## California Regional Water Quality Control Board

San Diego Region

David Gibson, Executive Officer



### Executive Officer's Report October 11, 2017

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The October report for the Tentative Schedule of Significant NPDES Permits, WDRs, and Actions; Agenda Items Requested by Board Members; and the attachments noted above are included at the end of this report.

### Part A – San Diego Region Staff Activities

### 1. Personnel Report

### Staff Contact: Lori Costa

The Organizational Chart of the San Diego Water Board is available at <u>http://www.waterboards.ca.gov/sandiego/about\_us/org\_charts/orgchart.pdf</u>

### Recent Hires

Rachel Astete Vasquez, Student Assistant Engineer in the Source Control Regulation Unit (NPDES), began working on September 11, 2017. Her duties include permits, monitoring, and data management. Previously she was a volunteer in the Compliance Assurance Unit. Ms. Astete Vasquez attends San Diego State University and plans to graduate in the fall of 2018 with a Bachelor of Science in Environmental Engineering.

### **Retirement**

Bruce Posthumus, Senior Water Resource Control Engineer Specialist, retired from state service on September 6, 2017. He began working for the San Diego Regional Board in 1981. Mr. Posthumus served most recently as the Monitoring Coordinator and before that as the Watershed Management Initiative Coordinator. Among his many accomplishments, Mr. Posthumus led efforts to develop the "Framework for Monitoring and Assessment" and the "Key Beneficial Uses and Key Areas" reports, both of which serve as major underpinnings of the Board's efforts to implement our Practical Vision. Mr. Posthumus is also well-known locally as an expert deep sea fisherman, a skill and passion he will likely practice more often in the years to come.

### **Recruitment**

Hiring interviews have been completed for the Water Resource Control Engineer vacancy in the Source Control Regulation Unit. Interviews have been scheduled for the Environmental Scientist vacancy in the Site Restoration & Agricultural Program Unit. The recruitment process has begun to fill the Senior Water Resource Control Engineer Specialist vacancy in the Healthy Water Branch and a Water Resource Control Engineer position in the Site Restoration & Agricultural Program Unit.

### 2. Chinese Environmental Delegation Visits the Board

### Staff Contact: Charles Cheng

The San Diego Water Board hosted a delegation from the National Environmental Monitoring Center (Center) of the Chinese Ministry of Environmental Protection (MEP) on September 19. The mission and function of the Center is to establish and manage a nationwide environmental monitoring network and data systems, and to provide technical support to the MEP. The visit by the delegates gave Water Board staff members the opportunity to share some of this agency's activities pertaining to water quality monitoring, assessment, and restoration. The delegates and staff members appreciated Assistant Executive Officer Jimmy Smith's support for this interaction, and for extending professional courtesy to our Chinese counterparts.

Mr. Chad Loflen, Senior Environmental Scientist and head of the Monitoring, Assessment, and Research Unit gave a brief slide presentation on water quality monitoring and assessment in the San Diego Region. His talk focused on the questions "Is it Safe to Eat Fish and Shellfish?" and "Are Our Aquatic Ecosystems Healthy?" Mr. Loflen discussed statewide and regional surveys on fish tissues, and the development and application of the California Stream Condition Index approach. His presentation was well received and there was an interactive question and answer session.

Next, Dr. Charles Cheng led the delegates to the San Diego River near Qualcomm Stadium. There Dr. Helen Yu demonstrated in-situ near real-time measurement of bacteria density using an instrument developed by Fluidion Inc. Ms. Carey Nagoda gave a brief description of the restoration project by City of San Diego to eradicate invasive plants along the San Diego River. The experience was positive, and the delegation reflected that they learned new concepts, principles, and methods that will benefit their future work.



Mr. Chad Loflen and Dr. Charles Cheng with the Chinese environmental delegation.



Field demonstration by Dr. Helen Yu and Ms. Carey Nagoda on in-situ bacteria measurement

### Part B – Significant Regional Water Quality Issues

### 1. Publication on Regional Assessment of Human Fecal Contamination in Southern California Coastal Drainages

### Staff Contact: Xueyuan (Helen) Yu

San Diego Water Board staff Xueyuan (Helen) Yu and former staff Bruce Posthumus participated in the Shoreline Microbiology Study of the Bight '13 Regional Monitoring Program. Additionally, Helen Yu also assisted with the preparation of and co-authored the Bight '13 Report on Shoreline Microbiology,<sup>1</sup> of which Chapter three "Regional Assessment of Human Fecal Contamination in Southern California Coastal Drainages" has been published recently in the *International Journal of Environmental Research and Public Health.*<sup>2</sup>

Pathogens associated with human fecal material are the main pollutant of concern for the protection of human health associated with water contact recreation activities. However, current water quality objectives for recreation use fecal indicator bacteria such as *Enterococcus* spp., which is a proxy for the presence of human fecal material. One goal of the Bight '13 Shoreline

<sup>1</sup> The full report is available at: <u>http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1005\_B13\_BightShorelineMicrobiology.pdf.</u>

<sup>2</sup> The full text is available at Int. J. Environ. Res. Public Health **2017**, 14, 874; <u>http://dx.doi.org/10.3390/ijerph14080874</u> Microbiology Study, therefore, was to compare levels of *Enterococcus* spp. with a human-specific marker at selected water bodies.

Chapter Three of Bight '13, discusses an investigation into the prevalence of human fecal contamination in selected coastal drainages (i.e., streams and creeks) that discharge to the Southern California coast.<sup>3</sup> From 2013 to 2015, human-specific genetic markers (HF183) and *Enterococcus spp.* were co-sampled from 22 and 23 coastal drainages in dry (April 1 to October 31) and wet (year round) weather, respectively. Samples were collected in each stream at a site close to the bottom of the watershed and upstream of tidal influence. In an effort to prioritize remediation work, sites were ranked by the frequency and the magnitude of the HF183 detection, and the ranking results were compared with those obtained with *Enterococcus* spp. In the San Diego Region, five drainages [Aliso Creek, Cottonwood Creek (at Carlsbad), Tecolote Creek, San Diego River, and Tijuana River] were selected for the study based on historic elevated levels of *Enterococcus spp.* at their downstream beaches.

