### California Regional Water Quality Control Board San Diego Region

**David Gibson, Executive Officer** 



### Executive Officer's Report November 13, 2012

### **Table of Contents**

Part .	A – San Diego Region Staff Activities	2
1.	Presentation at the American Water Works Association 2012 Annual Fall Conference	2
2.	La Jolla Cove Odor Abatement Measures	2
Part 1	B – Significant Regional Water Quality Issues	3
1.	Update on Expansion of Waste Disposal Operations at Sycamore Landfill (Attachment B1)	3
2.	Storm Drain Cleanout at Former Teledyne Ryan Aeronautical Site Completed	4
3.	Stormwater BMP Violation Corrections by City of San Marcos	5
4.	Enforcement Actions for September 2012	5
5.	Status of Recycled Water Policy Salt and Nutrient Management Plan: Lower Santa Margarita River and Las Flores Creek Watersheds ( <i>Attachment B5</i> )	
6.	Clean Water Act Section 401 Water Quality Certification Actions Taken from July to September 2012 ( <i>Attachment B6</i> )	7
Part (	C – Statewide Issues of Importance to the San Diego Region	8
1.	Clean Water Act Report (Attachment C1)	8

The August report for the Tentative Schedule of Significant NPDES Permits, WDRs, and Actions and the attachments noted on page 1 are included at the end of the report.

### Part A – San Diego Region Staff Activities

### 1. Presentation at the American Water Works Association 2012 Annual Fall Conference

Staff Contact: Bob Morris

Bob Morris, Senior Engineer in the Core Regulatory Unit made a presentation at the 2012 Annual Fall Conference of the California – Nevada Section, American Water Works Association (AWWA) on October 11, 2012. The purpose of his talk was to explain what categories of discharges are subject to National Pollutant Discharge Elimination System (NPDES) permits. Mr. Morris discussed the key terms contained in the federal Clean Water Act pertaining to the NPDES program and gave examples of NPDES general permits issued in California, Nevada and other states. The examples included permits that addressed discharges from groundwater extraction, utility vaults, water treatment processes, lake management, hydrostatic testing of pipelines, and storm water runoff. The session was well attended with AWWA members expressing interest in the topic by their questions throughout Mr. Morris's presentation.

Mr. Morris also participated in a session at the Conference regarding potable water discharges into municipal separate storm sewer systems (MS4s). The speaker for this session was Dr. David Kimbrough from the Pasadena Water & Power Department. Dr. Kimbrough discussed the concerns and involvement of water supply agencies in the Los Angeles area with the reissuance of the MS4 permit by the Los Angeles Water Board. Dr. Kimbrough asserted that water quality regulations are increasingly limiting the ability of community water systems to make periodic discharges into MS4s. Dr. Kimbrough, with support from Mr. Morris, explained the need for MS4 agencies to address all sources of pollutant leadings, including those resulting from potable water discharges, that are conveyed through their MS4s to the receiving waters. To address the concerns of the water supply agencies, the MS4 agencies have been working with the Los Angeles Water Board to develop language in the Los Angeles MS4 permit that provides for an exemption from the prohibition for potable water discharges. Mr. Morris clarified that no such change is necessary in the San Diego Region, where many of the potable water discharges by water supply agencies (such as discharges resulting from repair, maintenance, and disinfection of pipelines, tanks, and reservoirs) whether directly to a receiving water or to a MS4, are already subject to a general potable water NPDES permit.

### 2. La Jolla Cove Odor Abatement Measures

Staff Contact: Bob Morris

San Diego Water Board staff met recently with several concerned citizens who want to abate odors emanating from bird guano deposited on the rocks along La Jolla Cove. Also attending the October 12, 2012 meeting were representatives from the California Coastal Commission, San Diego City Councilwoman Lightner's office, City Park and Recreation Department, City Storm

Water Division, and BioOrganic Catalyst Technology, the company that manufactures a product proposed to be sprayed on the guano to abate the odors.

The citizens noted that the odors have gotten progressively worse over recent years as a result of the shoreline being fenced to limit public access to the rocks. Whereas previously, birds perching on the rocks were disturbed by the public and flew off elsewhere, birds are now finding the area a comfortable spot to rest and deposit their droppings. The citizens appreciate the birds, but not the odors and want to take steps to address the odors in an environmentally friendly manner.

The representatives from BioOrganic Catalyst Technology stated that it's product creates a broad spectrum bio-organic catalyst enabling aerobic reactions to speed up the natural degradation process. The product has not been used in an application like that under consideration at La Jolla Cove, but is being used effectively at chicken ranches to control odors. BioOrganic indicated that a trial and error approach could be used to determine how much of the product was needed and the frequency of application.

The rocks along La Jolla Cove shoreline are located immediately adjacent to coastal ocean waters. San Diego Water Board staff explained that if the project could result in a discharge of pollutants to ocean waters, the project would need to get prior coverage under a NPDES permit. It was suggested that the community, through Councilwoman Lightner's office and with assistance from BioOrganic, develop an application plan that would avoid discharges to ocean waters by establishing setbacks, seasonal restrictions, procedures, and other measures to demonstrate that the project would not result in a discharge. Depending upon the complexity of the management measures, the project might still need coverage under an NPDES permit. The City of San Diego will continue to work with the community to seek a solution to the odor problem and will inform the San Diego Water Board on any proposal that potentially could affect the nearby ocean waters.

### Part B – Significant Regional Water Quality Issues

### 1. Update on Expansion of Waste Disposal Operations at Sycamore Landfill (*Attachment B1*)

Staff Contacts: Carol Tamaki and John Odermatt

At final build-out, the Sycamore Landfill will be one of the two largest landfills located within the San Diego Region. Republic Services/Allied Waste Industries (the Discharger) has submitted a Design Report for the Stage III-B expansion cell, with a proposed capacity of approximately 1,000,000 tons, at the Sycamore Canyon Landfill (Attachment 1). This relatively small scale expansion will require the San Diego Water Board to amend the waste discharge requirements (WDRs) for the landfill. The Discharger anticipates submitting a new Joint Technical Document (or JTD which includes a Report of Waste Discharge), for an additional large-scale lateral and vertical expansion of the landfill, which may increase capacity to over

100,000,000 tons. This large scale expansion of landfill operations will require a complete revision of the current WDRs and a Clean Water Act Section 401 water quality certification.

