



CITY OF DANA POINT
MS4 WQIP JURISDICTIONAL RUNOFF
MANAGEMENT PROGRAM (JRMP) ANNUAL REPORT FY21-22
REPORTING PERIOD: JULY 1, 2021 - JUNE 30, 2022

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PIN: 219073, SMARTS Identifier: 9 0000511S2

This annual report submittal contains the following:

- **EXECUTIVE SUMMARY**
- **ATTACHMENT 1:** JRMP Annual Report Form Attachment D-3 & Signed Certification Statement
- **ATTACHMENT 2:** Fiscal Analysis
- **ATTACHMENT 3:** Dana Point Local Implementation Plan (LIP) & Water Quality Improvement Plan (WQIP) Strategies for Pathogen Health Risk High Priority Water Quality Condition
- **ATTACHMENT 4:** MS4 Outfall Dry Weather Flow Investigation Work Plan Summary Table
- **ATTACHMENT 5:** Final Project Report: State Parks Beach Water Quality Improvement Projects Date of report: 6/30/2022

EXECUTIVE SUMMARY

INTRODUCTION

The primary objective of the 2021-22 Jurisdictional Runoff Management Program (JRMP) Annual Report is to summarize progress regarding implementation of the City's stormwater program between July 1, 2021 and June 30, 2022, under Order R9-2013-0001, as amended by R9-2015-0001 & R9-2015-0100 (Permit), as the South Orange County Water Quality Improvement Plan (WQIP) was accepted by the Regional Water Quality Control Board (RWQCB) on June 20, 2018. No Local Implementation Plan (LIP) updates were required for this reporting period. Metrics for water quality program components and the signed certification statement are provided in **ATTACHMENT 1**. The annual fiscal summary is provided in **ATTACHMENT 2**.

SUMMARIES OF WATERBODIES & ACHIEVEMENTS DURING FY21-22

Implementation of South Orange County Water Quality Management Plan (WQIP)

The County of Orange and Co-Permittee Cities continue to implement the South Orange County Water Quality Improvement Plan (WQIP) which identifies the region's highest priority water quality conditions as: 1) Pathogen Health Risk, 2) Unnatural Water/Balance/Flow Regime, and 3) Channel Erosion/Geomorphic Impacts. South Orange County has taken an

integrated, innovative and engaging approach to address water quality priorities in our Region. The City of Dana Point (Dana Point) has been an active participant in three Areas of Investigation (AOI) studies as part of the Comprehensive Human Waste Source Reduction Strategy (CHWSRS), including AOI-DP1, AOI-SJC2, & AOI-SJC1. The data generated from the Outfall Capture Feasibility Study (OCFS) helps to support the AOI studies and guide future investigations and management decisions. **ATTACHMENT 3** provides a summary of the City's efforts to meet the goals and objectives described in the WQIP. **ATTACHMENT 4** provides a summary of the outfalls in Dana Point, status of investigations, Best Management Practice (BMP) Implementation and other prudent information that helps to guide the City's efforts in prioritized manner. Regional WQIP Program highlights, milestones, progress milestones and monitoring data are reported separately in the South Orange County WQIP Annual Report submitted on behalf of the co-permittees by the County of Orange.

Heal the Bay Honor Roll Beaches

Orange County had the most beaches on the Heal the Bay 2021-2022 Annual Beach Report Card Honor Roll for two years in a row (with 19 beaches). Heal the Bay has established a very high bar for the Honor Roll. To earn a spot on the Honor Roll, a beach must be monitored weekly all year and must receive an A+ for all seasons and weather conditions (Summer Dry, Winter Dry, Wet Weather). The results reflect the success of local and regional water quality programs. Many beaches in Dana Point were listed on the Honor Roll for 2021-2022:

- Dana Point Harbor Youth Dock
- Dana Point Harbor Guest Dock
- Doheny Beach
- Doheny State Beach, end of park
- Doheny State Beach, at last campground
- Marine Science Institute Beach
- Dana Point, Capistrano County Beach
- Doheny State Beach, Pedestrian Bridge
- Dana Strands Beach
- Salt Creek Beach

San Juan Creek / Doheny State Beach / Capistrano Beaches

San Juan Creek

San Juan Creek is a large watershed, encompassing over 160 square miles. Although the outlet of San Juan Creek is located in Dana Point (City), the City only encompasses approximately 2.26 percent of the watershed, based on population and land area (1.54 square miles). City and County agencies within the San Juan Creek watershed include, in addition to Dana Point,

County of Orange/Orange County Flood Control, Mission Viejo, San Juan Capistrano, Ranch Santa Margarita and small portions of Laguna Niguel and Laguna Hills (both approximately 1% land area each).

Dana Point has been an active participant in outfall investigations in this watershed. Please refer to the CHWSRS Update for AOI-SJC2 and AOI-SJC1 in the WQIP Annual Report.

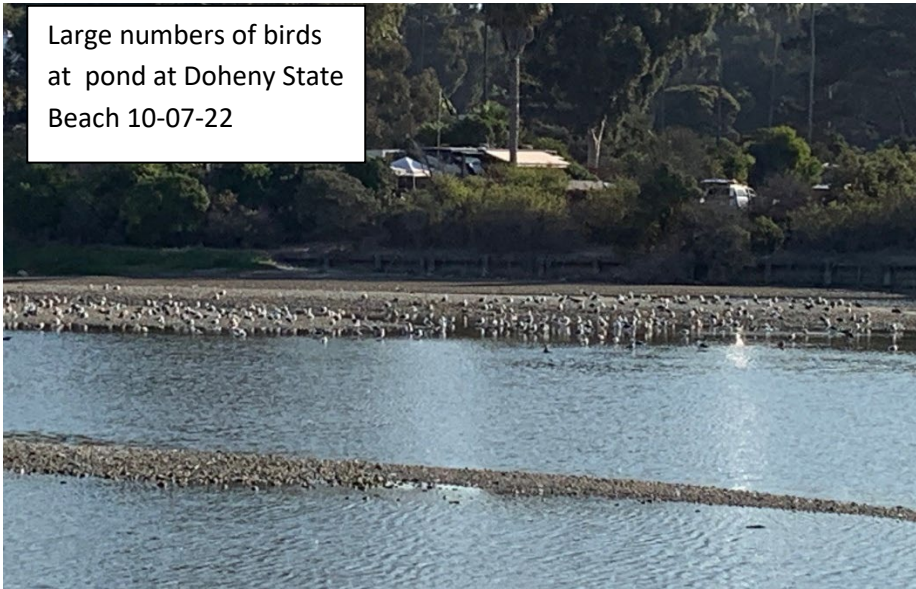
Dana Point continues to operate its two diversions and trash separation units in the San Juan Creek watershed, referred to as Alipaz and Del Obispo. The Alipaz diversion was operated from May 12 through October 4 for 2021 summer season and from May 12 through October 12 for 2022 summer season. The Del Obispo diversion was operated from May 13 through October 4 for 2021 summer season and from May 12 through October 12 for 2022 summer season. Note: South Orange County Wastewater Authority (SOCWA) Permit allows operation from April 15-October 15 during non-rain events. The trash separation units operate continuously all year long.

Doheny State Beach

At the end of the large San Juan Creek Watershed, as described above, lies Doheny State Beach with a large naturally forming scour pond that provides habitat for birds and wildlife. The water quality at the beach has shown significant improvement over time, but there are still challenges in meeting the current bacteria standards at times. Data has shown significant reduction in bacteria loads through the implementation of BMPs; however, the applicability of the natural source exclusion policy (due to a high bacteria loading from avian sources) or other alternative standards may need to be explored. Large numbers of birds congregate in the pond, and on the sand berm and in ocean.



Large numbers of birds
at pond at Doheny State
Beach 10-07-22



In addition to upstream watershed water quality improvement strategies, including nuisance flow reduction and human source abatement programs, Doheny State Beach which lies on both sides of the creek, and is beyond City MS4, has received close to \$5,000,000 for

the "Doheny State Beach Water Quality Improvement Project" (SWRCB Grant Agreement No. D1612420) - Sewer Pipe System Relining & Repair of Lift Station, which addresses potential human sources of bacteria to San Juan Creek and Doheny State Beach. This is not a Dana Point project, but this project is a result of Dana Point's commitment and leadership encouraging collaboration with all San Juan Creek/Doheny State Beach stakeholders (Caltrans, South California Coastal Water Research Project (SCCWRP), State Water Resources Control Board, State Parks, Dana Point, San Juan Capistrano, San Diego Regional Water Quality Control Board, County of Orange, Orange County Health Care Agency) beginning in 2013, which ultimately resulted in a large State Clean Beach Initiative (CBI) grant award to the State Parks Department with the purpose of reducing potential bacterial contamination by replacing/repairing aging sewer infrastructure at Doheny. Construction was completed during the reporting period on 11/27/2021.

The Final Project Report: State Parks Beach Water Quality Improvement Projects Date of report dated 6/30/2022, which was submitted to the State to finalize the grant and provides purposed and details of the project, is provided at **Attachment 5** to this Report for ease of reference.

In addition, Dana Point operates a dry weather diversion and trash separation unit for an outfall that outlets at the north end of Doheny State Park referred to as the "North Creek" facility. The diversion operated from June 4 through October 4 for the 2021 season and June 4 through October 12 for the 2022 season. Flows have decreased significantly since 2005 (60,000 GPD) to 22,000 average GPD. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.

Capistrano Beaches

The City operates the Capo Beach Diversion & trash separation unit in the Capistrano Beach area, known as "Capo Beach". The diversion operated from May 6 through September 24 for 2021 season and from May 23 through September 8 for 2022 season. Flows have decreased significantly since 2005 (estimated 60,000 GPD) to 15,000 average GPD. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events. This drainage area is known to have surfacing groundwater.

The Heal the Bay grades for Doheny State Beach were predominantly excellent to very good, including several sites on the Honor Roll. Wet weather grades at San Juan Creek were not as good, receiving a C and D. As mentioned, this is a very large watershed with large volumes of flow during wet weather and a high number of birds that congregate regularly in San Juan Creek and the Doheny sewer replacement project was completed in November 2021. Capistrano Beaches received excellent grades, including several listed on the Honor Roll. The individual grades follow:

Heal the Bay Beach Grades from Annual Beach Report Card

	Summer Dry	Winter Dry	Wet Weather
Doheny Beach	A+	A+	A+
Doheny, at San Juan Creek	A+	A+	C
Doheny, mid beach, north of San Juan Creek	A+	A	A+
Doheny, Last Campground	A+	A+	A+
Doheny, North Beach	A	A	B
Doheny, Pedestrian Bridge	A+	A+	A+
Doheny, End of the Park	A+	A+	A+
San Juan Creek	B	B	D
Capistrano County Beach	A+	A+	A+
Capistrano Bay Community Beach	A		A+
Capistrano Beach at Camino Estrella	A+		A+

Reference: Heal the Bay, 2021-2022 Beach Report Card, www.healthebay.org.

Salt Creek / Monarch Beach

Dana Point continues to operate its award-winning ozone facility during dry weather months. Operation of the facility occurred May 17, 2021 through November 8 for 2021 season and May 16 through November 7 for 2022 summer season. The project has demonstrated to be very effective in reducing bacteria levels from the MS4 (Municipal Separate Storm Sewer System) to well-below standards. However, bird defecation is a recognized natural source contributor to surface water quality indicator bacteria exceedences in the surf zone right at point zero

(after the MS4). In July 2016, the Dana Point City Council approved a Resolution authorizing the remediation of a bird nuisance at Salt Creek (in accordance with DPMC Chapter 10.14.040) with the intent of piloting a bird deterrent project, based on a successful similar project at Poche Beach. The Nuisance Bird Deterrent Project consists of a falconer who uses a natural predator, generally a Harris Hawk, to prevent the nuisance birds from congregating at the outlet, while protecting sensitive species. A Technical Memo describing the success of the project has been submitted previously. When funding is available, the County of Orange, the City of Dana Point and Monarch Beach Resort partner to fund a Nuisance Bird Deterrent project at the Salt Creek outlet. The project was implemented from April 4, 2021 through October 31, 2021 for the 2021 season and April 15 through October 31 for the 2022 summer season.

Beach locations exhibited good water quality, with the point zero testing location still posing some challenges as the falconer is effective at dramatically reducing the population of birds that congregate in this area but does not completely eliminate all of the birds at all times. The birds are a natural source of bacteria along the coast. Two beach sites were listed on the Honor Roll.



Heal the Bay Beach Grades from Annual Beach Report Card

	Summer Dry	Winter Dry	Wet Weather
Monarch Beach Salt Creek outlet (point zero)		A	A+
Monarch Beach, North	A	A	A+
Salt Creek Beach	A+	A+	A+
Dana Strands Beach, AWMA	A+	A+	A+
Marine Science Institute Beach, SERRA	A+	A+	A+

Reference: Heal the Bay, 2021-2022 Beach Report Card, www.healthebay.org.

Through the WQIP, watershed partners, including the City of Laguna Niguel and County of Orange are implementing several programs to help identify issues and the subsequent development of appropriate management actions, including the outfall capture feasibility study, the Comprehensive Human Waste Source Reduction Strategy and the outfall monitoring program. Recycled water use is prominent in this watershed which does pose challenges with the bacteria source investigations, as the recycled water in this region contains HF183, which is currently being used as a tool to try and detect sources of human waste. The Salt Creek watershed is estimated to be approximately 70% Laguna Niguel and 30% Dana Point.

Baby Beach

The water quality improvements at Baby Beach have become a success story. Multiple agencies, including Dana Point, Orange County Watersheds, and Orange County Parks have developed a cooperative and effective relationship to address the Total Maximum Load (TMDL) for Baby Beach. With the significant collaboration between these agencies, the milestone load reductions were achieved. Success is also evident based on the good grades the beach received from Heal the Bay (see below).

Heal the Bay Beach Grades from Annual Beach Report Card

	Summer Dry (Apr-Oct)	Winter Dry (Nov-Mar)	Wet Weather
Baby Beach - West End	A	C	A+
Baby Beach - Buoy Line	A	B	A+
Baby Beach - Swim Area	A	C	A+
Baby Beach - East End	A	A	A+
Guest Dock	A+	A+	A+
Youth Dock	A+	A+	A+

	Summer Dry (Apr-Oct)	Winter Dry (Nov-Mar)	Wet Weather
Fuel Dock	A+	A	A+
Dana Point Harbor Pier	A	A	A+
Dana Point Harbor Patrol Dock	A	A+	A+
Dana Point Harbor, M Dock (East Basin)	A	A	A+
Dana Point Harbor, Pilgrim Dock	A	A	A+

Reference: Heal the Bay 2021-2022 Beach Report Card, www.healthebay.org.

Please also refer to the Baby Beach Annual Progress Report for FY21-22 as part of the WQIP Annual Report, submitted by the County on behalf of the watershed partners for further details.

California Bacteria Summit

The City welcomed and participated in the California Bacteria Summit co-hosted by the California Water Boards and California Storm Water Quality Association (CASQA). The challenges of addressing indicator bacteria standards are widely recognized in the industry and this summit was a productive first step in bringing the stakeholders and experts together to discuss the topic. The purpose of the summit and subsequent efforts is to “understand what it means to have waters that are safe to swim and shellfish that are safe to eat, based on the latest science and learnings, and identify action needed to achieve those outcomes”. The three-day summit touched on the evolution of the standards and current science, current source reduction and regulatory tools, including what is working and what falls short and potential opportunities, and identifying regulatory action, research needs and next steps.

The City looks forward to future participation and the knowledge and outcomes that may result from this collaborative effort. The materials from the summit can be found here: <https://www.casqa.org/events/bacteria-summit>.

CONCLUSION/RECOMMENDATIONS

Dana Point continues to implement a robust municipal water quality program to comply with the Permit and implement the City's Local Implementation Plan (LIP) and South Orange County Water Quality Improvement Plan (WQIP). City actions and strategies being implemented are described in **ATTACHMENT 3** included in this report. The City is optimistic and looks forward to continuing to implement the South Orange County WQIP which represents a new paradigm and model in water quality programming. Regional progress towards meeting the goals and objectives of the WQIP is reported in the WQIP Annual Report submitted by the County of Orange on behalf of the co-permittees. Dana Point will continue to work closely with the Regional Water Quality Control Board staff to streamline reporting to provide information

necessary to demonstrate progress and compliance as Regional Permit Renewal begins in 2023.

The WQIP approach and programs have created a myriad of venues for collaboration and stakeholder involvement and partnerships with multiple agencies. The CHWSRS AOI workgroups have demonstrated that it is crucial for water and sewer agencies and MS4s to work together to address water quality priorities. In Dana Point's experience, partnership with SOCWA, SCWD, MNWD, San Juan Capistrano Utilities, Santa Margarita Water District and San Juan Basin Authority have been instrumental to success. As we continue on the journey to improve water quality and recognizing the notable progress to date, challenging issues remain, such as recycled water runoff (regulated under a separate permit and under jurisdiction of separate entities). Recycled water in South Orange County appears to contain HF183 which complicates human bacteria source investigations.

Dana Point will continue to implement its LIP and be an active participant in the WQIP program addressing the highest priority water quality conditions, specifically Pathogen Health Risk and Unnatural Water Balance. During the next reporting period, Dana Point will continue to focus on Bacteria Total Maximum Daily Load (TMDL) assessment and compliance, investigations at the highest priority outfalls using the work plan (summary of outfalls provided in **ATTACHMENT 4**), and implementation of the Comprehensive Human Waste Source Reduction Strategy. With new science and knowledge and recognized flaws, the indicator bacteria TMDL reopener is justified and overdue. Other tools, such as the Natural Source Exclusion Approach (NSEA) and/or Site Specific Objectives (SSOs) may need to be explored. We hope that the bacteria summit will provide a venue to help to facilitate smart decisions regarding standards so that efficient and effective implementation of bacteria TMDL can be done, while providing safe waters to swim.

Dana Point will also continue to populate the Orange County Stormwater Tools Database (<https://www.ocstormwatertools.org/>) which allows for modeling of water quality program implementation progress, future tracking, and reporting of the full capture trash regulations. In addition, based on the latest schedule provided by RWQCB staff, we anticipate the start of the Regional MS4 Permit renewal later this year.

This full report and the County-wide WQIP Annual Report can be found on the Regional Clearinghouse here:

South OC 2021-2022 WQIP Annual Report: <https://ocgov.box.com/v/2021-22WQIPAnnualReport>.

2021-2022 JRMP Annual Reports: <https://ocgov.box.com/v/2021-22JRMPAnnualReport>.

Please note that the City received the 2020-2021 Water Quality Improvement Plan (WQIP) Annual Report Review: San Juan Watershed Management Area (WMA) WQIP (which was submitted to the Regional Water Quality Control Board by the Copermittees on January 31, 2022), dated January 11, 2023, at the end of the day on Thursday, January 12, 2023 via email (CW-794813:Eryan, PIN: 794813:Eryan). This letter will be responded to separately.

However, in response to 3.E. WQIP Copermittee BMP Design Manuals, please note that the Orange County BMP Design Manual is a companion document to the City of Dana Point's Local Implementation Plan (LIP) which was adopted by Dana Point City Council on March 21, 2017. Section 7 of the City's LIP describes the City's planning, permitting and submittal requirements. All the information is provided on the City's website here: www.danapoint.org/wqrequirements.

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
CITY OF DANA POINT ANNUAL REPORT FORM
FY 2021-22

I. COPERMITTEE INFORMATION	
Copermittee Name: City of Dana Point	
Copermittee Primary Contact Name: Lisa Zawaski	
Copermittee Primary Contact Information: Dana Point City Hall Address: 33282 Golden Lantern, Public Works Suite 212 City: Dana Point County: Orange State: CA Zip: 92629 Telephone: 949-248-3584 Fax: N/A Email: lwawaski@danapoint.org	
II. LEGAL AUTHORITY	
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2013-0001?	YES ☒ NO ☐
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES ☒ NO ☐
III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES	
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Regional Water Board?	YES ☐ NO ☒
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse? The City's Local Implementation Plan is available on the OC clearinghouse at: https://ocgov.app.box.com/v/SDR-WQIP-Clearinghouse and the City's website: www.danapoint.org/environmental	YES ☐ NO ☐ N/A ☒
IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2013-0001?	YES ☒ NO ☐
Number of non-storm water discharges reported by the public	27
Number of non-storm water discharges detected by Copermittee staff or contractors	15
Number of non-storm water discharges investigated by the Copermittee	42
Number of sources of non-storm water discharges identified	35
Number of non-storm water discharges eliminated	35
Number of sources of illicit discharges or connections identified *this number is physical illicit connections	1
Number of illicit discharges or connections eliminated *this number is physical illicit connections	1
Number of enforcement actions issued	35+
Number of escalated enforcement actions issued (includes actions more than Notice of Violation/Compliance, i.e. Stop Work, Administrative Citations)	1
V. DEVELOPMENT PLANNING PROGRAM	
Has the Copermittee implemented a development planning program that complies with Order No. R9-2013-0001?	YES ☒ NO ☐
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES ☐ NO ☒
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse? N/A, Regional Clearinghouse continues to be hosted here: https://ocgov.app.box.com/v/SDR-WQIP-Clearinghouse	YES ☐ NO ☐ N/A ☒
Number of proposed development projects in review (includes projects pending issue of a Grading Improvement Permit and Discretionary reviews pending approval or issuance of Permits)	Grading= 34 Discretionary = 123 Total = 157
Number of Priority Development Projects in review (includes projects without an approved "Final" WQMP)	10
Number of Priority Development Projects approved (includes only Final WQMP approvals)	3
Number of approved Priority Development Projects exempt from any BMP requirements (Only Hydromodification Management Requirements Exemptions in effect per Permit are allowed)	3

As amended by Order No. R9-2015-0001 & R9-2015-0100

Number of approved Priority Development Projects allowed alternative compliance	0
Number of Priority Development Projects granted occupancy	0
Number of completed Priority Development projects in inventory	23
Number of high Priority Development Project structural BMP inspections/verifications	23
Number of Priority Development Project structural BMP violations	4
Number of enforcement actions issued	4
Number of escalated enforcement actions issued	0

VI. CONSTRUCTION

Has the Copermittee implemented a construction management program that complies with Order No. R9-2013-0001?	YES ☒
	NO ☐

Number of construction sites in inventory (current # Grading Permit sites = 51, 8/2022)	195
Number of active construction sites in inventory	195
Number of inactive construction sites in inventory	0
Number of construction sites closed/completed during reporting period (Permits Finaled)	162
Number of construction site inspections	2074
Number of construction site violations	33
Number of enforcement actions issued	33
Number of escalated enforcement actions issued	3

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2013-0001?	YES ☒
	NO ☐

	Municipal	Commercial*	Industrial**	Residential***
Number of facilities or areas in inventory	38	152	1	79
Number of existing development inspections	38	131	1	12 RMAs
Number of follow-up inspections	City Parks & Medians inspected on a routine basis (weekly)	93	0	****
Number of violations	10 (irrigation issues, 1 operational)	52	0	3
Number of enforcement actions issued	1	52	0	****
Number of escalated enforcement actions issued	1	0	0	****

Has the Copermittee implemented a public education program component that complies with Order No. R9-2013-0001?	YES ☒
	NO ☐

Has the Copermittee implemented a public participation program component that complies with Order No. R9-2013-0001?	YES ☒
	NO ☐

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2013-0001?	YES ☒
	NO ☐

Notes:

*Commercial inventory includes 127 food facilities and 25 other types of priority commercial businesses totaling 152.

