California Regional Water Quality Control Board

San Diego Region

David Gibson, Executive Officer



Executive Officer's Report February 10, 2016

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The February 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 can be viewed at http://www.waterboards.ca.gov/sandiego/about_us/org_charts/orgchart.pdf

Recent Hires

Giang Nguyen began working as a Seasonal Clerk in the Mission Support Services Unit on January 20, 2016. She will be working at the front reception desk. Giang received a Bachelor of Science degree in Accounting from California State San Marcos.

Spencer Marshall began working as a Scientific Aid in the Wetland and Riparian Protection Unit on January 25, 2016. His primary responsibilities are database management and preparing reports. Spencer received a Bachelor of Science degree in Environmental Studies from California State University Sacramento. He previously worked as a Scientific Aid with the State Water Board.

Departures

Anayeli Picasso, a Scientific Aid in the Central Cleanup Unit, left State service on December 24, 2015. Anayeli accepted a full-time position with Geosyntec Consultants.

Beatriz Davila, a Seasonal Clerk in the Mission Support Services Unit, left the Water Board on December 7, 2015. She accepted a full-time position with the Department of Toxic Substances Control.

Recruitment

The recruitment process has begun to fill a Scientific Aid position in the Central Cleanup Unit.

2. Chinese High School Students Visit the San Diego Water Board

Staff Contact: Charles Cheng

The San Diego Water Board hosted 25 students and 4 teachers from Beijing's Experimental High School on January 19. The school has earned the No. 1 ranking in China over the last few years, and is attached to Beijing Normal University. The 10th graders and their teachers are in the U.S. on an international exchange program; they will study in San Diego at the Horizon Christian High School for three weeks, with an emphasis on environmental protection and natural resource conservation. The group requested a visit to the San Diego Water Board to learn about our approach to water resource protection. Assistant Executive Officer Jimmy Smith supported this opportunity and assigned Dr. Charles Cheng to host the visiting group.

Upon the student's arrival Julie Chan, Chief of the Groundwater Protection Branch, gave a brief welcome speech. Mr. Smith also addressed the group and was rewarded with many thoughtful questions. Dr. Cheng provided an introductory level overview of what we do and how we protect water quality and water resources. Topics included laws and regulations, the rule making process, roles and responsibilities of the San Diego Water Board, permitting, monitoring, and enforcement, as well as other programs related to point source, non-point source, and storm

water discharge controls. Dr. Cheng also discussed unique challenges in San Diego, such as drought and water conservation, recycling efforts, beach protection and sewer overflow prevention, and groundwater protection and cleanup. The entire presentation was interactive with questions and answers, and Dr. Cheng was able to make some comparisons between the U.S. and China in terms of environmental policy, programs, and implementation. He encouraged the students to be leaders in improving the environment in China.

The experience was very positive. The students reflected that they learned many new concepts and important principles, opening their minds and making them think about what they could and should do in the future. After leaving the office, the students toured the City of San Diego's Advanced Water Purification Facility. The students will present and discuss what they learned during their U.S. tour in San Francisco before returning to Beijing.



Dr. Charles Cheng (behind the podium) with students from Beijing's Experimental High School.

3. Status Update – Public Meeting at Magnolia Elementary School Adjacent to the Former Ametek Facility, El Cajon

Staff Contact: Sean McClain

The San Diego Water Board participated in another public meeting with the Department of Toxic Substances Control, California Cancer Registry, and San Diego County Public Health Department on January 21, 2016, at the Magnolia Elementary School in El Cajon. The El Cajon School District closed the school in the fall 2015 over indoor air quality concerns. The meeting provided an update on vapor monitoring, the installation of vapor mitigation systems at the school, and a cancer surveillance in the neighborhood surrounding the School. Sean McClain of the Groundwater Protection Branch provided an update on the groundwater investigations and groundwater remediation at the Former Ametek facility. Also discussed was new work for 2016 that included a Human Health Risk Assessment that will be performed for residences in the mobile home park adjacent to the school and the Former Ametek property. Ametek will also prepare an annual fact sheet that will update the public on groundwater results and cleanup actions. The fact sheet should be available by the summer 2016.

Approximately 60 people attended, including parents, teachers, and representatives of Magnolia Elementary School District. The meeting concluded with the following message:



Sean McClain discusses the Ametek groundwater cleanup

- Groundwater monitoring and cleanup will continue and expand if needed;
- 2. Vapor monitoring at the school will continue until the groundwater pollution is cleaned up;
- 3. The school is safe for occupancy; and
- 4. There is no evidence of a generalized cancer excess or an excess among children in the vicinity of the Magnolia Elementary School.

The San Diego Water Board will participate in a third public meeting that will be scheduled before the school reopens in the fall of 2016. The agencies presentations are available for review online from the GeoTracker database.

4. South Orange County Recycled Water Summit

Staff Contact: Fisayo Osibodu

What is the future of recycled water in Orange County? The South Orange County Recycled Water Summit was held on January 22, 2016 in Rancho Santa Margarita and was organized by the Santa Margarita Water District. The Summit was well attended by representatives from

recycled water and water supply agencies in Orange County, and representatives from non-governmental organizations. The Summit was also attended by:

- State Water Board Chair, Ms. Felicia Marcus
- San Diego Water Board Member, Dr. Betty Olson
- Mr. David Gibson and Mr. Fisayo Osibodu of the San Diego Water Board staff
- State Water Board staff members

The Summit featured presentations from representatives from recycled water and water supply agencies. The presentations focused upon ongoing and proposed recycled water and indirect potable reuse (IPR) projects. Mr. Gibson; and Chair Marcus also gave presentations at the Summit. Mr. Gibson expressed the San Diego Water Board's support for recycled water and IPR projects, and highlighted actions taken by the San Diego Water Board to encourage those types of projects.

The Question and Answer Panel Session was a highlight of the Summit. Panel members included Mr. Gibson; Mr. Jeff Mosher of the National Water Research Institute; Mr. Paul Cook of Irvine Ranch Water District; Mr. Robert Hill of the El Toro Water District; and Mr. Oliver Pacifico of the State Water Board Division of Drinking Water. Panel members answered questions from members of the public on issues related to recycled water use and IPR. Topics discussed by the panel included road blocks to expanding recycled water use and IPR, and additional costs associated with expanding recycled water use and IPR.

Increasing recycled water use and IPR project will help reduce the San Diego Region's reliance on imported water, which is consistent with the Sustainable Local Water Supply Chapter of the San Diego Water Board's Practical Vision.

Part B – Significant Regional Water Quality Issues

1. ECO-Garden Aquaponics in San Diego Schools

Staff Contact: David Gibson

ECOLIFE Conservation® is an organization dedicated to a world in which people and nature prosper together. Their projects integrate community health and environmental sustainability through simple-adaptive approaches. They support science, technology, engineering, and math (STEM) through our project based School Aquaponics Program. The program engages students of all grade levels in scientific inquiry by making science relevant, tangible, and fun. They emphasize the importance sustainable agriculture and water conservation while inspiring students to design, engineer, budget, and build an aquaponic system to serve their school. ECOLIFE is planting seeds of sustainability, giving students the tools to shape the future they will inherit through innovative technology. In the past three years ECOLIFE has supported over 450 classrooms, reaching thousands of students. More information is available at ECOLIFE's website: http://www.ecolifeconservation.org/.