The HF183 marker was ubiquitous among the drainages investigated. It was detected in 20 (of the 22) streams in dry weather and in all (23) streams during wet weather. Site ranks in terms of HF183 detection did not differ significantly between different ranking methods (i.e., frequency vs. magnitude). However, considerable difference in the extent of human fecal contamination was observed among sites (Figure 1), and site ranking differed greatly between dry and wet weather. Site ranks based on HF183 also differed significantly from those obtained with *Enterococcus* spp.. As HF183 distinguishes higher risk human fecal source from other lower risk sources, whereas *Enterococcus* spp. does not, this result indicates added value of this human fecal-associated marker in prioritizing remediation actions for human health protection. In the San Diego Region, HF183 was detected in all five streams/creeks sampled in both dry and wet weather, and 42 and 92 percent in wet weather (Figure 1), suggesting consistent presence, especially in wet weather, of human fecal contamination.

Board staff and municipalities have begun follow-up investigations to identify and eliminate the sources of human fecal wastes. Additionally, based on the results of Chapter Three, stakeholders of the Bight Regional Monitoring Program have decided to evaluate the extent of human fecal material contamination in urban streams of Southern California using HF183 in the upcoming Bight '18 studies.

<sup>&</sup>lt;sup>3</sup> The first two chapters of Bight '13 report focus on assessing the applicability of the rapid analysis method for *Enterococcus spp.* (i.e., the US EPA method 1609 of qPCR) at coastal beaches of Southern California. While most labs participated in Bight '13 showed satisfactory performance with the USEPA method 1609 (Chapter One), the analytical results obtained using USEPA method 1609 under dry weather conditions do not agree well with those from traditional culture methods likely due to the general low concentrations of *Enterococcus spp.* in coastal beaches in dry weather (Chapter Two).

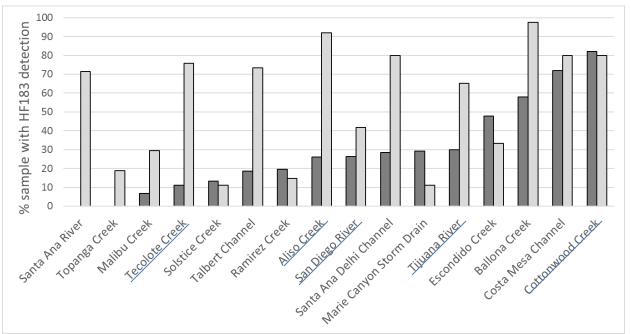


Figure 1. Frequency of HF183 detection by site in wet (light grey filled bars) versus dry (dark-filled) weather conditions. Sites are sorted from left to right by frequency of detection under dry weather conditions. Streams/creeks investigated in the San Diego Region are underlined. \*Note: The Escondido Creek depicted is within the Malibu Watershed.

### 2. Status of Claude "Bud" Lewis Carlsbad Desalination Plant NPDES Permit Reissuance

### Staff Contact: Ben Neill

This report provides a monthly status update on the San Diego Water Board's review of <u>Poseidon Resources (Channelside) LLC's (Poseidon)</u> Report of Waste Discharge (ROWD) application for reissuance of the National Pollutant Discharge Elimination System (NPDES) permit for the <u>Claude "Bud" Lewis Carlsbad Desalination Plant (CDP)</u> and the development of the draft NPDES permit. The reissuance of the NPDES permit for the CDP is a high priority for the San Diego Water Board and the State Water Board (collectively referred to as Water Boards). Following are updates on key activities since the <u>previous Executive Officer Report</u> update<sup>4</sup>:

 On September 7, 2017, San Diego Water Board staff met with U.S. Fish and Wildlife Service (USFWS) and Poseidon to discuss progress on the <u>Otay River Estuary Restoration Project</u> (Project) in the San Diego Bay National Wildlife Refuge. The Project intends to construct the required mitigation for co-located operation of the CDP and fulfill the applicable requirements of permits previously issued by the San Diego Water Board and the California Coastal Commission. In October of 2016, the USFWS released a draft Environmental Impact Statement (EIS) for the Project. On December 2, 2016, the San Diego Water Board provided comments on the draft EIS regarding long-term preservation of the Project site, sediment transport methods, and potential transport of contaminated sediment from an adjacent parcel. At the meeting on September 7, 2017, the participants discussed the USFWS's preliminary response to the San Diego Water Board's comments on the draft EIS

<sup>&</sup>lt;sup>4</sup> Additional information regarding the CDP can be found in Executive Officer Reports for <u>August 2017</u>, <u>June 2017</u>, <u>April 2017</u>, <u>February 2017</u>, <u>December 2016</u>, <u>November 2016</u>, <u>October 2016</u>, <u>September 2016</u>, <u>August 2016</u>, <u>May 2016</u>, <u>December 2015</u>, <u>September 2015</u>, and <u>June 2015</u>.

and fulfilling the California Environmental Quality Act (CEQA) requirements for the Project on federal land.

2. The Water Boards met with <u>San Diego County Water Authority</u> (SDCWA) and Poseidon on September 19, 2017, to discuss intake alternatives (including intake alternative number 21), a review of questions related to the impacts of the intake alternatives on the ecosystem by an independent scientific advisory panel, and NPDES permit development. Alternative number 21 refers to a preliminary new intake structure design submitted by Poseidon on June 27, 2017, providing for placement of wedgewire screens in the lagoon at the onset of seawater withdrawal.

Poseidon owns and operates the CDP subject to waste discharge requirements established by the San Diego Water Board in NPDES Permit No. CA0109223, Order No. R9-2006-0065. Order No. R9-2006-0065 expired in 2011, but remains in effect under an administrative extension until the reissued NPDES permit supersedes it.