As amended by Order No. R9-2015-0001 & R9-2015-0100

** Industrial sites included are those that are subject to the State Industrial General Permit, Pickering Properties: 25802 Victoria Blvd Dana Point California 92624, WDID: 9 30I023824. Note that SOCWA is a No Discharge Site, WDID 930NNA000193.

*** Residential Areas include 76 HOAs and three residential management areas (RMAs) as described in WQIP

**** Non compliances, violations, enforcement actions and escalated enforcement actions would be included in Section IV.

X. CERTIFICATION

I [☐ Principal Executive Officer ☐ Ranking Elected Official ☒ Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Signature

Lisa Zawaski

Print Name

949-248-3584

Telephone Number



Date

Senior Water Quality Engineer

Title

lzawaski@danapoint.org

Email

ATTACHMENT D: JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FORM

ATTACHMENT 2

CAPITAL COSTS		
Fiscal Analysis Summary		
LIP Program Elements	FY21-22 Costs	Projected Costs FY22-23
Public Projects - BMPs	\$0	\$0
Other Capital Projects / Major Equipment Purchases FY21-22: CIP Fund 11: Storm Drain Master Planning: \$96,626 As-needed storm drain repairs & water quality valve replacement: \$29,225 Storm drain Condition Assessment: \$10,200 FY22-23 Budget CIP Fund 11: Storm Drain Master Planning - \$190,000 Storm Drain Repairs - \$200,000 WQ / Diversion Repairs - \$50,000	\$136,051	\$440,000
TOTALS	\$136,051	\$440,000

OPERATIONS & MAINTENANCE

LIP Program Elements	FY21-22 Costs	Projected Costs FY22-23
Supportive of Program Administration: Communications (57-2010) Office Supplies (57-2070) Memberships & Dues (57-2090) Books & Subscriptions (57-2130) Training (57-2150) Travel, Conf., Meetings (57-2270) Mileage Reimbursement (57-2290) Legal Fees (Admin Budget)	\$8,747	\$15,000
Staff Resources	\$682,420	\$702,893
Municipal Activities (LIP Section 5.0) 57-2510, Storm Drains: Co-permittee Share, SOCWMA, NDPES Permit Fee, SJC TMDL Cost-Share, Structural BMP O&M (Diversions, Salt Creek Ozone Treatment Facility), ID/IC	\$306,778	\$310,000
Municipal Activities (LIP Section 5.0) County crew- trash/litter control, street & storm drain maintenance, stenciling (52-2350)	\$180,857	\$200,000
Municipal Activities (LIP Section 5.0) Trash & debris control BMP O&M, storm emergencies, video inspection (52-2510)	\$491,996	\$500,000
Municipal Activities (LIP Section 5.0) Street Sweeping (52-2490)	\$232,560	\$250,000
Municipal Activities (LIP Section 5.0): Park & Median Maintenance, Irrigation System Maintenance, Trash Management In Parks, Mutt Mitts (52-2110, 52-2450 & 52-2550 (Landscape vendor contract - irrigators)	\$107,890	\$120,000
Public Information (LIP Section 6.0) Nonpoint Source Pollution Awareness (Operating Supplies, including printing outreach materials, water quality booth, 57-2110)	\$3,678	\$5,000
Existing Development (LIP Section 9.0) Industrial/Comm./HOA Inspections, 57-2230	\$17,580	\$18,000
Professional Services, including WQ Tech Support, Bird Abatement at Salt Creek (57-2230)	\$88,755	\$110,000
TOTAL: General Fund	\$2,121,262	\$2,230,893

LIP Funding Sources	FY 2020-21 Funding Sources	FY 2020-21 Projected Funding Sources
General Fund - O&M	\$2,121,262	\$2,230,893
General Fund - Capital Costs	\$136,051	\$440,000
Utility Tax/Charges		
Separate Utility Billing Item		
Gas Tax		
Special District Fund	fill out funds below	
- Sanitation Fee		
- Benefit Assessment		
- Fleet Maintenance Fund		
- Community Services Fund		
- Water Fund		
- Sewer & Storm Drain Maintenance Fee		
Other:		
TOTAL	\$2,257,313	\$2,670,893
Other:		
Other:		
Other:		
Other:		

General Fund	100.00%	100.00%
Utility Tax/Charges	0.00%	0.00%
Separate Utility Billing Item	0.00%	0.00%
Gas Tax	0.00%	0.00%
Special District Fund	0.00%	0.00%
Other	0.00%	0.00%
TOTAL	100.00%	100.00%

ATTACHMENT 3

Dana Point Local Implementation Plan (LIP) & Water Quality Improvement Plan (WQIP) Strategies for Pathogen Health Risk High Priority Water Quality Condition

Dana Point		
LIP Strategies		
Municipal Activities	Trash and Debris Control	Maintain City Inlet Filters & Full Capture Trash Devices (530 inlets with over 700 devices): 8,353 gallons of trash, silt/sediment and green waste removed. Estimated 11% to be trash/litter. Maintain City CDS units (4): Total of 8,075 gallons of trash, sediment & green waste removed. Approximately 29% estimated to be trash. The City also implements a robust program for proper waste management including a litter ordinance, providing adequate public trash receptacles in parks & along trails & strategic locations around city with frequent service & providing special/bulky item clean ups and curbside pick-up for residents. Residents have the following programs as part of their trash service: Food recycling as part of the green waste recycling program (now referred to as organics). As of January 1, 2020, Dana Point residents can place food scraps and food-soiled paper in their green waste carts (now referred to as the organics cart). Free Residential On-call HHW Pick-up Service Program. Two curbside bulky item pick-ups per year and collection events throughout the year. Free Drop-off locations for batteries, bulbs, cell phones, medications and sharps.
	Drainage Facility Maintenance – MS4 Inspections/Cleaning	Videoed: 28,283 l.f. of storm drain (approx. 5 miles) per 2022 CCTV Inspection & Condition Assessment Reports, Empire Pipe Cleaning. Cleaned approximately 3,100 LF of storm drain. CCTV Video is also used to aid in investigations. No illegal connections were identified. 1500 lf channel cleaned (Del Obispo).
	Street Sweeping	Maintained weekly street sweeping schedule throughout year. The City streets are swept once per week. Parking restrictions are in place and enforced in prioritized areas to maximize debris pickup. In F21-2, 340 tons were recovered covering approximately 171 curb miles (same as last year).

Dana Point		
		The Traffic Improvement Subcommittee and City Council have worked with City staff in restricting parking on certain streets citywide during street sweeping hours based on certain established criteria. Generally, the criteria established by the Subcommittee and the City Council over time designated that parking restrictions should not be considered if the street sweeper can reach at least fifty (50) percent of the curb on any given street or in any given neighborhood. Streets where this criteria were not met have been designated for parking restrictions since incorporation (at various points in time) via City Council Resolution. In addition, staff continues to address site-specific locations where folks are not moving their cars for the street sweeper (in unrestricted areas) as identified by residents and City staff using the following cost effective tools: 1. Issuance of outreach/mailers to the neighborhood reminding residents when their street is swept. 2. Including the information on our website for use by our customers in understanding when various streets are swept. 3. Assistance from Police Services with citing stored vehicles exceeding the 72 hour limit on public streets. Occasionally posting of temporary no parking signs for challenging areas.
	Structural BMP Maintenance at Municipal Projects	See above in Trash & Debris Control. Operated Salt Creek Ozone Treatment System operated May 17, 2021 through November 8 for 2021 season and May 16 through November 7 for 2022 summer season. Operated diversions starting May 6 & 12, 2021 through October 4 for 2021 season. Diversions were activated on May 12 & 23 through Sept 8 & October 12 for the 2022 summer season (note: sporadic rain events shortened operation schedule). Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events. Nuisance Bird Deterrent project at Salt Creek outlet was implemented for 2021 summer season: April 4 through October 31. Nuisance Bird Deterrent project at Salt Creek outlet was implemented for 2022 summer season: April 15 through October 31.
	Pesticide & Fertilizer Management	The City has an Integrated Pest Management (IPM) Policy and Implementation Guidelines including procedures to manage fertilization and protect water quality. The types and quantities of fertilizers applied can be provided upon request. The City's Park Staff oversee the implementation of the program by the City's contractors.

Dana Point		
		In general, labor is encouraged in lieu of chemical means.
	Municipal Staff Training and Education	Construction BMP Training: 10 participants WQMP BMP Training, WQMP Modifications, Adaptations & Corrections, 4-20-22: 1 staff ASCE Orange County Geo-Institute <i>Expert Panel Discussion regarding Stormwater Infiltration Systems</i>, 3-31-22: 3 staff CASQA 2021: 1 staff Internal WQMP review training: 4 consultants
Public Education	Nonpoint Source Pollution Awareness	The City's public education efforts includes outreach events, including beach clean ups, social media posts, the City Website Water Quality pages, public signage, and participation in the County public education program. <u>Coastal Clean Up, Sept 2021:</u> Coastal Clean Up events in 2021 returned to “normal” after after the pandemic in 2021 and participant numbers were fantastic! Stand Up to Trash at Baby Beach: • Total volunteers: 250 • Total pounds of trash removed -300 Doheny State Parks & City of Dana Point at Doheny State Beach and San Juan Creek: • Total volunteers: 150 • Total pounds of trash removed -550

Dana Point



There was also a clean-up sponsored by Surfrider at Salt Creek Beach.

H2O for HOAs

Focusing on unnatural water balance in creeks and streams caused, in part, by irrigation runoff continues to be one of the Highest Priority Water Quality Conditions for the Co-Permittees in its Water Quality Improvement Plan. One of the ways the Co-Permittees are addressing unnatural water balance is by holding educational workshops with homeowner associations (HOAs). In October 2021, the South Orange County cities and water districts partnered, organized and hosted its fourth H2O for HOAs Workshop with over 150 attendees. The Workshop was designed to educate property managers, landscape contractors, and HOA board members on storm water best management practices, water use efficiency and conservation techniques, water efficient landscape design, and irrigation systems maintenance. Because irrigation runoff is tied to water use efficiency,

Dana Point

partnering with the water districts to present a cohesive message to some of the regions largest outdoor water customers is ideal.



H₂O for HOAs

Event Speakers

- Kay Havens**
El Toro Water District
- Emilio Fuentes**
Orange County Fire Authority
- Tony Lopez**
Lawn Irrigation and Landscape Supply
- Devin Slaven**
City of Lake Forest
- Justin Finch**
Wooden Market Water District

Panel Discussion

Moderator: Joone Lopez
General Manager, Alhambra Water District

Jodie Cook
Jodie Cook Design

Danny Smith
Park West Landscape

David Silva
California Landscape Contractors Association

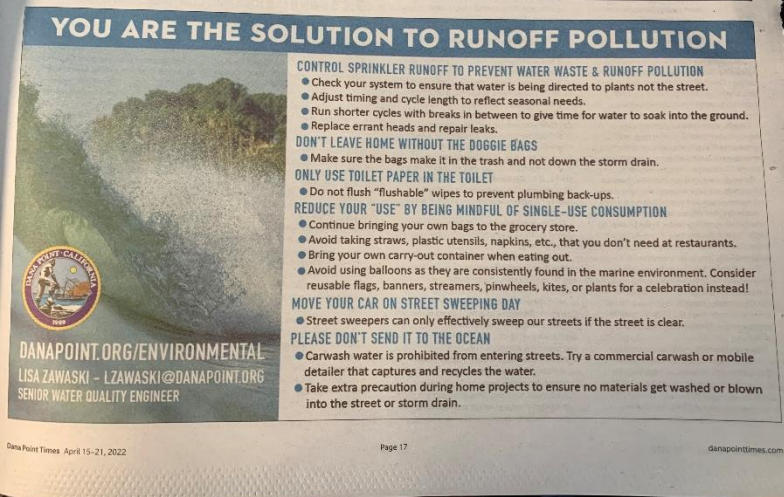
TUESDAY OCT 19
8AM - 12NOON

Online and in person at Lake Forest Community Center

Register for this FREE event at: bit.ly/H2OforHOAs.

Dana Point Times

DP Times Green Issue, Sustaining Sustainability in Dana Point (see below), April, 2022. Normal Distribution: 43,500 32,500 homes + 11,000 on news racks.



YOU ARE THE SOLUTION TO RUNOFF POLLUTION

CONTROL SPRINKLER RUNOFF TO PREVENT WATER WASTE & RUNOFF POLLUTION

- Check your system to ensure that water is being directed to plants not the street.
- Adjust timing and cycle length to reflect seasonal needs.
- Run shorter cycles with breaks in between to give time for water to soak into the ground.
- Replace errant heads and repair leaks.

DON'T LEAVE HOME WITHOUT THE DOGGIE BAGS

- Make sure the bags make it in the trash and not down the storm drain.

ONLY USE TOILET PAPER IN THE TOILET

- Do not flush "flushable" wipes to prevent plumbing back-ups.

REDUCE YOUR "USE" BY BEING MINDFUL OF SINGLE-USE CONSUMPTION

- Continue bringing your own bags to the grocery store.
- Avoid taking straws, plastic utensils, napkins, etc., that you don't need at restaurants.
- Bring your own carry-out container when eating out.
- Avoid using balloons as they are consistently found in the marine environment. Consider reusable flags, banners, streamers, pinwheels, kites, or plants for a celebration instead!

MOVE YOUR CAR ON STREET SWEEPING DAY

- Street sweepers can only effectively sweep our streets if the street is clear.

PLEASE DON'T SEND IT TO THE OCEAN

- Carwash water is prohibited from entering streets. Try a commercial carwash or mobile detailer that captures and recycles the water.
- Take extra precaution during home projects to ensure no materials get washed or blown into the street or storm drain.

DANAPPOINT.ORG/ENVIRONMENTAL
LISA ZAWASKI - LZAWASKI@DANAPPOINT.ORG
SENIOR WATER QUALITY ENGINEER

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- City's utilizes Social Media, such as Facebook & Twitter accounts for outreach, including posts regarding irrigation runoff, picking up after your pet, plastic balloon litter, Coastal Clean Up Day, etc.

- Maintained storm drain stencils

- Please also refer to Countywide WQIP Annual Report for Regional Public Education Programming

Dana Point		
	Household Hazardous Waste Collection	Curbside Pick-Up: 11.23 tons of Household Hazardous Waste (HHW) collected through residential curbside pick-up program (comparable w/ 13+/- for FY0-21). This is in addition to over 38 tons (vs 46.78 tons for FY20-21) that Dana Point residents individually dropped off at a designated household hazardous waste collection facility. No bulky Item Clean Up Days in FY20-21 due to COVID but extra free Bulky Item Curbside Pick Ups were provided to residents, collecting 147 tons (note: curbside pick-up is actually more convenient). Ewaste collection: 19 tons. White Goods (Appliances) disposed of at OC Landfills and curbside pick-up for recycling: 37. In order to facilitate proper disposal of items, the City generally provides three free bulky item & e-waste drop off events per year which are highly attended. The City provides a free and easily accessible place for collection household batteries, cell phones, and CFL Bulbs from residents in the Household Battery and CFL Bulb kiosks at City Hall. This service is highly utilized by residents. To discourage flushing or improper disposal of old or unwanted medications, the Sheriff's Department provides a receptacle at City Hall where one can easily dispose of medications, free of charge, no questions asked. Used Oil Collected in Dana Point through the Orange County Health Care Agency Use Oil Collection Program demonstrating proper disposal of materials: DIY used oil only (gallons): 260 gallons Marina Dock oil: 900 gallons 55 gal drums of oily absorbent pads / solids: 13 The City advertises the service generally, a couple times per year. Ad from Feb 4, 2022 in Dana Point Times shown:

Dana Point

**The easiest way to dispose of your hazardous waste is now
AT YOUR FRONT DOOR.**



As a coastal city, Dana Point has a strong interest in protecting the ocean and our environment which both contribute to the unique quality of life enjoyed in our town. The residents of Dana Point currently enjoy a variety of recycling and waste diversion programs through the City and our waste hauler, CR&R, Inc. The City's goal is to continually present new programs and services to Dana Point's residents aimed at providing access to additional sustainable programs with a time-saving advantage.

Dana Point residents have access to a **FREE On-Call Residential Household Hazardous Waste (HHW) Pick Up Service** with the intention of making it easier to dispose of HHW safely. Improper disposal of HHW can pollute the environment and pose a threat to human health. The Residential On-Call HHW Pick Up Service program will allow residents to conveniently call CR&R, Inc. for safe, efficient door-side pick-up and disposal of this special waste stream... **all free of charge.**

How does it work? Easy as 1-2-3!

- 1. Call CR&R Customer Service at 877-728-0446** to schedule convenient HHW pick up (To keep things easier, pick ups will be made on the same day as your usual trash service).
- 2. Identify to CR&R** the quantity of HHW items that are in need of disposal (see some common types noted below).
- 3. On your pick up day,** place the HHW for collection at the area determined when scheduling service. A receipt will be left upon pick up.

Common Household Hazardous Waste (HHW) acceptable through the On-Call Pick-Up Program:

Fluorescent Bulbs and tubes	Mercury-containing devices such as thermometers, thermostats, switches, etc.
Common household batteries (D, C, AA, AAA, button-type)	Home improvement supplies (paint, varnish, thinners, pool supplies, etc.)
Aerosol cans (non-empty)	Sharps (syringes, pen needles, lancets) in one-way, puncture proof containers
Automotive maintenance & repair products (motor oil, filters, antifreeze, brake fluid, etc.)	Household cleaning products (bathroom and drain cleaners, bleach, oven cleaners, etc.)
E-Waste (TV's, computers, microwaves, etc.)	
Lawn and garden chemicals	

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City's Ocean Water Quality Subcommittee

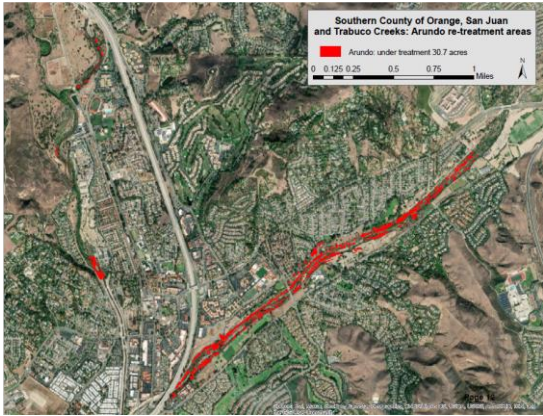
The City of Dana Point's Ocean Water Subcommittee serves as an advisory group to the City Council. The Committee meets as needed and is comprised of one appointed City Council member, three appointed residents and one non-profit organization, which is currently held by the Doheny Longboarders Association. Meetings during 2020 were postponed due to COVID. One new member was appointed in 2021 and the meetings reconvened in April 2021; however the Subcommittee has not been active.

Dana Point		
New Development / Significant Redevelopment	Water Quality Management Plan Review & Post Construction BMP Inspection	There were no WQMP projects that were granted occupancy during the reporting period. Note: From project approval to occupancy, it is not uncommon for projects to take multiple to several years. The City requires the Engineer of Record to inspect and sign and sealed a "WQMP Construction Certification" Form certifying that the BMPs have been field inspected and that the structural best management practices (BMPs) have been installed per the project's approved Water Quality Management Plan (WQMP) and associated grading plans. The Engineer certifies that the BMPs are operational and functioning properly for intended use and that any debris that may have been accumulated during construction has been removed. The WQMP Construction Certification Form requires photos of all BMPs (which is very helpful for O&M inspections). Annually, the City conducts self-certifications and/or inspections to confirm that require maintenance has been conducted during the past year. Due to being a small and built out City, the relatively low number of currently operating WQMP sites, the City has been able to take a proactive approach and send a reminder in August & September to all responsible parties to ensure that maintenance is conducted and the self-certification form is submitted before the rainy season, which had demonstrated to be effective to ensure proper maintenance of private BMPs and maintain a communication pathway for HOAs and other private responsible parties for water quality and other related issues. The City continues to utilize the County-wide online tracking tool, "OC Stormwater Tools" to inventory operational WQMPS (once constructed and issued a Certificate of Occupancy). This tracking tool provides maintenance tracking and inspections and has modeling capabilities for load reductions and other metrics of compliance. See appendix D for metrics.
Construction	Construction BMPs – Plan Check & Inspection	Ongoing implementation. The City inspects construction sites to confirm compliance with the MS4 Permit at frequencies greater than specified in the MS4 Permit. A summary of construction site inspections is reported in the Jurisdictional Runoff Management Program Annual Report Form (Appendix D).
Existing Development	Industrial Facility Inspections	Currently there is only one permitted Industrial Site within the City. The City inspects this site.