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2. Shot Hole Borer Beetles in the San Diego Region

Staff Contact: Deborah Woodward

A noteworthy biological invasion is taking place in the San Diego Region due to the arrival of a new insect pest, resulting in impacts and concern for the agricultural community as well as for streams and wetlands. Tiny beetles called Shot Hole Borers are attacking tens of thousands of trees, severely damaging or killing them. The beetles bore into trees, create networks of tunnels in the wood, inoculate the tunnels with an associated fungus, then live in the tunnels eating the fungus and reproducing. Females eventually emerge, fly to new trees, and perpetuate the infestation. Together, the beetle and fungus cause a dieback disease that interrupts water and nutrient transport in the tree. A beetle attack is therefore really a beetle-fungus one-two punch.

More than 35 tree species are susceptible to attack, including important agricultural species (avocado), important native species (black willow, arroyo willow, cottonwood, sycamore, live oak), and many ornamental and landscape trees used along streets and in parks. Signs of an attack include scattered small holes (hence the name shot hole), weeping sap, dark staining, and sawdust-like frass (Figure 1).

Shot Hole Borers have been found in the San Diego Region at about a dozen scattered locations from Laguna Beach to the Tijuana River Valley, but the Tijuana River Valley has been especially hard hit. Riparian forests near Dairy Mart Road and Hollister Bridge have been devastated. The once-thriving stands of arroyo and black willows are now a jumble of broken limbs and dead wood, their weakened limbs snapped off by the wind (Figure 2). Dr. John Boland, an ecologist at Southwest Wetlands Interpretive Association who for several years has conducted research on these forests, has done recent surveys and estimates that the beetles have caused – in only six months – major damage to more than 100,000 trees in the valley.



Figure 1 An arroyo willow tree under attack by Shot Hole Borers. [Photo by John Boland 10/29/15]



Figure 2 Forest near Dairy Mart Road with beetle-damaged willow trees. [Photo by John Boland 11/18/15]

The Tijuana River Valley is the first natural area found to be severely attacked by Shot Hole Borers. Other infestations have affected avocado orchards and urban landscaped areas. Dr. Akif

Eskalen, a plant pathologist from UC Riverside who works to combat the beetle/fungus problem in avocado trees, said the Tijuana River Valley is the worst-hit natural area he has seen. On December 12, 2015, he and several colleagues gave an informal information session for Tijuana River Valley land managers and resource agency staff. Deborah Woodward of the Monitoring, Assessment, and Research Unit attended. Dr. Eskalen confirmed that the Tijuana River Valley infestation is due to the Kurosiho Shot Hole Borer, a species native to Southeast Asia that was first observed in San Diego County in 2013. [Its close relative, the Polyphagus Shot Hole Borer, was first observed about ten years prior and is found north of San Diego County to Ventura County.] Land managers discussed concerns about detrimental effects on the critical habitat of the federally endangered Least Bell's Vireo, increased flood risk due to the large amount of woody debris in the river, and spread of the beetle to areas outside the valley but, at present, there are no easy ways to address these concerns.

It is not known whether the beetles will spread from their present locations to other agricultural, urban, or natural areas. As for the Tijuana River Valley forests, it is not known if some of the trees will recover or if there will be an unwelcome change in species composition and community structure. It is not known if or when an effective means of control will be found but, for now, wood or chipped material should not be moved from infected areas to uninfected areas.

While not a typical water quality issue, the Shot Hole Borer infestation is an unfortunate example of how a non-native species can wreak havoc on native species and ecosystems. By disrupting the biological integrity of the riparian ecosystem in the Tijuana River Valley, the beetles have compromised the capacity of the river to support its designated beneficial uses, especially those related to wildlife and non-contact recreation.

More information, a distribution map, and a list of trees affected are available on the Eskalen Lab website: http://eskalenlab.ucr.edu/avocado.html

A direct link to the distribution map is: http://eskalenlab.ucr.edu/distribution.html

3. Symposium on Harmful Algal Blooms

Staff Contacts: Carey Nagoda, Betty Fetscher, Deborah Woodward, Chad Loflen

Microscopic algae form the base of aquatic food webs and typically support healthy aquatic ecosystems. Under certain conditions, however, some cause harm when they proliferate to high cell concentrations, creating what are referred to as Harmful Algal Blooms (HABs). Some such bloom-forming algae produce toxins that can sicken or kill fish, mammals, birds, and humans. Others are nontoxic, but their high biomass during a bloom can clog the gills of fish and invertebrates, form low-oxygen dead zones as the cells die and decompose, make water look, smell or taste bad, and have other detrimental effects. Water Board staff have been conducting local assessments and participating in statewide planning and monitoring projects.

Held in November 2015, the Eighth Symposium on Harmful Algae in the U.S. featured over 100 presentations and 80 posters covering a wealth of topics such as Bloom Forecasting, Modeling, and Management; Population Genetics and Species Distributions; Emerging Technologies, Instrumentation, and Methodologies; Bloom Identification and Tracking Using Satellite Imagery;

Human and Animal Health Impacts; and Effects of Climate Change. Water Board staff Carey Nagoda, Betty Fetscher, and Deborah Woodward attended the symposium. In summary:

- HABs are natural phenomena that occur worldwide in nearly all aquatic environments (marine, estuarine, and freshwater) and latitudes.
- HABs are of international concern because some are increasing in frequency, severity, and geographical range; international research on HABs is coordinated by the Intergovernmental Oceanographic Commission and the Scientific Committee on Oceanographic Research.
- HABs have caused mass mortality events around the world involving marine invertebrates, fish, turtles, dolphins, manatees, whales, seabirds, and other wildlife, and have caused sporadic deaths of dogs and livestock.
- The factors that trigger HABs are not fully understood but appear to include anthropogenic changes to water bodies such as nutrient enrichment, alterations to water circulation, increased temperatures, and dispersion of microalgae through ship ballast water.
- In marine environments, HABs are caused primarily by planktonic dinoflagellates and diatoms, whose toxins are ingested and bioaccumulated by shellfish and other organisms and in some cases transferred through the food web to wildlife and humans.
- In freshwater environments, HABs are caused primarily by cyanobacteria, whose toxins can impair fish and zooplankton development and, in humans, cause rashes, respiratory problems, tumors, liver damage, and death.
- Toxins from freshwater HABs can be transported though the watershed to marine waters. [In Monterey Bay, more than 30 sea otters have died from eating shellfish contaminated by toxins originating in a lake more than five miles inland.]
- HABs have caused massive economic loss due to impaired fisheries, impaired recreational use and tourism, and impaired drinking water supply; annual economic loss due to HABs in the U.S. can be conservatively estimated at several billion dollars. [In August 2014, a cyanobacteria bloom in western Lake Erie led to contamination of Toledo's water and a two-day cutoff of drinking water supplies to nearly half a million people. In November 2015, a diatom bloom along the West Coast led to closures of the Dungeness crab fishery in California, Oregon, and Washington; as of January 1st the fishery has only partially reopened.]
- Climate change is expected to lead to less predictable blooms, range expansions of harmful species, and impacts to formally unaffected water bodies.

At the symposium, Carey Nagoda of the Monitoring, Assessment, and Research Unit presented a <u>talk</u> and <u>poster</u> about cyanobacteria toxins (cyanotoxins) in southern California. She summarized the results of cyanotoxin monitoring since 2011, all done through collaborative efforts of the San Diego Water Board (SDWB) and researchers from the Southern California Water Research Project (SCCWRP), University of Southern California, and University of California Santa Cruz. Three results are listed below, all having to do with the most commonly occurring cyanotoxins called microcystins:

 Microcystins are widespread in southern California water bodies and are present in different types of water bodies such as streams, recreational lakes, drinking water reservoirs, wetlands, and estuaries (Figures 1 and 2).

