

**California Regional Water Quality Control Board**

**San Diego Region**

**David Gibson, Executive Officer**



**Executive Officer’s Report**

**February 14, 2018**

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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 is available at [http://www.waterboards.ca.gov/sandiego/about\\_us/org\\_charts/orgchart.pdf](http://www.waterboards.ca.gov/sandiego/about_us/org_charts/orgchart.pdf)

#### Promotion

Wayne Chiu, formerly a Water Resource Control Engineer in the Site Restoration Unit, accepted an offer to serve as the Senior Water Resource Control Engineer Specialist in the Healthy Waters Branch in Monitoring & Surveillance. He began his new duties, primarily regional monitoring coordination, on January 8, 2018. Wayne has worked for the San Diego Water Board for 12 years.

#### Recruitment

The recruitment process has begun to fill an Engineering Student Assistant position in the Site Restoration & Agricultural Program Unit, the Water Resource Control Engineer vacancy in the Site Restoration Unit, and the impending Supervising Engineering Geologist vacancy in the Site Restoration and Groundwater Protection Branch.

### 2. Outreach to the Next Generation of Solid Waste Management Engineers

*Staff Contacts: Amy Grove and Brandon Bushnell*

The San Diego State University (SDSU) Civil Engineering Department invited staff member Amy Grove of the Groundwater Protection Unit to guest lecture to a class of civil and environmental engineering students and to lead a discussion on solid waste management issues. Brandon Bushnell, an SDSU engineering student and Engineering Student Assistant in the Groundwater Protection Unit, joined Ms. Grove in the lecture and the discussion on December 6, 2017. The lecture focused on the mission of the San Diego Water Board and the role of staff in providing regulatory oversight at both operating and closed landfills in the San Diego Region. Ms. Grove and Mr. Bushnell presented several specific case studies that highlight some of the Land Disposal Program's recent engineering challenges with the construction and expansion of active landfills and the resulting enforcement actions. The students had many questions and the group was engaged in the discussion that followed the lecture.

## Part B – Significant Regional Water Quality Issues

### 1. Providing Educational Opportunities for Elementary-School Children – SWPPP Internship Program (*Attachment B-1*)

*Staff Contact: David Gibson*

An offshoot of BCK Programs, LLC, which provides environmental education opportunities for elementary school students, the SWPPP Internship Program was the brainchild of Bill Dean, who wrote and managed Storm Water Pollution Prevention Plans (SWPPPs) for EDCO Waste & Recycling. He wanted students to experience real-world education through the development and implementation of SWPPPs for their school campuses.

SWPPP “hires” fifth and sixth grade students for the school year to sample, analyze, and study pollutants on their school campuses; partner with local water districts to study the impact of their findings; and craft recommendations to improve conditions and present their recommendations to the school district and the community.

Beginning in 2013 with two schools in the Encinitas Unified School District (EUSD), the program has grown to include 11 schools. In 2016, Mr. Dean applied for and received a \$720,000 Drought Response Outreach Program for Schools (DROPS) Grant for water quality projects at five EUSD schools.

## **2. Cleanup and Restoration Completed at the Water Tank Ravine Burn Dump Site**

*Staff Contact: Sean McClain*

The City of Laguna Beach (City) removed all the waste debris from the Water Tank Ravine Burn Dump Site (Burn Site) and restored the creek that runs through the site to its pre-waste disposal condition. The San Diego Water Board informed the City by letter in January that the areas impacted by waste from the Burn Site have met clean-closure requirements in accordance with State regulations.<sup>1</sup> The City removed approximately 14,700 cubic yards of burn dump-type waste and transported it to the South Yuma County Landfill for disposal.

The City was unaware of the presence of the Burn Site on its property until December 2010 when rain events generated storm water runoff that exposed and eroded significant amounts of wastes in an unnamed canyon tributary to Laguna Creek. Waste debris (primarily burn residuals consisting of glass, metal, and ceramics) was hydraulically transported down the canyon and onto residential properties in the Sun Valley Community.

The City completed removal of waste debris from the canyon in December 2014. A second phase of work restored the canyon to pre-waste disposal conditions. The restoration was completed in accordance with the 401 Water Quality Certification issued by the San Diego Water Board. The third phase of work involved public outreach, investigation, and cleanup of 15 residential properties in the Sun Valley Community.

The San Diego Water Board cleanup staff conducted inspections and met with the City representatives and its consultants on several occasions prior to and during the waste removal process. This cooperation was critical to the success of the project and allowed completion of the work prior to the rainy season. In addition, the San Diego Water Board Wetland and Riparian Protection staff worked with California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and the City to ensure the successful restoration of Laguna Canyon after waste removal.

Upon completion of the project, Bob Burnham on behalf of the Laguna Beach City Council, City Manager, and City staff thanked the Board for the support provided at each stage of the process. Mr. Burnham wrote that “[W]e could not have done this without you and the spirit of cooperation that pervaded our interaction with the Regional Board, the LEA, and CalRecycle.”

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<sup>1</sup> Cal. Code of Regs., title 27, section 21090(f).



**Water Tank Ravine Burn Site during Waste Removal**



**Water Tank Ravine Burn Site after Waste Removal**



Water Tank Ravine Burn Site restoration with rock emplacement in the canyon and vegetation on the slopes

### 3. Partnerships Equal Clean-up of Trash in the San Diego River

*Staff Contact: Laurie Walsh*

Caltrans, the City of San Diego, and the San Diego River Park Foundation are a collective force to be reckoned with. The synergistic effects of this collaborative effort are seen in the photos showing cleanup of 208 cubic yards of trash in early January 2018 in the San Diego River under the Highway 163 overpass in San Diego.



After much work and many phone calls, Caltrans and the City of San Diego were able to get access to an otherwise inaccessible area so that Caltrans crews and contractors and San Diego

River Park Foundation volunteers could remove piles of trash from the San Diego River. Caltrans crews used a crane to lower trash bins to collect the extraordinary amounts of trash waste littered across the river. The overall effort took nearly 50 hours to complete and cost just over \$30,000. Caltrans, the City of San Diego and the San Diego River Park Foundation are using this effort to improve communications between their agencies in order to facilitate cleanups like this in the future.

#### **4. 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 [Poseidon Resources \(Channelside\) LLC's](#) (Poseidon) Report of Waste Discharge (ROWD) application for reissuance of the National Pollutant Discharge Elimination System (NPDES) permit for the [Claude “Bud” Lewis Carlsbad Desalination Plant \(CDP\)](#) 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 [previous Executive Officer Report](#) update<sup>2</sup>:

1. By email on October 6, 2017, the San Diego Water Board provided Poseidon and the San Diego County Water Authority (SDCWA) a preliminary working draft of the NPDES permit for informal review and comment. The administrative draft was complete in many respects but did not include the proposed determination under staff development required by California Water Code (Water Code) section 13142.5(b) for stand-alone operation of the CDP when the Encina Power Station permanently ceases operation after December 31, 2018.<sup>3</sup>

The Water Boards met with Poseidon and the SDCWA on December 14, 2017 to discuss their comments on the administrative draft NPDES permit and the intake structure design referred to as Intake Alternative No. 21.<sup>4</sup> During that meeting, the San Diego Water Board provided feedback on Appendix DDD of the ROWD, *Feasibility Assessment of Carlsbad*

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<sup>2</sup> Additional information regarding the CDP can be found in Executive Officer Reports for [December 2017](#), [October 2017](#), [September 2017](#), [August 2017](#), [June 2017](#), [April 2017](#), [February 2017](#), [December 2016](#), [November 2016](#), [October 2016](#), [September 2016](#), [August 2016](#), [May 2016](#), [December 2015](#), [September 2015](#), and [June 2015](#).

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<sup>3</sup> Water Code section 13142.5(b) requires that “for each new or expanded coastal power plant or other industrial installation using seawater for cooling, heating or industrial processing, the best available site, design, technology, and mitigation measures feasible shall be used to minimize the intake and mortality of all forms of marine life.” The stand-alone operation of the CDP, after the Encina Power Station shuts down, is considered to be an expanded facility as defined by the California Water Quality Control Plan for Ocean Waters of California (Ocean Plan), “[t]o the extent that the desalination facility is co-located with another facility that withdraws water for a different purpose and that other facility reduces the volume of water withdrawn to a level less than the desalination facility's volume of water withdrawn, the desalination facility is considered to be an expanded facility.”

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<sup>4</sup> In June 2017, Poseidon submitted a very preliminary intake structure design alternative for consideration known as Alternative No. 21 that provides for placement of intake screens within the lagoon at the onset of seawater withdrawal to minimize impacts to marine life. San Diego Water Staff requested that this proposal be further analyzed to provide information on the cost, construction impacts to marine life, operational impacts to marine life, potential period for construction and other considerations. Poseidon provided the requested assessment on November 22, 2017.

*Desalination Plant Intake and Discharge Alternative 21*, submitted by Poseidon on November 22, 2017. The San Diego Water Board identified inconsistencies in the feasibility assessment of Alternative 21 including disparities in the acreage of impacts to benthic habitats, the prevalence of floating debris in the lagoon, and the timeline for construction. The San Diego Water Board expressed the view that Alternative 21 would result in less dredging required in the lagoon, had a potential for some habitat restoration by burying the lateral pipelines, and that the estimate for cleaning and maintenance and associated plant shutdown time was overly conservative. The San Diego Water Board also noted that Poseidon's feasibility report assumes that chlorine injection to control biofouling would be impermissible. However, chlorine injection may be allowable to control biofouling provided adequate management practices and monitoring is in place to protect water quality. During a phone conversation on January 18, 2018, Peter MacLaggan, Vice President of Poseidon, indicated that Poseidon may be submitting a revised Appendix DDD in the near future.

2. Chapter III.M.2.a(1) of the Ocean Plan provides that regional water boards may require an owner or operator of a desalination facility to hire a neutral third party entity to review studies and models and make recommendations to the boards regarding the Water Code section 13142.5(b) determination cited above. The neutral third party may include experts in the field for addressing issues associated with minimizing, mitigating, and monitoring of intake and brine impacts from desalination facilities. The San Diego Water Board is working with Poseidon to engage an independent science advisory panel to review outstanding permitting questions related to the Water Code section 13142.5(b) determination. The San Diego Water Board and Poseidon have agreed that the neutral third party for review will be comprised of an already established Science Advisory Panel (SAP) overseen by the California Coastal Commission. The SAP is already familiar with the project due to their review of the mitigation plans for the CDP. By email on December 15, 2017, the San Diego Water Board provided to Poseidon and the SDCWA, a draft scope of work for the neutral third party review. Poseidon had no objection to the draft scope of work but did propose additional changes to the topics for review. The San Diego Water Board has reviewed Poseidon's proposed changes to the topics and provided Poseidon with feedback on January 17, 2018. The San Diego Water Board is now coordinating with the California Coastal Commission to begin the third party review.

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 [NRG Energy](#)) on the southern shore of the [Agua Hedionda Lagoon](#) 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 currently intakes source water from Agua Hedionda Lagoon through the existing Encina Power Station discharge 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.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/regulatory/carlsbad_desalination.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](http://www.waterboards.ca.gov/resources/email_subscriptions/reg9_subscribe.shtml).

## **5. Status Update – Groundwater Cleanup and Indoor Vapor Sampling, Former AMETEK/Ketema Facility, El Cajon**

*Staff Contact: Sean McClain*

### **Vapor Sampling**

AMETEK continues to assess off-site vapor intrusion at the Starlight, Greenfield, and Villa Cajon Mobile Home Parks (Figure 1). Indoor air and crawl space samples were collected at 134 mobile homes from April to December 2017 (shown in blue and orange colored squares on Figure 1) near the Magnolia Elementary School property boundary. Vapor samples at 14 of the 134 homes (shown in light blue and orange colored squares on Figure 1) were reported to contain trichloroethylene (TCE) above the California Department of Toxic Substances Control's (DTSC) indoor air screening level (IASL) of 0.48 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ). DTSC approved AMETEK's mitigation measures for modifications at 7 of the 14 mobile homes that had TCE above the accelerated response action level (ARAL) of  $2 \text{ ug}/\text{m}^3$ . None of the samples were above the urgent response action level of  $6 \text{ ug}/\text{m}^3$ . The remaining 7 homes were below the TCE ARAL and are scheduled for resampling. The mitigation measures and resampling will be completed during first quarter 2018.

In addition to the sampling at the Mobile Home Parks, quarterly vapor sampling continues at Magnolia Elementary School. The results at the school continue to show that the school is safe for occupancy.