According to an evaluation of capacity performed by the Discharger in 2011, the solid waste disposal operations at Sycamore Landfill are as follows:

Parameter	Design and Operating Param	neters
Areas of landfill operations	152.7 acres lined area	
	136.4 acres unlined area	
Total final cover at build out	289 acres	
Permitted site capacity (Stages I – IV)	71,233,171 cubic yards	52, 427,614 tons <sup>1</sup>
Wastes in-situ (as of 2/28/2011)	28,986,620 cubic yards	21,334,152 tons
Remaining estimated capacity	40,355,079 cubic yards	29,701, 338 tons
Annual volume of solid waste accepted	1,950,177 cubic yards/yr	1,435,330 tons/yr
Estimated closure date	October 2031	

1 =one cubic yard = 0.736tons (or 1,471 lbs/cubic yard)

The Sycamore Landfill is a 491-acre facility located in San Diego, California, adjacent to the City of Santee (see Attachment 1). The landfill is located north of Mast Boulevard and east of Freeway 5, where it occupies part of a canyon known as Little Sycamore Canyon.

The landfill operations are subject to federal and State requirements regulating the management and disposal of solid wastes, which are currently implemented by the San Diego Water Board under Waste Discharge Requirements Order No. 99-74 (and addenda thereto). The facility is also subject to regulation by the San Diego Water Board under the Statewide Industrial Storm Water NPDES Permit and a Solid Waste Facility Permit issued by the City of San Diego Development Services Department, acting as the Local Enforcement Authority (LEA). The staff will continue to update the San Diego Water Board on this topic in future Executive Officer Reports.

### 2. Storm Drain Cleanout at Former Teledyne Ryan Aeronautical Site Completed

Staff Contact: Tom Alo

A significant milestone has been reached at the former Teledyne Ryan Aeronautical (TRA) site. Sediments containing polychlorinated biphenyls (PCBs) were recently removed from specific municipal storm drains beneath the site that drain into Convair Lagoon and San Diego Bay. This cleanout represents the final phase of PCB source removal from the former TRA site, and should mark the end of PCB-contaminated sediment discharges from the site to Convair Lagoon and San Diego Bay. The earlier cleanup phases, which primarily targeted land-side PCB sources,

<sup>&</sup>lt;sup>1</sup> Available on-line at: http://www.waterboards.ca.gov/sandiego/board\_decisions/adopted\_orders/1990/1999\_0074.pdf

included excavating soils, demolishing buildings, removing concrete slabs, and removing all storm drain laterals that were connected to the main storm drains. Since PCB discharges from the site have been abated, the San Diego Water Board can shift focus to investigating and cleaning up the PCB-impacted sediments in Convair Lagoon and San Diego Bay. Details on the recent storm drain cleanouts will be provided in a future EO report once staff receives the cleanout completion report from TRA.

### 3. Stormwater BMP Violation Corrections by City of San Marcos

Staff Contact: Laurie Walsh

On March 2, 2010, the San Diego Water Board issued Notice of Violation R9-2010-0022 (NOV) to the City of San Marcos for failure to verify, prior to occupancy, that constructed treatment control best management practices (BMPs) at Priority Development Projects (PDP) were in place and in compliance with all specifications, plans, permits, and ordinances as required by the Phase I Storm Water Permit, Order No. R9-2007-0001. In response to the NOV, the City of San Marcos took a pro-active comprehensive approach by developing and funding a Capital Improvement Project (CIP) to install all 125 post construction treatment control BMPs identified as missing during the San Diego Water Board's fiscal year 2008/2009 site inspections. As part of the City's aggressive response to the NOV, they also provided the San Diego Water Board with an installation schedule that identified when missing post construction treatment control BMPs at each of the thirty-seven (37) PDP sites would be installed. The work occurred in two phases. Phase I began in July 2010 and included installation of 71 treatment control BMPs along with work to request the bonds for those sites identified in the second Phase of work. Phase II began in July 2011 and included installation of all remaining 54 treatment control BMPs. Work to install all 125 missing treatment control BMPs was recently completed prior to June 30, 2012, in accordance with the City's proposed schedule. Staff appreciates the Cities rapid and appropriate response to the NOV and expects other violators to respond similarly.

### 4. Enforcement Actions for September 2012

Staff Contact: Chiara Clemente

During the month of September 2012, the San Diego Water Board initiated the following enforcement actions:

August 2012 Enforcement Actions	Number
Notice of Violation	1
Staff Enforcement Letters	3
Tota	4

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: <a href="http://www.waterboards.ca.gov/water\_issues/programs/enforcement/">http://www.waterboards.ca.gov/water\_issues/programs/enforcement/</a>

### 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/

### **Notice of Violation**

### S.C. Tile Company, Spring Valley

On September 14, 2012, NOV No. R9-2012-0061 was issued to S.C. Tile Company for unauthorized storm water discharges from failure to implement structural BMPs in accordance with requirements in Order No. 97-03-DWQ, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*.

### **Staff Enforcement Letters (SEL)**

### Encina Ocean Outfall, Encinitas

On September 4, 2012, an SEL was issued to the Encina Wastewater Authority for two reporting violations due to missing monitoring data, and for unauthorized discharges of partially treated wastewater from the plant on February 29, and May 19, 2012. These are violations of NPDES Order No. R9-2011-0019.

### Ramona Landfill Inc., San Diego County

An SEL was issued to Ramona Landfill Inc. on September 14, 2012 noting violations identified during a June 12, 2012 staff inspection. The inspection notes that contaminated green waste was observed on the landfill cover, in violation of 27 California Code of Regulations (CCR) section 21090(a)(3)(A)(1)a.

### Ariel Suites, San Diego

An SEL was issued to the Ariel Suites L.P. on September 25, 2012 for failure to record and report daily flow volumes of dewatered groundwater discharges in accordance with Order No. R9-2007-0034, General Waste Discharge requirements for Discharges From Temporary Groundwater Extraction and similar Waste Discharges to San Diego Bay, Tributaries Thereto Under Tidal influence, and Storm Drains or Other Conveyance Systems Tributary Thereto.

### 5. Status of Recycled Water Policy Salt and Nutrient Management Plan: Lower Santa Margarita River and Las Flores Creek Watersheds (Attachment B5)

Staff Contacts: Fisayo Osibodu and John Odermatt

The U.S. Marine Corps (USMC) has taken a lead role in developing its plan for management of salt and nutrient loads within the lower Santa Margarita River and Las Flores Creek watersheds (Attachment A). The USMC released its draft *Salt and Nutrient Management Plan, Southern* 

MCB Camp Pendleton (draft Plan), and convened a stakeholder meeting on October 11, 2012 at Camp Pendleton.