- The appearance of water is not indicative of the presence of microcystins; microcystins were sometimes found in water bodies with no obvious bloom and, conversely, microcystins were not always found in water bodies with visible blooms.
- Microcystins were detected in widely variable concentrations, from non-detectable to extremely high. There are as yet no water quality objectives for microcystins, but the California Office of Environmental Health Hazard Assessment sets the level at which humans could experience adverse health effects from contact recreation at 0.8 micrograms per liter (μg/l). The majority of detections were below that level, but the highest was an astounding 36,500 μg/l in the San Joaquin Marsh of the Santa Ana Region.

In 2016, monitoring of HABs in the San Diego Region will focus on the transport of cyanotoxins within watersheds to answer the question: To what extent do stream inputs contribute to downstream cyanotoxin toxin levels? Such monitoring stems from the finding that many stream sites had detectable cyanotoxin concentrations. Additionally, staff will continue to assist with the development of a statewide HABs monitoring plan.

Abstracts from the Eighth Symposium on Harmful Algae in the U.S. will be posted here: http://www.whoi.edu/page.do?pid=30893.

A useful "Frequently Asked Questions" is available on the USEPA website: http://www.epa.gov/sites/production/files/2015-07/documents/habs_faqs-and-resources_v1-july2015.pdf.

A recent publication, "Wadeable streams as widespread sources of benthic cyanotoxins in California, USA" (Fetscher *et al*, 2015) is available through: https://www.researchgate.net/publication/283168810 Wadeable streams as widespread source s of benthic cyanotoxins in California USA.

San Diego Water Board Special Studies, including the Cyanobacteria poster and presentation: http://www.waterboards.ca.gov/sandiego/water_issues/programs/swamp/regional.shtml.



Figure 1 Cyanobacteria bloom in a San Diego Region recreational lake (Lindo Lake, June 2014)

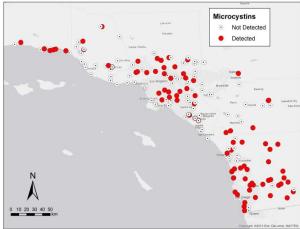


Figure 2 Sites at which microcystins were, and were not, detected in southern California.

4. El Niño Impacts in the Tijuana River Valley (Attachments B-4a and B-4b)

Staff Contact: David Gibson

The first really significant storms of the El Niño rain season arrived January 4-7, 2016. The storms resulted in high flows, but very little flooding. Higher precipitation was seen in watersheds north and south of the Tijuana River Watershed, which was spared some of the heavier flooding experienced elsewhere in the region.

The crossings at Smugglers Gulch, Hollister Street, and Saturn and Sunset streets were flooded and closed to traffic, but were open again by January 8, 2016. The flows in all the streams and channels in the Tijuana River smelled strongly of waste water, and a very large amount of floating and submerged trash was deposited throughout the Tijuana River Valley in the storm events in January, but control measures were only partially successful. An attempt to erect an improvised trash boom in Smugglers Gulch failed as the high flows overwhelmed the netting on January 5, 2016 (http://www.metatube.com/en/videos/293189/Trash-in-the-Tijuana-River-<u>valley/</u>). A larger and better designed trash boom in Goat Canyon, however, performed very well and captured most of the trash entering from Los Laureles Canyon in Tijuana (see photos below). Of significant note, many of the willow trees upstream of Hollister Bridge have been killed by infestations of Shot Hole Borer Beetles. The dead and dying trees were brought down by high winds in December and were piled up on the Hollister Street bridge pilings in the high storm flows. This issue will worsen as the beetle infestation spreads, very likely to other watersheds in the region. Additional rain on January 31st also brought high flows and more trash, but the heaviest rain events are predicted for mid-February through April. In these storm events serious flooding is anticipated with higher flows and larger solid waste discharges in the Valley.

The Tijuana River Valley Recovery Team and Border 2020 Tijuana River Binational Task Force will meet and receive additional reports on the El Nino impacts to the River Valley on February 25, 2016 at the Tijuana River National Estuarine Research Reserve at 301 Caspian Way in Imperial Beach from 1-4pm. A sediment modeling workshop will precede the joint meeting (Attachments B4a and B4b).

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Trash in the Tijuana River near the Effie May trail crossing.



Trash captured in Goat Canyon sediment basins trash interceptor device.



Tijuana River upstream of Hollister Street Bridge. Note the dead willows killed by infestations of shot Hole Borer Beetles infestations.



Dead trees against Hollister Street Bridge footings.



Trash in the Tijuana River.

5. Basin Plan Triennial Review 2nd Quarter Progress Reports

Staff Contacts: Chad Loflen, Melissa Valdovinos, Michelle Mata

Introduction

Periodic review of the Water Quality Control Plan for the San Diego Basin (Basin Plan) is required by state and federal law. 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 Resolution No. R9-2015-0043.

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

I. ISSUE 1 PROJECT INFORMATION

		Report Date	February 1, 2016	
Biological Objectives for Water Bodies in the San Diego Region		Report Period	January 2016	
		Overall Status	Project is on track	
Project Coordinator Chad Loflen		Project Contacts	Chad Loflen and Betty Fetscher	
Supervisor	Jeremy Haas, Healthy Waters Branch			
Project Description	The purpose of this project is to develop biological water quality objectives for the attainment of beneficial uses of inland surface waters.			

Project Objective(s)	1. To promote biological integrity of all surface waters.					
Troject Objective(b)	2. To preserve high quality streams, including non-perennial streams.					
	3. 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.					
	4. To better protect and restore altered streams from predictable hydrologic or					
	physical stressors.					
	1 2	logical degradation o	f streams that have suffered from			
	large scale hydrologic					
Triennial Review	Basin Plan Amendment sh					
Commitments						
0 0 1111111 0 111 0 11	_	e biological objective	for water bodies in the San Diego			
	Region.					
	2. Establish numerical measures by which to interpret the narrative objective.					
Key Milestones	Action	Date	Notes			
Key Milestones	Public informational	Date Fall 2015	To be combined with CEQA			
Key Milestones						
Key Milestones	Public informational		To be combined with CEQA			
Key Milestones	Public informational meeting	Fall 2015	To be combined with CEQA scoping meeting			
Key Milestones	Public informational meeting Draft Technical Reports	Fall 2015	To be combined with CEQA scoping meeting			
Key Milestones	Public informational meeting Draft Technical Reports complete	Fall 2015 July-Sept 2016	To be combined with CEQA scoping meeting			
Key Milestones	Public informational meeting Draft Technical Reports complete Public Workshop	Fall 2015 July-Sept 2016 Summer 2016	To be combined with CEQA scoping meeting Delayed to December 2016			
Key Milestones	Public informational meeting Draft Technical Reports complete Public Workshop Public and Peer Review	Fall 2015 July-Sept 2016 Summer 2016	To be combined with CEQA scoping meeting Delayed to December 2016			

II. ISSUE 1 PROGRESS REPORT

Reporting Period Eve	nts
Accomplishments during period	 Project leads have begun drafting an approach for biological objectives Review of peer-reviewed literature and technical reports Analysis of non-perennial stream results and field work preparation for ongoing monitoring Calculation of California Stream Conditions Index Scores for inclusion in the upcoming Clean Water Act Integrated Report
Collaboration during period	 Project leads are in regular communication with State Water Board staff working on a statewide Implementation Plan for Assessing Biological Integrity in Surface Waters Project leads met with State Water Board Citizen Monitoring Coordinator Erick Burres to discuss biological objectives and link to citizen monitoring efforts
Activities planned, but not completed	A public informational meeting was originally planned for Fall 2015. It has been postponed in order to be combined with a CEQA Scoping meeting that will be scheduled once an approach is drafted.
Key issues during period	 Project team has been focused on potential avenues for using the <u>California Stream Condition Index and other biological metrics</u> for objective(s) in surface waters in the San Diego region. Project team continues to pursue potential approaches for conducting economic considerations to satisfy Water Code section 13241 and CEQA.