### **Groundwater Cleanup**

AMETEK is preparing to implement Phase 3 of the in-situ chemical oxidation groundwater remediation system (ISCO system) at the former AMETEK/Ketema facility. The remediation consists of injecting a potassium permanganate solution into the groundwater to reduce the chemicals of concern beneath the facility and the downgradient areas. AMETEK began the ISCO injections in August 2015 and expanded the system in November 2016. There are now a total of 27 injection wells at the facility. The Phase 3 ISCO injection is scheduled for June 2018. The 2017 Third Quarter Groundwater Monitoring Report shows significant concentration reductions in the injection wells at the site.

In addition to the ISCO system, AMETEK continues to operate an off-site groundwater extraction and ultraviolet-oxidation treatment system for the discharge water. The off-site system started operation in January 2014 and has extracted and treated approximately 15,408,000 gallons of groundwater.

The San Diego Water Board continues to work closely with DTSC to evaluate the performance of the ISCO injections and groundwater extraction system. DTSC became the lead regulatory agency for this site in February 2017.



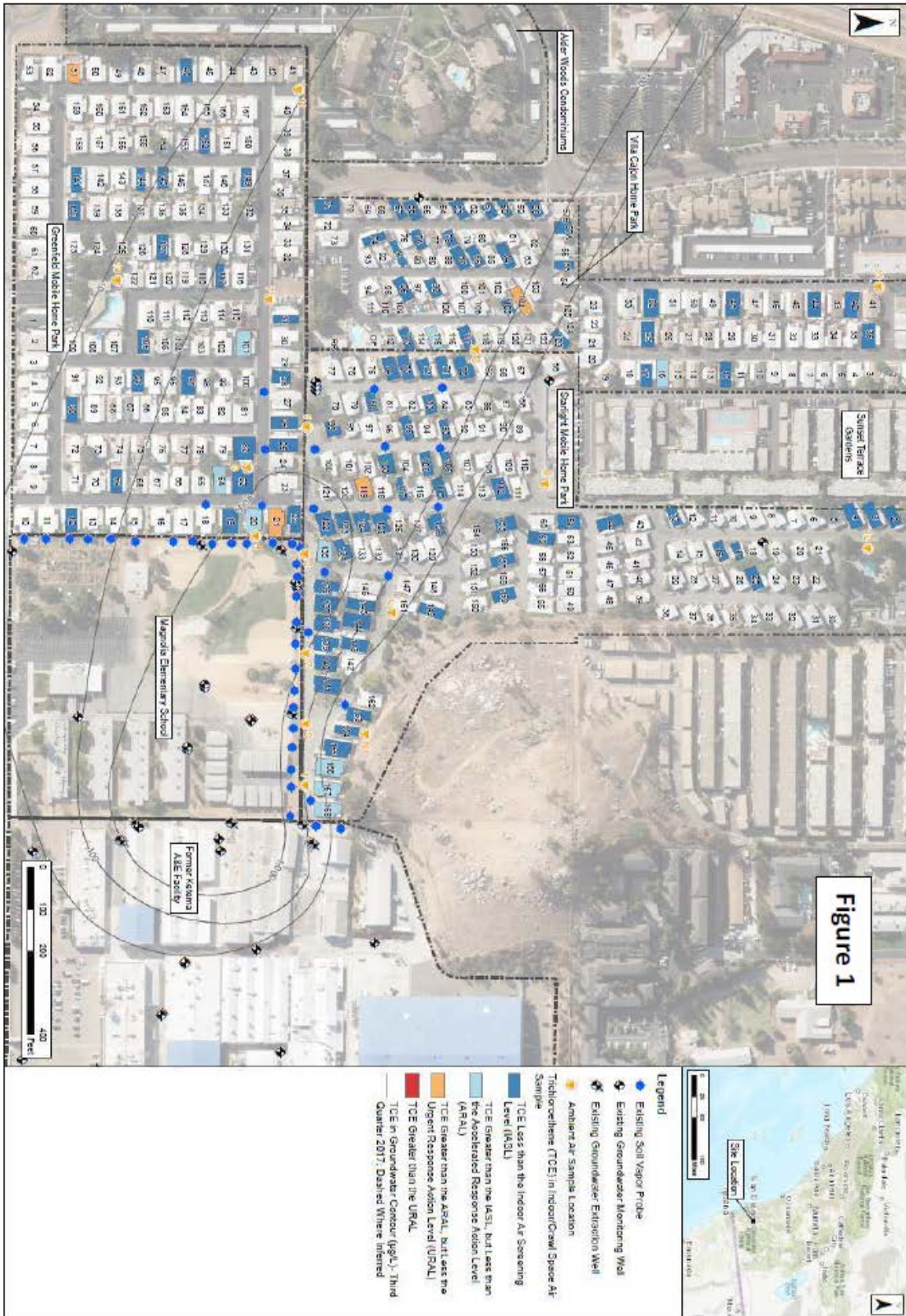


Figure 1: Site map of vapor sampling at Starlight, Greenfield and Villa Cajon Mobile Home Parks

## 6. Commercial Agriculture Regulatory Program

*Staff Contact: Christina Arias*

Approximately 1,200 agricultural operations have joined one of four Third-Party Groups and enrolled in [Order No. R9-2016-0004](#)<sup>5</sup> (Order). Although this represents a strong start, there are many more agricultural operations in the Region that are not enrolled, yet subject to the requirements of the Order. Staff is reviewing strategies for increasing enrollment. One potential strategy is coordinating with the Third-Party Groups and Municipal Separate Storm Sewer System (MS4) Copermittees to identify agriculture operations within their jurisdictions. The four approved Third-Party Groups in the San Diego Region are: San Diego Region Irrigated Lands Group, Upper Santa Margarita Irrigated Lands Group, Deluz Agricultural Group, and Frog Environmental.

Staff also contacted Central Coast Water Board staff members to discuss their enforcement process for non-filers, which has been successful at compelling dischargers to enroll. Staff plans to initiate progressive enforcement efforts on non-filer operations residing in watersheds draining to waterbodies that are impaired for sediment or eutrophic conditions.

## 7. Dredge and Fill Project Action Report, First Half of Fiscal Year 2017-18, July through December 2017

*Staff Contact: Eric Becker*

### Program Background

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

The regulations governing California's issuance of Certifications are contained in sections 3830 through 3869 of title 23 of the California Code of Regulations. The San Diego Water Board is the State agency responsible for issuing such Certifications for projects in the San Diego Region. The San Diego Water Board has delegated this function to the Executive Officer.

Upon receipt of a complete Certification application, the San Diego Water Board or its Executive Officer may 1) issue a Certification that the project complies with water quality standards, 2) issue a conditional Certification for the project, 3) deny Certification for the project, or 4) deny Certification for the project without prejudice when procedural matters preclude taking timely action on the Certification application. If the certification is denied, the federal license or permit for the project is deemed denied as well. In cases where there will be impacts to waters of the United States attributable to the project, the Certification applicant must show that a sequence of actions has been taken to first avoid, then minimize, and lastly mitigate for the impacts. The

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<sup>5</sup> *General Waste Discharge Requirements for Discharges From Commercial Agricultural Operations for Dischargers That Are Members of a Third-Party Group in the San Diego Region*

Certification will include appropriate conditions to offset unavoidable impacts through compensatory mitigation. In cases where a federal permit or license is not required because project impacts have been determined to only affect waters of the State; the San Diego Water Board may permit the project by adopting Waste Discharge Requirements (WDRs) with appropriate conditions to protect the water quality and beneficial uses of those waters.

### Application Processing and Timelines

The San Diego Water Board receives Certification applications for various projects and must determine if the application is *incomplete* or *complete*. *Incomplete* applications do not contain the information required to be included pursuant to applicable regulations. When an application is judged by Board staff to be *incomplete*, the Applicant is informed and requested to submit the information needed to complete the application. Applications that are deemed *complete* have submitted the statutory minimum required information. However, a *complete* application does not usually mean the project is ready to be certified. The need for additional supplemental information to make a final determination on the application must be determined on a case-by-case basis and requested from the Applicant.

The San Diego Water Board currently has over 100 pending Certification applications (including applications for certification amendments) as of December 31, 2017. Certification applications are prioritized for processing based on threats to water quality, human health or infrastructure, application submittal date, project size, funding at risk, and other factors. The average time for Board staff to a) evaluate an application for completeness; b) identify the need for supplemental information; c) evaluate the supplemental information once it is submitted; d) evaluate and determine compensatory mitigation requirements; and e) make a final determination to issue or deny the Certification, is 12 to 18 months. In the first half of Fiscal Year (FY) 2017-18, the average time for a project to receive a certification after an application is deemed complete has been approximately 6 months.

### Certifications, Amendments and Enrollments

Table 1 below contains a list of actions taken during the first half of FY 2017-18 for the months of July through December.

**Table 1**  
**San Diego Water Board Actions in First Half of FY 2017-18**

|              | Certifications | Amendments | Enrollments <sup>6</sup> |
|--------------|----------------|------------|--------------------------|
| July         | 7              | 2          | 1                        |
| August       | 5              | 2          | 1                        |
| September    | 2              | 0          | 1                        |
| October      | 9              | 0          | 1                        |
| November     | 3              | 1          | 1                        |
| December     | 3              | 2          | 1                        |
| <b>Total</b> | <b>29</b>      | <b>7</b>   | <b>6</b>                 |

<sup>6</sup> Enrollments are projects that are regulated through statewide Certifications or WDRs. The projects must meet certain criteria such as size, type and other criteria to qualify for enrollment. The San Diego Water Board issues a Notice of Applicability to the applicant to enroll these projects under the appropriate Certification or waste discharge requirements (WDRs).

Project specific information on the certifications and amended certifications issued from July through December 2017 are found on the San Diego Water Board web site at: [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/401\\_certification/401projects.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/401projects.shtml).

### **Process Improvements**

The 401 Program budget levels are too small to adequately staff a program that averages issuing approximately 80 certifications per year and regulates over 400 on-going permitted projects annually. Due to a significant backlog (over 100 in 2017) of projects requiring decisions on certification, the San Diego Water Board has not been able to process all applications for certifications in a timely manner. To better manage this project backlog over the past year, the 401 Program staff reviewed all existing applications for those that could be withdrawn due to the age of the application or project cancelation (at least 10 percent of the project applications). For new applications, 401 Program staff are implementing a “triage” approach to more quickly process applications. The triage approach puts projects into one of three categories: 1) Low impact projects that can be certified with a shortened certification template; 2) Complete project applications with sufficient proposed compensatory mitigation; and 3) projects with inadequate proposed compensatory mitigation that unless improved, would be denied certification. The triage approach has increased regulatory efficiency and effectiveness by directing staff efforts to processing project applications that are largely complete with approvable compensatory mitigation proposals to compensate for impacts and ensure a net gain in aquatic resources. Of the approximately 70 certifications issued in 2017, 20 of them have been with the shortened certification template.

### **Reporting and Compliance**

As discussed in the previous 401 Program EORs, many permittees fail to submit required monitoring reports after receiving their Certifications. The 401 Program staff have reviewed the files for over 400 permitted projects, with Certifications issued over the last 5 years, to determine if required monitoring reports were missing. Project permittees with missing or inadequate monitoring reports were notified and given the opportunity to submit complete reports. Many permittees with missing reports also had other compliance issues such as delayed implementation of compensatory mitigation requirements. These permittees received escalating enforcement ranging from staff issued violation notices to imposition of administrative civil liability (ACL) monetary penalties. The effort has been very successful at assuring the regulated community stays in compliance. Almost all of the certified projects since 2012 have now submitted their required reports. Oversight is an ongoing effort that must continue.

### **City of San Diego Funded Position**

The San Diego Water Board received a report at the August 9, 2017 Board meeting regarding the City of San Diego (City) offer to fund one additional staff position in the 401 Program for a period of 5 years dedicated to expediting the processing of applications for City water, wastewater and storm water projects. In order to move forward with funding the staff position for up to five years, staff is working with the State Water Resources Control Board (State Water Board), to develop and execute a Contract Standard Agreement with the City. It is anticipated that the contract will be finalized and executed for the City to fund the position in FY 2018-19.

## 8. Regional Enforcement Priorities for 2018

*Staff Contact: Chiara Clemente*

Advisory and prosecution staff members (led by the Executive Officer and Assistant Executive Officer, respectively) met in January for an annual evaluation and consideration of regional enforcement priorities. Current priorities were presented in the [April 2017 Executive Officer Report](#). For 2018, the advisory and prosecution staff collectively recommend to continue to prioritize enforcement of violations that affected one or more [key beneficial use categories](#) (i.e. municipal water supply, fish and shellfish consumption, recreation, and ecosystem health) in a key area for the specific use.

Consistent with our Practical Vision goal of focusing work on the most important issues, this recommended approach to prioritizing enforcement ensures that violations which potentially do harm in the most important water body areas are not overlooked. However, it is not the only determinate factor when selecting cases for formal enforcement. Other factors considered include variables such as timing/case readiness, available resources, program-specific enforcement priorities, degree of harm to receiving waters, and Enforcement Policy priorities such as considerations for environmental justice and the human right to water.