The CDP is located adjacent to the Encina Power Station (owned by <u>NRG Energy</u>) on the southern shore of the <u>Agua Hedionda Lagoon</u> in Carlsbad, California. The CDP is the nation's largest seawater desalination plant. On November 9, 2015, the CDP began potable water production providing up to 50 million gallons of drinking water per day to customers within the SDCWA service area. The CDP is currently designed to intake source water from Agua Hedionda Lagoon through the existing Encina Power Station intake structure.

The San Diego Water Board has developed a dedicated website to inform the public about the NPDES permit reissuance for the CDP:

http://www.waterboards.ca.gov/sandiego/water\_issues/programs/regulatory/carlsbad\_desalination\_n.shtml.

In addition, an email list is available for interested persons to subscribe to at this website: http://www.waterboards.ca.gov/resources/email\_subscriptions/reg9\_subscribe.shtml.

### 3. Basin Plan Triennial Review Progress Reports

Staff Contacts: Chad Loflen, Melissa Corona, Michelle Santillan

### Introduction

State and federal law requires periodic review of the Water Quality Control Plan for the San Diego Basin (Basin Plan). California Water Code section 13240 states that Basin Plans "...shall be periodically reviewed and may be revised." Federal Clean Water Act section 303(c)(1) states that the Water Boards "...shall from time to time (but at least once each three year period...) hold public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards." Because federal law requires that water quality standards be reviewed every three years, the periodic review of the Basin Plan is commonly referred to as the "triennial review."

The San Diego Water Board concluded its most recent Basin Plan Triennial Review in May 2015. The purpose of the review was to identify needed updates and revisions to water quality standards and other elements of the Basin Plan. The product of the review is a priority list of suggested projects, which may result in Basin Plan revisions, and that serve as the basis of a three-year work plan. The priority list was endorsed via <u>Resolution No. R9-2015-0043</u>.

The Tier 1 priority Basin Plan review projects include:

- 1. Biological Objectives for Water Bodies in the San Diego Region
- 2. Chollas Creek Metals Site Specific Water Effect Ratio (WER)
- 3. Evaluation of Contact Water Recreation (REC-1) Water Quality Objectives and Methods for Quantifying Exceedances

Included below are progress reports for the Tier 1 projects. More information on the Basin Plan review process and results is available at:

http://www.waterboards.ca.gov/sandiego/water\_issues/programs/basin\_plan/tri\_review.shtml.

# ISSUE 1: BIOLOGICAL OBJECTIVES FOR WATER BODIES IN THE SAN DIEGO REGION

		Report	Date September 15, 2017
0 0	ectives for Water Bodies in an Diego Region	Report Pe	June 2017 September
		Overall S	tatus Project is on track
Project Coordinator	• I I NACI OLIEN		Chad Loflen and Betty Fetscher
Supervisor	Jeremy Haas, Healthy Waters	Branch	
Project Description	The purpose of this project is attainment of beneficial uses of		er quality objectives for the
Project Objective(s)	<ol> <li>To promote biological integrity of all surface waters.</li> <li>To preserve high quality streams, including non-perennial streams.</li> <li>To use biological integrity to assess the condition of surface waters where the science is already developed and to add types of waters as science is developed.</li> <li>To better protect and restore altered streams from predictable hydrologic or physical stressors.</li> <li>To prevent further biological degradation of streams that have suffered from large- scale hydrologic and physical stressors.</li> </ol>		
Triennial Review Commitments	<ul> <li>Basin Plan Amendment should:</li> <li>1. Incorporate a narrative biological objective for water bodies in the San Diego Region.</li> <li>2. Establish numerical measures by which to interpret the narrative objective.</li> </ul>		
Key Milestones	Action	Date	Notes
	Public informational meeting	Fall 2015	Held with CEQA scoping meeting July 2016
	Draft Technical Reports complete	July-Sept 2016	June 2017
	Public Workshop	Summer 2016	TBD during public review period

### 1.A. ISSUE 1 PROJECT INFORMATION

	Public and Peer Review Submission	Oct-Dec 2016	Likely Oct or Nov 2017
	Board Hearing	Early 2018	
Project web site	http://www.waterboards.ca.go es/ Lyris list: http://www.waterboards.ca.gov/r		programs/basin_plan/bio_objectiv

### 1.B PROGRESS REPORT: Biological Objectives

<b>Reporting Period E</b>	lvents	
Accomplishments during period	• Project documents are currently under review by the Office of Chief Counsel	
Collaboration during period	<ul> <li>Project leads were in regular communication with State Water Board staff working on a statewide Implementation Plan for Assessing <u>Biological</u> <u>Integrity</u> in Surface Waters.</li> <li>Staff provided comments to City of San Diego on a proposed Supplemental Environmental Project involving bioassessment tools for prioritizing restoration projects that was subsequently approved by the Board in Settlement Order No. <u>R9-2017-0056</u>.</li> </ul>	
Activities planned, but not completed	Public and peer review submission were delayed	
Key issues during period	None	
Looking Forward		
Activities planned for next reporting period	<ul> <li>Release draft technical report and Basin Plan Amendments for public and peer review</li> <li>Hold a public workshop for the project</li> <li>Continue to coordinate with State Water Board</li> </ul>	
Key issues on the horizon	None at this time.	

### **ISSUE 2: CHOLLAS CREEK METALS SITE SPECIFIC WATER EFFECT RATIO**

### 2.A. ISSUE 2 PROJECT INFORMATION

Chollas Crook M	Aetals Site Specific Water	Report Date	October 1, 2017
	t Ratio (WER)	Report Period	June-September 2017
		Overall Status	Project is on track
Project CoordinatorMelissa Corona		Project Contact	<u>Melissa Corona</u>
Supervisor	Cynthia Gorham, Restoration and Protection Planning Unit		
<b>Project</b> The purpose of this project is		s to revise the Basin Plan base	ed upon the results of
<b>Description</b> completed water effects ratio		ios (WERs) for Chollas Creek dissolved copper and	
	dissolved zinc prepared by the City of San Diego.		