Ms. Julie Chan and Messers. Fisayo Osibodu and John Odermatt of the Cleanup and Land Discharge Branch attended the meeting, hosted by the USMC at Camp Pendleton. The primary objective of the meeting was for stakeholders to discuss the important elements of the draft Plan, specifically its assessment of salt and nutrient loadings in the lower Santa Margarita River, evaluation of assimilative capacity in the groundwater basins (Upper Ysidora, Chappo and Lower Ysidora basins), potential management strategies, and recommendations for implementation of the draft Plan in the Santa Margarita River watershed. Attendees at the meeting included other stakeholder representatives from Rancho California Water District and the Fallbrook Public Utilities District. Localized Salt and Nutrient Management Plans are required by the Recycled Water Policy and the draft Plan for southern Camp Pendleton is a significant step toward achieving the goal of managing salt loads within the Santa Margarita River watershed. Key implementation measures, proposed in the draft Plan include:

- using advanced water treatment technology as a source control measure to reduce the potable water concentrations of total dissolved solids (TDS) to approximately 300 mg/L,
- salt source reduction including a base wide ban on the use of water softeners, and
- using recycled water to create a hydrologic barrier- to control salt/sea water intrusion in the Lower Ysidora basin.

Groundwater in the Santa Margarita River watershed is the primary source of potable water supplies for Camp Pendleton and a significant source of potable water supplies for the Cities of Temecula and Murrieta. As a result, the primary topics of discussion are the salt and nutrient management elements that affect the joint interests of the stakeholders located in the Santa Margarita River watershed.

Upon receipt of the final plan, the San Diego Water Board will have one year to amend the Basin Plan to include the implementation provisions of the plan. The staff will continue to provide the San Diego Water Board with updates on recycled water and salt and nutrient planning issues in future Executive Officer Reports.

### 6. Clean Water Act Section 401 Water Quality Certification Actions Taken from July to September 2012 (*Attachment B6*)

Staff Contact: Kelly Dorsey

Section 401 of the Clean Water Act (CWA) requires that any person applying for a federal permit, which may result in a discharge of pollutants into waters of the United States, obtain a water quality certification that the specific activity complies with all applicable state water quality standards, limitations, requirements, and restrictions. The most common federal permit that requires a 401 Certification is a CWA Section 404 permit, most often issued by the Army Corps of Engineers, for the placing of fill (sediment, rip rap, concrete, pipes, etc.) in waters of the U.S. (i.e. ocean, bays, lagoons, rivers and streams).

Upon receipt of a complete 401 Certification application, the San Diego Water Board may either certify the project or deny certification, with or without prejudice. In cases where there are impacts to waters of the U.S., the San Diego Water Board may issue a conditional certification. The certification can be either in the form of a conditional certification document approved by the Executive Officer, or Waste Discharge Requirements (WDRs) adopted by the San Diego Water Board. In the case where a federal permit is not required because impacts have been determined to be only to waters of the State, the San Diego Water Board may adopt WDRs.

Table B6 (attached) contains a list of actions taken during the months of July, August, and September 2012. The first page of the Table summarizes the total impacts to jurisdictional waters, and proposed mitigation, for the individual months and quarter. This information is an imprecise measure of the actual conditions. For example, the data can be skewed depending on what is considered "self-mitigating" and how mitigation is categorized (i.e. establishment, restoration, or enhancement). Another limitation is that the data relies on the assumption that all the mitigation required is implemented and successful, and does not take into consideration any additional impacts resulting from illegal fill activities.

Public notification of pending 401 Water Quality Certification applications can be found on the San Diego Water Board's web site at:

http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/index.shtml . Certifications issued since January 2008 can also be found on the San Diego Water Board web site at:

http://www.waterboards.ca.gov/sandiego/water\_issues/programs/401\_certification/401projects.shtml.

For a complete list of State-issued general orders, please refer to http://www.waterboards.ca.gov/water\_issues/programs/cwa401/generalorders.shtml.

### Part C – Statewide Issues of Importance to the San Diego Region

### 1. Clean Water Act Report (Attachment C1)

Staff Contact: Bruce Posthumus

The Clean Water Act, as the Federal Water Pollution Control Act Amendments of 1972 have come to be known, was enacted on October 18, 1972. The Southern California Coastal Water Research Project (SCCWRP) recently released a report entitled "Forty Years after the Clean Water Act: A Retrospective Look at the Southern California Coastal Ocean." The report discusses changes in pollutant discharges to southern California coastal ocean waters, changes in conditions in those waters related to key beneficial use categories, costs and benefits, and future challenges. The report also includes the perspectives of several individuals with long-term experience in implementation of the Clean Water Act.

An executive summary of the report is attached. The executive summary and the full report are available at:

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/727\_CWA\_ES.pdf.

The San Diego Water Board is one of SCCWRP's fourteen member agencies. David Gibson represents the San Diego Water Board on the SCCWRP Commission. David Barker serves as alternate commissioner. Additional information about SCCWRP is available at: <a href="http://www.sccwrp.org/AboutSCCWRP.aspx">http://www.sccwrp.org/AboutSCCWRP.aspx</a>.

### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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