Examples of priority enforcement scenarios might include sanitary sewer overflows that result in beach closures at intensively used beaches, unauthorized discharges with pollutants that affect a local water supply, unreasonable delays in bay sediment cleanups, or unpermitted alteration high quality or reference stream areas.

### Public Opportunity to Provide Input through March 15

The new [2017 Water Quality Enforcement Policy](#) added a recommendation that each Regional Water Board consider identifying general enforcement priorities based on input from members of the public and Regional Water Board Members. As a result, staff is now seeking input from the Board and public on the recommended regional enforcement priorities.

In addition to this EO report, staff will post and distribute information and solicit comments via our website, social media, and our email subscription list for penalty notices.

Written suggestions may be submitted via email to [sandiego@waterboards.ca.gov](mailto:sandiego@waterboards.ca.gov). General questions about enforcement prioritization should be directed to Ms. Chiara Clemente, Enforcement Coordinator, at [Chiara.Clemente@waterboards.ca.gov](mailto:Chiara.Clemente@waterboards.ca.gov).

## 9. Enforcement Actions for November and December 2017 (*Attachment B-9*)

*Staff Contact: Chiara Clemente*

During the months of November and December 2017, the San Diego Water Board issued 9 written enforcement actions as follows; 2 amendments to Cleanup and Abatement Orders, 1 Notice of Violation, and 6 Staff Enforcement Letters. A summary of each enforcement action taken is provided in Attachment B-9. 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/](http://www.waterboards.ca.gov/water_issues/programs/enforcement/)

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

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

## **10. Sanitary Sewer Overflows and Transboundary Flows from Mexico in the San Diego Region – October and November 2017 (Attachment B-10)**

*Staff Contact: Keith Yaeger*

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.

### **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 on-line database system, the *California Integrated Water Quality System* (CIWQS). These spill reports are required under the [Statewide General SSO Order](#)<sup>7</sup>, the [Regional Water General SSO Order](#)<sup>8</sup>, and/or individual National Pollutant Discharge Elimination System (NPDES) permit requirements. Some federal entities<sup>9</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](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-10):

- Table 1: October 2017 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region.

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<sup>7</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*.

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<sup>8</sup> San Diego Water Board Order No. R9-2007-0005, *Waste Discharge Requirements for Sewage Collection Agencies in the San Diego Region*.

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<sup>9</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.

- Table 2: November 2017 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region.
- Table 3: October 2017 - Summary of Private Lateral Sewage Discharges in the San Diego Region.
- Table 4: November 2017 - Summary of Private Lateral Sewage Discharges in the San Diego Region.

A summary view of information on SSO trends provided in the following attached figures (Attachment B-10):

- Figure 1: Number of SSOs per Month
- Figure 2: Volume of SSOs per Month

These figures show the number and total volume of sewage spills per month from October 2016 to November 2017. During this time period, 42 of the 49 collection systems regulated under the SSO Program, reported one or more sewage spills. Seven collection systems did not report any sewage spills. A total of 328 sewage spills were reported and approximately 1.2 million gallons of sewage reached surface waters.

Additional information about the San Diego Water Board sewage overflow regulatory program is available at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/sso/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/sso/index.shtml).

### **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 [Order No. R9-2014-0009](#), 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 tables (Attachment B-10):

- Table 5: October 2017 - Summary of Transboundary Flows from Mexico into the San Diego Region.
- Table 6: November 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 [IBWC Minute No. 283](#), the

USIBWC and the Comisión Internacional de Límites y Aguas (CILA)<sup>10</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).

Additional information about sewage pollution within the Tijuana River Watershed is available at

[https://www.waterboards.ca.gov/sandiego/water\\_issues/programs/tijuana\\_river\\_valley\\_strategy/sewage\\_issue.html](https://www.waterboards.ca.gov/sandiego/water_issues/programs/tijuana_river_valley_strategy/sewage_issue.html).

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

### **1. State Water Board Approves Amendment to 2009 Policy on Supplemental Environmental Projects (SEP Policy)**

*Staff Contact: Chiara Clemente*

The Policy on Supplemental Environmental Projects (SEP Policy, or Policy) establishes criteria for the Regional Water Boards' review and approval of Supplemental Environmental Projects (SEPs) through deferred liability in a settlement order pursuant to Government Code section 11415.60. The original SEP Policy was approved in 2009. On December 5, 2017 the State Water Resources Control Board approved updates to the SEP Policy that will go into effect pending OAL Approval. The new SEP Policy is available on the State Board's [Enforcement Webpage](#).<sup>11</sup> Below is a summary of significant changes and their potential or anticipated effects for the San Diego Region.

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<sup>10</sup> The Mexican section of the IBWC.

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<sup>11</sup> [https://www.waterboards.ca.gov/water\\_issues/programs/enforcement/docs/sep\\_policy\\_amendment.pdf](https://www.waterboards.ca.gov/water_issues/programs/enforcement/docs/sep_policy_amendment.pdf)

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- 1) The Policy now requires Regional Boards and Divisions to solicit and evaluate SEP proposals within its jurisdiction at least annually and to notify applicants of the results. San Diego Water Board staff believes that the process established through [Resolution No. R9-2017-0014](#),<sup>12</sup> with ongoing solicitations, largely addresses these new requirements. However, staff anticipates some effort to update our SEP application materials and [website](#) to conform to State Water Board solicitation and reporting requirements.
- 2) The Policy identifies SEP-eligible categories and a list of projects not acceptable as SEPs. As our regional list of "[project concepts supported by the San Diego Water Board](#)" is updated via the ongoing solicitation process, staff will review previously-supported concepts to identify whether each concept conforms to categories in the Policy and then eliminate any SEPs that may no longer qualify (and notify the applicant accordingly).
- 3) The Policy now requires SEPs to be fully expended within 36 months from the adoption of the Settlement Order. This will likely require proponents of large, multi-phase projects to repackage their applications to focus on more immediate outcomes. This could potentially complicate efforts to use SEP funds to target certain wetland projects identified as priorities in Resolution [R9-2015-0041](#), *Resolution to Support Restoration of Aquatic Ecosystems in the San Diego Region*.
- 4) The Policy endorses and incentivizes the use of SEP funding to address Environmental Justice (EJ) issues, Human Right to Water, and climate change (as they relate to water quality projects). The San Diego Water Board already takes these into consideration in their solicitation and review process,<sup>13</sup> so the only possible outcome from this is that project proponents may be able to fund more work when selecting these types of projects.
- 5) The Policy clarifies that for mandatory minimum penalties (MMPs) less than or equal to \$15,000, the full amount of the MMP can be used to fund a SEP (SEP amounts from other penalties are generally capped at fifty percent of the liability). In this region, MMPs have not been used to fund SEP projects in recent years, but this is a valuable tool to regions that can use small sums of money to support a larger effort (e.g. a monitoring program).
- 6) The new Policy provides additional criteria and clarifying language with regards to third party-performed and third party-administered SEPs. With third party-administration, Water Boards can utilize a third party to oversee SEP work, reporting, and completion. In the case of third party-performed SEPs, a third party completes the SEP on behalf of the discharger. Many of the SEPs supported by this Board are, or would be, third party-performed SEPs. The Policy maintains that dischargers, rather than the third party, remain responsible for SEP completion under either circumstance. Several parties have

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<sup>12</sup> [https://www.waterboards.ca.gov/sandiego/board\\_decisions/adopted\\_orders/2017/R9-2017-0014.pdf](https://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2017/R9-2017-0014.pdf)

<sup>13</sup> For example, see [Resolution R9-2015-0020](#), *A Resolution in Support of Funding Projects that Further the Practical Vision Priorities with Consideration to Environmental Justice and Disadvantaged Communities and the Recovery of Streams, Wetlands and Riparian Systems*

suggested that such a transfer of liability would be an incentive to propose a SEP during settlement discussions.

Despite significant changes to the Policy, major modifications to the San Diego Water Board's SEP selection process are not anticipated or recommended at this time. Staff will continue to expend the resources necessary to maintain a list of vetted SEP concepts and conform to the new Policy, recognizing that oftentimes dischargers would prefer to either propose to fund a SEP not on the list, or not fund a third party-performed SEP.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

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

February 14, 2018

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 |
|--|------------------------------------|----------------|----------------------|--------------|
| <b>March 14, 2018</b><br><i>No Meeting Scheduled</i>   |                                    |                |                      |              |
| <b>April 11, 2018</b><br><i>Mission Viejo City Council Chambers</i>  |                                    |                |                      |              |
| Waste Discharge Requirement Rescission: Rescission of Orders Nos. 93-27 (Hideaway Lake Estates), and R9-2007-0046 (Oak Tree Ranch Private Residential Community Wastewater Treatment and Disposal facility, San Diego County (Tentative Order No. R9-2018-0006). ( <i>Brandon Bushnell and Alex Cali</i> ) | WDR Rescission                     | 100%           | 2-Mar-2018           | Yes          |
| Waste Discharge Requirement Rescission: Rescission of Order No. 87-61, California Department of Forestry and Fire Protection, La Cima Conservation Camp, San Diego County (Tentative Order No. R9-2018-XXX). ( <i>Brandon Bushnell and Alex Cali</i> )   | WDR Rescission                     | 25%            | TBD                  | Yes          |
| Issues in Orange County: Invasive Plant Removal, Homeless, Crown Valley Restoration Project and County Reorganization ( <i>Walsh</i> )   | Informational Item                 | NA             | NA                   | NA           |
| Sierra Club Zero Trash Initiative ( <i>Gibson</i> )  | Informational Item                 | NA             | NA                   | NA           |
| Presentation on Steelhead Recovery Efforts ( <i>Loflen</i> )   | Informational Item                 | NA             | NA                   | NA           |
| Addressing Threats to Beneficial Uses From Climate Change ( <i>Haas</i> )  | Tentative Resolution               | 100%           | 23-Feb-2017          | No           |
| NPDES Permit Reissuance for the San Elijo Water Reclamation Facility ( <i>Lim</i> )  | Permit Reissuance                  | 100%           | 26-Feb-2018          | maybe        |
| NPDES Permit Reissuance for the HARRF in Escondido, CA ( <i>Lim</i> )  | Permit Reissuance                  | 100%           | 26-Feb-2018          | maybe        |
| <b>May 9, 2018</b><br><i>San Diego Water Board</i>   |                                    |                |                      |              |
| Southern Regional Tertiary Treatment Plant, Camp Pendleton, San Diego County. Tentative Order No. R9-2018-0023 ( <i>Cali</i> )   | Master Recycling Permit Reissuance | 95%            | TBD                  | No           |
| Workshop on Triennial Review of the Basin Plan: Outcome of the 2015 Rec-1 TMDL Reopener and Comments for the 2018 Review ( <i>Ebsen</i> )  | Workshop                           | 0%             | TBD                  | NA           |
| Consideration of the Orange County Water Quality Improvement Plan ( <i>Walsh</i> )   | Tentative Resolution               | 0%             | TBD                  | No           |

**Agenda Items Requested by Board Members**

| <b>Requested Agenda Item</b>  | <b>Board Member</b> | <b>Status</b>                         |
|---|---------------------|---------------------------------------|
| <b>June 24, 2015</b>  |                     |                                       |
| 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               |                                       |
| <b>August 12, 2015</b>  |                     |                                       |
| Information item regarding data supporting Basin Plan Water Quality Objectives  | Olson               |                                       |
| <b>December 16, 2015</b>  |                     |                                       |
| San Diego River restoration and land acquisition workshop   | Strawn              |                                       |
| <b>August 10, 2016</b>  |                     |                                       |
| SCCWRP Flow Recovery Project Update   | Strawn              |                                       |
| <b>March 15, 2017</b>   |                     |                                       |
| 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           |                                       |
| <b>June 21, 2017</b>  |                     |                                       |
| Follow up on results from Environmental Justice Symposium   | Abarbanel           | October 2017                          |
| Follow up on San Diego Unified Port District information item   | Abarbanel           |                                       |
| <b>August 9, 2017</b>   |                     |                                       |
| 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                 |
| <b>September 13, 2017</b>   |                     |                                       |
| Informational Item on SDWB Emergency Response Procedures  | Warren              |                                       |
| Amendments to WDRs for Commercial Agriculture   | Abarbanel           |                                       |
| <b>October 11, 2017</b>   |                     |                                       |
| Update on MS4 Permit's approach to addressing human sources of pathogens and trash affecting receiving waters               | Olson               | March 2018 EOR                        |
| Update on Steelhead Recovery effort   | Strawn              | Spring or Summer 2018                 |
| Update on Commercial Agriculture entollments  | Abarbanel           | December 2017                         |
| Discussion with local partners regarding next gen monitoring approaches   | Abarbanel           |                                       |
| Return EJ Resolution to Board for approval  | Abarbanel           |                                       |
| <b>December 13, 2017</b>  |                     |                                       |
| Update on aerators installed in San Diego River   | Strawn              |                                       |
| Update on Linden Road MS4 issues  | Abarbanel           | April 2018 Executive Officer's Report |



January 29, 2018

San Diego Regional Water Quality Control Board  
February 14, 2018 – 9:00 am  
2375 Northside Dr.  
San Diego CA 92108  
David Gibson, Executive Director

### **SWPPP Internship Speakers**

- 1) Speaker #1 –SWPPP Internship Overview
- 2) Speaker #2 – SWPPP at Flora Vista
- 3) Speaker #3 – Flora Vista DROPS objectives
- 4) Speaker #4 – Flora Vista DROPS planning
- 5) Speaker #5 – Flora Vista DROPS Construction

### **Speaker #1 – SWPPP Internship Overview**

#### Slide 1 – SWPPP Internship Overview

Thanks for inviting us.