Duciast	1 Use site energific data to rev	vice total merimum deily le	and (TMDL a) for dissolved	
Project	1. Use site-specific data to revise total maximum daily loads (TMDLs) for dissolved			
Objective(s)	<ul><li>copper and dissolved zinc in Chollas Creek.</li><li>Protect beneficial uses of Chollas Creek and downstream waters.</li></ul>			
Triennial			emical-specific WERs to be	
Review	incorporated into the water			
Commitments	Creek, and to revise the dissolved copper and zinc WERs in the Chollas Creek			
	Metals TMDLs.			
	2. The Basin Plan should also	be amended to clarify the	application of WERs in the	
	California Toxics Rule (CT	R) when developing nume	ric water quality objectives	
	for toxic pollutants.			
Key Milestones	Action Date Notes			
	Held California	September 2015	Approximately 20	
	Environmental Quality Act		attendees	
	(CEQA) scoping meeting			
	Submitted documents for peer	June 2016		
	review			
	Received peer review	August-October 2016		
	comments			
	Finalized staff/technical December 2016			
	report December 2010			
	Presented at San Diego Water	December 2016	Adopted February 8, 2017	
	Board hearings February 2017			
Project web site	http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/basinpla_ n_wer.shtml			

### 2.B. ISSUE 2 PROGRESS REPORT

<b>Reporting Period Eve</b>	nts	
Accomplishments during period	<ul> <li>Staff initiated the process to present the Basin Plan amendment to the State Water Board for consideration at its December 5, 2017 meeting.</li> <li>Staff released a Notice of Opportunity to Comment on August 29, 2017 to solicit public comments on the State Water Board's consideration of the Basin Plan amendment.</li> </ul>	
Collaboration during period	n/a	
Activities planned, but not completed	Staff had planned for the State Water Board to consider the Basin Plan amendment at its October 17, 2017 meeting.	
Key issues during period	Staff were redirected from this project in July to work on urgent Tijuana River human health issues.	
Looking Forward		
Activities planned for next reporting period	<ul> <li>Respond to public comments after received from the State Water Board; comments are due by noon on October 18, 2017.</li> <li>The State Water Board is tentatively scheduled to consider approval of the Basin Plan amendment at its December 5, 2017 hearing.</li> </ul>	
Key issues on the horizon	n/a	

# ISSUE 3: EVALUATION OF CONTACT WATER RECREATION (REC-1) WATER QUALITY OBJECTIVES AND METHODS FOR QUANTIFYING EXCEEDANCES

### 3.A. ISSUE 3 PROJECT INFORMATION

Evaluation of C	Contact Water Recreation	Report Date	October 1, 2017
(REC-1) Water	Quality Objectives and the	Report Period	June 2017-September 2017
Methods for Quantifying Exceedances		Overall Status	Project is on track
Project			Michelle Santillan
Coordinator	Michelle Santillan	Project Contacts	and <u>Cynthia Gorham</u>
Supervisor	Cynthia Gorham, Restoratio	n and Protection Planni	ng Unit
Project Description	The project purpose is to determine whether and to what extent data supports amending the REC-1 objectives, implementation provisions for applicable TMDLs, or the TMDLs themselves. Then, as appropriate, to develop recommendations for carrying out such amendments. Results of the evaluation may include Basin Plan amendments to water quality objectives or the Bacteria TMDLs, and/or other Board actions.		
Project Objective(s)	<ol> <li>To protect REC-1 beneficial uses;</li> <li>To adopt new and/or updated regulations based upon the latest technical findings and scientific understanding;</li> <li>To facilitate effective use of resources by regulated parties; and</li> <li>To ensure judicious use of San Diego Water Board resources.</li> </ol>		
Triennial Review Commitments	<ol> <li>Staff commitments to:</li> <li>Continue participating on related technical, scientific, and regulatory advisory groups.</li> <li>Conduct a public workshop during fiscal year 2015-16 following community outreach on applicable science, particularly in relation to selection of indicators and compliance with objectives in wet weather.</li> <li>Seek a third-party cost-benefit analysis regarding compliance with regulations of the San Diego Water Board, with a specific focus on the infeasibility of meeting wet-weather TMDL water quality objectives.</li> </ol>		
Key Milestones	Action	Planned Date	Notes
	MOU with MS4     November 2015     Finalized in Octobe       group     Finalized in Octobe		Finalized in October 2016
	Cost-benefit study public scoping meeting	August 2015	Held September 16, 2015
REC-1 public worksho		Spring 2016	
	Cost-benefit analysis draft work plan public meetingAugust 31, 2016Held August 3		Held August 31, 2016
	Draft Cost-benefit analysis Report	April 2017	Reviewed by TAC and Steering Committee
	Cost-benefit analysis public meeting	May 31, 2017	Held August 17, 2017

	Cost-benefit analysis completed	August 2017	Delayed to October 2017
	Technical reports completed	September 2017	
	Board hearing for any recommended changes	2018	May require CEQA and peer review processes.
Project web site	<u>http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/issue3.s</u> <u>html</u>		

### 3.B. ISSUE 3 PROGRESS REPORT

<b>Reporting Period Eve</b>	nts
Accomplishments during period	<ul> <li>The draft cost benefit analysis report was released for public review and comment on July 27, 2017.</li> <li>A public workshop on the draft CBA was hosted by the County of San Diego on August 17, 2017.</li> </ul>
Collaboration during period	<ul> <li>The CBA steering committee met monthly between June and September.</li> <li>Approximately 30 people attended the CBA public workshop on August 17. See photo below:</li> <li>See photo below:</li> </ul>
Activities planned, but not completed	Completion of the CBA final report was delayed to October.
Key issues during period	The State Water Board released draft revisions for Statewide Bacteria Objectives that would supersede existing objectives in the San Diego Region's Basin Plan. This may obviate the need for the San Diego Region to adopt revised water quality objectives. In addition, the draft statewide objectives include provisions such as compliance determination and implementation provisions that could support or conflict with the findings and potential recommendations from staff's Triennial Review results. Staff will continue to be in contact with the State Water Board staff and local stakeholders.