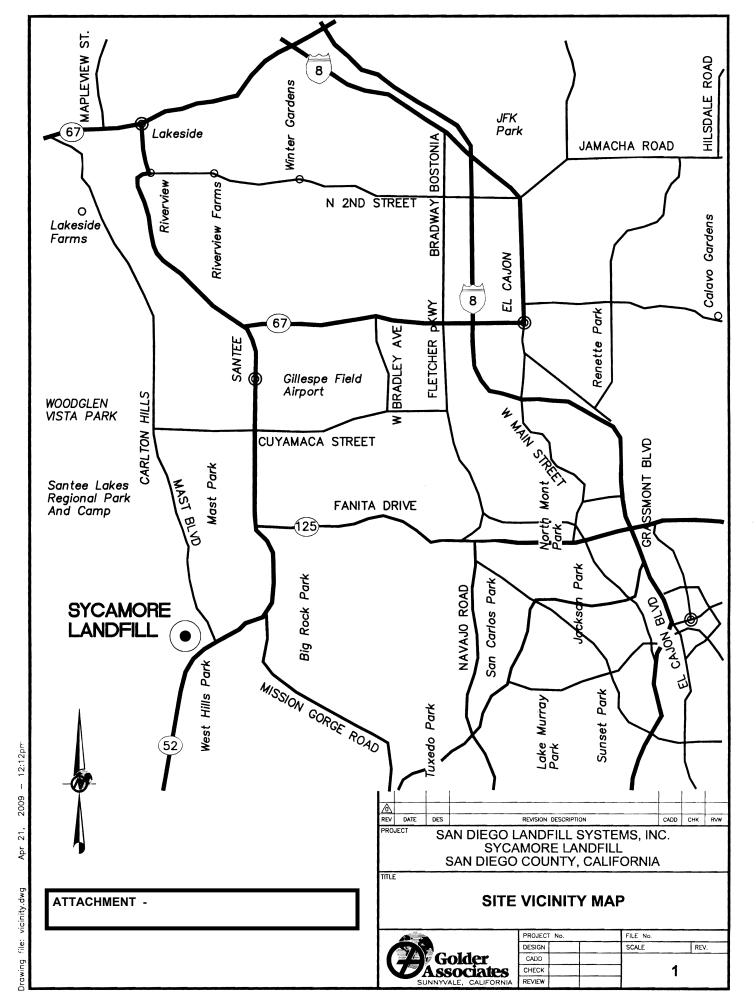
November 13, 2012

APPENDED TO EXECUTIVE OFFICER'S REPORT

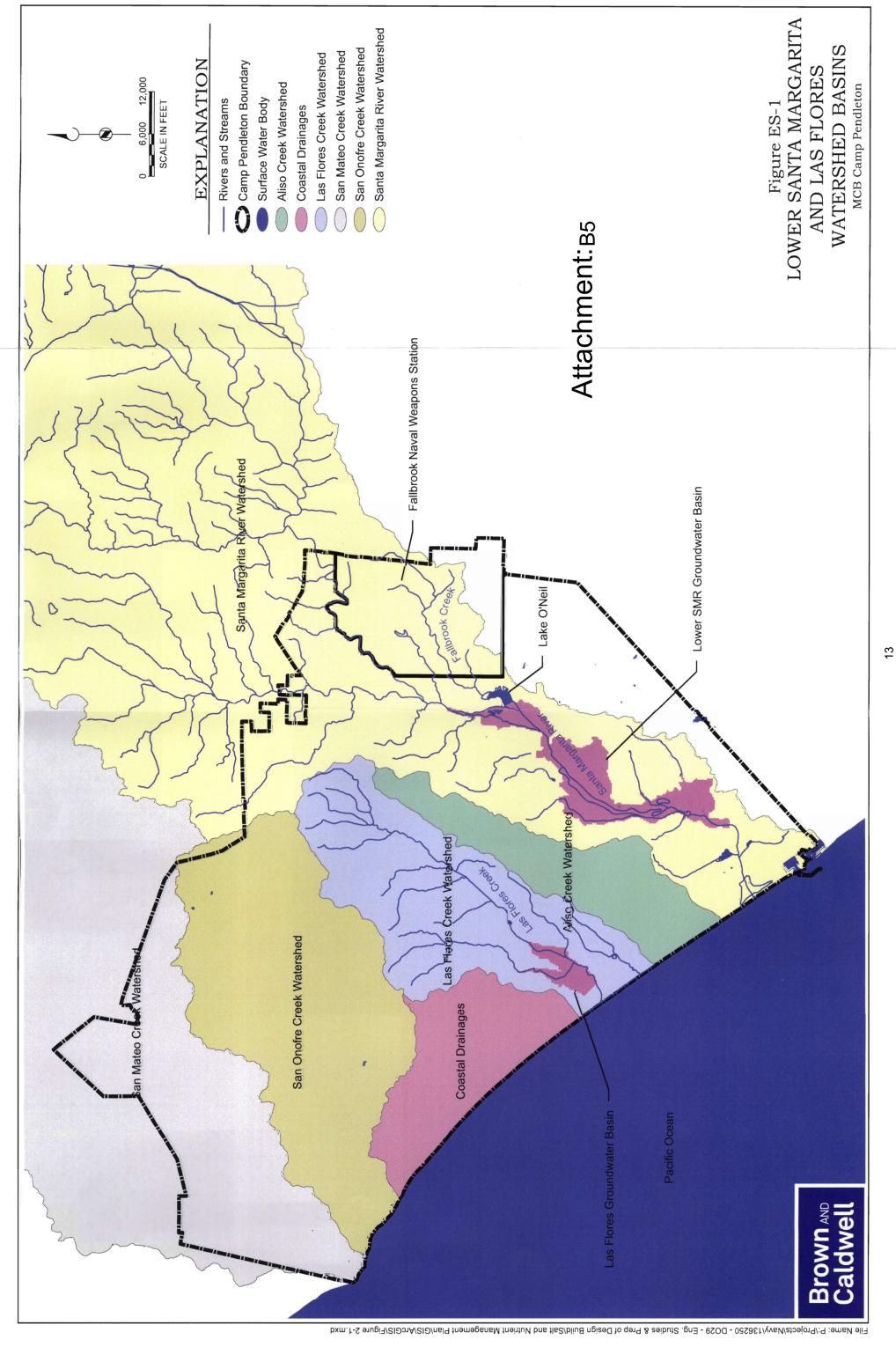
### TENTATIVE SCHEDULE SIGNIFICANT NPDES PERMITS, WDRS, AND ACTIONS OF THE SAN DIEGO WATER BOARD

Action Agenda Item	Action Type	Draft Complete	Written Comments Due	Consent Item		
	December 12, 2012 Diego Water Board C	Office				
Addendum to Waste Discharge Requirements for the San Elijo Water Reclamation Facility, (Osibodu)	WDR Addendum	100%	28-Nov-12	Yes		
San Dieguito Lagoon: Restoration, Fill Removal and Storm Water BMPs ( <i>Dorsey</i> )	Information Item	NA	NA	NA		
Mitigated Negative Declaration for Leuthe Residence Onsite Wastewater Treatment System, Escondido (Osibodu)	Negative Declaration	100%	31-Oct-12	Yes		
Waste Discharge Requirements for Leuthe Residence Onsite Wastewater Treatment System, Escondido (Osibodu)	New WDRs	100%	31-Oct-12	Yes		
Resolution in Support of the Regional Monitoring Framework (Posthumus)	Tentative Resolution	90%	NA	NA		
New NPDES General Permit for the Application of Phoslock in the San Diego Region (Morris)	New NPDES Permit	100%	31-Oct-12	Maybe		
Administrative Civil Liability for Mandatory Minimum Penalties against Ariel Suites, San Diego, CA (Melborn)	Administrative Civil Liability	95%	9-Nov-12	Yes		
January, 2013 No Meeting Scheduled						
	Februrary 13, 2013 Diego Water Board C					
City of San Diego South Bay Ocean Outfall Permit Reissuance (Lim)	NPDES Permit Reissuance	0%	3-Jan-13	No		