Dana Point		
		South Orange County Wastewater Authority is a No Discharge site.
	Commercial/Food Facility Inspections	The City annually inspects the food facilities and high priority commercial businesses that are considered to have a potential impact on water quality. See Appendix D for metrics.
	Mobile Business Program	Mobile businesses are inspected as necessary through Code Enforcement Program. The City does not have a business license program.
	Residential/HOA Inspections	Inspected by City Water Quality Engineer, Water Quality consultant and/or Code Enforcement Program & Engineering Tech (during late night street light inspections) through both proactive inspections and routine duties. See Appendix D for metrics. Targeted Residential Management Areas (RMAs) have been focused in Areas of Investigation under the CHWSRS program.
Illegal Discharges / Illicit Connections	Illicit Connection Inspections	ID/ICs are Investigated through Code Enforcement Program. See City of Dana Point Appendix D for metrics
	Illegal Discharge Investigations, Spill Response	Investigated through Code Enforcement Program. The City has a Water Quality Ordinance Implementation Agreement with the County or Orange to assist with some of the Authorized Inspector and Spill Responder duties, as needed. This contract allows the City to request assistance from the County's Authorized Inspectors in order to respond to and follow up on hazardous or after-hours complaints and incidents. The City also has vendors contracts for spills and has also a good working relationship with South Coast Water District and has procured their services and resources to address certain issues. See Appendix D for metrics.
WQIP Strategies		
HPWQC: Pathogen Health Risk	Encampment cleanups	While not under the Water Quality Division, the City has a comprehensive program to address homelessness. Dana Point City Council established a homeless Task Force and adopted a Community Work Plan to Address Homelessness on June 5, 2018. regularly updates a variety of statistics. For more info, see: http://www.danapoint.org/residents/services-a-p/connections-for-homeless-resources . The City employs a full-time dedicated Community Outreach Worker for homeless support services.

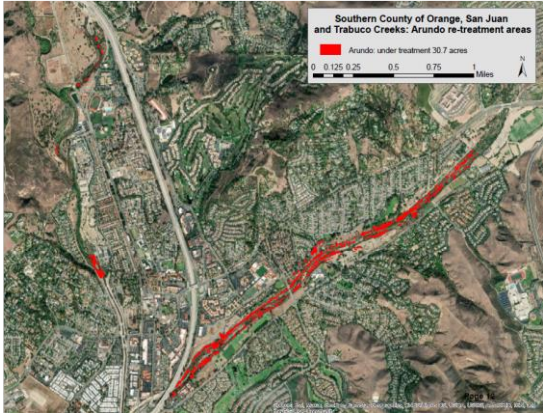
Dana Point		
		Public Works' staff is out daily in our community keeping Dana Point clean, and free of litter and debris in public spaces. If abandoned property is found in public spaces, Public Works often collects those materials for storage in a secure environment. Public Works crews are keeping public walkways and other facilities clear of obstructions. Crews do not hesitate to report illegal activity and work in tandem with law enforcement and other public agencies. January-June 2022: Number of hours spent by Public Works Crews addressing abandon property and engaging with homeless: 272 (previously reported by calendar year, now information is reported quarterly).
	JRMP program implementation	Ongoing implementation.
	Redevelopment through Permit-required LID Implementation	Ongoing implementation through plan check process.
	New Development Program	Ongoing implementation. The City implements LID components and WQMP requirements according to the permit and per the Model Water Quality Management Plan (WQMP).
	Dry weather flow retrofits / diversions within existing stormwater facilities	Many of the City diversion structures are close to 20 years old and the coastal air and soils can provide a harsh environment. Two valves are scheduled to be replaced in FY22-23. The Salt Creek Ozone Treatment System which was completed in December 2005 did not require any significant repairs during the reporting period. New pumps were installed at the three diversions at the Headlands and North Creek.
	New structural BMP implementation	No new significant City structural BMPs for FY21-22. Implement strategic conversion to drought tolerant landscaping when landscaping retrofits are needed, including Pines park planned for FY22-23.

Dana Point		
	Recreational Vehicle Waste Disposal Education Program	Any discharges that may be identified are addressed via code enforcement. During this reporting period, City staff observed one illegal discharge from an RV which was turned over to Doheny State Beach authorities for enforcement. Due to the popularity of RV's, we understood the need to provide information on approved RV waste dump sites and therefore compiled a list of local RV dumping facilities to provide upon request, one being Doheny State Beach. The Countywide program also developed a new brochure for proper RV use that the City utilizes. Please refer to the County-wide report for more info.
HPWQC: Channel Erosion	Jurisdictional Implementation of HMP via New Development /Redevelopment Program	Ongoing implementation. No projects in Dana Point were impacted by the HMP in Dana Point this reporting period.
	Wagon Wheel Creek Restoration Project and Stormwater Management Project	N/A. This project is not located within the City of Dana Point.
	Rehabilitation Projects	As a small coastal City at the end of the watersheds, there are limited opportunities for stream rehabilitation projects and no priority areas have been identified in Dana Point to date. Through the South Orange County Watershed Management Area Group (SOCWMA) & the Integrated Regional Watershed Management Plan (IRWMP) meetings and coordination efforts the City notes projects in upper watersheds that may provide benefits downstream. No projects were implemented in Dana Point during reporting period; however Team Arundo has completed a 30.7 acre Arundo removal project in San Juan Creek. Now, the removal work is in the "maintenance" phase, in which any Arundo that has re-emerged from rhizomes or seeds is "retreated" to eliminate the new growth before it migrates to other areas. Maintenance is crucial to the project's success. Team Arundo estimates it will take about seven years of annual retreatment to completely eliminate future stands of Arundo from South County watersheds. And, as retreatment progresses, each year there is less Arundo remaining to be retreated. This will be the second year of retreatment and the number of individual re-emerging plants is minimal. Below is a map that depicts the general areas where Arundo has been identified for retreatment. San Juan Creek and Trabuco Creek areas of

Dana Point		
		Arundo eradication maintenance In San Juan Capistrano, upstream of Dana Point.  Reference: San Juan Basin Authority Board of Director's meeting, October 24, 2022.
HPWQC: Unnatural Water Balance	New Development / Redevelopment Program	Ongoing implementation. Development projects are required to implement LID and landscaping on projects are reviewed for compliance with the City's water efficient landscape ordinance (Dana Point Municipal Code (DPMC) Chapter 9.55 Water Efficient Landscape Standards and Requirements). Per the 2021 Water Efficiency Landscape Ordinance (WELO) Report, 57,486 square feet of landscape was subject to the WELO in 2021.
	Dry weather flow reduction elements in wet weather retrofit BMPs	LID Site Design is required for all projects. Redevelopment priority projects require wet weather BMPs in accordance with the South OC WQMP. The wet weather BMPs also treat dry weather flows. Infiltration BMPs, where feasible would address all dry weather flows and biofiltration BMPs allow for potential infiltration of some or all of dry weather flows.
	Dry weather flow retrofits within existing stormwater facilities	Many of the City diversion structures are close to 20 years old and the coastal air and soils can provide a harsh environment. Two valves are scheduled to be replaced in FY22-23. The Salt Creek Ozone Treatment System which was completed in December 2005 did not require any significant repairs during the reporting period. New pumps were installed at the three diversions at the Headlands and North Creek.
	Outfall control strategies	Continue to operate and maintain existing diversions and treatment systems. No new during reporting period. Continue to follow-up and investigate outfall monitoring program. Continue to develop & implement outfall monitoring workplan to prioritize and plan course of action for outfall investigations based on

Dana Point		
		outfall monitoring data. See Workplan Update provided in City's Annual Report.
Jurisdictional Non-structural	Unauthorized Encampment Waste Management Program	While not under the Water Quality Division, the City has a comprehensive program to address homelessness. Dana Point City Council established a homeless Task Force and adopted a Community Work Plan to Address Homelessness on June 5, 2018. regularly updates a variety of statistics. For more info, see: http://www.danapoint.org/residents/services-a-p/connections-for-homeless-resources. The City hired a full-time dedicated Community Outreach Worker for homeless support services. Public Works' staff is out daily in our community keeping Dana Point clean, and free of litter and debris in public spaces. If abandoned property is found in public spaces, Public Works often collects those materials for storage in a secure environment. Public Works crews are keeping public walkways and other facilities clear of obstructions. Crews do not hesitate to report illegal activity and work in tandem with law enforcement and other public agencies. January-June 2022: Number of hours spent by Public Works Crews addressing abandon property and engaging with homeless: 272 (previously reported by calendar year, now information is reported quarterly).
	Permitted discharge and water impoundment inventories	Completed. Continue to review, update as necessary and use information during investigations.
	Investigation of L01S02 (in coordination with the City of San Juan Capistrano, County of Orange and Caltrans)	CHWSRS investigation AOI-SJC2 is completed. Please refer to update provided in South Orange County WQIP annual report.
Optional Strategies	Implement Offsite Alternative	There was no need or request during reporting period.

Dana Point		
	Compliance Program	
	Support projects that conduct invasive plant removal in key/strategic locations as identified, collaborate with and/or support volunteer groups as needed to encourage invasive plant removal and habitat restoration.	The County serves as the lead regional partner to apply for and maintain a regulatory permit package to facilitate a region-wide, multijurisdictional coordinated effort to address invasive plants—primarily Arundo—in South Orange County. The permit package is mostly used by Non-government Organizations (NGOs) to undertake grant-awarded non-native removal and watershed restoration projects. Current NGOs/projects utilizing the “Team Arundo” permit package include: Laguna Canyon Foundation/Aliso Creek Habitat Restoration and Enhancement project, and Mission Resource Conservation District/San Juan Creek Watershed Arundo eradication project. Both projects are funded via a Wildlife Conservation Board grant. The City supported the Upper San Juan Creek Stormwater Capture, Infiltration & Potable Reuse Project for submittal of grant funds under the Storm Water Grant Program (SWGP) Implementation, Round 2. The Phase 1 Project includes implementing three deflatable barriers in San Juan Creek to promote the in-stream recharge capability of the San Juan Basin aquifer by creating in-stream detention facilities for both dry weather and wet weather flows, allowing for the ponded water to naturally infiltrate into the aquifer. In the case of a severe storm event, the deflatable barriers will be lowered to allow full passage of the stormwater flow downstream to the Doheny State Beach estuary outlet to the Pacific Ocean. Allowance for the migration of Steelhead Trout in the creeks will be incorporated into the Project through the use of fish passages. https://www.southocirwm.org/ The project was unsuccessful in receiving Prop 1 funds but continues to seek funding and is currently going through the permitting process with multiple agencies. https://sanjuanwatershed.com/ Team Arundo has completed a 30.7 acre Arundo removal project in San Juan Creek. Now, the removal work is in the “maintenance” phase, in which any Arundo that has re-emerged from rhizomes or seeds is “retreated” to eliminate the new growth before it migrates to other areas. Maintenance is crucial to the project’s success. Team Arundo estimates it will take about seven years of annual retreatment to completely eliminate future stands of Arundo from South County watersheds. And, as retreatment progresses, each year there is less Arundo remaining to be retreated. This will be the second year of retreatment and the number of individual re-emerging plants is minimal.

Dana Point		
		Below is a map that depicts the general areas where Arundo has been identified for retreatment. San Juan Creek and Trabuco Creek areas of Arundo eradication maintenance In San Juan Capistrano, upstream of Dana Point.  Reference: San Juan Basin Authority Board of Director's meeting, October 24, 2022.
	Enhance and expand trash cleanups through community-based organizations involving target audiences.	<u>Coastal Clean Up, Sept 2021:</u> Coastal Clean Up events in 2021 returned to “normal” after after the pandemic in 2021 and participant numbers were fantastic! Stand Up to Trash at Baby Beach: • Total volunteers: 250 • Total pounds of trash removed -300 Doheny State Parks & City of Dana Point at Doheny State Beach and San Juan Creek: • Total volunteers: 150 • Total pounds of trash removed -550 South Orange County Surfrider also sponsored a beach clean-up at Salt Creek beach. County of Orange Adopt A Channel Program: The South County Watermen's Club have adopted San Juan Creek (L01) from the southern tip of Alipaz St. (on the west side) to PCH in fall of 2020. The program increases an awareness of and a commitment to keeping our waterways clean and healthy while in turn, providing community stewardship of these valuable resources. Stand Up to Trash, a relatively new local non-profit group in Dana Point, with a mission to: Protect and conserve our ocean by raising awareness of the negative effects caused by plastic pollution through environmental education for future generations to enjoy, has

Dana Point		
		become extremely popular and active. The group organizes monthly beach clean ups throughout the year with educational “lunch and learns” after the clean ups, www.standuptotrash.com . The City presented at the “lunch and learn” on how to protect your watershed In February 2022.
	Conduct special study(ies)	AOI-SJC1 - Please refer to the South OC WQIP Annual Report for summary. AOI-SJC2 - Please refer to the South OC WQIP Annual Report for summary. AOI-DP1 - Please refer to the South OC WQIP Annual Report for summary. See also Outfall Monitoring Workplan Summary Table.
	Enhance commercial, industrial, and/or municipal inspections in strategic locations	In addition to routine annual food facility inspections, additional focused commercial and RMA inspections in were conducted in AOIs. Discharges were observed in both AOIs and enforcement (and education) was conducted.
	Install treatment BMPs (diversion or treatment) to address HPCC's/Numeric Targets	Investigations are ongoing. No new treatment BMPs were installed during reporting period.
	Develop site specific objective (SSO) for Bacteria TMDL compliance	Not being pursued at this time. Investigations are ongoing and evaluation of compliance is being conducted. Although significant water quality improvement has been observed in many locations, Site Specific Objectives (SSOs) may be appropriate at specific sites. CHWSRS AOI investigations are ongoing in Salt Creek and completed in San Juan Creek. Key take-aways from the California Bacteria Summit held at CalEPA from September 14-16, 2022, include:

Dana Point		
		Take-aways & Principles • Our goal remains the same as when we started: Safe to swim, safe to eat • Risk-based perspective • Fecal source type matters • Not every source has the same level of risk • Opportunities for standards • The current objectives are most indicative of risk when there are high levels of human sources • A higher enterococci or E. coli threshold may be appropriate when sources are not as risky. Risk modeling could be a useful tool, could lead to SSDs. • A framework for this process would be helpful • Implementation matters • Control controllable sources • Prioritize source control for fecal source types with the greater illness risk • Accountability is important • A framework and toolbox for this process would also be helpful Take-aways & Principles • Collective action, partnering, and messaging are critical • Joint fact finding • Collective action and partnering between all of us • Partnering with public health experts • Working through expert panels, e.g., when considering QMRA model inputs • Highlighting successes while working toward continued improvements • Learning from monitoring reports • Communicating to the public so they can understand risks clearly, accurately, and in more real-time • Monitoring, Data, and Tools • Need consistent, comparable data • Need technology to monitor for source tracking and rapid, real-time data The City felt the summit was very productive and initiated a much needed dialogue that it hopes will continue to address the challenges with bacteria regulations.
	Grease Interceptor Rebate Program	This program has successfully facilitated installation of 13 grease interceptors that would not have been installed otherwise. Because there has been a lot of redevelopment and change of ownership of food businesses, which generally require the installation of grease interceptors, the intent of the program (to increase the number of restaurant with properly sized grease interceptors) is being accomplished due to other factors and therefore this program has been ceased.
	Investigate application of rainwater harvesting feasibility and applications in retrofit applications	No opportunities in Dana Point identified during FY21-22. Through the multi-faceted south Orange County Watershed Project Master Planning effort, opportunities are being considered and evaluated. High priority projects are being studied in further details and funding opportunities are being pursued. Please refer to the WQIP Annual Report for more details.
Other Efforts?		

Jurisdictional Structurals	TMDL Water Body(ies) Addressed	Completion Date	2020-21 Reporting Year Update
City-wide Catch Basin Inlet Filters & full capture trash devices (over 700 devices)	Salt Creek Beach at Salt Creek service road, Salt Creek Beach at Dana Strand Road, At Salt Creek (large outlet) at Monarch Beach Pacific Ocean Shoreline, at San Juan Creek, San Juan Creek, at mouth, lower 1 mile	Ongoing. Upgrades to full capture devices are being implemented in a phased approach.	Continue to inspection and clean (as needed) quarterly. During FY20-21: 8,353 gallons of trash, silt/sediment and green waste removed. Estimated 11% to be trash/litter.
Implementation of State Trash Control Plan	Salt Creek Beach at Salt Creek service road, Salt Creek Beach at Dana Strand Road, At Salt Creek (large outlet) at Monarch Beach Pacific Ocean Shoreline, at San Juan Creek, San Juan Creek, at mouth, lower 1 mile	Upgrades to full capture devices in priority areas are being implemented in a phased approach.	Participated in development of Land Use Substitution Guidelines. The State trash requirements have not yet been incorporated into the MS4 permit.
Alipaz Diversion	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline)	2003	Operated diversion from May 12 through October 4 for 2021 summer season. Operated diversion from May 12 through October 12 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Del Obispo Diversion	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1	2003	Operated diversion from May 13 through October 4 for 2021 summer season. Operated diversion from May 12 through October 12 for 2022 summer season. Note:

	mile, mouth and Pacific Ocean Shoreline)		SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Alipaz Trash Separation Unit (aka CDS unit)	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline)	2003	The City contracts with United Stormwater to inspect and clean the full capture hydrodynamic separation unit. Approximately 284 cubic feet of trash , sediment and green waste was removed (estimated 29% trash and 71% sediment & green waste).
Del Obispo Trash Separation unit (aka CDS unit)	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline)	2003	The City contracts with United Stormwater to inspect and clean the full capture hydrodynamic separation unit. Approximately 203 cubic feet of trash, sediment and green waste was removed. (estimated 14% trash and 86% sediment and green waste).
Water District "Smart Landscape" Rebate program	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline) Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	ongoing	The following landscape retrofits, funding through the county-wide rebate programs, help to prevent and reduce dry weather runoff. <u>Smartimers</u> installed: -MNWD: 381 residential, 104 commercial -SCWD: 5 residential, 1 commercial <u>Rotating Nozzles</u> installed in MNWD: 300 <u>Turf removal projects:</u> -MNWD: 37,648 sf residential, 115,313 sf comm. -SCWD: 1,409 sf residential, 76,798 sf comm. <u>Spray to drip irrigation conversions:</u> -MNWD: 66,612 sf -SCWD: 130,495 sf <u>Rainbarrels:</u> -MNWD: 10 -SCWD: 2

Priority Redevelopment Projects with WQMPs/Local Standard Stormwater Mitigation Plan (SSMP) and treatment control BMPs	Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	ongoing	Ongoing implementation. The City implements LID components and WQMP requirements according to the permit. Infiltration is prioritized where feasible to hydrologically disconnect and decrease wet weather loading in new development. No WQMP projects were completed and issued Certificates of Occupancy during the reporting period and there are 23 operating WQMP sites in the City's inventory. Note: From project approval to occupancy, it is not uncommon for projects to take multiple to several years.
Median Retrofits	Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	2018	Ongoing maintenance.
North Creek diversion	North portion of Doheny State Beach (not TMDL segment)	2003	Operated diversion from June 4 through Oct 4 for 2021 season. Operated June 4 through October 12 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Strands Beach diversion	Beaches & Creek Bacteria TMDL (Salt Creek at Dana Strand)	2009	Operated diversion from May 12 through October 4 for 2021 season. Operated May 23 through September 8 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Baby Beach diversion	Baby Beach Bacteria TMDL	2009	Operated diversion from May 6 through October 4 for 2021 season. Operated May 23 through October 12 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Urban runoff diversions, including Camino de Estrella	Pacific Coastline in Capo Beach, south of Doheny (not a TMDL segment)	2003	Operated diversions from May 6 & 12 through October 4 for 2021 season. Operated May 23 & June 4 through September 8 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
Capo Beach diversion	Pacific Coastline in Capo Beach, south of Doheny (not a TMDL segment)	2007	Operated diversion from May 6 through September 24 for 2021 season. Operated May 23 through September 8 for 2022 season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.

Headlands diversion (3)	Beaches & Creek Bacteria TMDL (Salt Creek at Dana Strand)	2009	Operated diversions from June 4 through October 4 for the 2021 season. Operated May 23 through September 8 for 2022 summer season. Note: SOCWA Permit allows operation from April 15- October 15 during non-rain events.
North Creek trash separation unit	North portion of Doheny State Beach (not TMDL segment)	2003	The City contracts with United Stormwater to inspect and clean the full capture hydrodynamic separation unit. Approximately 404 cubic feet of trash, sediment and green waste was removed (36% trash & 64% sediment and green waste).
Capo Beach trash separation unit	Pacific Coastline in Capo Beach, south of Doheny (not a TMDL segment)	2007	The City contracts with United Stormwater to inspect and clean the full capture hydrodynamic separation unit. Approximately 188 cubic feet of trash, sediment and green waste was removed (estimated 38% trash and 62% sediment and green waste).
Headlands trash unit and media filter	Beaches & Creek Bacteria TMDL (Salt Creek at Dana Strand)	2009	The City contracts with United Stormwater to inspect and clean the trash unit and media filters.
Baby Beach trash unit and media filter	Baby Beach Bacteria TMDL	2009	The City contracts with United Stormwater to inspect and clean the trash unit and media filters.
Doheny Village Parking Lot Infiltration BMP	Beaches & Creek Bacteria TMDL (San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline)	2015	Maintained regularly through City's landscaping contract.
Salt Creek Falconry Project	Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	2017 - Summer season when funding permits. Birds are not an anthropogenic source.	Avian fecal coliform contributions: Avian markers are consistently detected when analyzed at Salt Creek (note that the MS4 is treated when the Salt Creek Treatment Facility is operating). When funding is available, the County of Orange, the City of

			Dana Point and Monarch Beach Resort partner to fund a Nuisance Bird Deterrent project at Salt Creek outlet. The project was implemented from April 4, 2021 through October 31, 2021 for the 2021 season and April 15 through October 31 for the 2022 summer season.
Salt Creek Ozone Treatment Facility	Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	2005-operated May through early November.	Operated Salt Creek Ozone Treatment System operated May 17, 2021 through November 8 for 2021 season and May 16 through November 7 for 2022 summer season.
Active participant in the following AOI investigations AOI-DP1, Dana Point HSA, Salt Creek (large outlet) at Monarch Beach. AOI-SJC1, Lower San Juan HSA, San Juan Creek, lower 1 mile, mouth, and Pacific Ocean Shoreline AOI-SJC2, Lower San Juan HSA, San Juan Creek, lower 1 mile, mouth, and Pacific Ocean Shoreline	San Juan Creek lower 1 mile, mouth and Pacific Ocean Shoreline Beaches & Creek Bacteria TMDL (Salt Creek large outlet)	Ongoing	Please refer to the WQIP Summaries of the AOI investigations for details.