Looking Forward	
Activities planned for next reporting period	<ul> <li>The consultant team will produce the final CBA in October 2017, Water Board staff will distribute to interested parties.</li> <li>Staff expects to receive and review a TMDL reopener request from the municipal Copermittees.</li> </ul>
Key issues on the horizon	• The State Water Board is tentatively scheduled to consider adoption of the revised Statewide Bacteria Objectives on December 5, 2017.

### 4. Enforcement Actions for August 2017 (Attachment B-4)

### Staff Contact: Chiara Clemente

During the month of August, the San Diego Water Board issued 10 written enforcement actions as follows; 1 Administrative Civil Liability (ACL) Order, 1 Expedited Settlement Offer of ACL, 3 Investigative Orders, and 5 Staff Enforcement Letters. A summary of each enforcement action taken is provided in the table attached as Attachment B-4. The State Water Board's Enforcement Policy contains a brief description of the kinds of enforcement actions the Water Boards can take.

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: http://www.waterboards.ca.gov/water\_issues/programs/enforcement/

California Integrated Water Quality System (CIWQS): <u>http://www.waterboards.ca.gov/water\_issues/programs/ciwqs/publicreports.shtml</u>

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

# 5. Sanitary Sewer Overflows and Transboundary Flows from Mexico in the San Diego Region – July 2017 (*Attachment B-5*)

### Staff Contact: Joann Lim

Sanitary sewer overflow (SSO) discharges from sewage collection systems and private laterals, and transboundary flows from Mexico into the San Diego Region can contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. SSO discharges and transboundary flows can pollute surface and ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. Typical impacts of SSO discharges and transboundary flows include the closure of beaches and other recreational areas, inundated properties, and polluted rivers and streams.

The information below summarizes SSO spills and transboundary flows in the San Diego Region reported during **July 2017**:

Sewage Collection System SSO Spills	Private Lateral SSO Spills	Transboundary Flows from Mexico
Eight spills were	Thirteen spills were	One transboundary flow event was
reported, totaling 36,024	reported, totaling	reported during dry weather; totaling
gallons (1,080 gallons	13,820 gallons (11,095	1,720,000 gallons (100% reached
reached surface waters	gallons reached surface	surface waters).

or a tributary storm drain). San Diego Water Board staff is not aware of any closures of beaches or other recreational areas due to the reported spills.	<ul> <li>waters or a tributary storm drain).</li> <li>San Diego Water Board staff is not aware of any closures of beaches or other recreational areas due to the reported spills.</li> </ul>	Due to power fluctuation at Pump Station 1 in Tijuana, Mexico and the subsequent rapid rise in the water level of the influent channel to Pump Station 1, Mexico shut down Pump Station CILA, which feeds into Pump Station 1, to reduce the risk of flooding Pump Station 1. As a result of the shutdown of Pump Station CILA, flow in the Tijuana River bypassed the River Diversion Structure and flowed across the U.S./Mexico border.
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### Sanitary Sewer Overflows (SSOs)

State agencies, municipalities, counties, districts, and other entities (collectively referred to as public entities) that own or operate sewage collection systems report SSO spills through an online database system, the *California Integrated Water Quality System* (CIWQS). These spill reports are required under the <u>Statewide General SSO Order</u><sup>5</sup>, the <u>San Diego Region-wide</u> <u>General SSO Order</u><sup>6</sup>, and/or individual National Pollutant Discharge Elimination System (NPDES) permit requirements. Some federal entities<sup>7</sup> report this information voluntarily. Most SSO reports are available to the public on a real-time basis at the following State Water Board webpage:

https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria &reportId=sso\_main.

Details on the reported SSOs are provided in the following attached tables (Attachment B-5) titled:

- Table 1: July 2017 Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region.
- Table 2: July 2017 Summary of Private Lateral Sewage Discharges in the San Diego Region.

Additional information about the San Diego Water Board sewage overflow regulatory program is available at <a href="http://www.waterboards.ca.gov/sandiego/water\_issues/programs/sso/index.shtml">http://www.waterboards.ca.gov/sandiego/water\_issues/programs/sso/index.shtml</a>.

<sup>5</sup> State Water Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems as amended by Order No. WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

<sup>6</sup> San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

<sup>7</sup> Marine Corp Base Camp Pendleton reports sewage spills to CIWQS as required by its individual NPDES permit, Order No. R9-2013-0112, NPDES Permit No. CA0109347, *Waste Discharge Requirements for the Marine Corps Base, Camp Pendleton, Southern Regional Tertiary Treatment Plant and Advanced Water Treatment Plant, Discharge to the Pacific Ocean via the Oceanside Ocean Outfall.* The U.S. Marine Corps Recruit Depot and the U.S. Navy voluntarily report sewage spills through CIWQS.

### **Transboundary Flows**

Water and wastewater in the Tijuana River and from a number of canyons located along the international border ultimately drain from Tijuana, Mexico into the U.S. The water and wastewater flows are collectively referred to as transboundary flows. The U.S. Section of the International Boundary and Water Commission (USIBWC) has built canyon collectors to capture dry weather transboundary flows from some of the canyons for treatment at the South Bay International Wastewater Treatment Plant (SBIWTP) in San Diego County at the U.S./Mexico border. Dry weather transboundary flows that are not captured by the canyon collectors for treatment at the SBIWTP, such as flows within the main channel of the Tijuana River, are reported by the USIBWC pursuant to <u>Order No. R9-2014-0009</u>, the NPDES permit for the SBIWTP discharge. These uncaptured flows can enter waters of the U.S. and/or State, potentially polluting the Tijuana River Valley and Estuary, and south San Diego beach coastal waters.