Attachment B1



Reporting Period	Certification Applications Received	Certifications Issued <sup>1</sup>	Certifications Enrollment In State Issued <sup>1</sup> Certifications <sup>2</sup>	Certifications Time Expired <sup>3</sup>	Certification Amendments <sup>4</sup>	Certification Certification Amendments <sup>4</sup> Withdrawals <sup>5</sup>	Certification Denials Issued <sup>6</sup>
July	1	0	0	_	-	0	0
August	12	3	0	8	2	0	0
September	8	2	1	4	1	0	0
Quarterly Total	21	5	1	13	4	0	0
YTD TOTAL	92	20	ε	33	12	1	1

CO::00	Dormonont Impacts	Tomporony Importe	Ectablishment	Doctoration	Faboroomon.	Drocomostion
repoliting relica	(Acres) (Acres) (Acres)	(Acres)	Establishinem Mitigation <sup>8</sup> (Acres)	Mitigation <sup>3</sup> (Acres)	Mitigation <sup>10</sup> (Acres)	Mitigation 1 (Acres)
July	0	0.3076	0	0	0	0
August	0.5707	0.063	0.37	.020	1.25	0
September	2.725	0.797	2.3414	1.2088	5.39	4.91
Quarterly Total	3.2957	1.1676	2.7114	1.2288	6.64	4.91
YTD TOTAL	27.4168	31.1382	32.3014	42.1852	24.14	5.12

- Certifications can be low impact, conditional, or programmatic. Low impact certifications are issued to projects that have minimal potential to adversely impact conditions, will have minimal impacts. Programmatic certifications are conditional certifications issued to projects with like, recurring, or long-term impacts, water quality. Conditional certifications are issued to projects that have the potential to adversely impact water quality, but by complying with technical hereby requiring continuous oversight.
  - In cases where the State Water Resources Control Board has issued a programmatic certification (State Certification), the Regional Water Boards are responsible for reviewing projects in their area to confirm whether they qualify for enrollment in the programmatic certifications. ď
    - Time Expired refers to projects that may proceed due to the lack of an action by the San Diego Water Board within specified regulatory timelines.
      - Amendments are revisions to certifications that have been issued.
- <u>Withdrawn</u> refers to projects that the applicant or San Diego Water Board have withdrawn due to procedural issues not corrected within one year.
  - Denials are issued when a project will adversely impact water quality and suitable mitigation measures are not proposed or possible.
- Permanent impacts (P) result in a permanent fill or loss of wetland function and value. Temporary impacts (T) are expected to return to their original condition within one year. 8.4.6.9.
- Establishment is defined as the creation of vegetated or unvegetated waters of the United States and/or State where the resource has never previously existed (e.g. conversion of nonnative grassland to a freshwater marsh). œ
- where vegetated or unvegetated waters of the United States and/or State previously existed (e.g., removal of fill material to restore a drainage). Rehabilitation is defined as the improvement of the general suite of functions of degraded vegetated or unvegetated waters of the United States and/or State (e.g., removal Restoration is divided into two activities, re-establishment and rehabilitation. Re-establishment is defined as the return of natural/historic functions to a site of a heavy infestation or monoculture of exotic plant species from jurisdictional areas and replacing with native species) о о
- Enhancement is defined as the improvement to one or two functions of existing vegetated or unvegetated waters of the United States and/or State (e.g., removal of small patches of exotic plant species from an area containing predominantly natural plant species). 10.
  - Preservation is defined as the acquisition and legal protection from future impacts in perpetuity of existing vegetated or unvegetated waters of the United States and/or State (e.g., conservation easement). Έ.

CERTIFICATION ACTION <sup>2</sup>	12C-005 Time Expired	05C-118  Amendment  Order for Technically- Conditioned Certification	12C-039 Time Expired
MITIGATION (Acres)	None Proposed	No changes to mitigation	None Proposed
IMPACT (Acres) <sup>1</sup>	(T): 0.3076 acre of streambed	No changes to impacts	(P): 0.08 acre of streambed
WATERBODY	Escondido Creek and San Elijo Lagoon	Perennial Escondido Creek	Jeronimo Creek, Oso Creek, and San Juan Creek
PROJECT DESCRIPTION	The overall need for the project is the removal of natural and anthropogenic debris (e.g., sediment, plant material, and trash) that has accumulated near the endpoint of the concrete trapezoidal channel portion of Escondido Creek. Even though the channel is meant to convey both water and sediment, the City feels that the amount of material needs to be removed to help protect the downstream habitat and residents.	This amendment extended the term of the Certification an additional five years. The Certification covers the continued operations and maintenance (O&M) of the 14.2-mile treated sewage line and infrastructure for the City of Escondido's land outfall. The infrastructure includes the treated sewer line, 95 manholes, 16 cathodic protection test stations, 4 cathodic protection rectifier stations, and access roads for vehicles and pedestrians.	The proposed activity includes restoring function to the low flow intake structure and restoring the channel banks to their pre-disaster condition. The scoured channel will be replaced from the grouted riprap at the Silleros Road culvert to the first low flow intake structure tapering the new fill material to meet the existing channel invert 25 feet downstream of the structure.
PROJECT TITLE	Escondido Creek and Harmony Grove Material Removal	Escondido Sewer Outfall Operations and Maintenance Activities	Jeronimo Creek at Silleros Road
APPLICANT	City of Escondido	City of Escondido	City of Mission Viejo
DATE	7/18/2012	7/23/2012	8/6/2012