We are 5<sup>th</sup> and 6<sup>th</sup> grade students from Flora Vista, one of the eleven schools that are currently writing Stormwater Pollution Prevention Plans for their school sites.

We have all spent at least one or for some, two years learning about stormwater runoff, collecting data and designing and implementing BMPs at our school campuses in the Encinitas Union School District.

#### Slide 2 – SWPPP Plan

During our school year the information we research and produce is collated into our final document a Stormwater Pollution Prevention Plan, SWPPP for our school campus.

#### Slide 3 – ECC Gerry and Santos

So how did this all come about? In 2013, Mr. Dean designed the SWPPP Internship program, and presented the idea to Gerry Devitt, the Encinitas School District Facility and Maintenance Director.

With Mr. Dean's experience in writing SWPPPs, he thought that students could learn and be involved in creating SWPPPs for school campuses. And beyond the educational benefit, the District could meet goals and objectives required in the Phase II Small Municipal Separate Storm Sewer System (MS4) permit.

Slide 4 – School Districts included in next permit renewal

And during this time as interns, we have learned enough to recommend that in the next permit renewal at the beginning of next year, you focus on what schools can do – like:

- Education and Outreach
- Good housekeeping
- Trash control

Slide 5 – Interns at Work

The SWPPP Internship program is run like a business. We fill out an application to apply for an internship and then work as interns to produce our product – a Storm Water Pollution Prevention Plan for our school campus. Mr. Dean, is the executive of our business and we, this year almost 300 interns, have been hired... to do, pretty much, all the work!

Slide 6 –Interns

Yes, as you will see in our presentation today, we do all the work. And, what you will find amazing, is that after doing all this work; collecting water samples in the pouring rain, writing this 60 page SWPPP, we get paid... zero! We are unpaid interns.

Slide 7 – Research & Education

During the first section of the SWPPP Internship Program, we cover education and research. In our meetings we discuss the impact storm water has in our local environment, along with school site assessment and we discuss how the school discharges pollutants into storm water runoff.

Slide 8 –School Site Storm Drain System

Another part of our education includes studying blueprints of the school site storm water system. We follow the drainpipes that carry rainwater on campus and see where it ties into the City's infrastructure. The City of Carlsbad and Encinitas give us the GIS data of the storm water drains, the outfalls, and the path our campus rainwater takes to the ocean.

Slide 9 - Data Collection and Analysis

During the second section of our SWPPP Program, we continue with data collection and we start evaluating our results. Of course we enjoy going out and conducting our monthly visual observations, but the most exciting data we collect occurs... during a rainstorm!

Slide 10 - Rain Event

When it starts to rain, we put on our PPE. The equipment manager has prepared all the coolers, test bottles and forms and out we go into the pouring rain.

Slide 11 Collection Procedures

We follow very strict collection procedures and we fill out a chain of custody form.

Slide 12 – Scientific Data

Each drain groups tests for specific pollutants. These are based on our observations of the potential source of the pollutants. When we get the results we begin our evaluation process. Our first question is “do our test results exceed EPA benchmark for the specific test?”

Slide 13 – What we learned from our data

In the SWPPP program, we conduct monthly visual observations at five drains on campus. We look for, and document, signs of pollution and sources of pollution.

The lab results produce facts.

The data that we collect from our test results and our visual observations proved that yes, our school campuses were contributing to the pollution in our ocean.

Here is what we learned. For the school that had TSS levels at 660 milligrams per liter, the EPA benchmark is 100 milligrams per liter. For fertilizer, the nitrate result was 3.29 milligram per liter, EPA benchmark 0.68 milligram per liter.

Slide 14 – Solutions - BMPs

It would be sad if this was what the SWPPP Program was about, documenting the fact that we are polluting the ocean.

However, the best part of the program is that we can now turn our efforts to reducing or eliminating the pollutants from our campus.

Each of the five drain groups create three Best management Practices (BMPs) for their drains:

- Non-Structural or educational BMP
- An easy to install and inexpensive BMP and
- An elaborate and potentially expensive BMP

Slide 15 – Best Management Practices

During the last three years we have written into our plan, and implemented solutions.

- Conducted assemblies
- Made posters
- Created comics
- Cleaned catch basins and even designed a bioswale!

Slide 16 – End of year presentation

We present our completed plan to the school board

- 1 minute video
- 6 minute PowerPoint – that include our BMPs
- Present completed plan and have school Board president sign it

Slide 17 – End of the year

Over 300 people attended our presentation

Slide 18 – DROPS Grant

In 2016, the SWPPP interns at our school identified the need for a large BMP to build a bioswale to filter storm water on our campus before it goes to the ocean.

But the school district had no funds to pay for it.



And while we were able to place some less expensive BMPs on campus, like drain grates, we really wanted to make a bigger impact!

Mr. Dean heard about a grant from the California Water Board and applied for it. It was called the DROPS Grant. It stands for Drought Response Outreach Program for Schools.

The people at DROPS must have really liked our program because our school district won a \$720,000 to complete water quality projects at five EUSD schools.

#### Slide 19 – Flora Vista Parking Lot

Once our school got the “go-ahead” to get started on our big BMP our interns began going to extra meetings each month to learn about and plan our big bioswale.

#### Slide 20 – Preliminary Plans

In November, we reviewed the preliminary design plans. In January, we met with the landscape architect to select plants that will thrive in our bioswale.

#### Slide 21 – Survey and Topography

A survey crew came to our staff meeting and we met with surveyors and learned about where water flows downhill on our campus, and the importance of this information in our plan.

#### Slide 22 – Civil Engineer

The civil engineer discussed ideas and how the project would improve water quality.

#### Slide 23 – Flora Vista Project Plan

Here is one of the sheets from our project plan. We add the color flourishes.

#### Slide 24 – Contractor walk through

With plans and bids specification completed, we conducted a walk through with the contractors.

#### Slide 25 – Bid Opening

We opened the bids and awarded the construction contract.

#### Slide 26 – Project start

At the beginning of the project we conducted a public presentation

#### Slide 27 – Groundbreaking

We even used golden shovels to start construction.

#### Slide 28 – Construction Supervision

During the construction phase, we walked onto the job site and learned how the bioswales were constructed and the culverts were installed.

#### Slide 29 – Construction Verification

We even checked the plans to make sure the work was being completed to specs.

#### Slide 30 – Completion

Here is our completed DROPS project at Flora Vista

Slide 31 – Beyond the School Community

Our program has been recognized by industry organizations as making meaningful real world changes.

Slide 32 – Industry Presentations

Unpaid SWPPP Interns have presented to several industry and educational groups including:  
California Stormwater Quality Association  
Tri-State Seminar in Las Vegas

Slide 33 – We are Shaping the Future

Thank you for allowing us to speak today, we are proud to be working with you in helping improve water quality in the San Diego Region.

Slide 34 – Thanks to our Partners

SWPPP is supported by the following agencies and business.

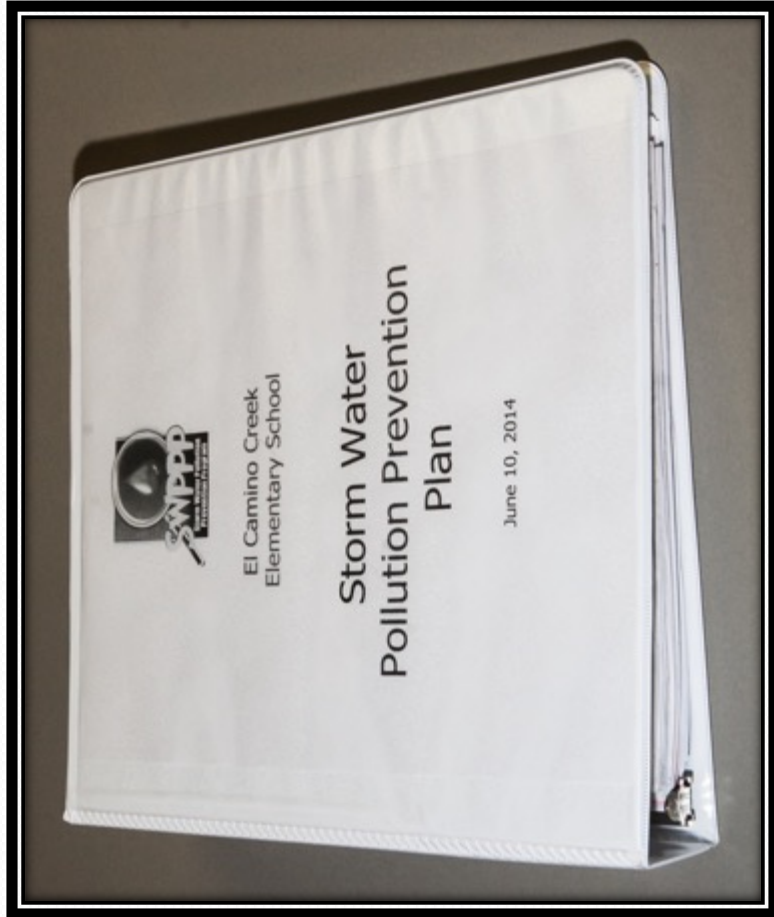
Slide 33 – Thank You!

We would be happy to answer a questions.