Details on the reported transboundary flows are provided in the attached table (Attachment B-5) titled:

• Table 3: July 2017 - Summary of Transboundary Flows from Mexico into the San Diego Region.

According to the 1944 *Water Treaty for the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande* and stipulations established in <u>IBWC Minute No. 283</u>, the USIBWC and the Comisión Internacional de Limites y Aguas (CILA)<sup>8</sup> share responsibility for addressing border sanitation problems, including transboundary flows. Efforts on both sides of the border have led to the construction and ongoing operation of several pump stations and treatment plants to reduce the frequency, volume, and pollutant levels of transboundary flows. This infrastructure includes but is not limited to the following:

- The SBIWTP, located just north of the U.S./Mexico border, provides secondary treatment for a portion of the sewage from Tijuana, Mexico and dry weather runoff collected from a series of canyon collectors located in Smuggler Gulch, Goat Canyon, Canyon del Sol, Stewart's Drain, and Silva Drain. The secondary-treated wastewater is discharged to the Pacific Ocean through the South Bay Ocean Outfall, in accordance with Order No. R9-2014-0009, NPDES No. CA0108928.
- Several pump stations and wastewater treatment plants in Tijuana, Mexico.

The River Diversion Structure and Pump Station CILA in Tijuana divert dry weather flows from the Tijuana River. The flows are diverted to a Pacific Ocean shoreline discharge point approximately 5.6 miles south of the U.S./Mexico border, or can be diverted to SBIWTP or another wastewater treatment plant in Tijuana, depending on how Tijuana's public utility department (CESPT) configures the collection system. The River Diversion Structure is not designed to collect wet weather river flows and any river flows over 1,000 liters per second (35.3 cubic feet per second).

<sup>&</sup>lt;sup>8</sup> The Mexican section of the IBWC.

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

### 1. Major Milestone toward Sustainable Groundwater Management

### Staff Contact: Kelly Dorsey

In a major step toward sustainable groundwater management in California, more than 99 percent of the State's high- and medium-priority groundwater basins have met a key deadline to form local Groundwater Sustainability Agencies (GSAs) under the State's landmark Sustainable Groundwater Management Act (SGMA) of 2014.

SGMA required formation of locally controlled GSAs in the State's 127 high- and mediumpriority groundwater basins by June 30, 2017. As of August 2017, 99 percent of the basins in that category are now covered by a local GSA, a groundwater adjudication, or an alternative sustainability plan. All of the groundwater basins in the San Diego Water Board Region are in compliance with SGMA requirements at this time.

For the remaining basins in the State that did not meet the GSA formation deadline, the State Water Board sent letters to property owners to identify if there are active wells drawing groundwater that must be reported to the state. Portions of basins not covered by a GSA, adjudication, or alternative plan are considered unmanaged areas. Groundwater extractions made from an unmanaged area must be reported to the State. The locations of unmanaged areas can be viewed on the <u>unmanaged area identification map</u>. The San Diego Region can be seen in Figure 2.

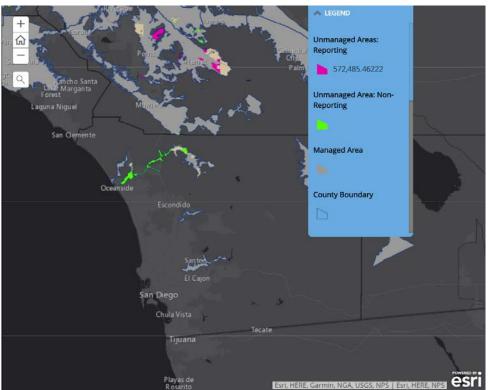


Figure 2 – Unmanaged Area Identification Map.

All gray areas are managed basins, tan areas are federal or tribal basins, pink areas are unmanaged basins, and the green areas are basin managed under other programs. The green areas near Oceanside are portions of the San Luis Rey basin. All groundwater pumpers in these areas must report their extractions and uses to the Division of Water Rights pursuant to the Water Code. Additionally, pumpers with water rights permits and licenses must limit extractions to the amounts in their permits and licenses.

The next step for GSAs is to create and implement groundwater sustainability plans that describe needed actions and implementation measures to bring their basins into balanced levels of pumping and recharge in the timeframe outlined in SGMA. SGMA allows GSAs to tailor plans to the economic and environmental needs of the regions, and provides tools and authorities for developing projects and regulating groundwater use to meet the GSA's sustainability goals.

Basins identified as critically overdrafted are required to have sustainability plans in place by Jan. 31, 2020. All other high- and medium-priority basins have until Jan. 31, 2022, to adopt plans.

The Department of Water Resources (DWR) will review the plans and will require any necessary plan updates to ensure sustainable management of the state's groundwater by the year 2042. DWR will also help develop groundwater sustainability plans by providing important information and data, technical and non-technical assistance, best practices, guidance publications, and grant funding opportunities that may be crucial to a plan's success. Information on all of DWR's SGMA resources and activities is available at <a href="http://www.water.ca.gov/groundwater/sgm/index.cfm">http://www.water.ca.gov/groundwater/sgm/index.cfm</a>.