Dana Point Prioritization of Major Outfalls	Outfall	Pipe Size	Estimated Flow (cfs)	Estimated Flow (gpd)	Drainage Area (acres)	Latitude	Longitude	DW Outfall Inspection Data (Flow/ponding observed 2x in 2021	Being Sampled in Outfall Monitoring Program	WQIP Priority Outfall	Sp. Conducti vity (uS/cm) (instanta neous)	2022 WQIP Prioritization Score (highest # = highest priority)	Outfall Dry Weather Water Quality Monitoring Data (NAL exceedances)	Discharges to Bacteria TMDL waterbody?	Notes	Investigation Status	Abatement Actions	City Atlas Map #	DP Storm Drain Reference
Dry- 2022	DP01-12022-2	54"				33.466503	-117.716091	No		No			No	No			Headlands Central Diversion - C	B8	
Dry- 2022	L01-726-6	48"			6.21 91% DP, 9% SJC	33.476197	-117.679246	No		No			No	Yes	Private?	not shown on City maps		F6	
Dry -2022 (when diversion operating)	L01-728-4	30"			79	33.466746	-117.682578	No		No			No	Yes	Not a Major Outfall.	very low flow noted when monitored for diversion	Del Obispo Diversion	F8	DP-L-012- C01 DL-L-012 SD-059-03
Dry or buried - 2022	SC11-035-2d	36"				33.458939	-117.673706	No		No			No	No				G10	
Dry, buried - 2022	SC11-130-2	42"	0.017			33.455718	-117.669171			No			No	No			Capo Beach Diversion	G11	SD-117
Dry-2022	L01-727-1 (L01SO4)	96"	0.159367		458 93% DP, 7% LN	33.471155	-117.681012	Yes	2021 - dry	Yes		60	no	Yes			Alipaz Diversion	F6	DP-L-05 TI-007-31
Dry-2022	L01-726-2	36"			2.51	33.474867	-117.679504	No - Dry		No			No	Yes				F6	DP-L-06 P-019-19
Dry-2022	L01-728-8d	42"			45	33.460856	-117.677281	No		No			No	No			Urban Runoff Diversion #1, valve 20' North of 34512 1/2 Coast Hwy. (east side, by above ground utility vault	F10	DP-M-026 SD-068- 02(City Drain #26)
Dry-2022	SC11-035-3d	48"	0.008664			33.45703	-117.67112			No			No	No		very low flow, could be tidally influenced flow that is ponded	Urban Runoff Diversion #3	G10	SD-068-03
Dry-2022	SC11-026-1 (M00P01)	box	0.072391		305 67% DP, 31% SC, 2% SJC	33.45392	-117.666472	Yes		No			No	No	tidally influended	very low flows, groundwater?	Urban Runoff Diversion #4	H11	SD-068-06 DP-M-019- P01 SD-072-02
Dry-2022	L01-727-2	36"			0.72	33.474188	-117.679722	No		No			No	Yes				F7	SI-034-33 DP-L-07
Dry-2022	L01-728-6	36"			4.4659	33.469715	-117.6809	No		No			No	Yes		not shown on City maps		F8	
Dry-2022	L01-728-9	36"				33.470773	-117.681097	No		No			No	Yes		not shown on City maps		F7	
Dry-2022, Private	L01-727-3	36"	0.027857		4.74	33.471546	-117.680126			No			No	Yes	very low flow	private SCWD		F7	SI-034-33 DP-L-07
NA	L01-728-2 - Caltrans	54"	0.003032		96	33.464696	-117.682205	Yes - ponded		No			No	Yes	owned by Caltrans			F9	SD-004-13
outfall buried, infiltrates into ground	SC11-035-1d	48"			73.59	33.459962	-117.675368	No		No			No	No		no flow at beach (oufall buried)		G10	DP-M-025 SI-054-01
Priority 1	K01-12126-1 K01S01 AOI-DP1	120"	0.477622		885.25 73% Laguna Niguel, 27% Dana Point	33.484034	-117.719876	Yes - ponded	Yes CHWSRS OFS	Yes	5427, 5087	78	6/22/22 FC >= 2200 TN = 3.6 mg/L TP = 0.36 Mn = 0.34 9/7/22 FC >= 3600 TN = 3.6 mg/L TP = 0.36 Mn = 0.34	Yes	Note: CHWSRS site Drainage area = 941 A (71% Laguna Niguel and 29% Dana Point.) Based on Outfall Capture Feasible Study results, minimal evidence of human waste impacts based on PPCPs and NGS, runoff consists predominantly of recycled and imported water irrigation runoff with limited groundwater. Also CHWSRS AOI-DP1. Please refer to CHWSRS Workplan Update for detailed information on ongoing investigation.	Based on Outfall Capture Feasible Study results, minimal evidence of human waste impacts based on PPCPs and NGS, runoff consists predominantly of recycled and imported water irrigation runoff with limited groundwater. Also CHWSRS AOI-DP1. Please refer to CHWSRS Workplan Update for detailed information on ongoing investigation.		B4	K01S01- 713-2

Dana Point Prioritization of Major Outfalls	Outfall	Pipe Size	Estimated Flow (cfs)	Estimated Flow (gpd)	Drainage Area (acres)	Latitude	Longitude	DW Outfall Inspection Data (Flow/ponding observed 2x in 2021)	Being Sampled in Outfall Monitoring Program	WQIP Priority Outfall	Sp. Conducti- vity (uS/cm) (instanta- neous)	2022 WQIP Prioritization Score (highest # = highest priority)	Outfall Dry Weather Water Quality Monitoring Data (NAL exceedances)	Discharges to Bacteria TMDL waterbody?	Notes	Investigation Status	Abatement Actions	City Atlas Map #	DP Storm Drain Reference
Priority 1	K01-12159-2	96"	0.17			33.482451	-117.720432	Yes	2022	Yes	2947, 4869	62	6/22/22 FC >= 460 TN = 2.2 mg/L TP = 0.39 Fe = 0.34 mg/L Mn = 0.27 mg/L 9/7/22 FC >=4700 TN = 3.7 mg/L TP = 0.33 Fe = 0.51 mg/L Mn = 0.57	Yes	Ongoing Study: appears to have some gorundwater and potable and recycled irrigation runoff	Initial flow monitoring and driving surveys completed in Summer-Fall 2021. Driving surveys limited to SeaPoint area to limit geographic scale of project. Special Study initiated this reporting period. Proactive irrigation surveys and follow-up notifications conducted. Iron, Manganese and conductivity indicative of groundwater contribution. TN & TP may be from recycled water.	13 irrigation runoff code cases issued in August, resolved by October 2021	B5	
Priority 1	K01-12159-3	48"	0.014 .007 0.013 0.007	9,048 4,527 8,042 4,524		33.482594	-117.720398	Yes	2022	No	3829, 3633	43	6/22/22 FC >= 3600 TN = 6.6 mg/L TP = 0.72 9/7/22 FC >= 8600 TN = 5.4 mg/L TP = 0.42	Yes		Mostly residential. no specific chronic sources identified. General irrigation runoff issues addressed through code enforcement when observed. Standard inspection program implemented. Suspect some surfacing groundwater inputs.		B5	
Priority 1 - move to Priority 3	L01-728-3 (L01S02)	11.5" x 11" Double box culvert	0.45		1014, SOME Caltrans groundwater 91% SJC, 9% DP	33.465522	-117.682141	Yes		Yes		70		Yes	FC, Ent, N MN, Cd	Part of CHWSRS: AOI-SJC2, OCFS site. Complete. Groundwater contributions. See OCFS Fact Sheet.	COMPLETE. See AOI- SJC2 Report	F9, F8	DP-L-02 L01-101-3 SD-023-14
Priority 1 - move to Priority 3	L01-726-5	54"	0.007169		69 94% Dana Point, 6% SJC	33.475819	-117.679308	Yes	2022	Yes	1674, 2380	29	6/22/22 - not enough flow to sample	Yes		Part of CHWSRS: AOI-SJC1 area Investigation - determined not to be a significant source in watershed survey. Small residential drainage area.	See AOI-SJC-1 Report	F6	DP-L-05 TI-007-31
Priority 2	DP06-12106-1 (DSB5)	60"	0.2955		66.54	33.463896	-117.688411	Yes - ponded		No			No	No	"North Creek", no specific chronic sources identified. General irrigation runoff issues addressed through code enforcement when observed. Standard inspection program implemented. Suspect some surfacing groundwater inputs. Dry Weather Flow diverted beginning June 4, 2022. Tidally influenced.	Flows have decreased significantly since 2005 (60,000 GPD) to 12,000-12,500 average GPD	North Creek Diversion	E9	DP-L-015 SI-150-34
Priority 2	SC10-075-1 M00P05	box	0.006388		83 90% DP, 10% SC	33.453565	-117.664941	Yes		No			No	No	suspect both groundwater and potential tidal influence	the outfall location should be moved to beach		H11	SD-068-06 DP-M-019- P01 SD-072-02
Priority 2	L01-728-5 L01-DP	60"	0.008 .011	5,170 7,109	24.72	33.468224	-117.682223	Yes	2022	No		22	6/22/22 Fecal Coliform >= 14900 Enteroto >= 54000 TP = 0.33 9/7/22 FC >=5000 Enteroto >=33000 TN = 2.2 mg/L TP = 0.39	Yes	any flow infiltrates	Ongoing investigation. Drainage area boudaries delineated. Drains between Del Obispo & Alipaz Diversion. Drains portions of Fountains at Seabluffs & Harbor Creek HOA. Low flow estimated at .01 cfs or less (6,461 gpd). Based on water quality data, it appears that there may be intermittent overirrigation and/or groundwater inputs; however specific sources have not been identified to date. No definitive source(s) to target for abatement	Continue to evaluate TDA pending additional WQ data from County	F7 & F8	SI-034-33 DP-L-07
Priority 3	M00.3-169-3	36"				33.447475	-117.653431	No		No			No	No		need to move outfall to beach		I13	DP-M-05 SD-068-06 & 11 SI-083-12
Priority 3	L01-728-7 (L01S03)	84" x 96"	.029 .049	18,743 31,670	186 64.5%SJC, 5.5% DP	33.469196	-117.679635	Yes		No			No	Yes- through L01S02	Not an outfall flowing into receiving waters. Mostly drains SJC and should not be priority for City to investigate.	drains to L01S02, Part of CHWSRS: AOI- SJC2, OCFS site. Complete. See OCFS Fact Sheet.	COMPLETE. See AOI- SJC2 Report	F8	L01S03

Dana Point Prioritization of Major Outfalls	Outfall	Pipe Size	Estimated Flow (cfs)	Estimated Flow (gpd)	Drainage Area (acres)	Latitude	Longitude	DW Outfall Inspection Data (Flow/ponding observed 2x in 2021	Being Sampled in Outfall Monitoring Program	WQIP Priority Outfall	Sp. Conducti vity (uS/cm) (instanta neous)	2022 WQIP Prioritization Score (highest # = highest priority)	Outfall Dry Weather Water Quality Monitoring Data (NAL exceedances)	Discharges to Bacteria TMDL waterbody?	Notes	Investigation Status	Abatement Actions	City Atlas Map #	DP Storm Drain Reference
	L01-728-1	18"				33.464078	-117.682203	No		No			No	Yes	Behind Doubletree Hotel, east side of San Juan Creek. Caltrans/County storm drain.			F9	SD-004-13 & 14
Priority 3	SC10-075-3 M00S01	8' by 3'			Dana Point and San Clemente	33.450411	-117.659668	No		No			No	No	No			H12	SD-027-02
Priority 3	SC10-075-2	24"				33.452221	-117.663441	No		No			No	No	Not a Major Outfall.		Urban Runoff Diversion #2, valve 20' north 34660 Coast Highway (Olamendi's)	G10	SD-068-03
Priority 3	M01-168-1d (M00P03)	43"			3.2	33.445842	-117.651094	No		No			No	No			upstream drainage drains to Urban Runoff Diversion #7	I13	SD-068-11 SD-068-12
Priority 3	M01-168-2d (M00P03)	36"	0.008654		27 53% SC, 47% DP	33.445014	-117.650077	Yes		No			No	No			upstream drainage drains to Urban Runoff Diversion #7	I13	SD-068-11 SD-068-12
Priority 3	L00-12107-1	60"				33.46043	-117.694232	No		No			No	No	Golden Lantern Storm drain to Harbor, Not recorded in County 2021 outfall field screening spreadsheet	County-owned		E10	
Priority 3	DP01-12020-1	22"				33.469195	-117.717895	No		No			No	No	Not a Major Outfall	County-owned	Strand Beach Diversion	B8	
Priority 3	DP01-12022-3	30"				33.469027	-117.717782	No		No			No	No	Not a Major Outfall		Headlands North diversion - D	B8	
Priority 3	K01-12046-3					33.492321	-117.717383	No		No			No	Yes	Not recorded in County 2021 outfall field screening spreadsheet	can't locate		B3	
Priority 3	L00-12095-1	18"				33.4625	-117.706184	No		No			No	Yes	Not a Major Outfall. In Harbor next to OI Pier. Baby Beach Media Filter & Diversion	Refer to Baby Beach TMDL Progress Reports	Baby Beach Diversions. Refer to Baby Beach TMDL Progress Reports	C9	SD-001-03 (PLAN)
Not in DP but DP has some drainage area	L01-724-1 (L01S01)	18"		0.082	283 SJC & LN	33.483186	-117.677063	No		No			No	Yes	Not major outfall.	Investigation as part of AOI-SJC1 investigation, not a priority		NA	
Priority 3	DP01-12022-1	48"	0.0672			33.464085	-117.71479	Yes		No	2985		No	No	below average discharge	Headlands E Diversion (South)Residential drainage area. Suspect groundwater and possible intermittant irrigation runoff inputs.Diversion started May 23, 2022. Note residential groundwater drain connected downstream of diversion. development above has foundation/footing drains	Headlands South Diversion - E	B9	
	Doheny Outfall (Arco Station)	24"				33.463704	-117.68365			No - smaller		NA	NA	Yes	Not a Major Outfall.	Feb-20	Over-irrigation enforcement: CE20-0165, CE20-0271	F9	
LN	K01-12046-2				3039.79 Acres 97% Laguna Niguel, 2.5% Dana Point	33.4922613	-117.71739							Yes	daylight of Salt Creek, just south of Laguna Niguel, south of Camino Del Avion in natural area			B2 & B3	

FINAL Project report

State Parks Beach Water Quality Improvement Projects

Date of report: 6/30/2022

California Department of Parks and Recreation

Jeff Brown, Project Director.

2797 Truxtun Road | Barracks 26 San Diego, CA 92106

Watershed(s): San Juan Creek / Carpinteria Creek / Pacific Ocean

Total project cost: \$ 5,956,444.69

Funded by: Proposition 84 – CLEAN BEACHES PROGRAM – Public Resources Code Sec. 75060

State Water Resource Control Board Grant Agreement SWRCB0000000000D1612420; Clean Beaches; Grant; Prop 84; water quality; California State Parks; Water Resources Control Board; Doheny State Beach; Carpinteria State Beach; D1612420; 514; 610
Proposition 84 Clean Beaches Initiative Grant Program

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Grant Summary

Project Purpose –: Reducing potential bacterial contamination by replacing/repairing aging sewer infrastructure at Doheny and Carpinteria State Beaches

Project Goals

a. Short-term Goals:

Reduce bacterial/pollutant loads and/or potential introduction of fecal indicator bacteria from the project area.

b. Long-term Goals:

Decreased potential for introduction of bacterial/pollutants to groundwater and ocean waters that require beach closures to protect public health

Project Location: San Juan Creek / Carpinteria Creek

a. Physical Size of Project: Doheny – approx.. 4 acres / Carpinteria – 80,000SF +/-

b. Counties Included in the Project: Orange / Santa Barbara

c. Legislative Districts: 73/37, 36/19

Grant Time Frame: Refers to the implementation period of the grant.

From: 2017-07-01 2017-07-01 2017-07-01 2017-07-01 To: 2022-07-31 2022-07-31 2022-07-31 2022-07-31
07-01 2017-07-01 31 2022-07-31

Project Partner Information: California State Parks / California State Water Resources Control Board

Nutrient and Sediment Load Reduction Projection: N/A

Executive Summary

California State Park System lands protect and preserve an unparalleled collection of culturally and environmentally sensitive structures and habitats, threatened plant and animal species, ancient Native American sites, historic structures, and artifacts. With 279 state park units, over 340 miles of coastline, 970 miles of lake and river frontage, 15,000 campsites, 5,200 miles of trails, 3,195 historic buildings and more than 11,000 known prehistoric and historic archaeological sites, the department contains the largest and most diverse recreational, natural, and cultural heritage holdings of any state agency in the nation. Many of those facilities are located on or adjacent beaches and waterways where aging infrastructure designed and installed in the 1960s and 1970s has outlived its useful service life, increasing the potential to directly impact adjacent beaches and waterways and Pacific Ocean.

The primary goal of the Clean Beaches Initiative (CBI) Grant Program is to implement projects that will reduce the risk of bacterial concentrations at public beaches. The CBI Grant Program has identified priority projects in California, including State Parks for implementation following research based upon specific criteria.

The Clean Beaches Task Force (CBTF) group appointed by the State Water Board reviewed and identified Doheny State Beach as a recommended priority beach for consideration of CBI funding. The proposed preventative project aims to address concerns about the aging infrastructure through the implementation of two critical elements of the existing sewage system, relining and or replacement of segments of the existing gravity and force-mains that have the most potential for failure and discharge of effluent directly into San Juan Creek and the Pacific Ocean.

The CBTF had not specifically reviewed and identified Carpinteria State Beach as a recommended priority beach, but the proposed preventative project meets the criteria and addresses concerns about its aging infrastructure by replacing existing gravity and force-mains that have the most potential for failure and discharge of effluent directly into Carpinteria Creek and the Pacific Ocean. The project also identified the need to prevent surface stormwater from infiltrating and overloading the sanitary systems which could lead to increased maintenance and potential discharge of effluent.

In October 2017, the State Water Board executed the subject Grant providing financial assistance to California State Parks, toward the completion of three separate project components, two at Doheny State Beach (Components 1 & 2) and one at Carpinteria State Beach (Component 3).

Each component included in this project resulted in the replacement of aging park sewage infrastructure and related components at highly popular beaches where exceedances of regulatory thresholds for bacteria were observed. While these projects cannot be definitively identified as the causal source of the measured exceedances, a positive correlation exists when the pre-project baseline and post-project monitoring periods are compared. As a result, with the correction of the numerous deficiencies found in the existing sewer systems during the design and construction process, and fewer exceedances documented in the post-project period indicating improved ocean water quality. We believe the projects are a success, consistent with project and Grant program goals.

Background

DOHENY STATE BEACH

Doheny State Beach is California's first state beach, covering 62 acres of scenic oceanfront land. The Orange County beach property was donated by oil tycoon Edward L. Doheny for public use in 1931 and was official named Doheny State Beach in 1963. Located in the city of Dana Point, it is one of California's most popular state beaches, attracting as many as one million visitors per year. Due to San Juan Creek (aka San Juan River), the beach is divided into two ends – the northern end that has a 5-acre lawn with accessible picnic facilities, volleyball courts, and parking; the southern end that has accessible campgrounds, tide pools, and a visitor center with several aquariums. Surf fishing, surfing, kayaking, windsurfing, and swimming are also popular activities enjoyed along the mile stretch of beach.

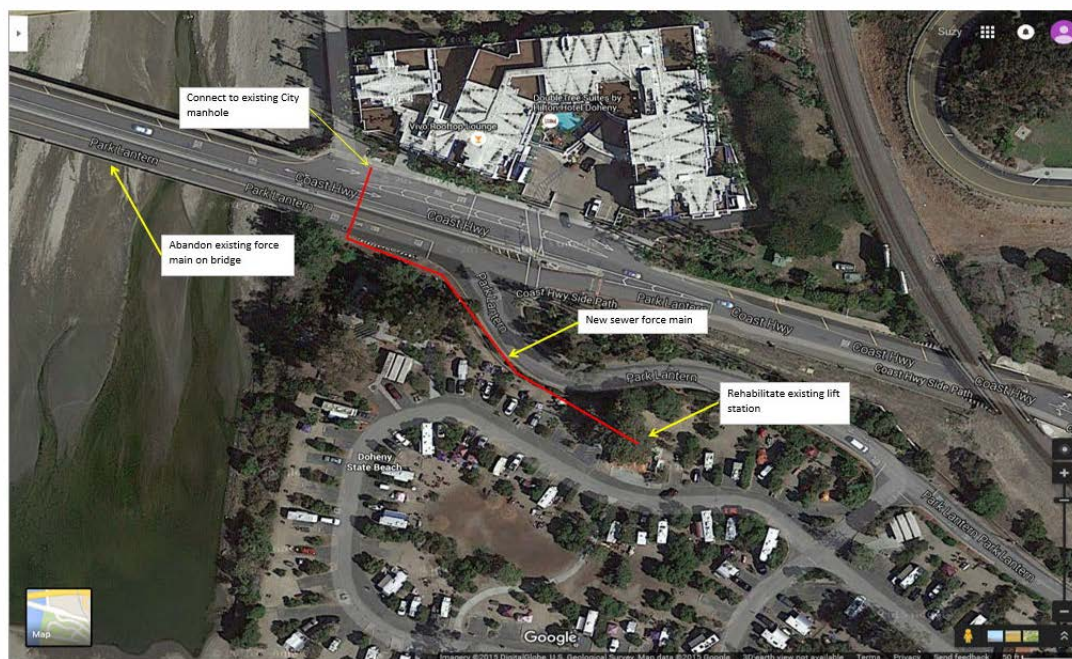
An aging force main sewage line is attached to the bridge which crosses over San Juan Creek. This line is used to carry sewage from the southern end of the park, including campground and day use areas, into the North Day Use gravity sewage system, where the rest of the existing sewer lines in the park connect to the city sewer close to the park entrance. In the event there was a rupture of the aging pipes, effluent would be discharged directly into San Juan Creek which discharges directly into the Pacific Ocean. There are many instances which could cause this infrastructure to leak into the creek. Examples include earthquakes or ruptures due to the age of the infrastructure.