CERTIFICATION ACTION <sup>2</sup>	12C-040 Time Expired	12C-041 Time Expired	12C-037 Time Expired
MITIGATION (Acres) <sup>1</sup>	None Proposed	None Proposed	None Proposed
IMPACT (Acres) <sup>1</sup>	(P): 0.08 acre of streambed	(P): 0.04 acre of streambed	None
WATERBODY	Aliso Creek	San Juan Creek. Oso Creek. Jeronimo Creek	San Diego Bay
PROJECT DESCRIPTION	The proposed activity includes the original riprap along the west channel bank and adding additional riprap to the eroded portion of the east channel bank. Filter fabric and 1/2 ton of ungrouted riprap would be placed along 20 feet of the west channel bank to replace the preexisting grouted riprap that was lost during the storms.	The proposed activity includes repairing any damage to the Low Flow Storm Drain Repairs at Arbolitos Road. The proposed activity includes repairing any damage to the existing 30-inch RCP, restoring function to the low flow intake structure and restoring the channel banks to their pre disaster condition. The area surrounding the 30-inch RCP will be dewatered to facilitate inspection and repair of the subject pipe.	The proposed action would replace the potable water lines consisting of the existing 6-inch cast iron fresh water lines to be replaced with 6-inch HDPE lines, sectional isolation valves, pipe hangers, and stainless steel pipe support brackets that are damaged or deteriorated and other incidental work on or directly underneath the pier deck.
PROJECT TITLE	Aliso Creek Bikeway Bridge Repairs	Jeronimo Creek at Arbolitos Road	Replace Pier 1 Freshwater Lines, Naval Base San Diego
APPLICANT	City of Mission Viejo	City of Mission Viejo	Naval Base San Diego
DATE	8/6/2012	8/6/2012	8/7/2012

DATE	APPLICANT	PROJECT TITLE	PROJECT DESCRIPTION	WATERBODY	IMPACT (Acres) <sup>1</sup>	MITIGATION (Acres) <sup>1</sup>	CERTIFICATION ACTION <sup>2</sup>
8/9/2012	Rancho California Water District	Recycled Water Storage Pond No. 5	The Recycled Water Storage Pond No. 5 project (Project) includes the construction	Seasonal wetlands and unnamed	(P) 0.09 acre of wetlands and 0.01	Establishment of 0.27 acre of wetland and 0.03	12C-028
			of an additional storage pond (capacity of	tributaries to	acre of streambed	acre of non-wetland	Order for Technically-
			approximately 335 acre-feet with a	Murrieta Creek.	(T) 0.04 acre of	waters of the U.S.	Conditioned Certification
			two 24-inch diameter pipelines, paving	hydrologic unit,			Enrollment in SWRCB
			the existing access road along Elm Street,	Murrieta hydrologic			GWDR Order No. 2003-
			lining the existing Pond No. 4, and	area.			017 DWQ
			constructing access ramps with				
			turnarounds in Ponds No. 1, 2 and 3. The				
			project also includes two box culverts to				
			accommodate the access roads.				
8/13/2012	Public Works	City of Poway	This amendment extended the term of	Rattlesnake Creek	No changes to	No changes to	07C-068
	Department City	Concrete Flood	the Certification an additional five years.		impacts	mitigation	
	of Poway	Control Channel	The Certification covers annual				Amendment
		Maintenance and	maintenance of concrete drainage				
		Cleaning	channels in the City of Poway to remove				Order for Low Impact
			sediment, weeds, trash, and debris				Certification
			(concrete channels only; no natural				
			channels).				
8/15/2012	SANDAG	Control Point (CP)	The Control Point (CP) San Onofre to CP	Eight (8) unnamed	(P): 0.050-acre of	Establishment of 0.07	12C-018
		San Onofre to CP	Pulgas Double Track Project (Project)	ephemeral	non-wetland	acre of non-wetland	
		Pulgas Double Track	includes the construction of a second	tributaries to the	waters of the	waters of the United	Order for Technically-
		Project	mainline railroad track adjacent to an	Pacific Ocean. San	United States	States and/or State	conditioned Certification
			existing single mainline railroad track	Juan hydrologic	and/or State		
			along approximately 4.3 miles of the Los	unit, San Onofre			Enrollment in SWRCB
			Angeles-San Diego-San Luis Obispo	hydrologic area.			GWDR
			(LOSSAN) rail corridor in northern San				Order No. 2003-017 DWQ
			Diego County.				

CERTIFICATION ACTION <sup>2</sup>	11C-082 Order for Technically- conditioned Certification Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	12C-055 Time Expired	12C-044 Time Expired
MITIGATION (Acres)	Enhancement of 1.25 acres of waters of the United States and/or State	Restoration of 0.020 acre of streambed	None Proposed
IMPACT (Acres) <sup>1</sup>	(P) 0.22 acre of wetland waters of the U.S. and/or State	(P): 0.0007 acre of streambed	None
WATERBODY	Unnamed tributaries to Rose Creek	Highly disturbed headwaters of an unnamed SE-NW ephemeral drainage that discharges into the reach of the San Dieguito River that occurs downstream of the Lake Hodges dam.	San Diego Bay
PROJECT DESCRIPTION	This project consists of construction of an approximately 360,000-gross-square-foot research building, expansion of the existing East Campus Utility Plant, roadway improvements along Medical Drive North along the project's frontage, utility connections, vehicular and pedestrian circulation improvements, construction of two pedestrian bridges, associated landscaping, and 2 temporary road hauls.	The project involves the emergency repair of two existing storm drain pipelines and outfalls, and as such, impacts associated with construction are temporary in nature. Work to repair the storm drain and adjacent slope involves the replacement of corrugated metal pipe storm drain with reinforced concrete pipe. The project also includes installation of eight concrete cutoff walls, four cleanouts, and two energy dissipaters. The project area will be revegetated with an appropriate hydroseed mix and jute matting.	The purpose of the project is to conduct above deck concrete repairs, under deck concrete repairs, pile repairs, and rub strip replacement.
PROJECT TITLE	UCSD Clinical and Translation Research Institute	Via Esprillo Emergency Storm Drain Replacement Project	Pier 7 Concrete Repairs
APPLICANT	UCSD	City of San Diego, Engineering & Capital Projects Division	Naval Base San Diego
DATE	8/15/2012	8/16/2012	8/20/2012