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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

October 11, 2017

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
	November 8, 2017 No Meeting Scheduled			
	December 13, 2017 San Diego Water Board			
Addendum to Master Recycling Permit Santa Rosa Water Reclamation Facility, Riverside County. Tentative Addendum 4 to Order No. 94-92. ( <i>Osibodu</i> )	Addendum to Master Recycling Permit	100%	3-Nov-2017	Consent
Amendment to the NPDES Permit for the South Bay International Wastewater Treatment Plant, Order No. R9-2014-0009 ( <i>Lim</i> )	NPDES Permit Amendment	100%	6-Nov-17	Consent
Amendment to the NPDES Permit for the South Bay Water Reclamation Plant, Order No. R9-2013-0006 ( <i>Lim</i> )	NPDES Permit Amendment	100%	6-Nov-17	Consent
Amendment to the NPDES Permit for US Naval Base Coronado, Order No. R9-2015-0117(Rodriguez)	NPDES Permit Amendment	100%	6-Nov-17	Consent
Amendment to the NPDES Permit for US Naval Base Point Loma, Order No. R9-2014-0037 (Rodriguez)	NPDES Permit Amendment	100%	6-Nov-17	Consent
Amendment to the NPDES Permit for US Naval Base San Diego, Order No. R9-2013-0064 (Rodriguez)	NPDES Permit Amendment	100%	6-Nov-17	Consent
Addressing Threats to Beneficial Uses From Climate Change (Haas)	Tentative Resolution	100%	23-Feb-2017	No
Southern Regional Tertiary Treatment Plant, Camp Pendleton, San Diego County. Tentative Order No. R9-2017-0109 ( <i>Cali</i> )	Master Recycling Permit Reissuance	80%	TBD	TBD
Technical Workshop on Steps Neccesary to Achieve Water Quality Objectives for Biostimulatory Substances in Famosa Slough ( <i>Ebsen</i> )	NA	NA	NA	NA
Approval of 2018 Board Meeting Schedule (Blank)	Consideration	NA	NA	Yes
	January 1, 2018			
	No Meeting Scheduled			
	•			

<b>Requested Agenda Item</b>	<b>Board Member</b>	Status
	June 24, 2015	
Workshop on low dissolved oxygen conditions in the San Diego River	Strawn	
Information Item regarding high levels of naturally occurring elements in groundwater when they interact with other issues.	Olson	
	August 12, 2015	
Information item regarding data supporting Basin Plan Water Quality Objectives	Olson	
	December 16, 2015	5
San Diego River restoration and land acquisition workshop	Strawn	
	August 10, 2016	6
SCCWRP Flow Recovery Project Update	Strawn	
	March 15, 2017	<u> </u>
Update on Tijuana sewage spill into Imperial Beach	Abarbanel	
Information item regarding impacts of population dynamics on water quality	Olson	
Dynamics of Climate Science, perhaps with U.S.N. Climate Scientists	Abarbanel, Morales	
Revisit Lake San Marcos timeline	Abarbanel	December 2017 EOR
Clarify Operation of value for discharges into San Diego Bay.	Abarbanel	
	June 21, 2017	7
Follow up on results from Environmental Justice Symposium	Abarbanel	October 2017
Follow up on San Diego Unified Port District information item	Abarbanel	
	August 9, 2017	7
Update on Commercial Ag Program Enrollments	Abarbanel	September 2017
Threats to Beneficial Uses from Climate Change	Abarbanel	
Update on City of San Diego improvements to the construction management program	Abarbanel	May or June 2018 EOSR
	September 13, 2017	7
Informational Item on SDWB Emergency Response Procedures	Warren	
Amendments to WDRs for Commercial Agriculture	Abarbanel	

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
08/09/2017	Settlement Agreement and Stipulation for Entry of <u>ACL</u> <u>Order No. R9-</u> <u>2017-0056</u>	City of San Diego, Municipal Separate Storm Sewer System (MS4), San Diego	Acceptance of settlement agreement (totaling \$3,220,664) resolving MS4 violations alleged in ACL Complaint No. R9-2016-0155	National Pollutant Discharge Elimination System (NPDES) Order No. R9- 2007-0001
08/25/2017	Expedited Settlement Offer of <u>ACL</u> , <u>Order No. R9-</u> <u>2017-0070</u>	San Elijo Joint Powers Association, San Elijo Water Reclamation Facility, Encinitas	Acceptance of offer to participate in Expedited Payment Program for mandatory minimum penalties (totaling \$3,000)	NPDES Order No. R9-2010- 0087
08/04/2017	<u>Investigative</u> Order No. R9- 2017-0081	San Diego Unified Port District and the City of San Diego, Tenth Avenue Marine Terminal, San Diego Bay	Directive to submit technical reports pertaining to an investigation of sediment chemistry in San Diego Bay adjacent to the Tenth Avenue Marine Terminal, Cesar Chavez Park, and Pacific Maritime Freight	Order issued pursuant to California Water Code Section 13267
08/04/2017	<u>Investigative</u> <u>Order No. R9-</u> <u>2017-0082</u>	Continental Maritime of San Diego, the California Department of Transportation, and the City of San Diego	Directive to submit technical reports pertaining to an investigation of sediment chemistry in San Diego Bay adjacent to Continental Maritime of San Diego	Order issued pursuant to California Water Code Section 13267

### **Enforcement Actions for August 2017**

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Permit/Order Violated
08/04/2017	<u>Investigative</u> Order No. R9- 2017-0083	BAE Systems San Diego Ship Repair, Inc. and San Diego Gas and Electric Company	Directive to submit technical reports pertaining to an investigation of sediment chemistry in San Diego Bay to the north of BAE Systems San Diego Ship Repair, Inc.	Order issued pursuant to California Water Code Section 13267
08/03/2017	Staff Enforcement Letter	City of Laguna Niguel, Salt Creek Trail Chapparosa Park	Failure to Submit 2014/2015 and 2015/2016 Annual Report	NPDES Construction General Permit Order No. 2009- 0009-DWQ
08/03/2017	Staff Enforcement Letter	City of Laguna Niguel, Crown Valley Community Park	Failure to Submit 2014/2015 and 2015/2016 Annual Report	NPDES Construction General Permit Order No. 2009- 0009-DWQ
08/03/2017	Staff Enforcement Letter	City of Laguna Niguel, Interstate 5 and Crown Valley Parkway Roadway Widening	Failure to Submit 2010/2011, 2012/2013, 2013/2014, 2014/2015, and 2015/2016 Annual Reports	NPDES Construction General Permit Order No. 2009- 0009-DWQ
08/17/2017	Staff Enforcement Letter	Miller Barz Enterprises Inc., Allways Metal Recycling, El Cajon	Deficient implementation of Best Management Practices (BMPs)	NPDES Industrial General Permit Order No. 2014- 0057-DWQ
08/30/2017	Staff Enforcement Letter	Alfred Pedroza, Pedroza Ready Mix, El Cajon	Failure to enroll in Industrial General Permit and deficient BMP implementation	NPDES Industrial General Permit Order No. 2014- 0057-DWQ