The existing sewage transmission lines in the park are a combination of clay gravity pipe and cast-iron force main pipes, which all are nearing the end of their useful life. Leaks in this system could potentially enter San Juan Creek, which discharges to the ocean, or could travel underground to the ocean itself.

Figure 1. Site location Component 1



Figure 2. Site location Component 2



Project

Description

Component 1: Reline/Replace Sewer Lines and Rehabilitate Lift Stations

Replace aging existing sewer mains, manholes and sewer laterals at Doheny State Beach to reduce the likelihood of effluent discharge and maintenance costs. Rehabilitate existing lift stations to prevent exfiltration of sewage and provide easier maintenance.

Goals

The primary goal of this project is to reline or replace the existing sewer pipes and associated manholes and appurtenances to eliminate leaks, and to rehabilitate two (2) existing sewer lift stations by replacing pumps and relining the pump stations. To achieve this the goals established within the PAEP were:

- Replace and/or repair defective piping, manholes and lift stations within the park area.
- Demonstrate that the sewer collection system and lift station repairs/replacement is not leaking
- Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system
- Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system

Scope

The Project-Specific Scope of Work for Component 1: Reline/Replace Sewer Lines and Rehabilitate Lift Stations as outlined in the project agreement is presented below:

1. Doheny State Beach - Reline/Replace Sewer Lines and Rehabilitate Lift Stations (Component 1)

- 1.1. Project Management

- 1.1.1. Provide all technical and administrative services as needed for Component 1 completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to ensure Component 1 is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
- 1.1.2. Notify the Grant Manager at least fifteen (15) working days in advance of upcoming meetings, workshops, and trainings.
- 1.1.3. Conduct periodic and final site visits with the Grant Manager.
- 1.1.4. Conduct pre-, during, and post-construction photo monitoring at the project site and submit to the Grant Manager.
- 1.2. General Compliance Requirements /Project Effectiveness and Performance
 - 1.2.1. Submit Global Positioning System (GPS) information for project site(s) and monitoring location(s) for Component 1 to the Grant Manager. Submittal requirements for GPS data are available at:
[http://www.waterboards.ca.gov/water issues/programs/grants loans/grant info/docs/gps.pdf](http://www.waterboards.ca.gov/water%20issues/programs/grants%20loans/grant%20info/docs/gps.pdf).
 - 1.2.2. Prepare and submit an updated Project Assessment and Evaluation Plan (PAEP) which describes the manner in which Component 1 performance will be assessed, evaluated, and reported to the Grant Manager for approval. The PAEP shall detail the methods of measuring and reporting project benefits. Implementation of any monitoring and performance assessment and/or evaluation actions shall not occur prior to PAEP approval by the Grant Manager.
- 1.3. Permitting and Environmental Compliance
 - 1.3.1. Complete documentation required under the California Environmental Quality Act (CEQA) for the proposed implementation project. Take all required steps to prepare, circulate, and certify the required CEQA document(s).
 - 1.3.1.1. Submit the draft CEQA document to the Grant Manager for comment, if applicable.
 - 1.3.1.2. Submit the final CEQA document to the Grant Manager.
 - 1.3.1.3. Obtain written environmental clearance from the State Water Board confirming the State Water Board has made its own environmental findings and concurred that implementation/construction may proceed.

- 1.3.2. Obtain all public agency approvals, entitlements, or permits required for project implementation before field work begins. If Component 1 is carried out on lands not owned by the Recipient, the Recipient must obtain adequate rights of way for the useful life of the project. Submit a list and signed copies of such approvals, entitlements or permits to the Grant Manager.

1.4. Planning, Design, and Engineering

- 1.4.1. Test a minimum of one thousand 1000 linear feet of polyvinyl chloride (PVC) pipe. Submit the test results and repair recommendations to the Grant Manager.
- 1.4.2. Prepare and submit to the Grant Manager for approval the fifty percent (50%) design plans and specifications, and detailed cost estimates to:
 - 1.4.2.1. Complete the recommended PVC pipe repairs in Item 1.4.1.
 - 1.4.2.2. Reline or replace, as appropriate, a minimum of five thousand (5,000) linear feet of sewer pipe and associated manholes, pits, appurtenances, and connections.
 - 1.4.2.3. Rehabilitate two existing sewer lift stations at Combo Building No. 2 in the campground and at the maintenance yard by epoxy lining and replacing the pumps.
- 1.4.3. Complete potholing/utility location and land survey.
- 1.4.4. Complete the one hundred percent (100%) design plans and specifications, a revised cost estimate, and prepare a summary identifying any changes from the fifty percent (50%) plans. Submit the one hundred percent (100%) design plans and specifications and summary of changes for Component 1 to the Grant Manager for approval prior to preparing the bid documents in Item 1.4.5.
- 1.4.5. Complete the bid documents in accordance with the approved design plans, after receiving all required approvals, and advertise Component 1 for bid. Submit the advertised bid documents to the Grant Manager.

1.5. Construction and Implementation

- 1.5.1. Submit the final budget for Component 1 to the Grant Manager for approval prior to awarding the construction contract(s).
- 1.5.2. Award the construction contract(s) and submit the Notice(s) to Proceed and awarded contract(s) for Component 1 to the Grant Manager.
- 1.5.3. Construct Component 1 in accordance with the approved design plans and specifications in Item 1.4.4 after obtaining environmental clearance in

Item 1.3.1.3 and the necessary approvals, entitlements, or permits in Item 1.3.2.

1.5.4. Submit any proposed changes that arise during construction that may affect Component 1 benefits, the scope listed in Item 1.4.2, schedule, or costs to the Grant Manager for approval.

1.5.5. Submit as-built drawings and a summary of changes from the approved design plans and specifications that occurred during construction to the Grant Manager.

1.5.6. Prepare an Operations and Maintenance Plan that addresses operation and maintenance of Component 1 for its useful life and submit to the Grant Manager for approval.

1.6. Monitoring and Performance

1.6.1. Monitor in accordance with the approved PAEP.

1.6.2. Summarize the monitoring data results and document implementation of monitoring in accordance with the PAEP. Include a summary of all monitoring data and analysis in the Final Project Report.

1.6.3. If required, perform biological monitoring and/or other mitigation measures as identified in the CEQA document and/or included in the permit conditions. Submit a summary of the monitoring with the associated quarterly progress reports.

Component 2: New Connection to City Sewer

Replace an existing force main attached to the bridge over San Juan Creek with a new force main connecting to the City sewer system.

Goals

The primary goal of the project is to eliminate the existing sewer pipe bridge crossing by constructing a new sewer line, adding a new connection to the City sewer, and abandoning the old sewer in order to reduce the potential for sewage leaks into San Juan Creek. To achieve this the goals outlined in the PAEP were:

- Replace existing force main and connect on the South Coast Water District owned gravity sewer main.
- Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking
- Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system

- Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system

Scope

The Project-Specific Scope of Work for Component 1: Reline/Replace Sewer Lines and Rehabilitate Lift Stations as outlined in the project agreement is presented below:

2. Doheny State Beach - New Connection to Dana Point (City) Sewer (Component 2)
 - 2.1. Project Management
 - 2.1.1. Provide all technical and administrative services as needed for Component 2 completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to ensure Component 2 is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
 - 2.1.2. Notify the Grant Manager at least fifteen (15) working days in advance of upcoming meetings, workshops, and trainings.
 - 2.1.3. Conduct periodic and final site visits with the Grant Manager.
 - 2.1.4. Conduct pre-, during, and post-construction photo monitoring at the project site and submit to the Grant Manager.
 - 2.2. General Compliance Requirements/Project Effectiveness and Performance
 - 2.2.1. Submit Global Positioning System (GPS) information for project site(s) and monitoring location(s) for Component 2 to the Grant Manager. Submittal requirements for GPS data are available at:
[http://www.waterboards.ca.gov/water issues/programs/grants loans/grant info/docs/gps.pdf](http://www.waterboards.ca.gov/water%20issues/programs/grants%20loans/grant%20info/docs/gps.pdf).
 - 2.2.2. Prepare and submit an updated Project Assessment and Evaluation Plan (PAEP) which describes the manner in which Component 2 performance will be assessed, evaluated, and reported to the Grant Manager for approval. The PAEP shall detail the methods of measuring and reporting project benefits. Implementation of any monitoring and performance assessment and/or evaluation actions shall not occur prior to PAEP approval by the Grant Manager.
 - 2.3. Permitting and Environmental Compliance
 - 2.3.1. Complete documentation required under the California Environmental Quality Act (CEQA) for the proposed implementation project. Take all required steps to prepare, circulate, and certify the required CEQA document(s).
 - 2.3.1.1. Submit the draft CEQA document to the Grant Manager for comment, if applicable.
 - 2.3.1.2. Submit the final CEQA document to the Grant Manager.
 - 2.3.1.3. Obtain written environmental clearance from the State Water Board confirming the State Water Board has made its own

environmental findings and concurred that implementation/construction may proceed.

- 2.3.2. Obtain all public agency approvals, entitlements, or permits required for project implementation before field work begins. If Component 1 is carried out on lands not owned by the Recipient, the Recipient must obtain adequate rights of way for the useful life of the project. Submit a list and signed copies of such approvals, entitlements or permits to the Grant Manager.

2.4. Planning, Design, and Engineering

- 2.4.1. Prepare and submit to the Grant Manager for approval the fifty percent (50%) design plans, specifications, and detailed cost estimates to:
 - 2.4.1.1. Construct a minimum of six hundred fifty (650) feet of sewer pipeline by directional boring/trenching from the lift station in the campground and under the Pacific Coast Highway to connect to a City manhole across the street from the campground entrance.
 - 2.4.1.2. Abandon the existing sewer pipe following all regulatory requirements.
- 2.4.2. Complete potholing/utility location and land survey.
- 2.4.3. Complete the one hundred percent (100%) design plans and specifications, a revised cost estimate, and prepare a summary identifying any changes from the fifty percent (50%) plans. Submit the one hundred percent (100%) design plans and specifications and summary of changes for Component 2 to the Grant Manager for approval prior to preparing the bid documents in Item 2.4.4.
- 2.4.4. Complete the bid documents in accordance with the approved design plans, after receiving all required approvals, and advertise Component 2 for bid. Submit the advertised bid documents to the Grant Manager.

2.5. Construction and Implementation

- 2.5.1. Submit the final budget for Component 2 to the Grant Manager for approval prior to awarding the construction contract(s).
- 2.5.2. Award the construction contract(s) and submit the Notice(s) to Proceed and awarded contract(s) for Component 2 to the Grant Manager.
- 2.5.3. Construct Component 2 in accordance with the approved design plans and specifications in Item 2.4.3 after obtaining environmental clearance in Item 2.3.1.3 and the necessary approvals, entitlements, or permits in Item 2.3.2.
- 2.5.4. Submit any proposed changes that arise during construction that may affect Component 2 benefits, the scope listed in Item 2.4.1, schedule, or costs to the Grant Manager for approval.
- 2.5.5. Submit as-built drawings and a summary of changes from the approved design plans and specifications that occurred during construction to the Grant Manager.

- 2.5.6. Prepare an Operations and Maintenance Plan that addresses operation and maintenance of Component 2 for its useful life and submit to the Grant Manager for approval.

- 2.6. Monitoring and Performance

- 2.6.1. Monitor in accordance with the approved PAEP.
- 2.6.2. Summarize the monitoring data results and document implementation of monitoring in accordance with the PAEP. Include a summary of all monitoring data and analysis in the Final Project Report.
- 2.6.3. If required, perform biological monitoring and/or other mitigation measures as identified in the CEQA document and/or included in the permit conditions. Submit a summary of the monitoring with the associated quarterly progress reports.

Permitting

CEQA

California State Parks is a Trustee Agency for the resources of the State Park System as defined in CCR § 15386. Particular efforts for notice and consultation with Trustee Agencies in the early stages of a project are required of a project proponent and Lead Agency when there is potential for impacts to resources under the trustee's jurisdiction (CCR §§ 15060.5, 15063, and 15082).

The Department has two general responsibilities under CEQA: (1) to provide environmental review of its own projects and document compliance with CEQA; and (2) to review other entities' projects to determine the impacts on the resources of the State Park System, including visual and/or scenic setting, high-quality visitor experience, natural and cultural resources, and on recreational resources, needs, and demands of the State.

As required by law and under the terms of the Agreement, California State Parks filed a Notice of Exemption (NOE) for the Doheny projects with the State Clearinghouse on February 13, 2019 and received State Water Board Concurrence of the NOE on June 14, 2019.

Construction Permits

- Caltrans R/W – A Caltrans encroachment permit (12-ORA-1, PM R0.95/0.95) was applied for on July 24, 2019, and approved on January 23, 2020.
- Local – The Orange County department of Public Works issued an encroachment permit (FE19-0172) allowing for the connection to the municipal sewer system operated by the South Coast Water District.

- Coastal Permit – A coastal development permit application was made on March 06, 2019 (5-19-0225) and the permit granted on October 18, 2019.

Implementation

Figure 3. Before construction.



Figure 4. During construction.

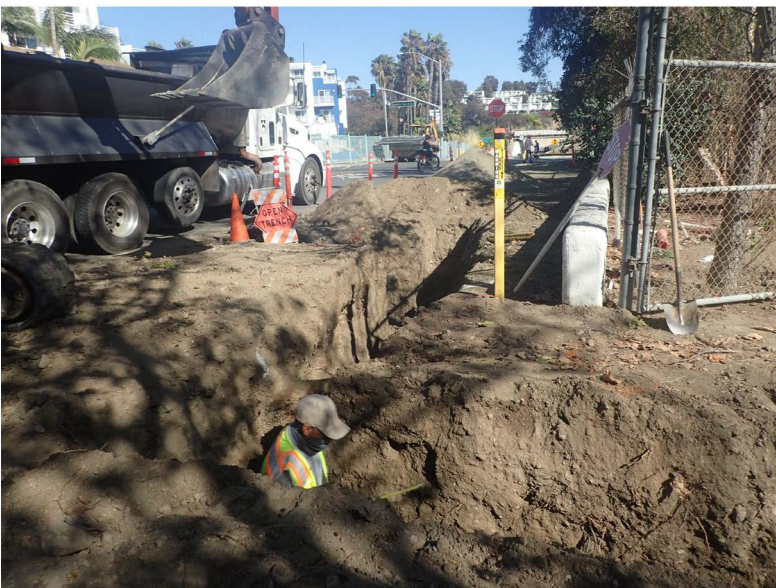


Figure 5. After construction.



Cost – Component 1, Replace/Reline Sewer Pipe system and Repair Lift Station(s) at Doheny State Beach

Figure 5. Funding.

	Estimated			Actual		
	Proposition 84 Grant	Local Match	Other Funding	Proposition 84 Grant	Local Match	Other Funding
Direct Project Administration Cost	\$156,000	\$63,505	\$0	\$133,863.10	\$0	\$0
Planning / Design	\$173,850	\$241,545	\$0	\$222,108.74	\$0	\$0
Equipment (Over \$5,000)	\$0	\$0	\$0	\$0	\$0	\$0
Construction / Implementation	\$4,660,329	\$399,263	\$0	\$2,813,406.66	\$5,571.43	\$0
Monitoring	\$0	\$193,200	\$0	\$0	\$0	\$0
Education / Outreach	\$0	\$0	\$0	\$0	\$0	\$0

	Estimated			Actual		
	Proposition 84 Grant	Local Match	Other Funding	Proposition 84 Grant	Local Match	Other Funding
Total	\$4,990,179	\$897,513	\$0	\$3,169,378.50	\$5,571.43	\$0

Cost – Component 2, New Connection to City Sewer at Doheny State Beach

Figure 6. Funding.

	Estimated			Actual		
	Proposition 84 Grant	Local Match	Other Funding	Proposition 84 Grant	Local Match	Other Funding
Direct Project Administration Cost	\$197,050	\$5,000	\$0	\$140,237.58	\$5,026.45	\$0
Planning / Design	\$266,875	\$0	\$0	\$182,837.14	\$0	\$0
Equipment (Over \$5,000)	\$0,000,000	\$0	\$0	\$0	\$0	\$0
Construction / Implementation	\$728,827	\$0	\$0	\$985,942.98	\$0	\$0
Monitoring	\$108,800	\$0	\$0	\$0	\$0	\$0
Education / Outreach	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$1,301,552	\$5,000	\$0	\$1,309,017.70	\$5,026.45	\$0

Schedule – Components 1 & 2, Replace/Reline 8Sewer Pipe system and Repair Lift Station(s) and new connection to City sewer at Doheny State Beach

The Doheny projects were combined with another water related infrastructure project for efficiency of management, reduced disruption to park operations, and cost savings during construction by bidding under one construction contract.

Figure 6. Schedule.

Task	Proposed Date	Actual Date	Delay (Actual - Proposed)
Apply for funding	n/a	April 2016	
Submit detailed application	n/a	March 2017	
Permitting		June 14, 2019	
Planning			
Construction complete	August 2021	11/27/2021	Approx. 90 days
As-built drawings	August 2021	4/11/2022	Approx. 240 days

Assessment and Evaluation

Baseline

The baseline for this evaluation was the pre-project ocean water monitoring data available from the orange county Health Care Agency, the pre-project baseline was selected as calendar year 2019 which directly preceded construction start for Components 1 and 2. The raw data was analyzed to quantify number of exceedances of regulatory limits for enterococcus, Fecal Coliform, and Total Coliform in a calendar year. The results are included in the charts presented in figures 8 and 9.

Assessment

Summary of monitoring locations

Two ocean monitoring locations were selected for evaluation of Component 1 and 2 of this grant. One monitoring location was selected for the North Day Use area, and one for the campground area. These two locations are labeled as follows in the Orange County Ocean Monitoring program:

- North Day Use: S-2, North of San Juan Creek
- Campground: S-1, 1000' South Outfall

Methods

Ocean Water Quality Monitoring Data was obtained from the Orange County Health Care Agency AB411 data. Weekly monitoring data was obtained for Enterococcus, Fecal Coliform, and Total Coliform for base line pre-project conditions, year 2019, and post-project conditions, for this report the latest 12-month period May 2021 to May 2022 was examined.

The results were evaluated against California regulatory thresholds for each bacteriological parameter; 104 MPN for Enterococcus, 400 MPN for Fecal Coliform, and 10,000 MPN for Total Coliform. The total number of exceedances during weekly sampling were determined for each parameter in both the pre-project and post-project periods.

Results

For the pre-project time period, 2019, the exceedances in the North Day Use area were 17 for enterococcus, 3 for Fecal Coliform, and 0 for Total Coliform. In the one year post-project monitoring period, May 2021 to May 2022, there was a single exceedance for Enterococcus, and no exceedances for Fecal Coliform or Total Coliform.

For the pre-project time period, 2019, the exceedances in the Campground area were 8 for enterococcus, 2 for Fecal Coliform, and 0 for Total Coliform. In the one year post-project monitoring period, May 2021 to May 2022, there was no exceedances for any of the three monitored parameters.

A graphical representation of these results is presented in Figure 8 and Figure 9 below.

Figure 7. Monitoring results.