CERTIFICATION ACTION <sup>2</sup>	12C-050 Time Expired	12C-047 Time Expired	11C-038  Amendment Order for Technically- conditioned Certification Enrollment in SWRCB GWDR
MITIGATION (Acres)	None Proposed	None Proposed	None Proposed
IMPACT (Acres) <sup>1</sup>	(T): 0.013 acre of San Diego Bay	(P): 0.01 acre of streambed	(T): An additional 0.01 acre of beach
WATERBODY	San Diego Bay	Aliso Creek	Monarch Beach and Coastal Pacific Ocean in Dana Point
PROJECT DESCRIPTION	North Side Interior The project consists of construction of a Roadway System and 36 inch diameter reinforced concrete pipe Storm Drain Force storm drain outfall structure, including a Main Outfall 10-foot long baffle/energy dissipater that reduces the flow velocity, beyond which the flow would descend along a concrete channel that is sloped between the mean higher water level and the mean lower water level within the Navy Boat Channel.	The proposed project will improve capacity along the most Transportation Corridor-North) Toll Road by adding one general-purpose lane in the southbound of Santa Margarita Parkway to north of the Bake Parkway direction just south of Santa Margarita Parkway to north of the Bake Parkway of Santa Margarita Parkway to north of the Bake Parkway undercrossing. This includes widening of the northbound and southbound Upper Oso Reservoir Bridge and the Aliso Creek Bridge and construction of limited pavement widening in the northbound direction between these two bridges.	This amendment allows for the construction of a temporary 'sand bridge' at the base of the vehicle access ramp so emergency vehicles can cross to the beach when water is pooled at the base of the ramp. The original project is to reestablish a westward flow path at the mouth of Salt Creek by constructing and maintaining temporary sand berms and a
PROJECT TITLE	North Side Interior Roadway System and Storm Drain Force Main Outfall	FTC-North (SR 241) Southbound Widening	Monarch Beach Management Plan: Salt Creek Pilot Project
APPLICANT	San Diego County Regional Airport Authority	Transportation Corridor Agencies (TCA)	Washington Holdings, LLC
DATE	8/21/2012	8/22/2012	8/31/2012

CERTIFICATION ACTION <sup>2</sup>	Order No. 2003-017 DWQ	12C-049 Time Expired	12C-045 Time Expired	11C-119 Time Expired
MITIGATION (Acres)		Restoration of 0.154 acre of riparian wetland	None Proposed	None Proposed
IMPACT (Acres) <sup>1</sup>		(P): 0.064 acre of wetland and 0.013 acre of streambed (T): 0.116 acre of wetland	(T): 0.39 acre of wetland	(P): 0.06 acre of unvegetated streambed
WATERBODY		A tributary to Las Flores Creek, the Creek itself and Riparian habitat	San Clemente Canyon	Tributary to San Marcos Creek
PROJECT DESCRIPTION	shallow channel to direct creek flow across the beach from the outlet structure to the ocean.	The Proposed Action would widen the I-5 undercrossing and improve and widen the approach road between the NCTD railroad tracks and the I-5. Widening the I-5 undercrossing would consist of clearing the soil material and concrete foundation in front (south) of the existing abutment and installing a tied back retaining wall system.	Retrofitting is required to accommodate the pipeline integrity testing apparatus or "smart pig" that will be launched through the pipeline to test for pipe anomalies.  Retrofit activities will include replacing Main Line Valves (MLV) that are too small for the smart pig to pass through.	Benton Burn Ash Site The project would consist of consolidating waste and capping the surface with an engineered soil cover. The primary objectives of the project are to implement remedial action in order to meet the State Minimum Standards for former landfill sites to comply with CCR Title 27 and to reduce the potential for human exposure and health risk related to burn ash-containing waste.
PROJECT TITLE		Red Beach Operations Access Points (P-159)	eTS#21039 - Gas Line 3010 South Retrofit - Siphon Tee Removal at Marian Bear Park	Benton Burn Ash Site
APPLICANT		Marine Corps Base Camp Pendleton	San Diego Gas & Electric (SD&GE)	City of Escondido
DATE		9/10/2012	9/13/2012	9/18/2012

CERTIFICATION ACTION <sup>2</sup>	Establishment of 0.3094 12C-065 acre of vernal pools and of vernal pools acre of vernal pools Resources Control Board General Water Quality Certification for Small Habitat Restoration Projects	10C-088  Amendment Order for Technically- conditioned Certification Enrollment in SWRCB GWDR Order No. 2003-017 DWQ	12C-013 Order for Technically- conditioned Certification Enrollment in SWRCB GWDR Order No. 2003- 017 DWQ
MITIGATION (Acres) <sup>1</sup>	Establishment of 0.3094 acre of vernal pools and restoration of .3548 acre of vernal pools	Additional Establishment of 0.002 acre of riparian habitat	Restoration of 0.70 acre of native wetland and riparian habitat
IMPACT (Acres) <sup>1</sup>	(P): 0.13 acre of wetlands	(T): An additional 0.001 acre of water of the U.S./State	(P): 0.49 acre of wetland and 0.02 acre of streambed
WATERBODY	Unnamed vernal pools	Soledad Valley Creek	Unnamed tributary to San Juan Creek
PROJECT DESCRIPTION	The project will restore five acres of degraded vernal pool wetlands and nearby watersheds, construct vernal pool interpretive boardwalk pier, and install approximately 1,000ft. of protective fencing and signs.	The San Diego Association of Governments (SANDAG) has proposed to construct a second railroad track parallel to an existing track to reduce train traffic. The proposed project area is located mostly parallel to and over Soledad Valley Creek, parallel and south-west of Sorrento Valley Road, starts at the Sorrento Valley Coaster Station, and ends at confluence of Carroll Canyon and Soledad Canyon Creeks (approximate ½ mile east of I-805).	The proposed project will consists of installing approximately 1,500 linear feet of buried 48-inch diameter reinforced concrete pipe (RCP) storm drain pipeline along a natural drainage course. The proposed pipeline will accommodate peak storm water flows.
PROJECT TITLE	Carmel Mountain Vernal Pool Restoration Project	Sorrento Miramar Double Track – Phase I	Sun Ranch Drainage Improvements Project
APPLICANT	The Chaparral Lands Conservancy	SANDAG	City of San Juan Capistrano
DATE	9/21/2012	9/21/2012	9/26/2012