# SWPPP Internship



# SWPPP - for our campus



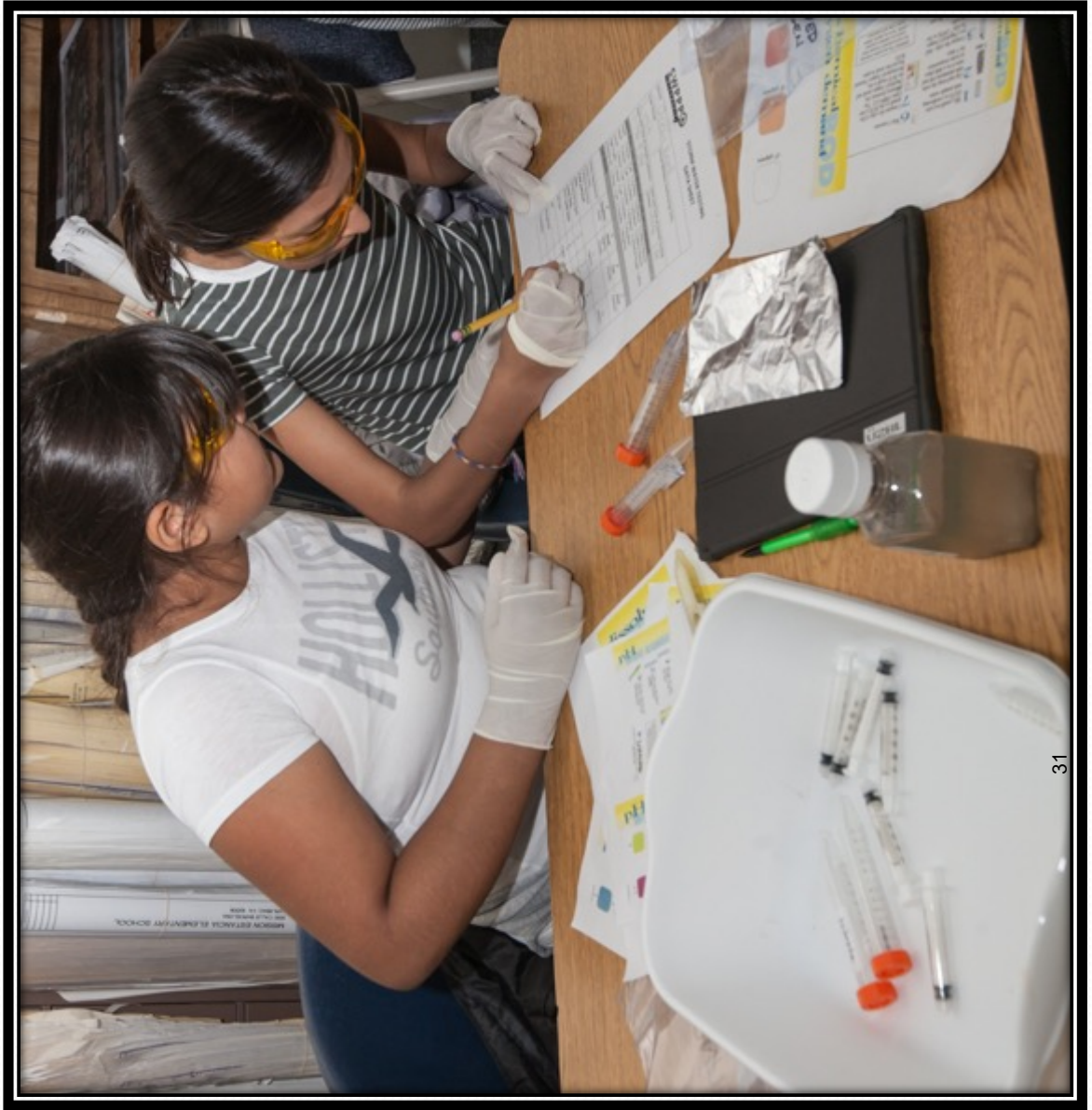
# EUSD Facility Director, Gerry Devitt



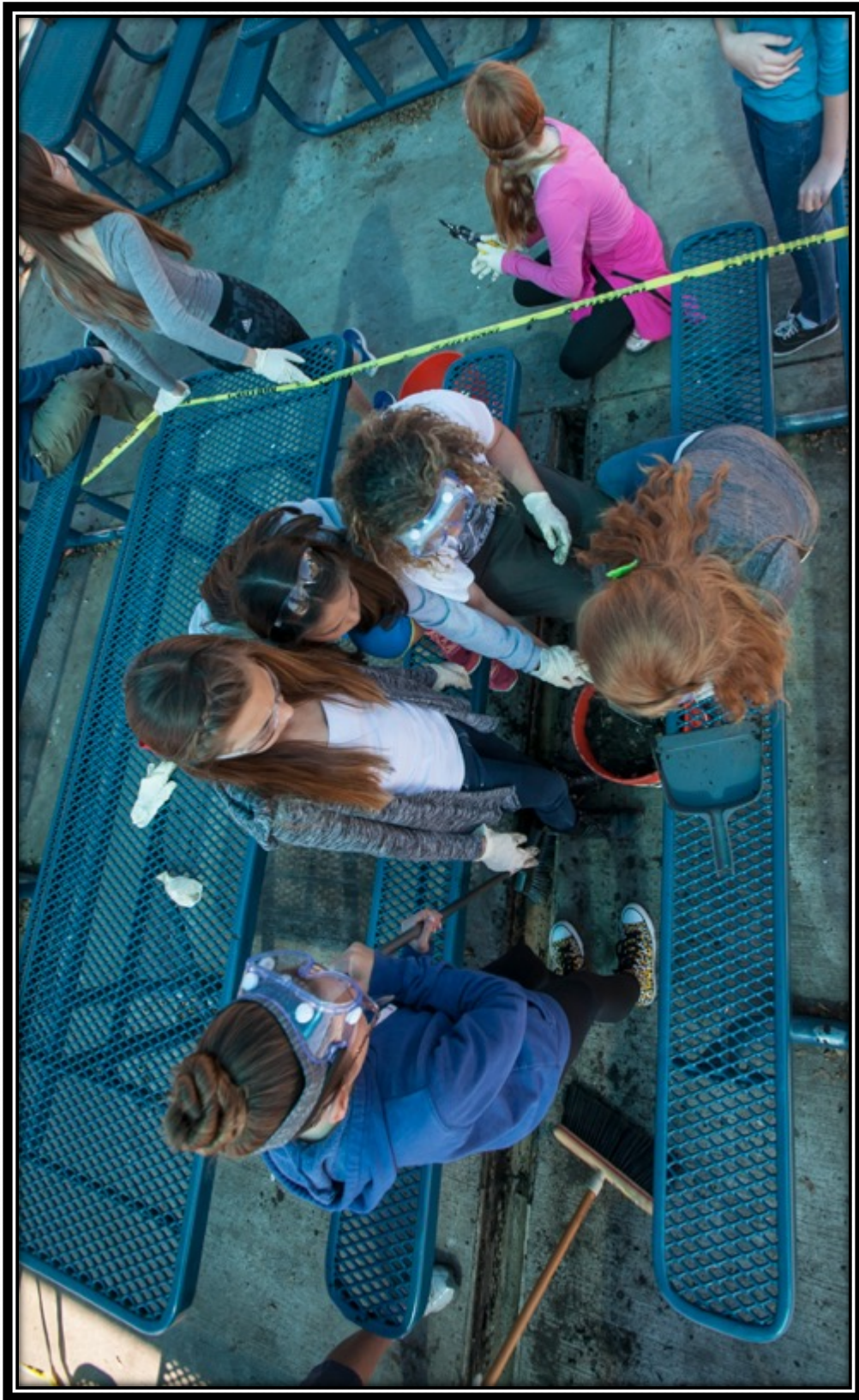
School Districts designated in next, permit renewal.



# Interns at Work



# Interns

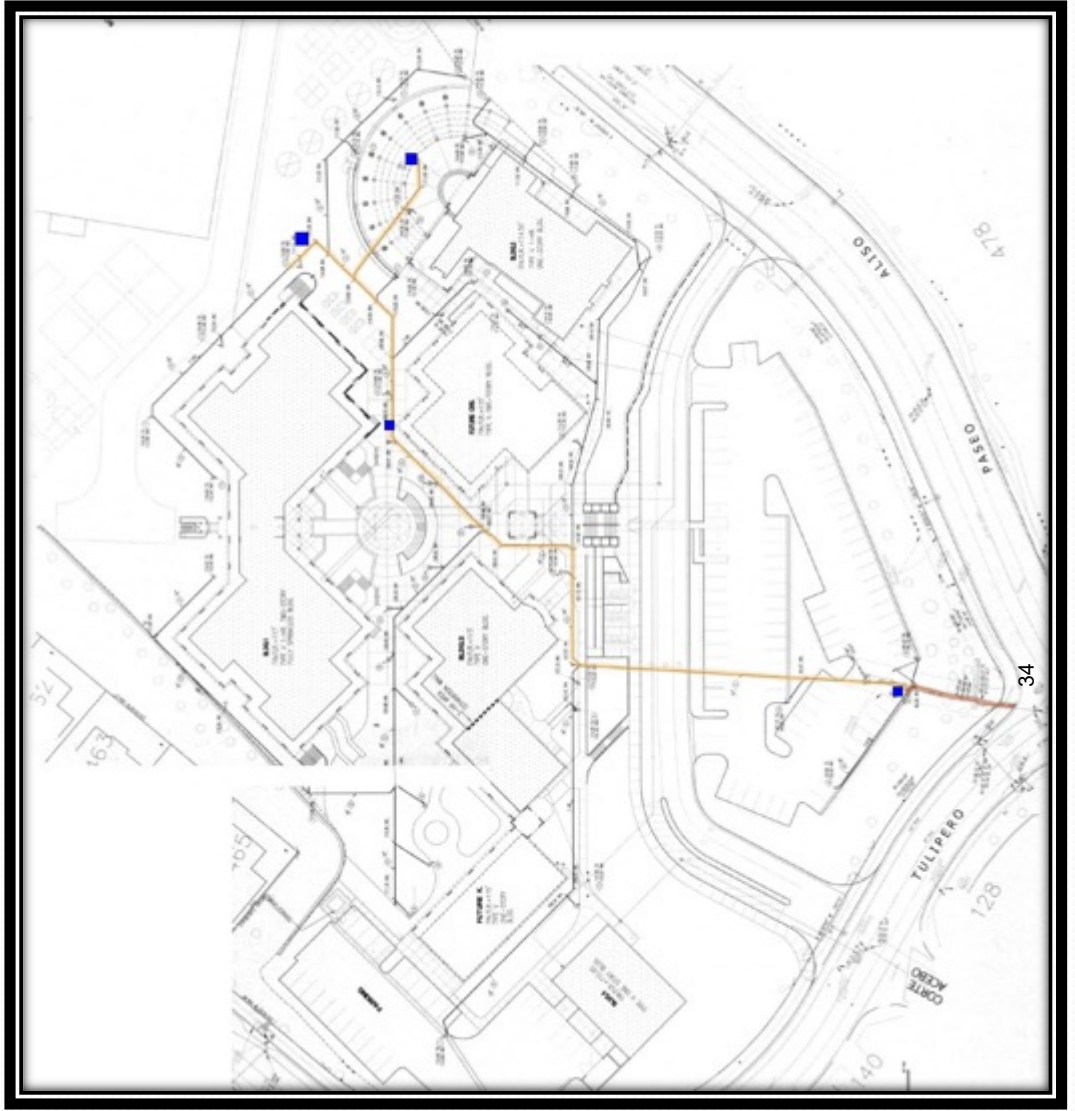




# Research and Education



# School Site Storm Drain System



# Data Collection and Analysis



# Rain Event



# Collection Protocol



# Scientific Data



## ENCINA WASTEWATER AUTHORITY

A Public Agency  
 6200 Avenida Encinas  
 Carlsbad, CA 92011-1095  
 Telephone (760) 438-3941  
 FAX (760) 438-3861 (PLand)  
 (760) 431-7493 (Admin)

### SAMPLE RESULTS REPORT

Report Date : 1/6/2015

ELAP Certification No. 1441      141215009  
 Ref. No. EC: 15-0004

Dean and Associates  
 765 Normandy Road  
 Leucadia, CA 92024

Attn: Mr. Bill Dean

| Sample ID | Sample Point     | Analyte Name  | Result                | Units                          | Method Reference   |
|-----------|------------------|---|-----------------------|--------------------------------|--|
| AA71149   | OPE PARKING LOT  | OMG<br>Total Suspended Solids                           | Not Detected<br>94.0  | mg/L                           | Collected: 12/12/2014<br>Time: 06:39<br>EPA1661A<br>SM25400                |
| AA71150   | OPE LUNCH        | BOD<br>Total Suspended Solids                           | 61<br>208             | mg/L                           | Collected: 12/12/2014<br>Time: 06:21<br>SM5210B<br>SM25400                 |
| AA71151   | OPE HIGH TRAFFIC | Total Suspended Solids                                  | 343                   | mg/L                           | Collected: 12/12/2014<br>Time: 06:31<br>SM25400                            |
| AA71152   | OPE FIELD        | Conductivity<br>Total Suspended Solids<br>Nitric TNT839 | 48.8<br>30.0<br>0.046 | umhos/cm<br>mg/L<br>mg/L NO2-N | Collected: 12/12/2014<br>Time: 06:35<br>SM2510B<br>SM25400<br>BEACH TNT839 |
| AA71153   | OPE ROOF         | Total Suspended Solids                                  | 11.0                  | mg/L                           | Collected: 12/12/2014<br>Time: 06:38<br>SM25400                            |

Certified By: *Julia Parks*      Date: 1/6/2015  
 Julia Parks, Laboratory Manager



