitigation project**; or

(c) Developing and implementing a *mitigation* ~~program~~*project** for the facility, approved by the ~~Regional~~State Water Board, which will compensate for the interim impingement and entrainment impacts. Such a project must be overseen by an advisory panel of experts convened by the State Water Board.

(d) The *habitat production foregone** method, or a comparable alternate method approved by the ~~Regional~~State Water Board Division of Water

Quality, shall be used to determine the habitat and area ~~for~~, based on replacement of the annual entrainment, for funding a *mitigation project**.

(e) It is the preference of the State Water Board that funding be provided to the California Coastal Conservancy, working with the California Ocean Protection Council, for mitigation projects directed toward the implementation, monitoring, maintenance and management of the State's Marine Protected Areas.

D. *Nuclear-Fueled Power Plants**

If the owner or operator of an existing *nuclear-fueled power plant** demonstrates that compliance with the requirements for *existing power plants** in Section 2.A, above, of this Policy would result in a conflict with ~~a safety~~any requirement established by the ~~Nuclear Regulatory Commission (Commission)~~Commission, with appropriate documentation or other substantiation from the Commission, the State Water Board will make a site-specific determination of best technology available for minimizing adverse environmental impact that would not result in a conflict with the Commission's ~~safety requirement~~requirements. The State Water Board may also establish alternative, site-specific requirements in accordance with Section 3.D(8).

3. Implementation Provisions

A. With the exception of *nuclear-fueled power plants**, which are covered under 3.D, below, no later than [six months after the effective date of this Policy], the owner or operator of an *existing power plant** shall submit an implementation plan to the State and Regional Water Boards.

(1) The implementation plan shall identify the compliance alternative selected by the owner or operator, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule for implementing these measures that is as short as possible. If the owner or operator chooses to repower the facility to reduce or eliminate reliance upon OTC, or to retrofit the facility to implement either Track 1 or Track 2 alternatives, the implementation plan shall identify the time period when generating power is infeasible and describe measures taken to coordinate this activity through the appropriate electrical system balancing authority's maintenance scheduling process.

(2) If the owner or operator selects *closed-cycle wet cooling** as a compliance alternative, the owner or operator shall address in the implementation plan whether recycled water of suitable quality is available for use as makeup water.

B. The SACCWIS shall be impaneled no later than [three months after the effective date of this Policy], by the Executive Director of the State Water Board, to advise

the State Water Board on the implementation of this Policy to ensure that the implementation schedule takes into account local area and grid reliability, including permitting constraints. SACCWIS shall include representatives from the CEC, CPUC, CAISO, CCC, SLC, ARB, and State Water Board.

(1) SACCWIS meetings shall be scheduled regularly and as needed. Meetings shall be open to the public and shall be noticed at least 10 days in advance of the meeting. All SACCWIS products shall be made available to the public.

(2) The SACCWIS shall review the owner or operator's proposed implementation schedule and report to the State Water Board with recommendations no later than [one year after the effective date of this Policy]. The SACCWIS may consult with other appropriate agencies, including but not limited to the Regional Water Boards, air quality districts, and the LADWP, in the process of reviewing implementation schedules and providing recommendations to the State Water Board.

(3) The CAISO and the LADWP shall each submit to the SACCWIS by December 31, each year a grid reliability study, for their respective jurisdictions, that has been developed pursuant to a public process and approved by their governing bodies. In order to assure that SACCWIS can provide annual reports to the State Water Board by March 31, the SACCWIS shall promptly meet to consider the reliability studies submitted by CAISO and the LADWP.

(4) ~~(3)~~ The SACCWIS will report to the State Water Board with recommendations on modifications to the implementation schedule ~~at least~~ every ~~two years~~year starting in ~~20~~2012. If members of SACCWIS do not believe the full committee recommendations reflect their concerns they may issue minority recommendations that the State Water Board shall consider as part of the SACCWIS recommendations.