Looking Forward					
Activities planned for • Finalize a recommended approach for biological objectives					
next reporting period	Continue to coordinate with State Water Board				
	Prepare public participation process				
	Outline various materials for Basin Plan amendments, including technical				
	report and Substitute Environmental Document				
Key issues on the • External resources may be required to complete economic consideration					
horizon	assessment.				
	Competing demands on staff time for the Clean Water Act Integrated Report				
	threaten to delay the schedule. Staff hopes to find resolution through the				
	2016 Practical Vision Operational Plan.				

Issue 2: Chollas Creek Metals Site Specific Water Effect Ratio

I. ISSUE 2 PROJECT INFORMATION

		Report Date	February 1, 2016	
	Metals Site Specific Water et Ratio (WER)	Report Period	November 2015-January 2016	
		Overall Status	Project is on track	
Project Coordinator	Melissa Valdovinos	Project Contact	Melissa Valdovinos	
Supervisor	Cynthia Gorham, Restoration	n and Protection Planning Un	it	
Project Description	The purpose of this project is to Revise the Basin Plan based upon the results of completed water effects ratios (WERs) for Chollas Creek dissolved copper and dissolved zinc prepared by the City of San Diego.			
Project Objective(s)	 Use site-specific data to revise total maximum daily loads (TMDLs) for dissolved copper and dissolved zinc in Chollas Creek. Protect beneficial uses of Chollas Creek and downstream waters. 			
Triennial Review Commitments	 Amend the Basin Plan to establish site-specific and chemical-specific WERs to be incorporated into the water quality objectives for toxic pollutants in Chollas Creek, and to revise the dissolved copper and zinc WERs in the Chollas Creek Metals TMDLs. The Basin Plan should also be amended to clarify the application of WERs in the California Toxics Rule (CTR) when developing numeric water quality objectives for toxic pollutants. 			
Key Milestones	Action	Notes		
	CEQA scoping meeting August 2015		Held September 24, 2015	
	Submit documents for public and peer review	December 2015	Rescheduled for January 2016	
	Board hearing	September 2016		
Project web site	http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/basinpla n_wer.shtml			

II. ISSUE 2 PROGRESS REPORT

Reporting Period Events					
Accomplishments during period	 Prepared draft Technical Report, CEQA analysis documents, and proposed Basin Plan amendment for public and external scientific peer review. Submit memo to peer review program manager. 				
Collaboration during period	San Diego Water Board staff worked with City of San Diego consultants to expand sections of the draft Technical Report.				
Activities planned, but not completed	n/a				
Key issues during period	None				
Looking Forward					
Activities planned for next reporting period • Review of public comments. • Submit documents for review to peer review program manager					
Key issues on the horizon None					

<u>Issue 3: Evaluation of Contact Water Recreation (REC-1) Water Quality Objectives and Methods</u> <u>for Quantifying Exceedances</u>

I. ISSUE 3 PROJECT INFORMATION

Evaluation of Contact Water Recreation (REC-1) Water Quality Objectives and the Methods for Quantifying Exceedances		Report Date February 1, 2016 Report Period November 2015-January 2016		
		Overall Status	Project is on track	
Project Coordinator Michelle Mata		Project Contacts	Michelle Mata and Cynthia Gorham	
Supervisor	Cynthia Gorham, Restoration	n and Protection Planning Unit		
Project Description The project purpose is to de amending the REC-1 object the TMDLs themselves. The carrying out such amendments		ves, implementation pr en, as appropriate, to de its. Results of the evalu	ovisions for applicable TMDLs, or	

D 1 4	1 T	1-1-1				
Project	1. To protect REC-1 beneficial uses;					
Objective(s)	2. To adopt new and/or updated regulations based upon the latest technical findings					
	and scientific understanding; 3. To facilitate effective use of resources by regulated parties; and					
		of San Diego Water Board res	sources.			
Triennial	Staff commitments to:					
Review	1. Continue participating o	n related technical, scientific,	and regulatory advisory			
Commitments	groups.	,	and regarding the reality			
		hop during fiscal year 2015-16	following community			
		cience, particularly in relation				
	and compliance with ob-					
		penefit analysis regarding com	pliance with regulations of			
		oard, with a specific focus on t				
	wet-weather TMDL wat		<i>-</i>			
Key Milestones	Action Planned Date Notes					
	MOU with MS4	November 2015	Drafted, likely to be			
	Copermittee working		finalized in by March			
	group		2016.			
	Cost-benefit study public	August 2015	Held September 16, 2015			
	scoping meeting		_			
	REC-1 public workshop	Spring 2016				
	Cost-benefit analysis	Fall 2016				
	completed					
	Technical reports November 2016					
	completed					
	Board hearing for any	2017	May require CEQA and			
	recommended changes 2017 recommended changes 2017					
Project web site	http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/issue3.s html					

II. ISSUE 3 PROGRESS REPORT

Reporting Period Events				
Accomplishments during period	• The County of San Diego, with support from the County of Orange and the City of San Diego, has begun a public bidding process to select a contractor for the cost-benefit analysis.			

Collaboration during period	 Staff is actively participating in a TMDL stakeholder working group and continues to participate and track various technical studies that are currently underway that can inform the selection of pathogen indicators and objectives. Staff is working on a Memorandum of Understanding (MOU) between the San Diego Water Board and the County of San Diego, County of Orange, and the City of San Diego. The purpose of the MOU is to memorialize commitments between the parties including, but not limited to, using the best available science and information to facilitate potential updates. Ken Schiff, Southern California Coastal Waters Research Program (SCCWRP), provided an informational update to the Board in December 2015 on the Surfer Health (Epidemiology) Study and Beach Water Quality and Fecal Indicator Bacteria Testing Methods by the SCCWRP.
Activities planned, but not completed	n/a
Key issues during period	none
Looking Forward	
Activities planned for next reporting period	 The MOU between the San Diego Water Board and the County of San Diego, County of Orange, and the City of San Diego should be finalized in by March 2016. The cost-benefit contractor will be selected in early February 2016. The Surfer Health Study report is expected to be completed in Spring 2016.
Key issues on the horizon	A public workshop will be scheduled for Spring 2016.

6. Enforcement Actions for November and December 2015 (Attachment B-6)

Staff Contact: Chiara Clemente

Data Sources

Information about violations and enforcement actions is available to the public from the Water Boards' <u>CIWQS</u>, ¹ <u>SMARTS</u>, ² and/or <u>Geotracker</u> ³ databases. According to the <u>Enforcement Policy</u>, all violations should be entered into their respective databases within 10 days of discovery, and all enforcement actions should be entered within 20 days of the effective date of the enforcement action. Water Board staff track compliance and enforcement work using one or more of these three databases.