# What we learned from our data



# Solutions - BMPs





# Best Management Practices



# End of Year Presentation



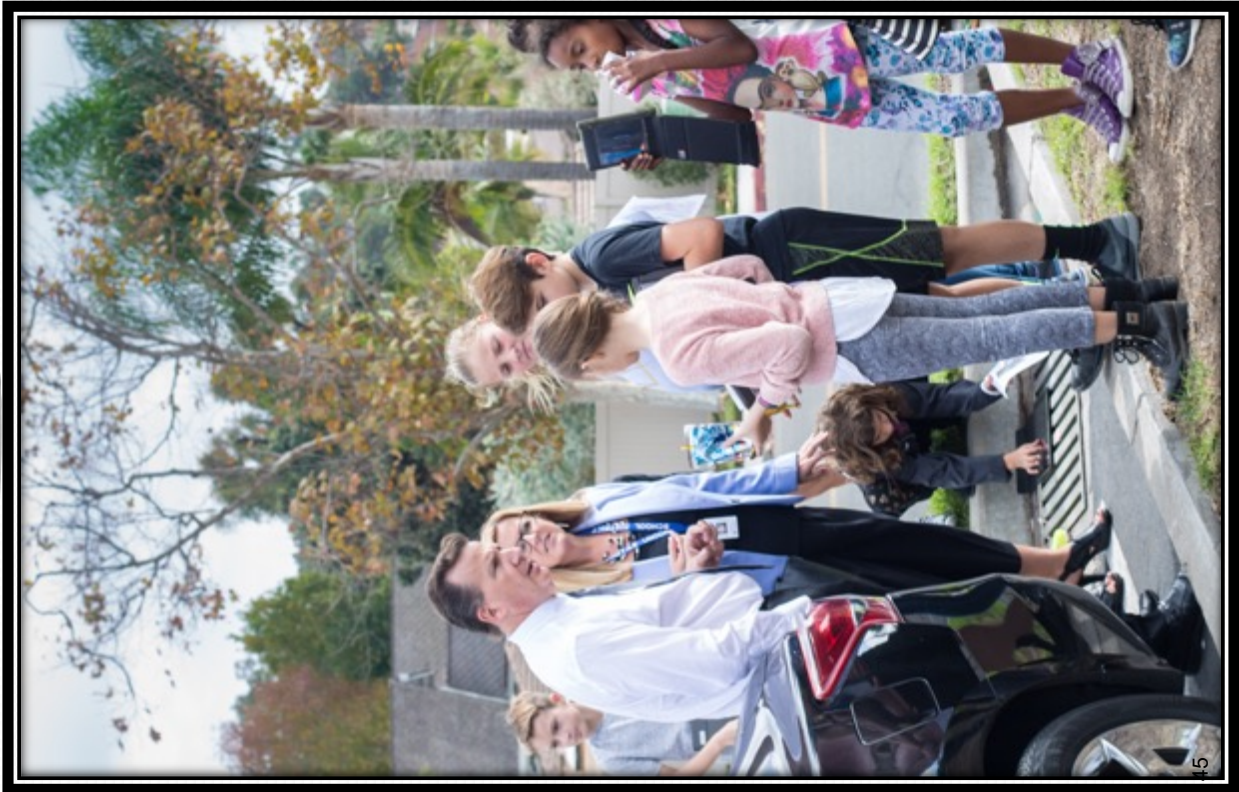
# End of the Year



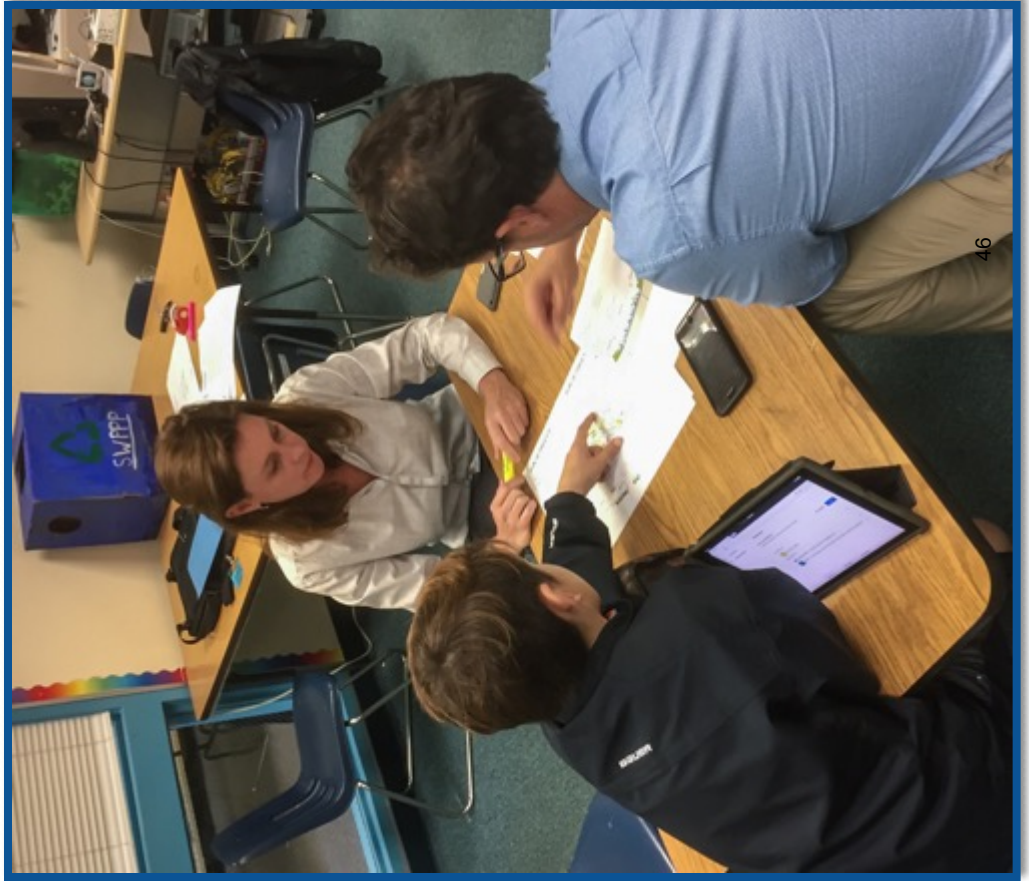
# DROPS Grant



# Flora Vista, Parking Lot



# Preliminary Plans



# Survey and Topography



# Civil Engineer







# Contractor Walk Through



# Bid Opening



# Project Start



# Groundbreaking



# Construction Supervision



# Construction Verification



# Completion





# Beyond the School Community

## AWARDS & RECOGNITION

2017 California Resource Recovery Association

"Next Generation" Recycler Award"



2016 California Stormwater Quality Association

"Outstanding Stormwater News, Information, Outreach and Media Project"



2016 San Diego Green Building Council

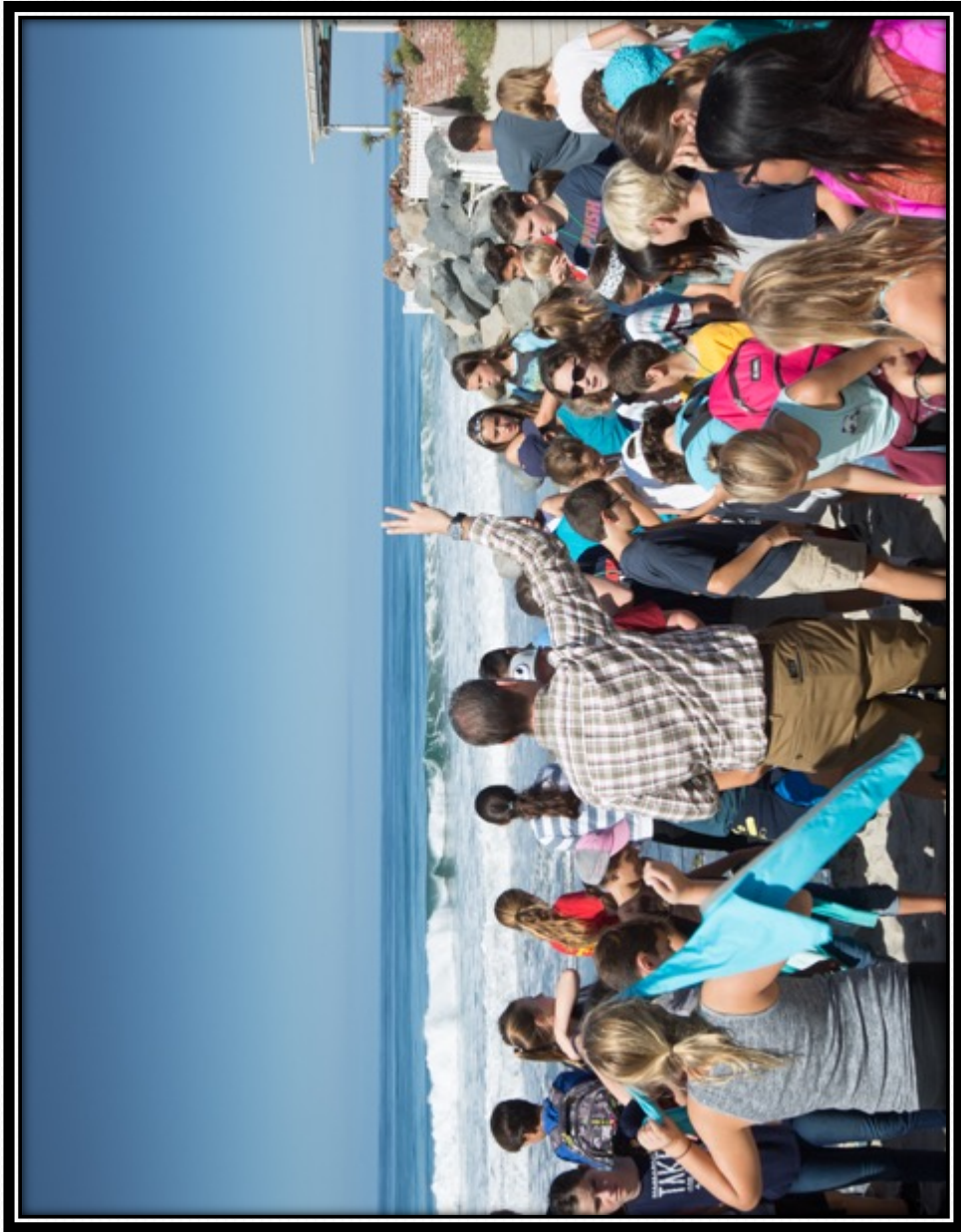
"Green Schools Challenge"



# Industry Presentations



# We Are Shaping the Future



Thanks



DUDEK



LEADERS IN  
ENVIRONMENTAL  
PROTECTION



# Thank You!



## Enforcement Actions for November and December 2017

| <b>Enforcement Date</b> | <b>Enforcement Action</b>  | <b>Entity/<br/>Facility/<br/>Location</b>                                      | <b>Summary of<br/>Violations and<br/>Enforcement</b>                               | <b>Applicable<br/>Permit/Order<br/>Violated</b>   |
|-------------------------|--|--|--|---|
| <b>11/07/17</b>         | <a href="#">Addendum No. 1 to Cleanup and Abatement Order No. R9-2011-0029</a> | MV Universal LLC and Unisys Corporation, Former Unisys Facility, Mission Viejo | Modifications to the monitoring and reporting requirements.                        | Unauthorized discharge to Waters of the State   |
| <b>11/07/17</b>         | <a href="#">Addendum No. 1 to Cleanup and Abatement Order No. R9-2017-0041</a> | Former Electralab Facility, Encinitas  | Modifications to the monitoring and reporting requirements.                        | Unauthorized discharge to Waters of the State   |
| <b>11/29/17</b>         | Notice of Violation Order No. R9-2017-0169                                     | City of Murrieta, Jackson Avenue Street Improvement Project                    | Failure to comply with notification and reporting requirements                     | Clean Water Act Section 401 Water Quality Certification (401 Certification) No. 09C-087                     |
| <b>11/02/17</b>         | Staff Enforcement Letter   | Chung Residence, 43510 Foolish Pleasure Rd., Aguanga                           | Deficient Best Management Practices (BMPs)   | National Pollutant Discharge Elimination System (NPDES) Construction General Permit Order No. 2009-0009-DWQ |
| <b>11/02/17</b>         | Staff Enforcement Letter   | Douglas Hartman, Hartman Project, Murrieta                                     | Failure to have a Storm Water Pollution Prevention Plan (SWPPP) and implement BMPs | NPDES Construction General Permit Order No. 2009-0009-DWQ   |

**Enforcement Actions for November and December 2017**

| <b>Enforcement Date</b> | <b>Enforcement Action</b> | <b>Entity/<br/>Facility/<br/>Location</b>   | <b>Summary of<br/>Violations and<br/>Enforcement</b>   | <b>Applicable<br/>Permit/Order<br/>Violated</b>           |
|-------------------------|---------------------------|---|--|---|
| <b>11/09/17</b>         | Staff Enforcement Letter  | Spread the Word, Poway Corporate Center, Lot 12, Poway  | Deficient BMPs   | NPDES Construction General Permit Order No. 2009-0009-DWQ |
| <b>11/15/17</b>         | Staff Enforcement Letter  | Eastern Municipal Water District, Temecula Valley Regional Water Reclamation Facility, Temecula | Multiple exceedances of the daily maximum discharge specification for Total Dissolved Solids (TDS), and the 12-month average discharge specifications for TDS and Chloride | Waste Discharge Requirements (WDR) Order No. R9-2000-0165 |
| <b>11/16/17</b>         | Staff Enforcement Letter  | DR Horton, Los Angeles Holding Company, Horse Creek Ridge Tract 5338 Phase 1, Fallbrook         | Unauthorized discharge due to deficient BMPs   | NPDES Construction General Permit Order No. 2009-0009-DWQ |
| <b>12/07/2017</b>       | Staff Enforcement Letter  | William Lyon Homes, Grand Monarch, Dana Point   | Failure to submit annual report and have a SWPPP on site   | NPDES Construction General Permit Order No. 2009-0009-DWQ |