(5) ~~(4)~~ The State Water Board shall consider the SACCWIS' recommendations and direct staff to make modifications, if appropriate, for the State Water Board's consideration. In the event that the SACCWIS energy agencies (CAISO, CPUC, and CEC) make a unanimous recommendation for implementation schedule modification based on grid reliability, the State Water Board shall implement the recommendation unless the State Water Board finds that there is compelling evidence not to make the recommended modification and makes a finding of overriding considerations. In the event that (i) an owner or operator is unable to obtain permits required for a facility upgrade to comply with a final compliance date established in this policy, and (ii) the State Water Board finds that the owner or operator used best efforts to obtain the required permits, then the State Water Board shall suspend a final compliance date specified in this policy for a period not to exceed two years.

C. The Regional Water Boards shall reissue or, as appropriate, modify NPDES permits issued to owners or operators of *existing power plants** to ensure that the permits conform to the provisions of this Policy.

(1) The permits shall incorporate a final compliance schedule that requires compliance ~~as soon as possible, but no~~ later than the ~~deadline~~dues dates contained in Table 1, contained in Section 3.E, below. ~~The compliance schedule shall be as short as possible, given the type of facilities being constructed, and industry experience with the time typically required to construct similar facilities; and, taking into account the amount of time reasonably required for the discharger to implement actions, such as designing, permitting, securing, financing and constructing facilities.~~ If the State Water Board determines that a longer compliance schedule is necessary to maintain reliability of the electric system per SACCWIS recommendations while other OTC power plants are retrofitted, repowered, or retired or transmission upgrades take place, this delay shall be incorporated into the compliance schedule and stated in the permit findings.

(2) The Regional Water Boards shall reopen, if necessary, the relevant permits and modify the final compliance schedules, if appropriate, based on modifications to the policy approved by the State Water Board or the suspension of final compliance dates pursuant to this policy.

(3) If an owner or operator selects Track 2 as the compliance alternative, the NPDES permit shall include a monitoring program that complies with Section 4 of this Policy.

(4) NPDES permits issued by the Regional Water Boards shall include appropriate permit provisions to implement suspensions of final compliance dates authorized in Section 2.B(2) and modifications to final compliance dates specified in this policy, without reopening the permits.

D. No later than [three months of the effective date of this Policy] the Executive Director of the State Water Board, using the authority under section 13267(f) of the Water Code, shall request that Southern California Edison (SCE) and Pacific Gas & Electric Company (PG&E) conduct special studies for submission to the State Water Board.

(1) The special studies shall investigate alternatives for the *nuclear-fueled power plants** to meet the requirements of this Policy, including the costs for these alternatives.

(2) The special studies shall be conducted by an independent third party, selected by the Executive Director of the State Water Board.

(3) The special studies shall be overseen by a Review Committee, established by the Executive Director of the State Water Board no later than [three months of the effective date of the Policy], which shall include, at a minimum, representatives of SCE, PG&E, SACCWIS, the environmental community, and staffs of the State Water Board, Central Coast Regional Water Board, and the San Diego Regional Water Board.

(4) No later than [one year after the effective date of this Policy], the Review Committee, described above, shall provide a report for public comment detailing the scope of the special studies, including the degree to which existing, completed studies can be relied upon.

(5) No later than [three years after the effective date of this Policy] the Review Committee shall provide ~~a~~the final report and the Review Committee's comments for public comment detailing the results of the special studies and shall present the report to the State Water Board.

(6) Meetings of the Review Committee shall be open to the public and shall be noticed at least 10 days in advance of the meeting. All products of the Review Committee shall be made available to the public.

(7) The State Water Board shall consider the results of the special studies, ~~including costs and feasibility, in~~and shall evaluate the need to modify this Policy with respect to the *nuclear-fueled power plants**. In evaluating the need to modify this Policy, the State Water Board shall base its decision to modify this Policy with respect to the *nuclear-fueled power plants** on the following factors:

(a) Costs of compliance in terms of total dollars and dollars per megawatt hour of electrical energy produced over an amortization period of 20 years;

(b) Ability to achieve compliance with Track 1 or Track 2 considering factors including, but not limited to, engineering constraints, space constraints, permitting constraints, and public safety considerations;

(c) Potential environmental impacts of compliance with Track 1 or Track 2, including, but not limited to, air emissions;

(d) Any other relevant information.

(8) If the State Water Board finds that the costs for a specific *nuclear-fueled power plant** to implement Track 1 or Track 2, considering all the factors set forth in paragraph (7), are wholly out of proportion to the costs considered by the State Water Board in establishing Track 1, then the State Water Board shall establish alternate requirements for that *nuclear-fueled power plant**.