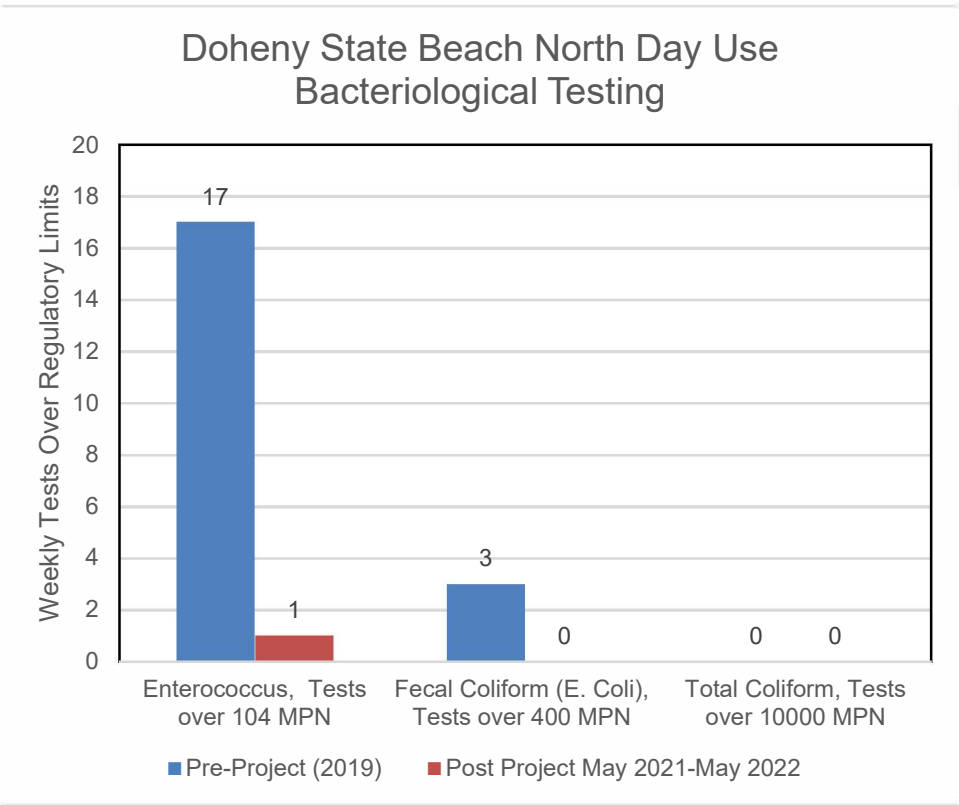
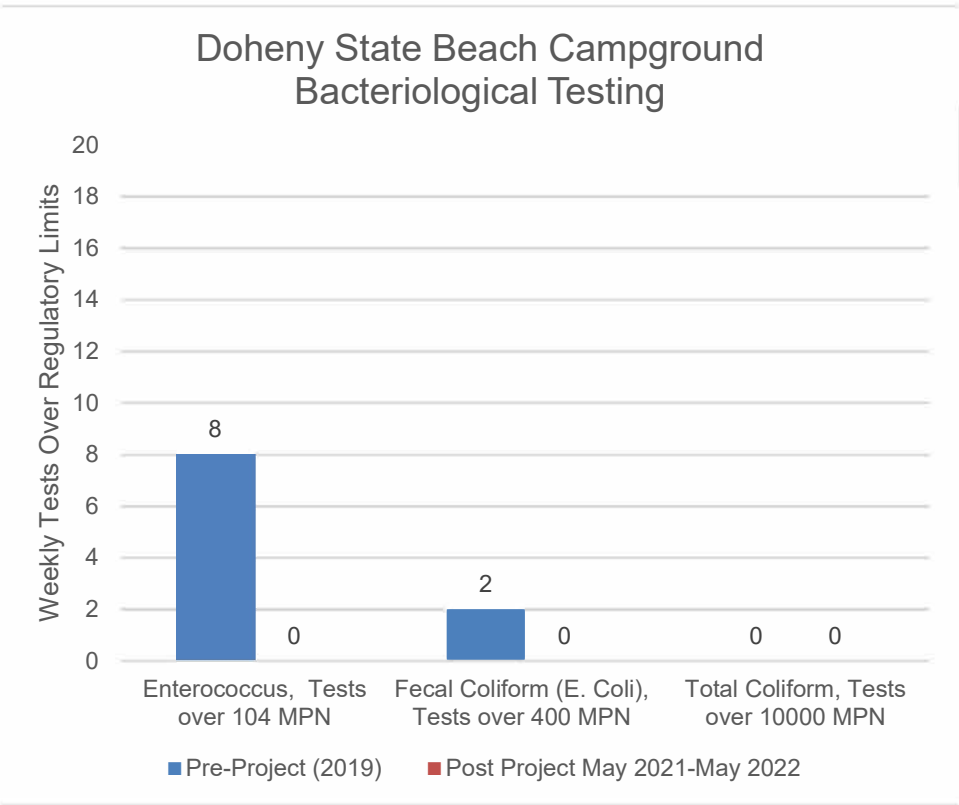


Figure 8. Monitoring results.



Evaluation

List of targets in PAEP.

Component 1 – Reline/Replace Sewer Lines and Rehabilitate Lift Stations PAEP Targets:

Project Goals	Measurement Tools and Methods	Targets
Replace and/or repair defective piping, manholes and lift stations within the park area.	Construction Inspection & Documentation, Photo Documentation, As-Built Drawings	Successful repair or replacement of a minimum of 5,000 linear feet of gravity sewer main and laterals and the upgrades and pump replacement of the two sewer lift stations.
Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking	Conduct Hydrostatic Pressure Test and perform a Close Circuit Television Inspection (CCTV)	Hydraulic pressure testing and CCTV inspection confirm that the rehabilitated system is not leaking.
Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system	AB411 data from water quality monitoring at Doheny State Beach	Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.
Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system	AB411 data from water quality monitoring at Doheny State Beach	Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.

Goal #1: Replace and/or repair defective piping, manholes and lift stations within the park area.

Target: Successful repair or replacement of a minimum of 5,000 linear feet of gravity sewer main and laterals and the upgrades and pump replacement of the two sewer lift stations.

Evaluation: This goal was successfully met during project construction approximately 600 feet of sewer line were repaired via relining, and approximately 5500 feet of sewer line was replaced. Additionally, 21 manholes were replaced. One lift station was replaced with an aboveground lift station and one lift station was rehabilitated by replacing equipment and repairing the wet well.

Goal #2: Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking

Target: Hydraulic pressure testing and CCTV inspection confirm that the rehabilitated system is not leaking.

Evaluation: Select lines were checked via CCTV to verify pipe bursting method of installation was successful. Other lines were tested via hydrostatic testing to verify no leaks existed.

Goal #3: Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system

Target: Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.

Evaluation: The results of the AB411 data analysis show a reduction in number of exceedances of bacteriological limits decreased from the pre-project evaluation period to the post-project evaluation period. The results show improved beach water quality correlated with the completion of construction, however due to the complex nature and many contributing factors to Beach Water Quality causation cannot be determined between the completion of this work and the improved water quality.

Goal #4: Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system

Target: Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.

Evaluation: Based on the proximity of the improvements to the beach and the shallow groundwater level, beach water quality is used as a proxy for evaluating the groundwater quality.

The results of the AB411 data analysis show a reduction in number of exceedances of bacteriological limits decreased from the pre-project evaluation period to the post-project evaluation period. The results show improved beach water quality correlated with the completion of construction, however due to the complex nature and many contributing factors to Beach Water Quality causation cannot be determined between the completion of this work and the improved water quality.

Component 2 – New Connection to City Sewer PAEP Targets:

Project Goals	Measurement Tools and Methods	Targets
Replace existing force main and connect on the South Coast Water District owned gravity sewer main.	Construction Inspection & Documentation, Photo Documentation, As-Built Drawings	Successful install new force main onto the SCWD sewer main.
Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking	Conduct Hydrostatic Pressure Test and perform a Close Circuit Television Inspection (CCTV)	Hydraulic pressure testing and CCTV inspection confirm that the rehabilitated system is not leaking.
Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system	AB411 data from water quality monitoring at Doheny State Beach	Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.
Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system	AB411 data from water quality monitoring at Doheny State Beach	Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.

Goal #1: Replace existing force main and connect on the South Coast Water District owned gravity sewer main.

Target: Successful install new force main onto the SCWD sewer main.

Evaluation: This goal was successfully met during project construction feet of sewer force main was replaced and connected to SCWD sewer main.

Goal #2: Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking

Target: Hydraulic pressure testing and CCTV inspection confirm that the rehabilitated system is not leaking.

Evaluation: Lines were tested via hydrostatic pressure testing to verify no leaks.

Goal #3: Improve the ocean water quality of by reducing the amounts of wastewater entering the ocean via the sewer collection or force main system

Target: Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411.

Evaluation: The results of the AB411 data analysis show a reduction in number of exceedances of bacteriological limits decreased from the pre-project evaluation period to the post-project evaluation period. The results show improved beach water quality correlated with the completion of construction, however due to the complex nature and many contributing factors to Beach Water Quality causation cannot be determined between the completion of this work and the improved water quality.

Goal #4: Improve the groundwater quality by reducing the amounts of wastewater entering the groundwater table via the sewer collection or force main system

Target: Demonstrate beach water quality improvements through the County of Orange Environmental Health Services routine testing pursuant to AB 411

Evaluation: Based on the proximity of the improvements to the beach and the shallow groundwater level, beach water quality is used as a proxy for evaluating the groundwater quality.

The results of the AB411 data analysis show a reduction in number of exceedances of bacteriological limits decreased from the pre-project evaluation period to the post-project evaluation period. The results show improved beach water quality correlated with the completion of construction, however due to the complex nature and many contributing factors to Beach Water Quality causation cannot be determined between the completion of this work and the improved water quality.

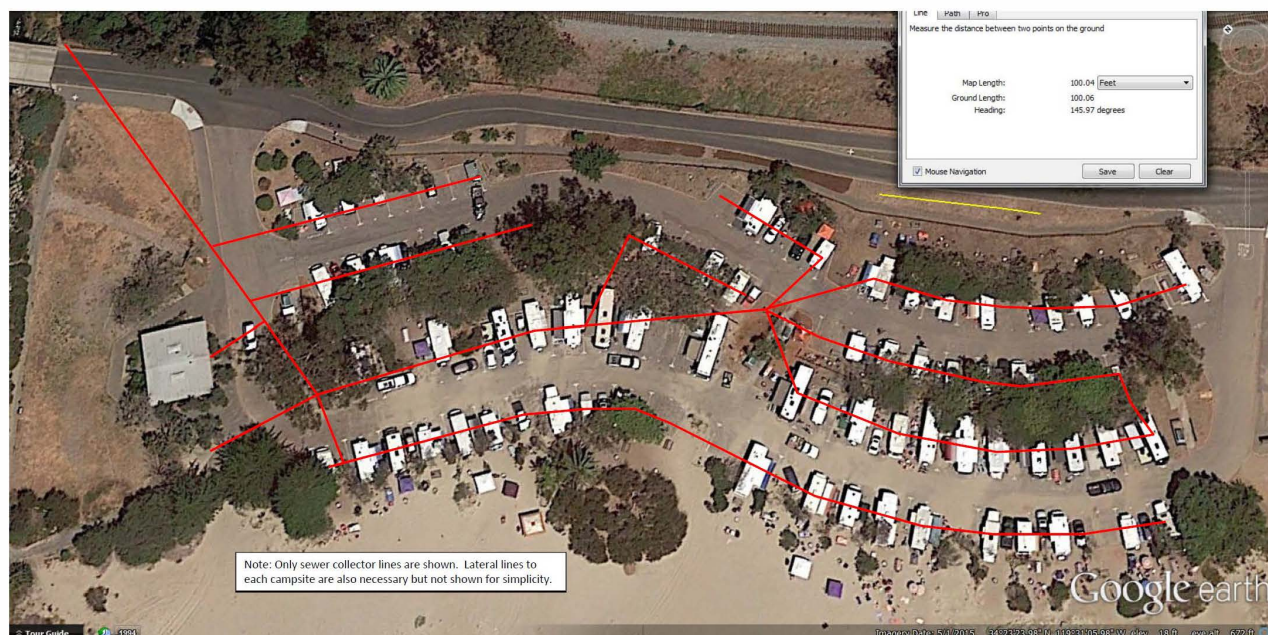
Background

CARPINTERIA STATE BEACH

Carpinteria State Beach covers 62 acres of scenic oceanfront land, located just 12 miles south of the popular coastal town of Santa Barbara. The Santa Barbara County beach property was acquired by State Parks in 1932 and was formally opened to the public in July 1941. Located in the city of Carpinteria, the beach sits at the foot of the Santa Ynez Mountains on the Pacific Ocean facing the Channel Islands. The Spanish named the area Carpinteria because the Chumash tribe, which lived in the area, had a large seagoing canoe-building enterprise, or “carpentry shop” there, because of naturally occurring surface tar which was used to seal the boats. The Carpinteria Harbor Seal Preserve and rookery is located within and south of the park. The beach has four campground loops offering more than 200 family campsites, an accessible Tomol Interpretive Play Area, picnic facilities with barbeques and covered ramadas, visitor center with interpretive displays, parking and restroom facilities. Bird watching, surf fishing, nature walks, surfing, tidepool exploration, and swimming are also popular activities enjoyed along the mile-long stretch of beach.

The Santa Rosa loop is the only area in the campground that has full hookups. The sewer hookups have reached the end of their useful life and need repair on a regular basis. Pipe inspections indicate interior deterioration. This loop is located immediately adjacent to the beach which is particularly concerning due to the potential for sewage spills directly onto the beach and into the ocean. In addition, the outdated design of the sewer hookups does not include protection from ocean or rainwater intrusion. This could lead to an overburden and potential failure of the City’s sewer system due to the additional load.

Figure 90. Site location.



Project Description

The existing sewer hookups have reached the end of their useful life and are in need of repair on a regular basis. Pipe inspections of the system in the Santa Rosa Loop indicate interior deterioration. The condition is of significant concern as the loop is located immediately adjacent to the beach increasing the potential for sewage spills directly onto the beach and into the ocean. This project will redesign, repair, and/or replace as needed the Santa Rosa loop sewer lines and hook-ups to prevent effluent leaks and overburdening of the municipal system due to surface water intrusion.

Goals

The goals of this project are to replace the existing Santa Rosa Campground sewer lines and hook-ups to prevent leaks and surface water intrusion. To achieve this the goals identified in the PAEP are:

- Replace and/or repair defective piping, manholes within the Santa Rosa campground area.
- Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking
- Reduce the frequency of sewage spills to surface.
- Reduce the concentrations of fecal indicator bacteria in ocean waters adjacent to the project site.

Scope

The Project-Specific Scope for the Carpinteria State Beach - Replace Sewer Pipe System and Hook-ups project as outlined in the project agreement is as follows:

3. Carpinteria State Beach – Replace Sewer Pipe System and Hook-ups (Component 3)
 - 3.1. Project Management
 - 3.1.1. Provide all technical and administrative services as needed for Component 2 completion; monitor, supervise, and review all work performed; and coordinate budgeting and scheduling to ensure Component 3 is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.
 - 3.1.2. Notify the Grant Manager at least fifteen (15) working days in advance of upcoming meetings, workshops, and trainings.
 - 3.1.3. Conduct periodic and final site visits with the Grant Manager.
 - 3.1.4. Conduct pre-, during, and post-construction photo monitoring at the project site and submit to the Grant Manager.
 - 3.2. General Compliance Requirements/Project Effectiveness and Performance
 - 3.2.1. Submit Global Positioning System (GPS) information for project site(s) and monitoring location(s) for Component 3 to the Grant Manager. Submittal requirements for GPS data are available at:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/grant_info/docs/gps.pdf.
 - 3.2.2. Prepare and submit an updated Project Assessment and Evaluation Plan (PAEP) which describes the manner in which Component 3 performance will be assessed, evaluated, and reported to the Grant Manager for approval. The PAEP shall detail the methods of measuring and reporting Project benefits.

- Implementation of any monitoring and performance assessment and/or evaluation actions shall not occur prior to PAEP approval by the Grant Manager.
- 3.3. Permitting and Environmental Compliance
 - 3.3.1. Submit the final CQA document to the Grant Manager
 - 3.3.2. Obtain written environmental clearance from the State Water Board confirming the State Water Board has made its own environmental findings and concurred that implementation/construction may proceed.
 - 3.4. Planning, Design, and Engineering
 - 3.4.1. Prepare and submit to the Grant Manager for approval the one hundred percent (100%) design plans and specifications, and detailed cost estimate to:
 - 3.4.1.1. Replace a minimum of one thousand, four hundred (1,400) linear feet of sewer mains.
 - 3.4.1.2. Replace a minimum of one thousand, eight hundred (1,800) linear feet of sewer laterals.
 - 3.4.1.3. Replace a minimum of seventy-five (75) recreational vehicle site sewer connections.
 - 3.4.1.4. Replace a minimum of eight (8) sewer manholes.
 - 3.4.1.5. Replace a minimum of seventy-five thousand (75,000) square feet of asphalt-concrete overlay.
 - 3.5. Construction and Implementation
 - 3.5.1. Submit the final budget for the project to the Grant Manager for approval prior to awarding the construction contract(s).
 - 3.5.2. Award the construction contract(s) and submit the Notice(s) to Proceed and awarded contract(s) for Component 3 to the Grant Manager.
 - 3.5.3. Construct Component 3 in accordance with the approved design plans and specifications in Item 3.4.3 after obtaining environmental clearance in Item 3.3.1.3 and the necessary approvals, entitlements, or permits in Item 3.3.2.
 - 3.5.4. Submit any proposed changes that arise during construction that may affect Component 3 benefits, the scope listed in Item 3.4.1, schedule, or costs to the Grant Manager for approval.
 - 3.5.5. Submit as-built drawings and a summary of changes from the approved design plans and specifications that occurred during construction to the Grant Manager.
 - 3.5.6. Prepare an Operations and Maintenance Plan that addresses operation and maintenance of Component 3 for its useful life and submit to the Grant Manager for approval.
 - 3.6. Monitoring and Performance
 - 3.6.1. Monitor in accordance with the approved PAEP.
 - 3.6.2. Summarize the monitoring data results and document implementation of monitoring in accordance with the PAEP. Include a summary of all monitoring data and analysis in the Final Project Report.
 - 3.6.3. If required, perform biological monitoring and/or other mitigation measures as identified in the CEQA document and/or included in the permit

conditions. Submit a summary of the monitoring with the associated quarterly progress reports.

Permitting

CEQA

California State Parks is a Trustee Agency for the resources of the State Park System as defined in CCR § 15386. Particular efforts for notice and consultation with Trustee Agencies in the early stages of a project are required of a project proponent and Lead Agency when there is potential for impacts to resources under the trustee's jurisdiction (CCR §§ 15060.5, 15063, and 15082).

The Department has two general responsibilities under CEQA: (1) to provide environmental review of its own projects and document compliance with CEQA; and (2) to review other entities' projects to determine the impacts on the resources of the State Park System, including visual and/or scenic setting, high-quality visitor experience, natural and cultural resources, and on recreational resources, needs, and demands of the State.

As required by law and under the terms of the Agreement, California State Parks filed a Notice of Exemption (NOE) for the Doheny projects with the State Clearinghouse on January 17, 2019, and received State Water Board Concurrence of the NOE on February 11, 2020.

CDP was issued by LCP, City of Carpinteria on March 1, 2019. (Project 18-1938-CDP)

Construction SWPPP was reviewed and accepted on March 05, 2020

Implementation

Figure 11. Before construction.



Figure 12. During construction.



Figure 13. After construction.



Cost

Figure 15. Funding.

	Estimated			Actual		
	Proposition 84 Grant	Local Match	Other Funding	Proposition 84 Grant	Local Match	Other Funding
Direct Project Administration Cost	\$40,138	\$5,000	\$0	\$33,630.76	\$5,093.13	\$0
Planning / Design	\$243,953	\$0	\$0	\$154,680.96	\$0	\$0
Equipment (Over \$5,000)	\$0	\$0	\$0	\$0	\$0	\$0
Construction / Implementation	\$1,480,387	\$0	\$0	\$1,273,855.25	\$0	\$0
Monitoring	\$120,000	\$0	\$0	\$0	\$0	\$0
Education / Outreach	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$1,884,478	\$5,000	\$0	\$1,462,166.97	\$5,093.13	\$0

Schedule

Discussion of schedule and rationale for delays.

Figure 16. Schedule.

Task	Proposed Date	Actual Date	Delay (Actual - Proposed)
Apply for funding	n/a	April 2016	
Submit detailed application	n/a	March 2017	
Permitting	n/a	January 17, 2019	
Planning	n/a		
Construction complete	n/a	January 14, 2021	
As-built drawings	November 2020	April 21, 2022	17 months

Assessment and Evaluation

Baseline

Baseline data for this project was obtained from County of Santa Barbara Ocean Water Monitoring program. Data from 2019 was selected as the pre-project baseline as this timeframe directly preceded construction start. Data on enterococcus, Fecal Coliform, and Total Coliform was evaluated against regulatory thresholds to determine number of exceedances for each parameter.

Assessment

Summary of monitoring locations

The selected monitoring location was the County of Santa Barbara Ocean Water Monitoring station for Carpinteria State Beach.

Methods

Data was obtained from the County of Santa Barbara Ocean Water Monitoring program. Pre-project data from 2019, and post project data from May 2021 to May 2022 (the 12-months preceding this report).

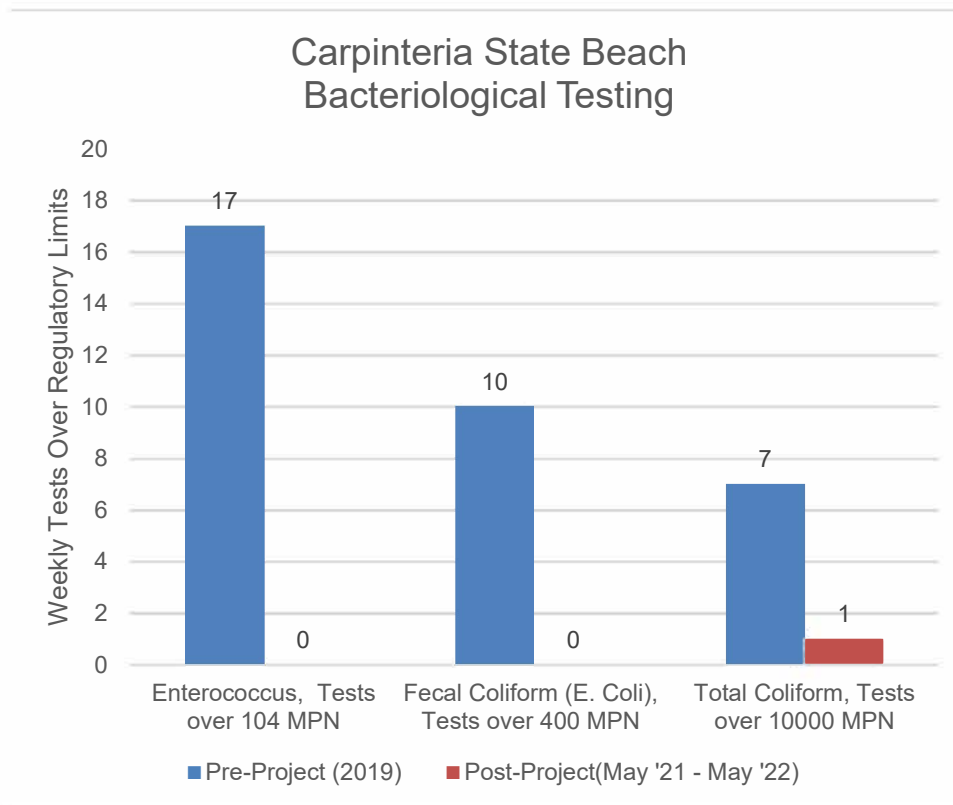
The results were evaluated against California regulatory thresholds for each bacteriological parameter; 104 MPN for Enterococcus, 400 MPN for Fecal Coliform, and 10,000 MPN for Total Coliform. The total number of exceedances during weekly sampling were determined for each parameter in both the pre-project and post-project periods.