Table 1: October 2017 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region

| Responsible Agency  | Collection System (CS)  | Total Volume <sup>1</sup> | Total Recovered <sup>2</sup> | Total Reaching Surface Waters <sup>3</sup> | Total Reaching Separate Storm Drain and Recovered <sup>4</sup> | Total Discharged to Land <sup>5</sup> | Percent Recovered | Percent Reaching Surface Waters | Percent Reaching Separate Storm Drain and Recovered | Percent Discharged to Land | Surface Water Body Affected | Miles of Pressure Sewer | Miles of Gravity Sewer | Population in Service Area |
|---|---|---------------------------|------------------------------|--|--|---------------------------------------|-------------------|---------------------------------|---|----------------------------|-----------------------------|-------------------------|------------------------|----------------------------|
|   |   |                           |                              |  |  |                                       |                   |                                 |   |                            |                             |                         |                        |                            |
| El Toro Water District  | El Toro Water District R9 CS  | 5                         | 0                            | 0  | 0  | 5                                     | 0%                | 0%                              | 0%  | 100%                       | -                           | 6.0                     | 118.0                  | 48,461                     |
|   |   | 62                        | 62                           | 0  | 0  | 62                                    | 100%              | 0%                              | 0%  | 100%                       | -                           |                         |                        |                            |
| Escondido City  | Hale Avenue Resource Recovery Facility Dish to San Elijo Ocean Outfall CS | 59,331                    | 4,500                        | 54,831                                     | 4,500  | 0                                     | 8%                | 92%                             | 8%  | 0%                         | Kit Carson Creek            | 10.7                    | 370.0                  | 142,000                    |
|   |   |                           |                              |  |  |                                       |                   |                                 |   |                            |                             |                         |                        |                            |
| La Mesa City  | City of La Mesa CS  | 36                        | 36                           | 0  | 0  | 36                                    | 100%              | 0%                              | 0%  | 100%                       | -                           | 0.0                     | 155.0                  | 58,244                     |
|   |   | 500                       | 0                            | 500  | 0  | 0                                     | 0%                | 100%                            | 0%  | 0%                         | Pacific Ocean               | 9.0                     | 86.0                   | 18,000                     |
| National City   | National City CS  | 300                       | 300                          | 0  | 0  | 300                                   | 100%              | 0%                              | 0%  | 100%                       | -                           | 1.0                     | 105.0                  | 58,967                     |
|   |   | 208                       | 208                          | 0  | 0  | 208                                   | 100%              | 0%                              | 0%  | 100%                       | -                           |                         |                        |                            |
| San Diego City (City Attorney's Office at Civic Center Plaza) | San Diego City CS   | 300                       | 300                          | 0  | 0  | 300                                   | 100%              | 0%                              | 0%  | 100%                       | -                           | 145.0                   | 3,032.0                | 2,207,591                  |
|   |   | 160                       | 100                          | 0  | 0  | 160                                   | 63%               | 0%                              | 0%  | 100%                       | -                           |                         |                        |                            |
| Oceanside City  | City of Oceanside CS, La Salina Wastewater Treatment Plant                | 250                       | 100                          | 250  | 0  | 0                                     | 40%               | 100%                            | 0%  | 0%                         | n/a                         | 35.6                    | 439.7                  | 171,455                    |
|   |   | 4,050                     | 3,000                        | 0  | 0  | 4,050                                 | 74%               | 0%                              | 0%  | 100%                       | -                           |                         |                        |                            |
| Oceanside Municipal Water District                            | 4-S Ranch CS  | 20,000                    | 15,000                       | 3,000                                      | 0  | 17,000                                | 75%               | 15%                             | 0%  | 85%                        | Lusardi Creek               | 5.5                     | 65.0                   | 12,000                     |
|   |   | 800                       | 500                          | 300  | 500  | 0                                     | 63%               | 38%                             | 63%   | 0%                         | n/a                         |                         |                        |                            |
| <b>Totals for Public Spills</b>                               |   | <b>86,002</b>             | <b>24,106</b>                | <b>58,881</b>                              | <b>5,000</b>   | <b>22,121</b>                         | <b>28%</b>        | <b>68%</b>                      | <b>6%</b>   | <b>26%</b>                 | <b>-</b>                    | <b>212.8</b>            | <b>4,370.7</b>         | <b>2,716,718</b>           |
| <b>Totals for Federal Spills</b>                              |   | <b>0</b>                  | <b>0</b>                     | <b>0</b>                                   | <b>0</b>   | <b>0</b>                              | <b>-</b>          | <b>-</b>                        | <b>-</b>  | <b>-</b>                   | <b>-</b>                    | <b>-</b>                | <b>-</b>               | <b>-</b>                   |

<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.

<sup>4</sup>Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

<sup>5</sup>Total Discharged to Land = total amount reaching land.



Table 2: November 2017 - Summary of Public and Federal Sanitary Sewer Overflows in the San Diego Region

| Responsible Agency  | Collection System (CS)  | Total Volume <sup>1</sup> | Total Recovered <sup>2</sup> | Total Reaching Surface Waters <sup>3</sup> | Total Reaching Separate Storm Drain and Recovered <sup>4</sup> |          | Total Discharged to Land <sup>5</sup> | Percent Recovered | Percent Reaching Surface Waters | Percent Reaching Separate Storm Drain and Recovered | Percent Discharged to Land | Surface Water Body Affected | Miles of Pressure Sewer | Miles of Gravity Sewer | Population in Service Area |
|---|---|---------------------------|------------------------------|--|--|----------|---------------------------------------|-------------------|---------------------------------|---|----------------------------|-----------------------------|-------------------------|------------------------|----------------------------|
|   |   |                           |                              |  | (Gallons)  | (%)      |                                       |                   |                                 |   |                            |                             |                         |                        |                            |
| Escondido City  | Hale Avenue Resource Recovery Facility Dish to San Elijo Ocean Outfall CS | 578                       | 578                          | 0  | 0  | 0        | 578                                   | 100%              | 0%                              | 0%  | 100%                       | -                           | 10.7                    | 370.0                  | 142,000                    |
| Laguna Beach City   | City of Laguna Beach CS   | 48                        | 48                           | 0  | 0  | 0        | 48                                    | 100%              | 0%                              | 0%  | 100%                       | -                           | 9.0                     | 86.0                   | 18,000                     |
| La Mesa City  | City of La Mesa CS  | 300                       | 300                          | 0  | 200  | 0        | 100                                   | 100%              | 0%                              | 67%   | 33%                        | -                           | 0.0                     | 155.0                  | 58,244                     |
| Oceanside City  | City of Oceanside CS, La Salina Wastewater Treatment Plant                | 90                        | 90                           | 0  | 0  | 0        | 90                                    | 100%              | 0%                              | 0%  | 100%                       | -                           | 35.6                    | 439.7                  | 171,455                    |
| San Diego City (City Attorney's Office at Civic Center Plaza) | San Diego City CS   | 300                       | 200                          | 0  | 0  | 0        | 300                                   | 67%               | 0%                              | 0%  | 100%                       | -                           | 145.0                   | 3,032.0                | 2,207,591                  |
| San Diego County Dept. of Public Works                        | County of San Diego CS  | 156                       | 450                          | 0  | 0  | 0        | 625                                   | 72%               | 0%                              | 0%  | 100%                       | -                           | 10.0                    | 408.0                  | 151,500                    |
| Solana Beach City   | County of San Diego CS  | 955                       | 750                          | 0  | 0  | 0        | 955                                   | 79%               | 0%                              | 0%  | 100%                       | -                           | 2.0                     | 49.0                   | 14,000                     |
| US Marine Corps (USMC) Base Camp Pendleton                    | City of Solana Beach CS<br>USMC Base Camp Pendleton CS                    | 3,000                     | 3,000                        | 0  | 3,000  | 0        | 0                                     | 100%              | 0%                              | 100%  | 0%                         | -                           | 35.0                    | 122.0                  | 90,000                     |
| <b>Totals for Public Spills</b>                               |   | 770                       | 0                            | 770  | 0  | 0        | 0                                     | 0%                | 100%                            | 0%  | 0%                         | n/a                         |                         |                        |                            |
| <b>Totals for Federal Spills</b>                              |   | 700                       | 0                            | 700  | 0  | 0        | 0                                     | 0%                | 100%                            | 0%  | 0%                         | n/a                         |                         |                        |                            |
| <b>Totals for Public Spills</b>                               |   | <b>6,247</b>              | <b>5,416</b>                 | <b>195</b>                                 | <b>3,200</b>   | <b>0</b> | <b>2,852</b>                          | <b>87%</b>        | <b>3%</b>                       | <b>51%</b>  | <b>46%</b>                 | <b>-</b>                    | <b>212.3</b>            | <b>4,539.7</b>         | <b>2,762,790</b>           |
| <b>Totals for Federal Spills</b>                              |   | <b>1,470</b>              | <b>0</b>                     | <b>1,470</b>                               | <b>0</b>   | <b>0</b> | <b>0</b>                              | <b>0%</b>         | <b>100%</b>                     | <b>0%</b>   | <b>0%</b>                  | <b>-</b>                    | <b>35.0</b>             | <b>122.0</b>           | <b>90,000</b>              |

<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.

<sup>4</sup>Total Reaching Separate Storm Drain and Recovered = total amount reaching separate storm drain that was recovered.

<sup>5</sup>Total Discharged to Land = total amount reaching land.

Table 3: October 2017 - Summary of Private Lateral Sewage Discharges in the San Diego Region

| Responsible Agency  | Collection System (CS)                                     | Total Volume <sup>1</sup> |              |            | Total Recovered <sup>2</sup> |            |              | Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land <sup>4</sup> |            |            | Percent Recovered | Percent Reaching Surface Waters (%) |                | Percent Reaching Separate Storm Drain & Recovered and/or Discharged to Land | Population in Service Area | Lateral Connections |
|---|--|---------------------------|--------------|------------|------------------------------|------------|--------------|--|------------|------------|-------------------|-------------------------------------|----------------|---|----------------------------|---------------------|
|   |  | (Gallons)                 | (Gallons)    | (Gallons)  | (Gallons)                    | (Gallons)  | (Gallons)    | (Gallons)  | (Gallons)  | (Gallons)  |                   | (Gallons)                           | (Gallons)      |   |                            |                     |
| Carlsbad Municipal Water District (MWD)                       | Carlsbad MWD CS  | 1                         | 1            | 0          | 1                            | 0          | 1            | 0  | 1          | 100%       | 0%                | 0%                                  | 100%           | 69,420  | 22,000                     |                     |
|   |  | 20                        | 0            | 0          | 0                            | 0          | 0            | 20   | 0%         | 0%         | 0%                | 100%                                | 103,091        | 16,675  |                            |                     |
|   |  | 15                        | 0            | 0          | 0                            | 0          | 0            | 15   | 0%         | 0%         | 0%                | 100%                                |                |   |                            |                     |
| Oceanside City  | City of Oceanside CS, La Salina Wastewater Treatment Plant | 2,250                     | 1,450        | 800        | 1,450                        | 800        | 1,450        | 800  | 64%        | 36%        | 64%               | 64%                                 | 171,455        | 41,750  |                            |                     |
| National City   | National City CS   | 100                       | 100          | 0          | 100                          | 0          | 100          | 0  | 100%       | 100%       | 0%                | 0%                                  | 100%           | 58,967  | 8,000                      |                     |
|   |  | 180                       | 100          | 80         | 100                          | 80         | 100          | 100  | 56%        | 44%        | 56%               | 56%                                 |                |   |                            |                     |
|   |  | 246                       | 246          | 0          | 246                          | 0          | 246          | 246  | 100%       | 0%         | 100%              | 100%                                |                |   |                            |                     |
|   |  | 55                        | 0            | 0          | 55                           | 0          | 55           | 55   | 0%         | 0%         | 0%                | 100%                                |                |   |                            |                     |
|   |  | 450                       | 450          | 0          | 450                          | 0          | 450          | 450  | 100%       | 0%         | 100%              | 100%                                |                |   |                            |                     |
| San Diego City (City Attorney's Office at Civic Center Plaza) | San Diego City CS  | 73                        | 73           | 0          | 73                           | 0          | 73           | 0  | 100%       | 0%         | 0%                | 100%                                |                |   |                            |                     |
|   |  | 24                        | 24           | 0          | 24                           | 0          | 24           | 24   | 100%       | 0%         | 0%                | 100%                                |                |   |                            |                     |
|   |  | 29                        | 29           | 0          | 29                           | 0          | 29           | 29   | 100%       | 0%         | 0%                | 100%                                |                |   |                            |                     |
|   |  | 5                         | 5            | 0          | 5                            | 0          | 5            | 5  | 100%       | 0%         | 0%                | 100%                                |                |   |                            |                     |
|   |  | 3,448                     | 2,478        | 880        | 2,568                        | 880        | 2,568        | 2,568  | 72%        | 26%        | 74%               | 74%                                 | 2,207,591      | 267,237   |                            |                     |
| South Coast Water District                                    | South Coast Water District CS                              | 5                         | 5            | 0          | 5                            | 0          | 5            | 0  | 100%       | 0%         | 0%                | 100%                                | 42,000         | 14,762  |                            |                     |
| <b>Totals</b>   |  | <b>3,448</b>              | <b>2,478</b> | <b>880</b> | <b>2,568</b>                 | <b>880</b> | <b>2,568</b> | <b>72%</b>   | <b>26%</b> | <b>74%</b> | <b>74%</b>        | <b>2,652,524</b>                    | <b>370,424</b> |   |                            |                     |