The State Water Board shall establish alternative requirements no less stringent than justified by the wholly out of proportion (i) cost and (ii) factor(s) of paragraph (7). The burden is on the person requesting the alternative requirement to demonstrate that alternative requirements should be authorized.

(9) In the event the State Water Board establishes alternate requirements for *nuclear-fueled power plants**, the difference in impacts to marine life resulting from any alternative, less stringent requirements shall be fully mitigated. Mitigation required pursuant to this paragraph shall be a *mitigation project** directed toward the implementation, monitoring, maintenance and management of the State's Marine Protected Areas. Funding for the *mitigation project** shall be provided to the California Coastal Conservancy, working with the Ocean Protection Council to fund an appropriate *mitigation project**.

E. Table 1. Implementation Schedule

	Milestone	Responsible Entity/Party	Due Date[2]
1	Request SCE and PG&E to conduct special studies to investigate compliance options for *nuclear-fueled power plants** [Section 3.D]	State Water Board Executive Director	[three months after the effective date of the Policy]
2	Establish Review Committee [Section 3.D(3)]	State Water Board Executive Director	[three months after the effective date of the Policy]
3	Establish SACCWIS [Section 3.B]	State Water Board Executive Director	[three months after the effective date of the Policy]
4	Submit a proposed implementation plan to the State and Regional Water Boards [Section 3.A]	Owner/operators of existing fossil-fueled power plants	[six months after the effective date of the Policy]
5	Provide a report for public comment, detailing the scope of the special studies on compliance options for *nuclear-fueled power plants** [Section 3.D(4)]	Review Committee	[one year after the effective date of the Policy]
6	Review the owners or operators' proposed implementation schedules and report to the State Water Board with recommendations	SACCWIS	[one year after the effective date of the

[2] These compliance dates were developed considering information provided by the CEC, CPUC, CAISO, and ~~the Los Angeles Department of Water and Power~~ (LADWP).

	Milestone	Responsible Entity/Party	Due Date[2]
	[Section 3.B(2)]		Policy]
7	Humboldt Bay Power Plant in compliance	Owner/operator	[one year after the effective date of the Policy]
8	Potrero Power Plant in compliance	Owner/operator	[one year after the effective date of the Policy]
9	Install large organism exclusion devices with a distance between exclusion bars of no greater than nine inches, or equivalent device [Section 2.C(1)]	Owner/operators of *existing power plants** with *offshore intakes**	[one year after the effective date of the Policy]
10	Cease intake flows for units not directly engaging in *power-generating activities** or *critical system maintenance**, or demonstrate to the Regional Water Board that a reduced minimum flow is necessary for operations [Section 2.C(2)]	Owner/operators of *existing power plants**	[one year after the effective date of the Policy]
11	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2012
~~11~~ 12	South Bay Power Plant in compliance	Owner/operator	12/31/2012
~~12~~ 13	Report to State Water Board on results of special studies on compliance options for *nuclear-fueled power plants** [Section 3.D(5)]	Review Committee	[three years after the effective date of the Policy]
~~13~~ 14	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2013
15	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2014
~~14~~ 16	Commence to implement measures to mitigate the interim impingement and entrainment impacts due to the cooling water intake structure(s) [Section 2.C(3)]	Owners/operators of *existing power plants**	[five years after the effective date of the Policy]
~~15~~	~~Report to State Water Board on status of implementation of Policy [Section 3.B(3)]~~	~~SACCWIS~~	~~3/31/2015~~
~~16~~	~~El Segundo, Haynes, and Morro Bay power plants in compliance~~	~~Owner/operator~~	~~12/31/2015~~
17	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/~~2017~~2015
18	El Segundo, Harbor, and Morro Bay power plants in compliance	Owner/operator	12/31/2015
19	Report to State Water Board on status of	SACCWIS	3/31/16