¹ California Integrated Water Quality System, http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

² Storm Water Multiple Application and Report Tracking System, https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp

³ https://geotracker.waterboards.ca.gov/

- Geotracker tracks site cleanup, Department of Defense facilities, and other ground water applications.
- SMARTS tracks construction and industrial storm water enrollment, inspection, violation, and enforcement actions.
- CIWQS tracks work (e.g. permitting, inspections, violations, enforcement, billing, etc.) from landfills and all other surface water discharge programs (e.g. certifications and NPDES permits).

Although each of the databases has different query and report tools, the CIWQS database has the capability of generating multiple reports from data entered into either SMARTS and/or CIWQS. Geotracker information, however, cannot be queried using CIWQS. Therefore, all formal enforcement actions are entered into both Geotracker and CIWQS.

Using the CIWQS public reports, the public can review data and drill down into specific compliance details. The State Water Board staff use these reports for generating the Annual Performance Reports.⁴ Regional Board staff use these reports to generate the monthly Executive Officer Reports.

Summary of Enforcement Actions for November and December 2015

During the months of November and December, the San Diego Water Board issued one Time Schedule Order, one Administrative Civil Liability Complaint, two Notices of Violation, fifty Notices of Non-Compliance, and twelve Staff Enforcement Letters. A summary of each enforcement action taken is provided in the attached Table. These monthly reports are also provided on the Board's website⁵ with hyperlinks to many of the individual enforcement actions.

7. Sanitary Sewer Overflows (SSOs)—October and November 2015 (Attachment B-7)

Staff Contact: Dat Quach

State agencies, municipalities, counties, districts, and other entities (collectively referred to as public entities) that own or operate sewage collection systems report sanitary sewer overflow spills (SSOs) through an on-line system, the *California Integrated Water Quality System* (CIWQS). These spill reports are required under the <u>Statewide General SSO Order</u>⁶, the <u>San Diego Region-wide SSO Order</u>⁷, and/or individual National Pollutant Discharge Elimination

⁴ http://www.waterboards.ca.gov/about_us/performance_report_1415/

⁵ http://www.waterboards.ca.gov/sandiego/water_issues/programs/enforcement/

⁶ 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.

⁷ San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

System (NPDES) permit requirements. Some federal entities⁸ report this information voluntarily. The SSO reports are available to the public on a real-time basis at the following State Water Board webpage:

 $\frac{https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria\\ \& reportId=sso_main.$

A summary of the information reported for October and November 2015 is provided in the following tables:

- 1. Table 1: October 2015 Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region.
- 2. Table 2: October 2015 Summary of Private Lateral Sewage Spills in the San Diego Region.
- 3. Table 3: November 2015 Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region.
- 4. Table 4: November 2015 Summary of Private Lateral Sewage Spills in the San Diego Region.

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

1. U.S. EPA Approves California's New Trash Control Policy

Staff Contact: Cynthia Gorham

The U.S. Environmental Protection Agency approved the State Water Resources Control Board's new Trash Control Policy on January 11, 2016. The policy provides a narrative water quality objective, establishes a prohibition on the discharge of trash, and provides implementation requirements. It is designed to keep all of California waters free of trash. The Trash Control Policy amends the Water Quality Control Plans for the Ocean (California Ocean Plan) and the Inland Surface Waters, Enclosed Bays, and Estuaries of California.

Trash threatens practically all of the region's surface water beneficial uses. Fish and wildlife can be harmed through ingestion, entanglement and habitat degradation. Trash can present a public health and safety hazard to recreational or commercial boaters. Trash can also act as a transport medium for other pollutants or act as a vector for invasive species.

The Trash Control Policy provides a phased approach for elimination in California's waters by 2026. Much of the trash generated on land is transported to waterways via storm drains. The policy calls for the use of trash capture devices in areas that generate large amounts of garbage. Where storm water permit holders do not install full trash capture systems, they must use other means of reducing trash such as street sweeping or educational outreach.

⁸ 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 is not required to report sewage spills but does so voluntarily. The U.S. Navy is not required to report sewage spills but does voluntarily fax in its sewage spill reports. This report does not include sewage spills from U.S. Navy sewage collection systems because this information is not available through CIWQS.

The provisions in this policy will be incorporated into regional and statewide NPDES storm water discharge permits for municipal systems, Caltrans, industrial sites, and construction sites. The provisions also will be incorporated into waste discharge requirements and waivers of waste discharge requirements for areas that may generate trash such as campgrounds, picnic area, parks, and recreational beaches.

The prospects for this new policy are promising; as these trash control approaches have already performed successfully in the Los Angeles and San Francisco Regions.

For more information: See press release at U.S. EPA web site: <u>U.S. EPA Approves California's</u> New Trash Control Policy.

Visit the State Water Board web site at: http://www.waterboards.ca.gov/water_issues/programs/trash_control/.

2. Update on Implementation of the Sustainable Groundwater Management Act

Staff Contact: Julie Chan

The Department of Water Resources (DWR) recently identified 21 groundwater basins in which excessive groundwater pumping has resulted in significant overdraft. None of the critically overdrafted basins are in the San Diego Region. Overdrafted basins fall under the earliest deadlines to form Groundwater Sustainability Agencies and draft Groundwater Sustainability Plans required by the Sustainable Groundwater Management Act (SGMA).

Under SGMA, high and medium priority groundwater basins must be managed under a plan by January 31, 2022. Locally controlled Groundwater Sustainability Agencies, responsible for preparing and implementing the plans, must be formed by June 30, 2017. If no water management agency or agencies apply to the DWR to become Groundwater Sustainability Agencies, the responsibility will fall to the county.

In the San Diego Region, the DWR has designated the Temecula Valley Basin as a High Priority Basin. DWR assigned a medium priority to the San Luis Rey Valley, San Pasqual Valley, Santa Margarita Valley, Cahuilla Valley, and San Diego River Valley basins. To date, no agencies with jurisdiction in the San Diego Region have filed with the DWR to form Groundwater Sustainability Agencies.

Executive Officer's Report February 10, 2016

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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

February 10, 2016

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
	March 9, 2016 San Diego Water Board			
Innovative Cleanup and Abatement of PCB Contaminated Sediment in San Diego Bay at the Laurel/Hawthorn Embayment: A Case Study (McDaniel)	Information Item	NA	NA	NA
Preliminary Data from the San Diego Bay Fish Consumption Study (Alo)	Information Item	NA		NA
Tentative Addendum 4 to Waste Discharge Requirements Order No. 99-74, Sycamore Landfill, Republic Services Inc., San Diego County. (Grove)	WDR Addendum	100%	29-Jan-16	Yes
Rescission of WDRs for San Diego County's Heise Park Water Pollution Control Facility and Pine Valley WPCF (Cali)	WDRs Rescission	100%	19-Feb-2016	Yes
NPDES Permit Renewal - Encina Power Plant (Neill)	NPDES Permit Reissuance	90%	19-Jan-2016	Maybe
Time Schedule Order for the Encina Power Plant (Neill)	TSO		19-Jan-2016	Maybe
Assessement of Civil Liability for Construction Storm Water Violation Against San Altos-Lemon Grove, LLC. (Jayne)	ACL Complaint	95%	10-Feb-2016 19-Feb-2016	No
	May 11, 2016 San Diego Water Board			
Presentation of Water Quality Report Cards for the San Mateo and	San Diego Water Board			
San Diego River Watersheds (Fetscher / Loflen)	Information Item	NA	NA	NA
Revised Master Reclamation Permit for the Ramona Municipal Water District, Santa Maria Wastewater Treatment Plant, City of Ramona, San Diego County (Cali)	Revised Master Reclamation Permit	80%	TBD	Yes
Hearing to consider the Acceptance or Rejection of a Water Quality Improvement Plan as Required by the Regional MS4 Permit (Arias)	Hearing	50%	TBD	No
Negative Declaration for General Waste Discharge Requirements for Agricultural and Nursery Operations within the San Diego Region (Mitchell and Pulver)	Resolution	95%	NA	No
General Waste Discharge Requirements for Agricultural and Nursery Operations within the San Diego Region (Pulver and Mitchell)	New WDR	90%	NA	No