<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 4: November 2017 - Summary of Private Lateral Sewage Discharges in the San Diego Region**

| Responsible Agency  | Collection System (CS)   | Total Volume <sup>1</sup> | Total Recovered <sup>2</sup> | Total Reaching Surface Waters <sup>3</sup> | Total Reaching Separate Storm Drain & Recovered and/or Discharged to Land <sup>4</sup> | Percent Recovered | Percent Reaching Surface Waters | Percent Reaching Separate Storm Drain & Recovered and/or Discharged to Land | Population in Service Area | Lateral Connections |
|---|--|---------------------------|------------------------------|--|--|-------------------|---------------------------------|---|----------------------------|---------------------|
|   |  |                           |                              |  |  |                   |                                 |   |                            |                     |
| Carlsbad Municipal Water District (MWD)                       | Carlsbad MWD CS  | 1                         | 0                            | 0  | 1  | 0%                | 0%                              | 100%  | 69,420                     | 22,000              |
| Chula Vista City  | City of Chula Vista CS   | 10                        | 10                           | 0  | 10   | 100%              | 0%                              | 100%  | 265,070                    | 49,532              |
| El Cajon City   | City of El Cajon CS  | 200                       | 0                            | 0  | 200  | 0%                | 0%                              | 100%  | 103,091                    | 16,675              |
| Elsinore Valley MWD   | Southern Section CS  | 15                        | 15                           | 0  | 15   | 100%              | 0%                              | 100%  | 13,689                     | 4,577               |
| Escondido City  | Hale Avenue Resource Recovery Facility Disch to San Elijo Ocean Outfall CS | 75                        | 0                            | 75   | 0  | 0%                | 100%                            | 0%  |                            |                     |
| Padre Dam MWD   | Padre Dam CS   | 600                       | 600                          | 0  | 600  | 100%              | 0%                              | 100%  | 171,455                    | 41,750              |
| San Diego City (City Attorney's Office at Civic Center Plaza) | San Diego City CS  | 8                         | 0                            | 0  | 8  | 0%                | 0%                              | 100%  | 69,957                     | 15,131              |
|   |  | 820                       | 820                          | 0  | 820  | 100%              | 0%                              | 100%  |                            |                     |
|   |  | 300                       | 200                          | 0  | 300  | 67%               | 0%                              | 100%  |                            |                     |
|   |  | 29                        | 29                           | 0  | 29   | 100%              | 0%                              | 100%  |                            |                     |
|   |  | 35                        | 35                           | 0  | 35   | 100%              | 0%                              | 100%  |                            |                     |
|   |  | 454                       | 454                          | 0  | 454  | 100%              | 0%                              | 100%  |                            |                     |
|   |  | 940                       | 880                          | 60   | 880  | 94%               | 6%                              | 94%   |                            |                     |
|   |  | 60                        | 60                           | 0  | 60   | 100%              | 0%                              | 100%  |                            |                     |
|   |  | 800                       | 0                            | 0  | 800  | 0%                | 0%                              | 100%  |                            |                     |
|   |  | 200                       | 200                          | 0  | 200  | 100%              | 0%                              | 100%  |                            |                     |
| Vallecitos Water District                                     | Meadowlark CS  | 45                        | 15                           | 30   | 15   | 33%               | 67%                             | 33%   | 97,481                     | 22,047              |
| <b>Totals</b>   |  | <b>4,592</b>              | <b>3,318</b>                 | <b>165</b>                                 | <b>4,427</b>   | <b>72%</b>        | <b>4%</b>                       | <b>96%</b>  | <b>3,166,754</b>           | <b>499,249</b>      |

<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.

**Figure 1: Number of SSOs per Month**

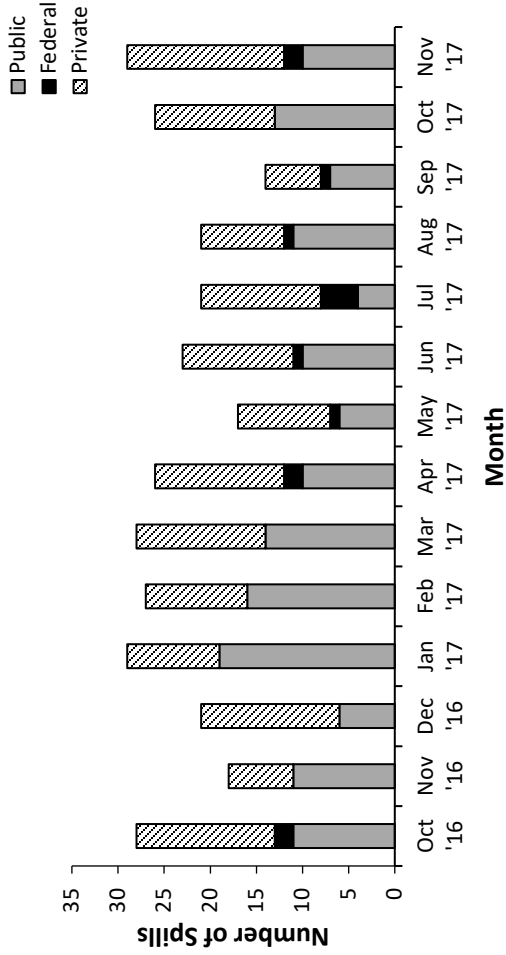


Figure 1: The number of public, federal, and private sanitary sewer overflows (SSOs) per month from October 2016 to November 2017.

**Figure 2: Volume of SSOs per Month**

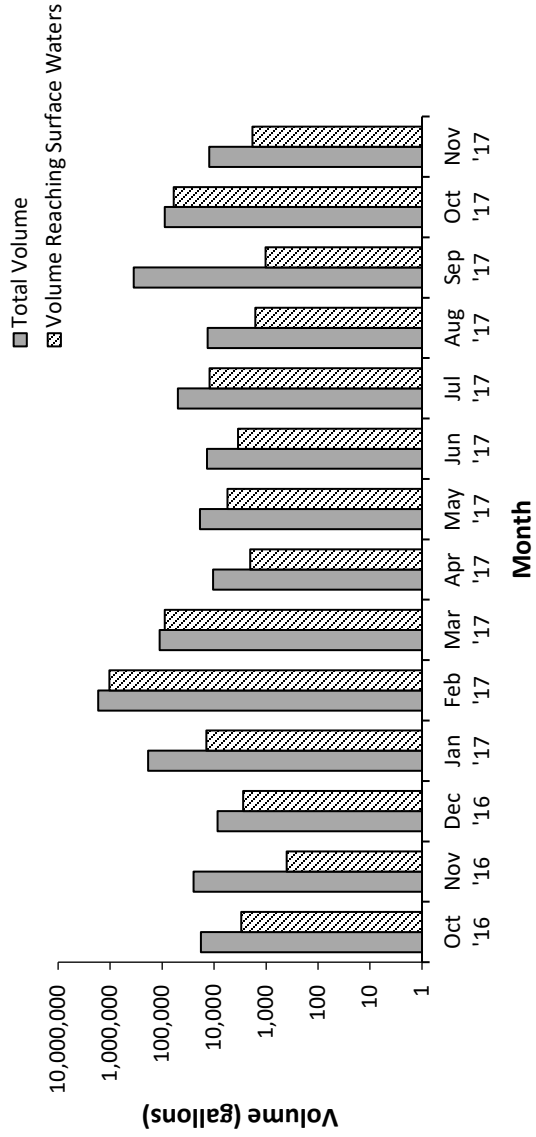


Figure 2: The volume of public, federal, and private sanitary sewer overflows (SSOs) per month from October 2016 to November 2017. Note the logarithmic scale on the vertical axis.

Table 5: October 2017 - Summary of Transboundary Flows from Mexico into the San Diego Region

| Location                 | Start Date | Total Volume<br>(Gallons) | Total Recovered<br>(Gallons) | Total Reaching<br>Surface Waters | Percent Recovered<br>(%) | Percent Reaching<br>Surface Waters<br>(%) | Additional Details   |
|--------------------------|------------|---------------------------|------------------------------|----------------------------------|--------------------------|---|--|
|                          |            |                           |                              |                                  |                          |   |  |
| Del Sol Canyon Collector | 10/6/2017  | 4,152,000                 | 0                            | 4,152,000                        | 0%                       | 100%                                      | A broken water main in Mexico caused flow from Canon del Sol to enter the Tijuana River downstream of Dailyart Bridge.   |
| Tijuana River            | 10/11/2017 | 80,800                    | 0                            | 80,800                           | 0%                       | 100%                                      | The intake screens on Pump Station CILA became clogged causing flow in the Tijuana River to bypass the River Diversion Structure and flow across the U.S./Mexico border. |
| Del Sol Canyon Collector | 10/19/2017 | 1,207,000                 | 0                            | 1,207,000                        | 0%                       | 100%                                      | A break in a 20 inch diameter Col. Herrera Aqueduct in Mexico caused flow from Canon del Sol to enter the Tijuana River downstream of Dailyart Bridge.                   |
| Tijuana River            | 10/22/2017 | 228,000                   | 0                            | 228,000                          | 0%                       | 100%                                      | The Villas del Prado water storage tank in Canon del Sainz area of Tijuana overflowed causing flow to enter the Tijuana River.   |
| <b>Total Dry Weather</b> |            | <b>5,667,800</b>          | <b>0</b>                     | <b>5,667,800</b>                 | <b>0</b>                 | <b>100%</b>                               |  |
| n/a                      | n/a        | n/a                       |                              |                                  |                          |   |  |
| <b>Total Wet Weather</b> |            | <b>n/a</b>                |                              |                                  |                          |   |  |

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.

Table 6: November 2017 - Summary of Transboundary Flows from Mexico into the San Diego Region

| Location                 | Start Date | Total Volume | Total Recovered<br>(Gallons) | Total Reaching<br>Surface Waters | Percent Recovered (%)              |                   | Additional Details  |
|--------------------------|------------|--------------|------------------------------|----------------------------------|------------------------------------|-------------------|---|
|                          |            |              |                              |                                  | Percent Reaching<br>Surface Waters | Percent Recovered |   |
| Dry Weather <sup>1</sup> |            |              |                              |                                  |                                    |                   |   |
| n/a                      | n/a        | n/a          | -                            | -                                | -                                  | -                 | -   |
| <b>Total Dry Weather</b> |            | <b>n/a</b>   | <b>-</b>                     | <b>-</b>                         | <b>-</b>                           | <b>-</b>          | <b>-</b>  |
| Wet Weather <sup>2</sup> |            |              |                              |                                  |                                    |                   |   |
| Tijuana River            | 11/7/2017  | Unknown      | -                            | -                                | -                                  | -                 | Precipitation in the Tijuana watershed necessitated the shutdown of Pump Station CILA. With Pump Station CILA shutdown, flow was not diverted causing the flow to cross the U.S./Mexico border. Pump Station CILA resumed operation on 11/9/17. |
| Goat Canyon              | 11/7/2017  | Unknown      | -                            | -                                | -                                  | -                 | Precipitation in the Tijuana watershed caused Goat Canyon to flood. Contaminated water and debris flowed passed the diverter and into the south and north basins.   |
| Smugglers Gulch          | 11/7/2017  | Unknown      | -                            | -                                | -                                  | -                 | Precipitation in the Tijuana watershed caused Smugglers Gulch to flood. Contaminated water and debris flowed passed the diverter and into the wash.   |
| Stewarts Canyon          | 11/7/2017  | Unknown      | -                            | -                                | -                                  | -                 | Precipitation in the Tijuana watershed caused Stewarts Canyon to flood. Contaminated water, resembling a black/brown sludge, breached the northern grates and entered into the Tijuana River Channel.   |
| <b>Total Wet Weather</b> |            | <b>n/a</b>   | <b>-</b>                     | <b>-</b>                         | <b>-</b>                           | <b>-</b>          | <b>-</b>  |

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.