	Milestone	Responsible Entity/Party	Due Date[2]
	implementation of Policy [Section 3.B(3)]		
20	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2017
~~18~~ 21	Power plants in CPUC 2010 LTPP Cycle in compliance: Encina, Contra Costa, Pittsburg, Moss Landing [Section 1.J]	~~Owner/Operator~~	12/31/2017
22	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2018
23	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2019
~~19~~ 24	~~Harbor and Scattergood~~Haynes generating ~~stations~~station in compliance	Owner/operator	12/31/~~2017~~2019
~~20~~ 25	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/~~2019~~2020
~~21~~ 26	Power plants in CPUC 2012 LTPP Procurement Cycle in compliance: Huntington Beach, Redondo, Alamitos, Mandalay, Ormond Beach [Section 1.J]. Scattergood generating station in compliance.	Owner/operator	12/31/2020
~~22~~ 27	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2021
~~23~~ 28	~~Diablo Canyon Power Plant in compliance~~Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	~~Owner/operator~~SACCWIS	~~12~~3/31/~~2024~~2022
~~24~~ 29	San Onofre Nuclear Generating Station in compliance with implementation provisions resulting from State Water Board action on special studies from Section 3.D	Owner/operator	12/31/2022
30	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2023
31	Report to State Water Board on status of implementation of Policy [Section 3.B(3)]	SACCWIS	3/31/2024
32	Diablo Canyon Power Plant in compliance with implementation provisions resulting from State Water Board action on special studies from Section 3.D	Owner/operator	12/31/2024

4. Track 2 Monitoring Provisions

A. Impingement Impacts: The following impingement studies are required to comply with Section ~~2~~(2.A).(2)(a)(~~2~~ii):

(1) A baseline impingement study shall be performed, unless the discharger demonstrates, to the Regional Water Board's satisfaction, that prior studies accurately reflect current impacts. Baseline impingement shall be measured on-site and shall include sampling for all species impinged. The impingement study shall be designed to accurately characterize the species currently impinged and their seasonal abundance to the satisfaction of the Regional Water Board.

(a) The study period shall be at least 12 consecutive months.

(b) Impingement shall be measured during different seasons when the cooling system is in operation and over 24-hour sampling periods.

(c) When applicable, impingement shall be sampled under differing representative operational conditions (e.g., differing levels of power production, heat treatments, etc.).

(d) The study shall not result in any additional mortality above typical operating conditions.

(2) After the Track 2 controls are implemented, to confirm the level of impingement controls, another impingement study, consistent with ~~section~~Section 4.A(1)(a) to (d), above, shall be performed and reported to the Regional Water Board.

(3) The need for additional impingement studies shall be evaluated at the end of each permit period. Impingement studies shall be required when changing operational or environmental conditions indicate that new studies are needed, at the discretion of the Regional Water Board.

B. Entrainment Impacts. The following entrainment studies are required to comply with Section ~~2~~(2.A).(2)(b)(ii):

(1) A baseline entrainment study shall be performed, unless the discharger demonstrates, to the Regional Water Board's satisfaction, that prior studies accurately reflect current impacts. ~~Baseline sampling~~Prior studies that may have used a mesh size of 333 or 335 microns for sampling are acceptable for compliance with the review and approval of the Regional Water Board. If the Regional Water Board determines that a new baseline entrainment study shall be performed to determine larval composition and abundance in the source water, representative of water that is being entrained, then samples must be collected using a mesh size no larger than 335 microns. Additional samples shall also be collected using a 200 micron mesh to provide a broader characterization of other *meroplankton** entrained. The source water shall be determined based on oceanographic conditions reasonably expected after Track 2 controls are implemented. Baseline entrainment sampling shall

provide an unbiased estimate of larvae entrained at the intake prior to the implementation of Track 2 controls.

(a) Entrainment impacts shall be based on sampling for all *ichthyoplankton** and invertebrate *meroplankton** species. Individuals collected shall be identified to the lowest taxonomical level practicable. When practicable, genetic identification through molecular biological techniques may be used to assist in compliance with this requirement. Samples shall be preserved and archived such that genetic identification is possible at a later date.

(b) The study period shall be at least 12 consecutive months, and ~~sampling~~shall occur during different seasons, including periods of peak use when the cooling system is in operation (such as the summer months when energy is in high demand). Sampling shall be designed to account for variation in oceanographic conditions and larval abundance and behavior such that abundance estimates are reasonably accurate.

(2) After the Track 2 controls are implemented, to confirm the level of entrainment controls, another entrainment study (with a study design to the Regional Water Board's satisfaction, with samples collected using a mesh size no larger than 335 microns, and with additional samples also collected using a 200 micron mesh) shall be performed and reported to the Regional Water Board.