Agenda Items Requested by Board Members

Requested Agenda Item	Board Member	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	1
Information item regarding data supporting Basin Plan Water Quality Objectives	Olson	
	September 9, 2015	
Using sea level rise mapping capabilities		
developed by the USN.	Abarbanel	Scheduled for February 2016
Tour of USN laboratory	Olson	Scheduled for February 2016
	November 18, 2015	;
Conduct Series of Outreach Meetings with local Water Districts, Elected Officials, and City Managers throughout the Region.	Abarbanel	2016 Outreach Meetings are scheduled and ongoing.
	December 16, 2015	;
Annual Enforcement Summary	Warren	
San Diego River restoration and land acquisition w	Strawn	February 2016 Agenda item.
Environmental Justice Outreach Update	Morales	
Wetlands Recovery Project Update	Abarbanel	

Sediment modeling in Los Laureles basin of the Tijuana River watershed

Tijuana River National Estuarine Research Reserve Training Center 301 Caspian Way, Imperial Beach, CA 91932 February 25, 2016, 10:00 am-12 pm Simultaneous translation services available Please RSVP to liden.douglas@epa.gov, 619-235-4763



- Welcome and introductions, Doug Liden and Cindy Lin, EPA, 10-10:10 am
- Sediment model overview- Trent Biggs, SDSU, 10:10-10:25
- "CONCEPTs" channel erosion model, Napoleon Gudino, CICESE, 10:25-10:40
- "AGNPS" model for gully erosion, Kris Taniguchi, SDSU, 10:40-11:00
- Break, 11:00-11:15
- Flood modeling in Los Laureles- Adam Luke, UCI, 11:15-11:30
- Q&A, discussion of possible sediment-control BMPs, etc, group, 11:30-12:00

Modelo de sedimentación en la sub-cuenca Los Laureles de la Cuenca Hidrográfica del Rio Tijuana

Tijuana River National Estuarine Research Reserve Training Center 301 Caspian Way, Imperial Beach, CA 91932 Febrero 25, 2016, 10:00 am-12 pm Traducción simultánea disponible



RSVP: <u>liden.douglas@epa.gov</u>, 619-235-4763

- Bienvenida y presentaciones, Doug Liden y Cindy Lin, EPA, 10-10:10:00 am
- Visión general del modelo de sedimentación- Trent Biggs, SDSU, 10:10-10:25
- "CONCEPTs" modelo de erosión en canal, Napoleon Gudino, CICESE, 10:25-10:40
- "AGNPS" modelo de erosión por cárcavas, Kris Taniguchi, SDSU, 10:40-11:00
- Receso, 11:00-11:15
- Modelo de inundación en Los Laureles- Adam Luke, UCI, 11:15-11:30
- P&R, discusión de posibles BMPs para control de sedimentos-erosión, etc., grupo, 11:30-12:00



U.S.-Mexico Border Environmental Program (Border 2020) Tijuana River Watershed Task Force Meeting and

Tijuana River Valley Recovery Team Meeting

February 25, 2016

Tijuana River National Estuarine Research Reserve 301 Caspian Way, Imperial Beach, CA 91932

AGENDA

1:00 – 1:15	Welcome and Introductions David Gibson, San Diego Regional Water Quality Control Board Mayra Cruz, Comisión Nacional de Agua
1:15 – 1:20	Border 2020 Update Doug Liden, U.S. Environmental Protection Agency
1:20 – 1:25	Ocean Friendly Restaurants Margarita Díaz, Proyecto Fronterizo de Educación Ambiental
1:25 – 1:35	Tijuana River Action Month Successes John Holder, WILDCOAST
1:35 – 1:45	Proposal to Recover and Recycle Tijuana River Watershed Waste Tires John Holder, WILDCOAST
1:45 – 1:55	Minute 320 Progress Steve Smullen, U.S. International Boundary and Water Commission
1:55 - 2:05	Public Announcements and Comments
2:05 - 2:20	Break
2:20 – 2:40	Tijuana River Watershed Water Quality Improvement Plan Chris Helmer, City of Imperial Beach
2:40 – 3:00	Impacts from El Niño Storms Mayra Cruz and Francisco López Chávez, Comisión Nacional del Agua
3:00 – 3:20	Shot-Hole Borer in Tijuana River Valley John Boland, Ph.D., Southwest Wetlands Interpretive Association
3:20 – 3:40	Tijuana River Valley Regional Park Feasibility Study Jennifer Price, County of San Diego
3:40 – 3:55	Nelson Sloan Management and Operations Plan and Cost Analysis Bob Scott, Haley & Aldrich
3:55 – 4:00	Closing Remarks David Gibson, San Diego Regional Water Quality Control Board Mayra Cruz, Comisión Nacional de Agua



Reunión del Grupo de Trabajo de la Cuenca del Río Tijuana (Frontera 2020) y

Reunión del Equipo de Recuperación del Valle del Río Tijuana

25 de febrero de 2016

Tijuana River National Estuarine Research Reserve 301 Caspian Way, Imperial Beach, CA 91932

AGENDA

1:00 – 1:15	Bienvenida y auto-presentaciones David Gibson, Junta Regional para el Control de la Calidad del Agua Mayra Cruz, CONAGUA
1:15 – 1:20	Actualización de Estatus del Programa Frontera 2020 Doug Liden, Agencia de Protección Ambiental de EEUU
1:20 – 1:25	"Restaurantes Amigos del Mar" (Proyecto de Frontera 2020) Margarita Díaz, Proyecto Fronterizo de Educación Ambiental
1:25 – 1:35	Éxitos del Mes de Acción del Río Tijuana John Holder, WILDCOAST
1:35 – 1:45	Propuesta de Recuperación y Reciclaje de Llantas en la Cuenca del Río Tijuana John Holder, WILDCOAST
1:45 – 1:55	Actualización de Progreso de "Minuta 320" Steve Smullen, Comisión de Limites y Aguas, sección americana
1:55 – 2:05	Anuncios y Comentarios Públicos
2:05 - 2:20	Receso
2:20 – 2:40	Plan para el Mejoramiento de Calidad de Agua del Río Tijuana Chris Helmer, City of Imperial Beach
2:40 – 3:00	Impactos de las Tormentas por "El Niño" Mayra Cruz y Francisco López Chávez, Comisión Nacional del Agua
3:00 – 3:20	Escarabajo "Shot-Hole Borer" en la Valle del Río Tijuana John Boland, Ph.D., Southwest Wetlands Interpretive Association
3:20 – 3:40	Estudio de Factibilidad para el Parque Regional del Rio Tijuana Jennifer Price, Condado de San Diego
3:40 – 3:55	Plan de Operación y Mantenimiento de la Cantera de Nelson Sloan Bob Scott, Haley & Aldrich
3:55 – 4:00	Palabras de Clausura David Gibson, Junta Regional para el Control de la Calidad del Agua Mayra Cruz, , Comisión Nacional del Agua