**Enforcement Actions for August 2017** 

Collection System	Total Volume <sup>1</sup>	Total Recovered <sup>2</sup>	Total Reaching Surface Waters <sup>3</sup>	Total Reaching Separate Storm Drain and	Total Discharged to Land <sup>5</sup>	Percent Recovered	Percent Reaching Surface Waters	Percent Reaching Separate Storm Drain and Recovered	Percent Discharged to Land	Miles of Pressure Sewer		Miles of Population Gravity in Service Sewer Area
			(Gallons)	Irecovered			5)	(%)				
City of Chula Vista CS	471	471	0	471	0	100%	%0	100%	%0	3.4	503.0	265,070
City of Oceanside Collection System, La Salina WWTP	21,225	0	0	0	21,225	%0	%0	%0	100%	35.6	439.7	171,455
	125	125	0	0	125	100%	%0	%0	100%		155.0	110 03
20	58	58	0	0	58	100%	%0	%0	100%	0.0	0.001	J0,244
Naval Base San Diode	540	0	540	0	0	%0	100%	%0	%0		and available	
	540	0	540	0	0	%0	100%	%0	%0	_	iut avallau	D
USMC Base, Camp	300	0	0	0	300	%0	%0	%0	100%	25.0	1000	05 000
Pendleton CS	12,765	11,100	0	0	12,765	87%	%0	%0	100%	0.00	122.0	000,000
Totals for Public Spills	21,879	654	0	471	21,408							
Totals for Federal Spills	14,145	11,100	1,080	0	13,065							

<sup>1</sup>Total Volume = total amount that discharged from sanitary sewer system to a separate storm drain, drainage channel, surface water body, and/or land.

<sup>2</sup>Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

<sup>3</sup>Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

 $^{5}$ Total Discharged to Land = total amount reaching land.

Attachment B-5

Table 2: July 2017 - Summary of Private Lateral Sewage Discharges in the San Diego Region

add       Total       Total       Forcant       Percent       Feaching         Total       Separate       Reaching       Reaching       Lateral       Reaching         Freaching       Storm Drain &       Percent       Reaching       Storm Drain &       Lateral         Reaching       Storm Drain &       Percent       Reaching       Storm Drain &       Lateral         and/or       Waters <sup>3</sup> and/or       Waters       and/or       Maters       and/or         Discharged to       Land <sup>4</sup> Land <sup>4</sup> Land <sup>4</sup> Land <sup>4</sup> Land <sup>4</sup> Land <sup>4</sup>	(Gallons) [ (%) ] [		0 50 0% 0% 100% 200,00 43,032	0 50 100% 0% 100%	0 10 100% 0% 100% 103,091 16,675	11,090 0 0% 100% 0%	5 1 1 17% 83% 17% 67,000 20,644	0 500 100% 0% 100% 69,957 15,131	0   10   100%   00%   100%   44,507   12,212	0 760 100% 0% 100%	0 360 100% 0% 100%	0 102 100% 0% 100% 2,207,591 267,237	0 82 49% 0% 100%	0 600 100% 0% 100%	
Surface Waters <sup>3</sup>	(Gallons)	0					1 5 1	0		0	0	0	0	0	533 11.095 2.725
Total Volume <sup>1</sup> Recovered <sup>2</sup>		200 100	50 0	50 50	10 10	11,090 0	6 1	500 500	10 10	760 760	360 360	102 102	82 40	600 600	13.820 2.533
Collection System					City of El Cajon CS		Leucadia Wastewater District CS	Padre Dam CS	City of Poway CS		San Diego City CS	(Wastewater Collection	System)		Totals
Responsible Agency					El Cajon City		Leucadia Wastewater District	Padre Dam Municipal Water District	Poway City		San Diego City (City	Attorney's Office at Civic	Center Plaza)		

<sup>1</sup>Total Volume = total amount that discharged from private lateral to a separate storm drain, drainage channel, surface water body, and/or land.

<sup>2</sup>Total Recovered = total amount recovered from a separate storm drain, drainage channel, surface water body, and/or land.

<sup>3</sup>Total Reaching Surface Waters = total amount reaching separate storm drain (not recovered), drainage channel, and/or surface water body, but does not include amount reaching separate storm drain that was recovered.

<sup>4</sup>Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land = total amount reaching separate storm drain that was recovered and/or total amount reaching land.

# Table 3: July 2017 - Summary of Transboundary Flows from Mexico into the San Diego Region

Percent Reaching Surface Waters	(%)	Dry Weather <sup>1</sup>	Due to power fluctuation at Pump Station 1 in Tijuana, Mexico and subsequent rapid rise in the water level of the influent channel to Pump Station 1, Mexico shut down Pump Station CILA, which feeds into Pump Station 1, to reduce the risk of flooding Pump Station 1. As a result of the shut down of Pump Station CILA, flow in the Tijuana River bypassed the River Diversion Structure and flowed across the U.S./Mexico border.		Wet Weather <sup>2</sup>	n/a n/a	
Percent Recovered	)	Dry	%0		Wet	n/a	
Total Reaching Surface Waters			1,720,000	1,720,000		n/a	
Total Recovered	(Gallons)		0	0		e/u	
Total Volume			1,720,000	1,720,000		n/a	n/a
Start Date			7/31/2017	'eather		n/a	/eather
Location			Tijuana River	Total Dry Weather		n/a	Total Wet Weather

1 - Order No. R9-2014-0009 requires monthly reporting of all dry weather transboundary flows.

2 - Order No. R9-2014-0009 does not require monthly reporting of wet weather transboundary flows. Any information provided regarding these flows is voluntary.