(3) The need for additional entrainment studies shall be evaluated at the end of each permit period. Entrainment studies shall be required when changing operational or environmental conditions indicate that new studies are needed, at the discretion of the Regional Water Board.

5. Definition of Terms

Closed-~~Cycle Wet Cooling System~~cycle wet cooling system – Refers to a cooling system, which functions by transferring waste heat to the surrounding air through the evaporation of water, thus enabling the reuse of a smaller amount of water several times to achieve the desired cooling effect. The only discharge of wastewater is from periodic blowdown~~, which is either boiler water or re-circulating cooling water~~ for the purpose of limiting the buildup of concentrations of materials in excess of desirable limits established by best engineering practice.

Combined-cycle power-generating units - Refers to ~~several~~ units within a power plant which combined generate electricity through a two-stage process involving combustion and steam. Hot exhaust gas from ~~one or two~~ combustion turbines is passed through a heat recovery steam generator to produce steam for a steam turbine. The turbine exhaust steam is condensed in the cooling system and may or may not be returned to the power cycle. Combined cycle power-generating

units are generally more fuel-efficient and use less cooling water than steam boiler units with the same generating capacity.

Critical system maintenance – are activities that are critical for maintenance of a plant's physical machinery and absolutely cannot be postponed until the unit is operating to generate electricity.

Existing power plant(s) – Refers to any power plant that is not a *new power plant.**

Habitat ~~*Production Foregone*~~*production foregone* – Refers to the product of the average annual *proportional mortality** and the estimated area of the water body that is habitat for the species' source population. Habitat production foregone* is an estimate of habitat area production that is lost to all entrained species on an annual basis. ~~For example, if the average *proportional mortality** of estuarine species is 17 percent and the area of the source water estuary is 2000 acres, then the *habitat production foregone** is equal to 17 percent of 2000 acres, which is 340 acres.~~

Ichthyoplankton – Refers to the planktonic early life stages of fish (i.e., the pelagic eggs and larval forms of fishes).

Intake ~~*Flow Rate*~~*flow rate* – Refers to the instantaneous rate at which water is withdrawn through the intake structure, expressed as gallons per minute.

Meroplankton – ~~Refers~~For purposes of this Policy, refers to that component of the *zooplankton** community composed of squid paralarvae and the pelagic larvae of benthic invertebrates.

Mitigation project – Projects to restore marine life lost through impingement mortality and entrainment. Restoration of marine life may include projects to restore and/or enhance coastal marine or estuarine habitat, and may also include protection of marine life in existing marine habitat, for example through the funding of implementation and/or management of Marine Protected Areas.

New power plant – Refers to any plant that is a "new facility", as defined in 40 C.F.R. § 125.83 (revised as of July 1, 2007), and that is subject to Subpart I, Part 125 of the Code of Federal Regulations (revised as of July 1, 2007) (referred to as "Phase I regulations").

~~*Not Feasible* – Cannot be accomplished because of space constraints or the inability to obtain necessary permits due to public safety considerations, unacceptable environmental impacts, local ordinances, regulations, etc. Cost is not a factor to be considered when determining feasibility under Track 1.~~

Nuclear-~~Fueled Power Plant~~fueled power plant(s) – Refers to Diablo Canyon Power Plant and/or San Onofre Nuclear Generating Station.

Offshore intake –refers to any submerged intake structure that is not located at the shoreline, and includes such intakes that are located in ocean, bay and estuary environments.

Power-generating ~~Activities~~activities – Refers to activities directly related the generation of electrical power, including start-up and shut-down procedures, contractual obligations (hot stand-by), hot bypasses, and *critical system maintenance ~~activities~~** regulated by the Nuclear Regulatory Commission. Activities that are not considered directly related to the generation of electricity include (but are not limited to) dilution for in-plant wastes, maintenance of source-and receiving water quality strictly for monitoring purposes, and running pumps strictly to prevent fouling of condensers and other power plant equipment.

Proportional ~~Mortality~~mortality – the proportion of larvae killed from entrainment to the larvae in the source population, as determined by an Empirical Transport Model.

Zooplankton – For purposes of this Policy, refers to those planktonic invertebrates larger than 200 microns.