Results

For the pre-project time period, 2019, the exceedances in the North Day Use area were 17 for enterococcus, 10 for Fecal Coliform, and 7 for Total Coliform. In the one year post-project monitoring period, May 2021 to May 2022, there was no exceedances for enterococcus and Fecal Coliform and a single exceedance for Total Coliform.

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Figure 17. Monitoring results.



Evaluation

The table below presents the targets from the PAEP

Project Goals	Measurement Tools and Methods	Targets
Replace and/or repair defective piping, manholes within the Santa Rosa campground area.	Construction Inspection & Documentation, Photo Documentation, As-Built Drawings	Successful repair or replacement of entire Santa Rosa Campground Sewer collection system.

Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking	Conduct Hydrostatic Pressure Test	Hydrostatic pressure testing confirms that the rehabilitated system is not leaking.
Reduce the frequency of sewage spills to surface.	Logs of sewer servicing and cleanup maintained by parks staff.	Reduction of clogs or blockages in RV site sewer connection, causing sewage to spill to surface.
Reduce the concentrations of fecal indicator bacteria in ocean waters adjacent to the project site.	Comparison of pre and post project bacteriological monitoring reports from Santa Barbara County Ocean Water Monitoring Program	Reduction in the exceedances of State Health Standards for fecal indicator bacteria (Total Coliform, Fecal Coliform, and Enterococcus). And reduction in beach closure days.

Component 3 – Replace Santa Rosa Campground Sewer PAEP Targets

Goal #1: Replace and/or repair defective piping, manholes within the Santa Rosa campground area.

Target: Successful repair or replacement of entire Santa Rosa Campground Sewer collection system.

Evaluation: All sewer lines in the Santa Rosa Campground were successfully replaced for a total of 1490 feet of sewer mains and 80 sewer laterals ranging from approximately 15 feet to 35 feet.

Goal #2: Demonstrate that the sewer collection system and lift station repairs/replacement are not leaking

Target: Hydrostatic pressure testing confirms that the rehabilitated system is not leaking.

Evaluation: Hydrostatic testing was completed to verify the system had no leaks. Final hydrostatic testing showed no leaks in the sewer system.

Goal #3: Reduce the frequency of sewage spills to surface.

Target: Reduction of clogs or blockages in RV site sewer connection, causing sewage to spill to surface.

Evaluation: Unfortunately efforts to create a comprehensive log of maintenance issues within the Santa Rosa campground were unsuccessful. Anecdotally, based on conversations with park staff, while overall maintenance of the sewer was not reduced, the number of spills reaching the ground surface was reduced by the new containment boxes. Thereby preventing possibility for sewage entering the ocean or groundwater or possible contact by the public.

Implementation of a formal documentation or reporting process and allocation of sufficient park staff time to follow through with reporting would be an improvement to this process on future projects.

Goal #4: Reduce the concentrations of fecal indicator bacteria in ocean waters adjacent to the project site.

Target: Reduction in the exceedances of State Health Standards for fecal indicator bacteria (Total Coliform, Fecal Coliform, and Enterococcus). And reduction in beach closure days.

Evaluation: This goal was successfully met. Exceedances of regulatory thresholds for Enterococcus, Fecal Coliform, and Total Coliform were all reduced in the post-project period, compared to the pre-project period.

Conclusions

For each component of significant reductions in the exceedances of regulatory thresholds for bacteria were observed. While these projects cannot be definitively identified as the causal source of these reductions, a positive correlation exists when the pre-project baseline and post-project monitoring periods are compared. With fewer exceedances in the post-project period indicating improved ocean water quality, in line with project and program goals.

Numerous deficiencies in the existing sewer systems were identified during the design and construction process and were rectified through the repair and replacement of deteriorated sewer lines and manholes. Additionally, for Component 3 at Carpinteria state Beach the addition of containment around RV hookups prevents sewer spills from reaching the surface and keep spills from reaching groundwater or the ocean

Lessons learned

Several lessons were learned in carrying out the project:

Firstly, preliminary investigations by CCTV inspection of sewer lines proved important to project design decisions and implementation of the project. At an early stage of the project, the sizes, materials, and condition of sewer lines at Doheny State Beach were inspected via CCTV allowing the engineers to assess the correct method of repair. In the end most of the sewer lines were replaced rather than relined based on the defects and deficiencies noted. This investigative method is recommended for all future sewer rehabilitation projects.

One item that could be improved upon in future projects is the RV sewer hook-ups. While the hook-ups installed achieve some of the project goals of containing incidental sewage spills and preventing surface water inflows, they also trap sand in the containment boxes which is a concern for park maintenance staff. Improvements could be made to reduce sand intrusion into the boxes, perhaps by incorporating a lid into the design.

Next steps

No next steps are planned at this time.

Recommendations

While no further recommendations are needed regarding the project components included in this report, the Department has numerous other facilities of similar age throughout the State. It is recommended we take the lessons learned and incorporate the scope of preliminary investigations into our process to identify deficiencies in existing sewer systems prior to starting design. Early inspection of sewer lines by CCTV proved important to design decisions and implementation of the project(s) and allowed the engineering team to accurately identify the sizes, materials, and condition of sewer lines and determine the correct method of repair.

In addition, as more and more overnight visitors arrive at State Parks in Recreational Vehicles (RVs), and desire to have access to sewer hook-ups, Department engineers will need to continue to refine and adjust details to improve user and maintenance needs. More specifically, while the current design is successful at containing incidental sewage spills and preventing surface water inflows, where this detail has been deployed in beach settings, they also trap sand in the containment boxes which is a maintenance concern for park staff.

Acknowledgements

Funding for this project has been provided in full or in part through an agreement with the State Water Resources Control Board. The contents of this document do not necessarily reflect the views and policies of the State Water Resources Control Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Appendix A: Deliverables

Work Item	Items for Review #	Due Date	% of Work Complete	Date Submitted
1.	Doheny State Beach – Relining of Sewer Pipe System and Repair of Lift Stations			
1.1	Project Management			
1.1.2	Notification of Upcoming Meetings, Workshops, and Trainings	15 Days Prior to Event	100%	4/15/2022
1.1.3	Periodic and Final Site Visits	Ongoing	100%	4/15/2022
1.1.4	Pre-, During, and Post-Construction Photos	Ongoing	100%	4/15/2022
1.2	General Compliance Requirements/Project Effectiveness and Performance			
1.2.1	GPS Information for Project Site and Monitoring Locations	Complete	100%	4/11/18
1.2.2	Project Assessment and Evaluation Plan (PAEP)	Complete	100%	4/11/18
1.3.3	Permitting and Environmental Compliance			
1.3.1.1	Draft CEQA Documentation	Complete	100%	9/17/18
1.3.1.2	Copy of Final CEQA Documentation	Complete	100%	2/27/19
1.3.2	Public Agency Approvals, Entitlements, or Permits	Complete	100%	1/23/20
1.4	Planning, Design, and Engineering			
1.4.1	Test Results and Repair Recommendations	Complete	100%	8/1/18
1.4.2	50% Design Plans and Specifications, and Detailed Cost Estimates	Complete	100%	8/1/18
1.4.4	100% Design Plans and Specifications, Revised Cost Estimate, and Summary of Changes	Complete	100%	5/31/19
1.4.5	Advertised Bid Documents	Complete	100%	6/5/19
1.5	Construction and Implementation			
1.5.1	Final Budget	Complete	100%	6/28/19
1.5.2	Notice(s) to Proceed and Awarded Contract(s)	Complete	100%	12/24/19
1.5.4	Proposed Changes	Ongoing	100%	4/15/2022
1.5.5	As-Built Drawings and Summary of Changes	August 2021	100%	4/15/2022
1.5.6	Operations and Maintenance Plan	August 2021	100%	4/15/2022
2.	Doheny State Beach – New Connection to City Sewer			
2.1	Project Management			

2.1.2	Notification of Upcoming Meetings, Workshops, and Trainings	15 Days Prior to Event	100%	4/15/2022
2.1.3	Periodic and Final Site Visits	Ongoing	100%	4/15/2022
2.1.4	Pre-, During, and Post-Construction Photos	Ongoing	100%	4/15/2022
2.2	General Compliance Requirements/Project Effectiveness and Performance			
2.2.1	GPS Information for Project Site and Monitoring Locations	Complete	100%	4/11/18
2.2.2	Project Assessment and Evaluation Plan (PAEP)	Complete	100%	4/11/18
2.3	Permitting and Environmental Compliance			
2.3.1.1	Draft CEQA Documentation	Complete	100%	9/17/18
2.3.1.2	Copy of Final CEQA Documentation	Complete	100%	2/28/19
2.3.2	Public Agency Approvals, Entitlements, or Permits	Complete	100%	1/23/20
2.4	Planning, Design, and Engineering			
2.4.1	50% Design Plans and Specifications, and Detailed Cost Estimates	Complete	100%	8/31/18
2.4.3	100% Design Plans and Specifications, Revised Cost Estimate, and Summary of Changes	Complete	100%	5/31/19
2.4.4	Advertised Bid Documents	Complete	100%	6/5/19
2.5	Construction and Implementation			
2.5.1	Final Budget	Complete	100%	6/28/19
2.5.2	Notice(s) to Proceed and Awarded Contract(s)	Complete	100%	12/24/19
2.5.4	Proposed Changes	Ongoing	100%	4/15/2022
2.5.5	As-Built Drawings and Summary of Changes	August 2021	100%	4/15/2022
2.5.6	Operations and Maintenance Plan	August 2021	100%	4/15/2022
3.	Carpinteria State Beach – Replace Santa Rosa Sewer Loop			
3.2	General Compliance Requirements/Project Effectiveness and Performance			
3.2.1	GPS Information for Project Site and Monitoring Locations	June 2020	100%	
3.2.2.1	Project Assessment and Evaluation Plan (PAEP)	June 2020	100%	
3.3	Permitting and Environmental Compliance			
3.3.1.1	Draft CEQA Documentation	Complete	100%	Complete
3.3.1.2	Copy of Final CEQA Documentation	Complete	100%	Complete
3.3.2	Public Agency Approvals, Entitlements, or Permits	Complete	100%	Complete
3.4	Planning, Design, and Engineering			
3.4.1	50% Design Plans and Specifications, and Detailed Cost Estimates	Complete	100%	Complete
3.4.3	100% Design Plans and Specifications, Revised Cost Estimate, and Summary of Changes	Complete	100%	Complete

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3.4.4	Advertised Bid Documents	Complete	100%	Complete
3.5	Construction and Implementation			
3.5.1	Final Budget	Complete	100%	Complete
3.5.2	Notice(s) to Proceed and Awarded Contracts(s)	Complete	100%	Complete
3.5.4	Proposed Changes	Ongoing	100%	4/15/2022
3.5.5	As-Built Drawings and Summary of Changes	October 2020	100%	4/15/2022
3.5.6	Operations and Maintenance Plan	November 2020	100%	4/15/2022
(a)	Progress Reports	Quarterly	100%	4/15/2022
(b)	As Needed Information or Reports	As Needed	100%	4/15/2022
(c)	Annual Progress Summaries	Annually by 11/15	100%	11/15/2021
(d)	Final Reports			
(d)(1)	Draft Final Project Report	May 31,2022	100%	5/31/2022
(d)(2)	Final Project Report	June 30, 2022	100%	July 08, 2022
(d)(3)	Final Project Summary	Before Work Completion Date		
(d)(4)	Final Project Inspection and Certification	Before Work Completion Date		

Appendix B: Monitoring Data

Doheny State Beach

Post-Project Enterococcus Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 104 MPN
Doheny State Beach	S-1	5/18/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	5/25/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	6/3/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	6/8/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	6/15/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	6/24/2021	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	6/29/2021	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/19/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/27/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	8/3/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	8/11/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	8/18/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-1	8/24/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/2/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-1	9/8/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/21/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/27/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/4/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/12/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/19/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/27/2021	Enterococcus	30	CFU/100ml	FALSE
Doheny State Beach	S-1	11/2/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	11/9/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	11/16/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-1	11/23/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	11/30/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	12/6/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	12/13/2021	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/20/2021	Enterococcus	12	CFU/100ml	FALSE
Doheny State Beach	S-1	12/27/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-1	1/6/2022	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-1	1/9/2022	Enterococcus	20	CFU/100ml	FALSE

Doheny State Beach	S-1	1/19/2022	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	1/26/2022	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	2/10/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	2/13/2022	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/20/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	2/27/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	3/7/2022	Enterococcus	2	CFU/100ml	FALSE

Doheny State Beach	S-1	3/13/2022	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	3/20/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	3/27/2022	Enterococcus	12	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2022	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/10/2022	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	4/17/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	4/27/2022	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/1/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	5/8/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	5/15/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/18/2021	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	5/25/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-2	6/3/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	6/8/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	6/15/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	6/24/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	6/29/2021	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	7/19/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	7/27/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/3/2021	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-2	8/11/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	8/18/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/24/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	9/2/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/8/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/21/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/27/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	10/4/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	10/12/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	10/19/2021	Enterococcus	6	CFU/100ml	FALSE

Doheny State Beach	S-2	10/27/2021	Enterococcus	32	CFU/100ml	FALSE
Doheny State Beach	S-2	11/2/2021	Enterococcus	40	CFU/100ml	FALSE
Doheny State Beach	S-2	11/9/2021	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	11/16/2021	Enterococcus	28	CFU/100ml	FALSE
Doheny State Beach	S-2	11/23/2021	Enterococcus	24	CFU/100ml	FALSE
Doheny State Beach	S-2	11/30/2021	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/6/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	12/13/2021	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	12/20/2021	Enterococcus	40	CFU/100ml	FALSE
Doheny State Beach	S-2	12/27/2021	Enterococcus	52	CFU/100ml	FALSE
Doheny State Beach	S-2	1/6/2022	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/9/2022	Enterococcus	8	CFU/100ml	FALSE

Doheny State Beach	S-2	1/19/2022	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	1/26/2022	Enterococcus	40	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2022	Enterococcus	18	CFU/100ml	FALSE
Doheny State Beach	S-2	2/10/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	2/13/2022	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	2/20/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	2/27/2022	Enterococcus	460	CFU/100ml	TRUE
Doheny State Beach	S-2	3/1/2022	Enterococcus	9	CFU/100ml	FALSE
Doheny State Beach	S-2	3/7/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	3/13/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	3/20/2022	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	3/27/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2022	Enterococcus	66	CFU/100ml	FALSE
Doheny State Beach	S-2	4/10/2022	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-2	4/17/2022	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/27/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/1/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/8/2022	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/15/2022	Enterococcus	2	CFU/100ml	FALSE

Doheny State Beach

Post-Project Fecal Coliform Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 400 MPN
Doheny State Beach	S-1	5/18/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/25/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/3/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/8/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/15/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/24/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/29/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/19/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/3/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/11/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/18/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/24/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/2/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/8/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/21/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/4/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/12/2021	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	10/19/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/2/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/9/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/16/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/23/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/30/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/6/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/13/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/20/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/6/2022	Fecal Coliforms	10	CFU/100ml	FALSE
Doheny State Beach	S-1	1/9/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/19/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/26/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/10/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/13/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/20/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/27/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/7/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/13/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/20/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/27/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/10/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/17/2022	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/27/2022	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-1	5/1/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/8/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/15/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/18/2021	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-2	5/25/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/3/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/8/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/15/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/24/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/29/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/19/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/3/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/11/2021	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	8/18/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/24/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/2/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/8/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/21/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/4/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/12/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/19/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/2/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/9/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/16/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/23/2021	Fecal Coliforms	120	CFU/100ml	FALSE
Doheny State Beach	S-2	11/30/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/6/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/13/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/20/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/27/2021	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/6/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/9/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/19/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/26/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/10/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/13/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/20/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/27/2022	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-2	3/1/2022	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-2	3/7/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/13/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/20/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/27/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2022	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-2	4/10/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/17/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/27/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/1/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/8/2022	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/15/2022	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach
Post-Project Total Coliform Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 10,000 MPN
Doheny State Beach	S-1	5/18/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/25/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/3/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/8/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/15/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/24/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/29/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/19/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/27/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/3/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/11/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/18/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/24/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/2/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/8/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/21/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/27/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/4/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/12/2021	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	10/19/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/27/2021	Total Coliforms	140	CFU/100ml	FALSE
Doheny State Beach	S-1	11/2/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/9/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/16/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	11/23/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/30/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/6/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/13/2021	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	12/20/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/27/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/6/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/9/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/19/2022	Total Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-1	1/26/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/10/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/13/2022	Total Coliforms	10	CFU/100ml	FALSE
Doheny State Beach	S-1	2/20/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/27/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/7/2022	Total Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-1	3/13/2022	Total Coliforms	50	CFU/100ml	FALSE
Doheny State Beach	S-1	3/20/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/27/2022	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/10/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/17/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/27/2022	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	5/1/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/8/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/15/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/18/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/25/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/3/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/8/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	6/15/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/24/2021	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	6/29/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/19/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/27/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/3/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/11/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/18/2021	Total Coliforms	800	CFU/100ml	FALSE
Doheny State Beach	S-2	8/24/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/2/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/8/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/21/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/27/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/4/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/12/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	10/19/2021	Total Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	10/27/2021	Total Coliforms	140	CFU/100ml	FALSE

Doheny State Beach	S-2	11/2/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/9/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/16/2021	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	11/23/2021	Total Coliforms	300	CFU/100ml	FALSE
Doheny State Beach	S-2	11/30/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	12/6/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/13/2021	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/20/2021	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	12/27/2021	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-2	1/6/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/9/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/19/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/26/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/10/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/13/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/20/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	2/27/2022	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-2	3/1/2022	Total Coliforms	30	CFU/100ml	FALSE
Doheny State Beach	S-2	3/7/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/13/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/20/2022	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	3/27/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2022	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-2	4/10/2022	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	4/17/2022	Total Coliforms	240	CFU/100ml	FALSE
Doheny State Beach	S-2	4/27/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/1/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/8/2022	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/15/2022	Total Coliforms	20	CFU/100ml	FALSE

Doheny State Beach
Baseline Enterococcus Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 104 MPN
Doheny State Beach	S-1	1/8/2019	Enterococcus	64	CFU/100ml	FALSE
Doheny State Beach	S-1	1/16/2019	Enterococcus	7800	CFU/100ml	TRUE
Doheny State Beach	S-1	1/23/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2019	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-1	2/7/2019	Enterococcus	300	CFU/100ml	TRUE
Doheny State Beach	S-1	2/12/2019	Enterococcus	34	CFU/100ml	FALSE
Doheny State Beach	S-1	2/21/2019	Enterococcus	400	CFU/100ml	TRUE
Doheny State Beach	S-1	2/26/2019	Enterococcus	52	CFU/100ml	FALSE
Doheny State Beach	S-1	3/6/2019	Enterococcus	100	CFU/100ml	FALSE
Doheny State Beach	S-1	3/14/2019	Enterococcus	36	CFU/100ml	FALSE
Doheny State Beach	S-1	3/19/2019	Enterococcus	300	CFU/100ml	TRUE
Doheny State Beach	S-1	3/21/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/26/2019	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2019	Enterococcus	60	CFU/100ml	FALSE
Doheny State Beach	S-1	4/11/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/18/2019	Enterococcus	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/25/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/30/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	5/6/2019	Enterococcus	500	CFU/100ml	TRUE
Doheny State Beach	S-1	5/8/2019	Enterococcus	80	CFU/100ml	FALSE
Doheny State Beach	S-1	5/10/2019	Enterococcus	60	CFU/100ml	FALSE
Doheny State Beach	S-1	5/13/2019	Enterococcus	80	CFU/100ml	FALSE
Doheny State Beach	S-1	5/20/2019	Enterococcus	400	CFU/100ml	TRUE
Doheny State Beach	S-1	5/29/2019	Enterococcus	34	CFU/100ml	FALSE
Doheny State Beach	S-1	6/5/2019	Enterococcus	14	CFU/100ml	FALSE
Doheny State Beach	S-1	6/7/2019	Enterococcus	40	CFU/100ml	FALSE
Doheny State Beach	S-1	6/10/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	6/17/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	6/26/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/1/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/8/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	7/23/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	7/31/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	8/5/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	8/12/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	8/19/2019	Enterococcus	2	CFU/100ml	FALSE

Doheny State Beach	S-1	8/26/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/3/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/9/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	9/23/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	9/30/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/7/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/14/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	10/23/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	10/28/2019	Enterococcus	14	CFU/100ml	FALSE
Doheny State Beach	S-1	11/4/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	11/12/2019	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	11/20/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-1	11/26/2019	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-1	12/5/2019	Enterococcus	440	CFU/100ml	TRUE
Doheny State Beach	S-1	12/12/2019	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-1	12/18/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-1	12/23/2019	Enterococcus	130	CFU/100ml	TRUE
Doheny State Beach	S-1	12/31/2019	Enterococcus	16	CFU/100ml	FALSE
Doheny State Beach	S-2	1/8/2019	Enterococcus	54	CFU/100ml	FALSE
Doheny State Beach	S-2	1/16/2019	Enterococcus	17000	CFU/100ml	TRUE
Doheny State Beach	S-2	1/23/2019	Enterococcus	80	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2019	Enterococcus	400	CFU/100ml	TRUE
Doheny State Beach	S-2	2/7/2019	Enterococcus	300	CFU/100ml	TRUE
Doheny State Beach	S-2	2/12/2019	Enterococcus	760	CFU/100ml	TRUE
Doheny State Beach	S-2	2/21/2019	Enterococcus	80	CFU/100ml	FALSE
Doheny State Beach	S-2	2/26/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/1/2019	Enterococcus	70	CFU/100ml	FALSE
Doheny State Beach	S-2	3/6/2019	Enterococcus	40	CFU/100ml	FALSE
Doheny State Beach	S-2	3/14/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	3/19/2019	Enterococcus	200	CFU/100ml	TRUE
Doheny State Beach	S-2	3/26/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/28/2019	Enterococcus	30	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	4/5/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/11/2019	Enterococcus	6	CFU/100ml	FALSE
Doheny State Beach	S-2	4/18/2019	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-2	4/25/2019	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-2	4/30/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/6/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	5/13/2019	Enterococcus	2	CFU/100ml	FALSE