DATE	APPLICANT	PROJECT TITLE	PROJECT DESCRIPTION	WATERBODY	IMPACT (Acres) <sup>1</sup>	MITIGATION (Acres) <sup>1</sup>	CERTIFICATION ACTION <sup>2</sup>
9/28/2012	Integral Communities	Palomar Station Smart Growth	Integral Communities proposes a mixed use development site comprised of 370 residential condominium units and 49,000 square feet of commercial retail use which includes 5,000 square feet of restaurants. The Project includes 70,000 square feet of open space that is integrated throughout the Project.	San Marcos Creek	(P): 1.92 acres of waters of the U.S./State and 0.008 acre of vernal pool habitat	waters of the acres of riparian scrub, U.S./State and Enhancement of 0.59 0.008 acre of vernal acre of cismontane alkali conditioned Certification pool habitat acre of existing acres of existing acres of existing wetlands , Establishment Order No. 2003-017 DWO of 0.03 acre of vernal pools, and enhancement of 4.8 acres of vernal pools	ecstablishment of 2.00 acres of riparian scrub, Enhancement of 0.59 acre of cismontane alkali marsh habitat, Preservation of 4.91 acres of existing wetlands , Establishment Order No. 2003-017 DWQ of 0.03 acre of vernal pools, and enhancement of 4.8 acres of vernal pools
9/30/2012	U.S. General Services Administration	San Ysidro Land Port of Entry Improvements Project	The proposed project requesting authorization entails a single phase of the three phased reconfiguration and expansion of the existing Land Port of Entry (LPOE) to improve operational efficiency, security, and safety for cross-border travelers and federal agencies at the San Ysidro LPOE.	An ephemeral concrete channel, which forms a hydrological connection with the Tijuana River	(P) 0.02 acre of streambed (T) 0.29 acre of streambed	None Proposed	12C-057 Time Expired

- Wetland refers to vegetated waters of the United States and streambed refers to unvegetated waters of the United States (P) = permanent impacts. (T) = temporary impacts.
- Low impact certification is issued to projects that have minimal potential to adversely impact water quality. Conditional certification is issued to Denials are issued when the project will adversely impact water quality and suitable mitigation measures are not proposed or possible. Time Expired refers to projects that may proceed due to the lack of an action by the San Diego Water Board within specified regulatory timelines. projects that have the potential to adversely impact water quality, but by complying with technical conditions, will have minimal impacts. Withdrawn refers to projects that the applicant or San Diego Water Board have withdrawn due to procedural issues that have not been corrected within one year. ۲,

### Technical Report 0727

### Forty Years after the Clean Water Act: A Retrospective Look at the Southern California Coastal Ocean

K. Setty, K. Schiff and S. Weisberg, eds.

Southern California Coastal Water Research Project, Costa Mesa, CA

### **EXECUTIVE SUMMARY**

The ocean is a cornerstone of southern California's environment, culture, and economy. Its complex ecosystem features a unique diversity of plants, invertebrates, fish, birds, and marine mammals. Southern California is also home to 21 million people, and its coastal waters serve as a repository for the pollutants produced by human activities. As local and national attitudes changed and concerns about natural resource protection grew through the 1960s, the resulting flurry of environmental legislative activity included passage of the federal Clean Water Act (CWA) in 1972.

Since the CWA became law 40 years ago, tremendous effort has been devoted to managing and monitoring waste discharges and regional conditions in the southern California's coastal ocean. Even so, there has not been an integrated assessment of how ocean conditions have changed over that time period. This report summarizes a collaborative effort to assess historical data, the current status, and ongoing challenges to the integrity of the region's marine environment. By addressing several critical questions about the core CWA goals, it intends both to synthesize knowledge of the early environmental pioneers and to guide those who follow in their footsteps.

### **How Have Pollutant Inputs Changed?**

Pollutant inputs from wastewater treatment plants and industrial facilities have declined markedly over the last 40 years, in large part because these "end-of-pipe" facilities were a primary target of the CWA. Inputs of targeted toxic substances from these sources have decreased more than 95%, despite a doubling in southern California's coastal population. Widely dispersed and much harder to control, pollutant inputs from overland runoff have not seen similar reductions. Controlling pollutants in runoff is now a focal point for water quality management, but more time and additional monitoring are needed to determine the success of these efforts.

### Is It Safe to Swim?

Recreational water quality has greatly improved over the last 40 years. This has resulted primarily from improvements in wastewater treatment, relocation of treated wastewater discharges further from shore, and diversion of runoff during dry weather. Visual evidence of sewage, commonplace prior to the CWA, is now rare. Water quality monitoring is frequent and indicates 95% of southern California beaches are safe for swimming during the summer. Recent beach advisories are almost exclusively associated with flowing storm drains or accidental sewage spills.

### Is It Safe to Eat Fish?

Contaminant levels in fish tissue have declined as pollutant inputs have decreased. High levels of contaminants such as DDT (a pesticide) and PCBs (a group of industrial chemicals) in fish tissue are now observed mostly in hotspot areas where large quantities of those pollutants were once discharged. In contrast, moderate levels of mercury, which has more diffuse and difficult to manage sources, are still observed in fish throughout southern California coastal waters. As a result, fish consumption advisories

### Attachment C1

due to mercury, particularly for children and women of childbearing age, can be found along large sections of the Los Angeles and Orange County coastlines.

### Is the Ecosystem Protected?

By several measures, the health of southern California coastal ocean ecosystems has improved substantially over the last 40 years. Communities of bottom-dwelling invertebrates living near wastewater outfalls, once severely degraded, have rebounded. Fish communities in these areas have also shown improvement. In addition, fish diseases common in the early 1970s are no longer observed. California brown pelican and bald eagle populations, once endangered by DDT effects, show signs of recovery. Other ecosystem indicators, such as the extent of giant kelp forests and population size of some fish species, remain impacted. These trends are likely related to a combination of factors including habitat loss, natural climatic cycles, and overfishing.

### What Were the Costs and Benefits?

Although no formal economic analysis has been performed to calculate total costs and benefits on a regional scale, both financial investments and economic benefits associated with southern California's coastal ocean are substantial. For example, ocean-dependent activities in California generate an estimated \$22 billion annually, over half of which comes from tourism and recreation; however, it is unclear how much of that revenue is linked to water quality improvements. Although it is difficult to estimate total investments in ocean water quality improvement, large wastewater treatment plants in southern California currently spend as much as \$600 million annually. In addition, county flood control agencies spend roughly \$100 to \$350 million each year managing runoff. A thorough cost-benefit analysis is recommended to inform future management directions.

### What Are the Future Challenges?

Future water quality management efforts are faced with both technical and financial challenges. While end-of-pipe treatment methods were highly successful in the first 40 years following passage of the CWA, new contaminants, subtle toxicological effects, ocean acidification, pollution-related harmful algal blooms, marine debris, atmospheric deposition, and other emerging issues require novel technology and creative management approaches. Meanwhile, capacity to address both new and lingering issues continues to be constrained by decreased federal funding. Continued cooperation among dischargers, regulators, scientists, and others will be essential to understanding and addressing water quality problems over the next 40 years.

### **Full Text**

http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/727 CWA.pdf