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
11/18/2015	Time Schedule Order No. R9- 2015-0118	U.S. Navy Southwest Division, U.S. Naval Base Coronado	Time Schedule Order (TSO) requiring the U.S. Navy to comply with requirements prescribed in NPDES Order No. R9-2015-0117 within 3 years	National Pollutant Discharge Elimination System (NPDES) Order No. R9- 2015-0117
11/19/2015	Administrative Civil Liability Complaint No. R9-2015- 0166	SANDAG, Rail Projects Between the LOSSAN and Mid-Coast Corridor, Rose Canyon, San Diego	Civil Liability Complaint in the amount of \$50,000 for unauthorized discharges and inadequate best management practices (BMPs) during construction	NPDES General Construction Storm Water Permit Order No. R9-2009-0009- DWQ
11/4/2015	Notice of Violation No. R9-2015- 0171	Kinder Morgan Energy Partners, Mission Valley Bulk Fuel Terminal	Failure to comply with compliance schedules in Time Schedule Order No. R9-2011-0052	Time Schedule Order No. R9- 2011-0052
11/17/2015	Notice of Violation No. R9-2015- 0185	City of Temecula, Municipal Separate Storm Sewer System (MS4)	Failure to coordinate with Water Districts and failure to prevent/prohibit over irrigation discharges	NPDES Municipal Storm Water Permit Order No. R9-2010-0016
11/2/2015	Staff Enforcement Letter	Physician's Hospital of Murrieta	Failure to submit reports and demonstrate completion of mitigation requirements in Water Quality Certification No. 07C-024	Clean Water Act (CWA) Section 401 Water Quality Certification No. 07C-024
11/13/2015	Staff Enforcement Letter	Marine Group Boat Works, National City, San Diego Bay	Missing quarterly and annual reports	NPDES Order Nos. R9-2001- 0149 and R9- 2013-0026
11/17/2015	Staff Enforcement Letter	Costco Wholesale 910, Otay Mesa	Inaccurate report of no exposure; inadequate industrial storm water BMP); failure to enroll in the new general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
11/25/2015	Staff Enforcement Letter	HVAC Exchange, Chula Vista	Inadequate industrial storm water BMPs	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/8/2015	Staff Enforcement Letter	US Navy Southwest Division, Naval Base San Diego, San Diego Bay	Exceedance of Total Recoverable Copper daily maximum effluent limit on September 19, 2015	NPDES Permit Order No. R9- 2013-0064
12/15/2015	Staff Enforcement Letter	City of Temecula, Main Street Bridge Replacement Project	Failure to submit required notifications and reports pursuant to certification requirements	Clean Water Act (CWA) Section 401, Water Quality Certification 10C- 065
12/15/2015	Staff Enforcement Letter	Shelter Island Boatyard, San Diego Bay	Failure to submit 2014 annual report	NPDES General Permit Order No. R9-2013-0026
12/16/2015	Staff Enforcement Letter	Driscoll Mission Bay	Failure to submit 2015 annual report	NPDES General Permit Order No. R9-2013-0026
12/16/2015	Staff Enforcement Letter	Marine Group Boat Works, San Diego Bay	Failure to submit 2014 and 2015 annual report	NPDES General Permit Order No. R9-2013-0026
12/17/2015	Staff Enforcement Letter	Municipal Storm Water Copermittees in the Carlsbad Watershed Management Area (WMA) (i.e. cities of Carlsbad, Encinitas, Escondido, Oceanside, Vista, San Marcos, Solana Beach, and County of San Diego)	Carlsbad WMA Water Quality Improvement Plan (WQIP) significantly out of compliance with multiple provisions of the Municipal Storm Water Permit	NPDES Municipal Storm Water Permit Order No. R9-2013-0001

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/21/2015	Staff Enforcement Letter	City of San Marcos, Grand Avenue Capital Improvements 317 Drainage/Road Improvements Project	Failure to submit required reports pursuant to certification monitoring and reporting requirements	CWA Section 401 Water Quality Certification 10C- 029
12/28/2015	Staff Enforcement Letter	Dana Point Shipyard, Dana Harbor	Missing multiple quarterly and annual reports	NPDES General Permit Order No. R9-2013-0026
12/11/2015	Notice of Non- Compliance	US Joiner LLC, 6540 Federal Blvd Partnership, Lemon Grove	Second notice of non- compliance pursuant to California Water Code (CWC) 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Aerowind Corporation, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Aircraft Service Intl., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	America Auto Repair, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	ATK Space Systems, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Ben's Recycling Scrap, Oceanside	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Brinks Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Brown Field Truck Auto Dist., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Cal Artisan Castings, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Cornerstone Remodel, San Marcos	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Craftstones, Ramona	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Cymer Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	El Vaquero Auto Wrecking, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Escondido Disposal Inc., Escondido	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Flatline Ready Mix, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Gear Vendors Inc., El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Gilead Sciences Inc., Oceanside	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Golden Auto Wrecking, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Greenstone Materials Inc., San Joan Capistrano	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Harcon Precision Metals Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	High Tech Auto Dismantling LLC, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Imperial Auto Wrecking, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Japan Tech Auto Wrecking, Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Japanese Auto Wrecking, Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Las Vegas LA Express Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Lite Stone Concrete, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Main Street Recycling Inc., Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Marjan Stone Co, County of San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Maurice Carrie Winery, Temecula	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	MCM Auto Recycling, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Millers Towing, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Mission Avenue Landfill, Oceanside	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Modern Stairways, County of San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Montoyas Auto Wrecking LLC, Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Multimodal Esquer Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	OC Trucking , San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Pacific Ambulance, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Quality Systems Integrated Corp., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Ramona Duck Farm, County of San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	RC Import Auto Recycler, Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Richardson Recycling, County of San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Rush Press, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	San Diego Auto Wrecking & Recycling, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	San Diego Crating and Packing, Poway	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	San Diego Powder Coating, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	South Bay Sand Blasting and Tank Cleaning Inc., San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Stoneworks, El Cajon	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Enforcement Date	Enforcement Action	Entity/ Facility/ Location	Summary of Violations and Enforcement	Applicable Requirements/ Order Violated
12/11/2015	Notice of Non- Compliance	Texano Auto Recycling Inc., Chula Vista	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	Tunys Auto Wrecking, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ
12/11/2015	Notice of Non- Compliance	West Tech Contracting, San Diego	Second notice of non- compliance pursuant to CWC 13399 for failure to recertify enrollment in the general industrial storm water permit	NPDES General Industrial Storm Water Permit Order No. 2014- 0057-DWQ

Table 1: October 2015 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region

Responsible Agency	Collection System	Total Volume*	Total Recovered*	Total Reaching Surface Waters*	Percent Recovered	Percent Reaching Surface Waters	Additional Details	Miles of Pressure Sewer	Miles of Gravity Sewer	Population in Service Area
			(Gallons)		(%)	(
CSU San Diego	San Diego State University CS	5,050	2,000	20	%66	1%		0.0	5.0	35,000
Carlebad MWD	O CIWAM bedalred	15	15	0	100%	%0		4 5	282.0	69 420
Calibrad Mive C	Callsbad MWD CO	င	0	0	%0	%0	*_	r F	202.0	03,470
Del Mar City	City of Del Mar CS	2,750	2,750	0	100%	%0		1.8	29.0	4,234
		25	25	0	100%	%0				
4;C	OC COOM OF BOLISH	35	35	0	100%	%0		Ċ	155.0	70 077
La Mesa City	CITY OI LA MESA CO	20	20	0	100%	%0		9	0.00	7,00
		15	15	0	100%	%0				
Laguna Beach City	City of Laguna Beach CS	2	2	0	100%	%0		9.0	86.0	18,000
San Diego City	San Diego City CS (Wastewater Collection System)	2,525	2,423	0	%96	%0	2*	145.0	3,002.0	2,186,810
to into in a second days of	Of sociatorial rosto M. sociolo de Los	750	750	0	100%	%0		0	120.0	42,000
South Coast Water District	Sodill Coast Water District Co	220	220	0	100%	%0		o.	0.061	44,000
	Totals for Public Spills	11,760	11,605	20						
	Totals for Federal Spills	0	0	0						

*Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to land and recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters).

^{1*} All 3 gallons seeped into the ground and/or evaporated.

^{2* 2525} gallons were discharged to land. 2423 gallons were recovered, and 102 gallons seeped into the ground and/or evaporated.

Table 2: October 2015 - Summary of Private Lateral Sewage Spills in the San Diego Region

Reporting Agency	Collection System	Total Volume*	Total Recovered*	Total Reaching Surface Waters*	Percent Recovered	Percent Reaching Surface Waters	Additional Details	Population in Service Area	Lateral
			(Gallons)		(%)	_			
Eastern Municipal Water District	Temecula Valley RCS	75	75	0	100%	%0		218,981	55,201
El Cajon City	City of El Cajon CS	5	5	0	100%	%0		102,211	16,675
Escondido City	HARRF Disch To San Elijo OO CS	225	225	0	%001	%0		142,000	53,848
Laguna Beach City	City of Laguna Beach CS	10	10	0	100%	%0		18,000	6,650
Leucadia Wastewater District	Leucadia Wastewater District CS	10	10	0	100%	%0		60,000	20,639
National City	City of National City CS	60	09	0	100%	%0		58,967	8,000
Padre Dam Municipal Water District	Padre Dam CS	4	1	0	722%	%0	*	67,658	15,024
Ati O vomod	SO years	60	2	0	3%	%0	2*	42 862	, , , , , , , , , , , , , , , , , , ,
roway ony	Oily of Fowdy CO	215	215	0	100%	%0		42,002	12,103
San Diogo City	San Diego City CS	148	148	0	100%	%0		0 186 810	750 790
	System)	91	91	0	100%	%0		2,100,010	162, 102
	Totals	903	842	0					

*Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to a drainage channel and recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters whether recovered or not is considered reaching surface waters).

^{1* 4} gallons were discharged to land. 1 gallon was recovered and 3 gallons seeped into the ground and/or evaporated.

⁶⁰ gallons were discharged to land. 2 gallons were recovered and 58 gallons seeped into the ground and/or evaporated. *

Executive Officer's Report

Table 3: November 2015 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region

February 10, 2016

Responsible Agency	Collection System	Total Volume*	Total Recovered*	Total Reaching Surface	Percent Recovered	Percent Reaching Surface	Additional Details	Miles of Pressure	Miles of Gravity	Population in
				Waters*		Waters		Sewer	Sewer	service Area
			(Gallons)		(%))				
Ca Dept of Parks & Rec Winterhaven	San Mateo Campground/San Onofre CS	900	0	0	%0	0%	1*	1.2	9.0	1,350
Carlsbad MWD	Carlsbad MWD CS	15	0	0	%0	0%	2*	4.5	282.0	69,420
Encinitas City	City of Encinitas CS	1	0	0	%0	0%	3*	4.0	123.0	36,100
vij Good o	O caoM o Lac vitio	80	∞	0	100%	%0		C	777	770 021
רם ויופטם כוול	(1) O La Mesa (0)	42	42	0	100%	%0		2	2	t 7,000
Oceanside City	La Salina WWTP, Oceanside Outfall Cs	5,750	5,000	750	%28	13%		35.6	439.7	169,527
Poway City	City of Poway CS	119	0	119	%0	100%		3.4	185.0	42,862
		09	20	0	83%	%0	4*	771	0 000 6	0 106 010
San Diego City	San Diego City CS (Wastewater Collection System)	720	0	360	%0	20%	2*	0.04	3,002.0	2,100,010
San Juan Capistrano City	City Of San Juan Capistrano CS	006	006	0	100%	%0		0.2	123.0	37,500
Constant of the second of the		15	15	0	100%	0%		35.0	122.0	000 38
US Marine Corps base Camp Pendleton	USMC Base, Camp Pendleton CS	30	30	0	100%	%0		0.00	0.221	000,00
	Totals for Public Spills	8,515	6,000	1,229						
	Totals for Federal Spills	45	45	0						

^{*}Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to land and not recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters whether recovered or not is considered reaching surface waters).

^{1*} All 900 gallons seeped into the ground and/or evaporated.

^{2*} All 15 gallons seeped into the ground and/or evaporated.

^{3*} All 1 gallon seeped into the ground and/or evaporated.

^{4* 60} gallons were discharged to land. 50 gallons were recovered, and 10 gallons seeped into the ground and/or evaporated.

^{5* 720} gallons were discharged to land. 360 gallons reached surface water, and 360 gallons seeped into the ground and/or evaporated.

Connections 16,675 53,848 267,237 Lateral 49,532 13,000 20,603 6,650 12,165 2,300 Population in Service Area 2,186,810 142,000 256,780 102,211 58,244 18,000 42,862 4,600 97,481 0 Additional Details * * ကံ Reaching Surface Waters 14% 15% %69 %0 %0 %0 %0 %0 %0 %0 % %0 %0 %0 %0 %0 8 Recovered Percent 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 94% %98 85% 23% %0 Reaching Waters* Surface 532 450 0 0 0 0 0 0 0 0 0 0 0 0 0 0 52 30 Recovered (Gallons) Total 2,724 9 180 264 186 320 168 15 250 150 900 30 6 32 15 32 7 0 Volume* 3,436 Total 100 180 960 264 186 372 198 250 650 32 15 70 32 15 7 30 61 Rainbow Municipal Water Dist HARRF Disch To San Elijo City of Laguna Beach CS Collection System (Wastewater Collection System) City of Chula Vista CS City of La Mesa CS City of El Cajon CS City of La Mesa CS San Diego City CS City of Poway CS Meadowlark CS SO 00 Totals SS Rainbow Municipal Water Reporting Agency /allecitos Water District -aguna Beach City Chula Vista City **Escondido City** San Diego City El Cajon City La Mesa City La Mesa City Poway City District

Total Recovered plus Total Reaching Surface Waters does not always equal Total Volume for one or more of the following reasons: 1) a portion of the spill may have been to land and not recovered, 2) a portion of the spill may have been to a drainage channel and recovered (all of the volume discharged to a drainage channel whether recovered or not is considered reaching surface waters), and/or 3) a portion of the spill may have been discharged directly to surface waters and recovered (all of the volume discharged directly to surface waters whether recovered or not is considered reaching surface waters).

^{1*} All 70 gallons seeped into the ground and/or evaporated.

⁶⁵⁰ gallons were discharged to land. 150 gallons were recovered. 450 gallons reached surface water and 50 gallons seeped into the ground and/or evaporated. *د

⁹⁶⁰ gallons were discharged to land. 900 gallons were recovered. 60 gallons seeped into the ground and/or evaporated. *ტ