Doheny State Beach	S-2	5/20/2019	Enterococcus	400	CFU/100ml	TRUE
Doheny State Beach	S-2	5/29/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/5/2019	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-2	6/10/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	6/17/2019	Enterococcus	48	CFU/100ml	FALSE
Doheny State Beach	S-2	6/26/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	7/1/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	7/8/2019	Enterococcus	24	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/23/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	7/31/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/5/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/12/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/19/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	8/26/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/3/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/9/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	9/23/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/30/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	10/7/2019	Enterococcus	8	CFU/100ml	FALSE
Doheny State Beach	S-2	10/14/2019	Enterococcus	10	CFU/100ml	FALSE
Doheny State Beach	S-2	10/23/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	10/28/2019	Enterococcus	28	CFU/100ml	FALSE
Doheny State Beach	S-2	11/4/2019	Enterococcus	4	CFU/100ml	FALSE
Doheny State Beach	S-2	11/12/2019	Enterococcus	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/20/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	11/26/2019	Enterococcus	2	CFU/100ml	FALSE
Doheny State Beach	S-2	12/5/2019	Enterococcus	650	CFU/100ml	TRUE
Doheny State Beach	S-2	12/12/2019	Enterococcus	360	CFU/100ml	TRUE
Doheny State Beach	S-2	12/18/2019	Enterococcus	38	CFU/100ml	FALSE
Doheny State Beach	S-2	12/23/2019	Enterococcus	2000	CFU/100ml	TRUE
Doheny State Beach	S-2	12/31/2019	Enterococcus	140	CFU/100ml	TRUE

Doheny State Beach
Baseline Fecal Coliform Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 400 MPN
Doheny State Beach	S-1	1/8/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/16/2019	Fecal Coliforms	1000	CFU/100ml	TRUE
Doheny State Beach	S-1	1/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/7/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	2/12/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/21/2019	Fecal Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	2/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	3/6/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	3/14/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	3/19/2019	Fecal Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	3/21/2019	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-1	3/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	4/11/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	4/18/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/25/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/30/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	5/6/2019	Fecal Coliforms	400	CFU/100ml	FALSE
Doheny State Beach	S-1	5/8/2019	Fecal Coliforms	30	CFU/100ml	FALSE
Doheny State Beach	S-1	5/10/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	5/13/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	5/20/2019	Fecal Coliforms	300	CFU/100ml	FALSE
Doheny State Beach	S-1	5/29/2019	Fecal Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-1	6/5/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/7/2019	Fecal Coliforms	30	CFU/100ml	FALSE
Doheny State Beach	S-1	6/10/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/17/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/1/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/8/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/31/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/5/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/12/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/19/2019	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-1	8/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/3/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/9/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/30/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/7/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/14/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/28/2019	Fecal Coliforms	220	CFU/100ml	FALSE
Doheny State Beach	S-1	11/4/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/12/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/20/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/5/2019	Fecal Coliforms	420	CFU/100ml	TRUE
Doheny State Beach	S-1	12/12/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	12/18/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/23/2019	Fecal Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-1	12/31/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/8/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	1/16/2019	Fecal Coliforms	3200	CFU/100ml	TRUE
Doheny State Beach	S-2	1/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2019	Fecal Coliforms	500	CFU/100ml	TRUE
Doheny State Beach	S-2	2/7/2019	Fecal Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	2/12/2019	Fecal Coliforms	380	CFU/100ml	FALSE
Doheny State Beach	S-2	2/21/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-2	2/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/1/2019	Fecal Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	3/6/2019	Fecal Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	3/14/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/19/2019	Fecal Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	3/21/2019	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-2	3/21/2019	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-2	3/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/28/2019	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/5/2019	Fecal Coliforms	9	CFU/100ml	FALSE
Doheny State Beach	S-2	4/11/2019	Fecal Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	4/18/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/25/2019	Fecal Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	4/30/2019	Fecal Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-2	5/6/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/13/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/20/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/29/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/5/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/10/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/17/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/1/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/8/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/31/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/5/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/12/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/19/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/3/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/9/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/30/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/7/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/14/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/23/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/28/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/4/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/12/2019	Fecal Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	11/20/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/26/2019	Fecal Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	12/5/2019	Fecal Coliforms	920	CFU/100ml	TRUE
Doheny State Beach	S-2	12/12/2019	Fecal Coliforms	280	CFU/100ml	FALSE
Doheny State Beach	S-2	12/18/2019	Fecal Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-2	12/23/2019	Fecal Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-2	12/31/2019	Fecal Coliforms	140	CFU/100ml	FALSE

Doheny State Beach
Baseline Total Coliform Data

Beach Name	StationID	SampleDate	ParameterCode	Result	Units	Exceeds 10,000 MPN
Doheny State Beach	S-1	1/8/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	1/16/2019	Total Coliforms	5200	CFU/100ml	FALSE
Doheny State Beach	S-1	1/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	1/30/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	2/7/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	2/12/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	2/21/2019	Total Coliforms	500	CFU/100ml	FALSE
Doheny State Beach	S-1	2/26/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	3/6/2019	Total Coliforms	120	CFU/100ml	FALSE
Doheny State Beach	S-1	3/14/2019	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	3/19/2019	Total Coliforms	600	CFU/100ml	FALSE
Doheny State Beach	S-1	3/21/2019	Total Coliforms	30	CFU/100ml	FALSE
Doheny State Beach	S-1	3/26/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	4/3/2019	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	4/11/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	4/18/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	4/25/2019	Total Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-1	4/30/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	5/6/2019	Total Coliforms	500	CFU/100ml	FALSE
Doheny State Beach	S-1	5/8/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	5/10/2019	Total Coliforms	160	CFU/100ml	FALSE
Doheny State Beach	S-1	5/13/2019	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	5/20/2019	Total Coliforms	2000	CFU/100ml	FALSE
Doheny State Beach	S-1	5/29/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	6/5/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/7/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	6/10/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/17/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	6/26/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	7/1/2019	Total Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-1	7/8/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/15/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	7/31/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/5/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/12/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/19/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	8/26/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/3/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/9/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/16/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	9/30/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/7/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/14/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	10/28/2019	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-1	11/4/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/12/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	11/20/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	11/26/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-1	12/5/2019	Total Coliforms	600	CFU/100ml	FALSE
Doheny State Beach	S-1	12/12/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-1	12/18/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-1	12/23/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-1	12/31/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	1/8/2019	Total Coliforms	140	CFU/100ml	FALSE
Doheny State Beach	S-2	1/16/2019	Total Coliforms	7000	CFU/100ml	FALSE
Doheny State Beach	S-2	1/23/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	1/30/2019	Total Coliforms	300	CFU/100ml	FALSE
Doheny State Beach	S-2	2/7/2019	Total Coliforms	700	CFU/100ml	FALSE
Doheny State Beach	S-2	2/12/2019	Total Coliforms	420	CFU/100ml	FALSE
Doheny State Beach	S-2	2/21/2019	Total Coliforms	300	CFU/100ml	FALSE
Doheny State Beach	S-2	2/26/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/1/2019	Total Coliforms	210	CFU/100ml	FALSE
Doheny State Beach	S-2	3/6/2019	Total Coliforms	100	CFU/100ml	FALSE

Doheny State Beach	S-2	3/14/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/19/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-2	3/21/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	3/26/2019	Total Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	3/28/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/3/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/5/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	4/11/2019	Total Coliforms	200	CFU/100ml	FALSE
Doheny State Beach	S-2	4/18/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/25/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	4/30/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/6/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/13/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	5/20/2019	Total Coliforms	60	CFU/100ml	FALSE
Doheny State Beach	S-2	5/29/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/5/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/10/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/17/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	6/26/2019	Total Coliforms	80	CFU/100ml	FALSE
Doheny State Beach	S-2	7/1/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/8/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/15/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	7/31/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/5/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/12/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/19/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	8/26/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/3/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/9/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/16/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/23/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	9/30/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/7/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/14/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	10/23/2019	Total Coliforms	20	CFU/100ml	FALSE

Doheny State Beach	S-2	10/28/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/4/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/12/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	11/20/2019	Total Coliforms	20	CFU/100ml	FALSE
Doheny State Beach	S-2	11/26/2019	Total Coliforms	40	CFU/100ml	FALSE
Doheny State Beach	S-2	12/5/2019	Total Coliforms	1200	CFU/100ml	FALSE
Doheny State Beach	S-2	12/12/2019	Total Coliforms	420	CFU/100ml	FALSE
Doheny State Beach	S-2	12/18/2019	Total Coliforms	100	CFU/100ml	FALSE
Doheny State Beach	S-2	12/23/2019	Total Coliforms	1600	CFU/100ml	FALSE
Doheny State Beach	S-2	12/31/2019	Total Coliforms	240	CFU/100ml	FALSE

Carpinteria State Beach
Post-Project Enterococcus Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 104 MPN
Carpinteria State	5/18/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	5/24/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	6/1/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	6/7/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	6/14/2021	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	6/21/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	6/28/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/6/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/12/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/19/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/26/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/2/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/9/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/16/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/23/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/30/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/7/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/13/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/20/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/27/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/4/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/11/2021	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	10/18/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/26/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/1/2021	Enterococcus	31	MPN/100ml	FALSE
Carpinteria State	11/8/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/15/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/22/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/29/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	12/6/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	12/13/2021	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	12/20/2021	Enterococcus	31	MPN/100ml	FALSE
Carpinteria State	1/3/2022	Enterococcus	41	MPN/100ml	FALSE
Carpinteria State	1/18/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	1/24/2022	Enterococcus	10	MPN/100ml	FALSE

Carpinteria State	1/31/2022	Enterococcus	30	MPN/100ml	FALSE
Carpinteria State	2/7/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	2/14/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	2/22/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	2/28/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	3/7/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	3/14/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	3/21/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/4/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/11/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/18/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/25/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	5/2/2022	Enterococcus	31	MPN/100ml	FALSE
Carpinteria State	5/9/2022	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	5/16/2022	Enterococcus	10	MPN/100ml	FALSE

Carpinteria State Beach
Post-Project Fecal Coliform Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 400 MPN
Carpinteria State	5/18/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	5/24/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	6/1/2021	E. Coli	52	MPN/100ml	FALSE
Carpinteria State	6/7/2021	E. Coli	20	MPN/100ml	FALSE
Carpinteria State	6/14/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	6/21/2021	E. Coli	20	MPN/100ml	FALSE
Carpinteria State	6/28/2021	E. Coli	30	MPN/100ml	FALSE
Carpinteria State	7/6/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	7/12/2021	E. Coli	230	MPN/100ml	FALSE
Carpinteria State	7/19/2021	E. Coli	20	MPN/100ml	FALSE
Carpinteria State	7/26/2021	E. Coli	31	MPN/100ml	FALSE
Carpinteria State	8/2/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	8/9/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	8/16/2021	E. Coli	31	MPN/100ml	FALSE
Carpinteria State	8/23/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	8/30/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	9/7/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	9/13/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	9/20/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	9/27/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	10/4/2021	E. Coli	41	MPN/100ml	FALSE
Carpinteria State	10/11/2021	E. Coli	20	MPN/100ml	FALSE
Carpinteria State	10/18/2021	E. Coli	52	MPN/100ml	FALSE
Carpinteria State	10/26/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	11/1/2021	E. Coli	98	MPN/100ml	FALSE
Carpinteria State	11/8/2021	E. Coli	41	MPN/100ml	FALSE
Carpinteria State	11/15/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	11/22/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	11/29/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	12/6/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	12/13/2021	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	12/20/2021	E. Coli	20	MPN/100ml	FALSE
Carpinteria State	1/3/2022	E. Coli	110	MPN/100ml	FALSE
Carpinteria State	1/18/2022	E. Coli	41	MPN/100ml	FALSE
Carpinteria State	1/24/2022	E. Coli	10	MPN/100ml	FALSE

Carpinteria State	1/31/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	2/7/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	2/14/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	2/22/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	2/28/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	3/7/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	3/14/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	3/21/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	4/4/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	4/11/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	4/18/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	4/25/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	5/2/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	5/9/2022	E. Coli	10	MPN/100ml	FALSE
Carpinteria State	5/16/2022	E. Coli	10	MPN/100ml	FALSE

Carpinteria State Beach
Post-Project Total Coliform Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 10,000 MPN
Carpinteria State	5/18/2021	Total Coliforms	110	MPN/100ml	FALSE
Carpinteria State	5/24/2021	Total Coliforms	330	MPN/100ml	FALSE
Carpinteria State	6/1/2021	Total Coliforms	300	MPN/100ml	FALSE
Carpinteria State	6/7/2021	Total Coliforms	550	MPN/100ml	FALSE
Carpinteria State	6/14/2021	Total Coliforms	380	MPN/100ml	FALSE
Carpinteria State	6/21/2021	Total Coliforms	490	MPN/100ml	FALSE
Carpinteria State	6/28/2021	Total Coliforms	320	MPN/100ml	FALSE
Carpinteria State	7/6/2021	Total Coliforms	190	MPN/100ml	FALSE
Carpinteria State	7/12/2021	Total Coliforms	910	MPN/100ml	FALSE
Carpinteria State	7/19/2021	Total Coliforms	500	MPN/100ml	FALSE
Carpinteria State	7/26/2021	Total Coliforms	500	MPN/100ml	FALSE
Carpinteria State	8/2/2021	Total Coliforms	110	MPN/100ml	FALSE
Carpinteria State	8/9/2021	Total Coliforms	180	MPN/100ml	FALSE
Carpinteria State	8/16/2021	Total Coliforms	380	MPN/100ml	FALSE
Carpinteria State	8/23/2021	Total Coliforms	200	MPN/100ml	FALSE
Carpinteria State	8/30/2021	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	9/7/2021	Total Coliforms	190	MPN/100ml	FALSE
Carpinteria State	9/13/2021	Total Coliforms	84	MPN/100ml	FALSE
Carpinteria State	9/20/2021	Total Coliforms	340	MPN/100ml	FALSE
Carpinteria State	9/27/2021	Total Coliforms	74	MPN/100ml	FALSE
Carpinteria State	10/4/2021	Total Coliforms	390	MPN/100ml	FALSE
Carpinteria State	10/11/2021	Total Coliforms	84	MPN/100ml	FALSE
Carpinteria State	10/18/2021	Total Coliforms	1200	MPN/100ml	FALSE
Carpinteria State	10/26/2021	Total Coliforms	85	MPN/100ml	FALSE
Carpinteria State	11/1/2021	Total Coliforms	98	MPN/100ml	FALSE
Carpinteria State	11/8/2021	Total Coliforms	180	MPN/100ml	FALSE
Carpinteria State	11/15/2021	Total Coliforms	52	MPN/100ml	FALSE
Carpinteria State	11/22/2021	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/29/2021	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	12/6/2021	Total Coliforms	63	MPN/100ml	FALSE
Carpinteria State	12/13/2021	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/20/2021	Total Coliforms	52	MPN/100ml	FALSE
Carpinteria State	1/3/2022	Total Coliforms	10000	MPN/100ml	FALSE
Carpinteria State	1/18/2022	Total Coliforms	310	MPN/100ml	FALSE
Carpinteria State	1/24/2022	Total Coliforms	220	MPN/100ml	FALSE

Carpinteria State	1/31/2022	Total Coliforms	52	MPN/100ml	FALSE
Carpinteria State	2/7/2022	Total Coliforms	75	MPN/100ml	FALSE
Carpinteria State	2/14/2022	Total Coliforms	120	MPN/100ml	FALSE
Carpinteria State	2/22/2022	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	2/28/2022	Total Coliforms	410	MPN/100ml	FALSE
Carpinteria State	3/7/2022	Total Coliforms	41	MPN/100ml	FALSE
Carpinteria State	3/14/2022	Total Coliforms	75	MPN/100ml	FALSE
Carpinteria State	3/21/2022	Total Coliforms	1300	MPN/100ml	FALSE
Carpinteria State	4/4/2022	Total Coliforms	400	MPN/100ml	FALSE
Carpinteria State	4/11/2022	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	4/18/2022	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	4/25/2022	Total Coliforms	150	MPN/100ml	FALSE
Carpinteria State	5/2/2022	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	5/9/2022	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	5/16/2022	Total Coliforms	360	MPN/100ml	FALSE

Carpinteria State Beach
Baseline Enterococcus Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 104 MPN
Carpinteria State	1/2/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	1/7/2019	Enterococcus	4106	MPN/100ml	TRUE
Carpinteria State	1/9/2019	Enterococcus	97	MPN/100ml	FALSE
Carpinteria State	1/14/2019	Enterococcus	1723	MPN/100ml	TRUE
Carpinteria State	1/16/2019	Enterococcus	238	MPN/100ml	TRUE
Carpinteria State	1/22/2019	Enterococcus	156	MPN/100ml	TRUE
Carpinteria State	1/24/2019	Enterococcus	63	MPN/100ml	FALSE
Carpinteria State	1/28/2019	Enterococcus	134	MPN/100ml	TRUE
Carpinteria State	1/31/2019	Enterococcus	19863	MPN/100ml	TRUE
Carpinteria State	2/4/2019	Enterococcus	1396	MPN/100ml	TRUE
Carpinteria State	2/6/2019	Enterococcus	30	MPN/100ml	FALSE
Carpinteria State	2/11/2019	Enterococcus	134	MPN/100ml	TRUE
Carpinteria State	2/13/2019	Enterococcus	84	MPN/100ml	FALSE
Carpinteria State	2/19/2019	Enterococcus	31	MPN/100ml	FALSE
Carpinteria State	2/25/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	3/4/2019	Enterococcus	63	MPN/100ml	FALSE
Carpinteria State	3/11/2019	Enterococcus	336	MPN/100ml	TRUE
Carpinteria State	3/13/2019	Enterococcus	98	MPN/100ml	FALSE
Carpinteria State	3/18/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	3/25/2019	Enterococcus	98	MPN/100ml	FALSE
Carpinteria State	4/1/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/8/2019	Enterococcus	74	MPN/100ml	FALSE
Carpinteria State	4/15/2019	Enterococcus	41	MPN/100ml	FALSE
Carpinteria State	4/22/2019	Enterococcus	399	MPN/100ml	TRUE
Carpinteria State	4/24/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	4/29/2019	Enterococcus	1723	MPN/100ml	TRUE
Carpinteria State	5/1/2019	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	5/6/2019	Enterococcus	41	MPN/100ml	FALSE
Carpinteria State	5/13/2019	Enterococcus	132	MPN/100ml	TRUE
Carpinteria State	5/15/2019	Enterococcus	414	MPN/100ml	TRUE
Carpinteria State	5/20/2019	Enterococcus	561	MPN/100ml	TRUE
Carpinteria State	5/22/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	5/28/2019	Enterococcus	231	MPN/100ml	TRUE
Carpinteria State	5/30/2019	Enterococcus	52	MPN/100ml	FALSE
Carpinteria State	6/3/2019	Enterococcus	95	MPN/100ml	FALSE

Carpinteria State	6/10/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	6/17/2019	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	6/24/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/1/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/8/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/15/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	7/22/2019	Enterococcus	85	MPN/100ml	FALSE
Carpinteria State	7/29/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/5/2019	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	8/12/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/19/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	8/26/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/3/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/9/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/16/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/23/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	9/30/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/7/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/14/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/21/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	10/28/2019	Enterococcus	20	MPN/100ml	FALSE
Carpinteria State	11/4/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/12/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/18/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	11/23/2019	Enterococcus	41	MPN/100ml	FALSE
Carpinteria State	12/2/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	12/9/2019	Enterococcus	52	MPN/100ml	FALSE
Carpinteria State	12/16/2019	Enterococcus	10	MPN/100ml	FALSE
Carpinteria State	12/23/2019	Enterococcus	1296	MPN/100ml	TRUE
Carpinteria State	12/26/2019	Enterococcus	3654	MPN/100ml	TRUE

Carpinteria State Beach
Baseline Fecal Coliform Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 400 MPN
Carpinteria State	1/2/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	1/7/2019	Fecal Coliforms	1483	MPN/100ml	TRUE
Carpinteria State	1/9/2019	Fecal Coliforms	86	MPN/100ml	FALSE
Carpinteria State	1/14/2019	Fecal Coliforms	495	MPN/100ml	TRUE
Carpinteria State	1/16/2019	Fecal Coliforms	241	MPN/100ml	FALSE
Carpinteria State	1/22/2019	Fecal Coliforms	52	MPN/100ml	FALSE
Carpinteria State	1/24/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	1/28/2019	Fecal Coliforms	557	MPN/100ml	TRUE
Carpinteria State	1/31/2019	Fecal Coliforms	5794	MPN/100ml	TRUE
Carpinteria State	2/4/2019	Fecal Coliforms	496	MPN/100ml	TRUE
Carpinteria State	2/6/2019	Fecal Coliforms	20	MPN/100ml	FALSE
Carpinteria State	2/11/2019	Fecal Coliforms	86	MPN/100ml	FALSE
Carpinteria State	2/13/2019	Fecal Coliforms	120	MPN/100ml	FALSE
Carpinteria State	2/19/2019	Fecal Coliforms	30	MPN/100ml	FALSE
Carpinteria State	2/25/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	3/4/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	3/11/2019	Fecal Coliforms	31	MPN/100ml	FALSE
Carpinteria State	3/13/2019	Fecal Coliforms	109	MPN/100ml	FALSE
Carpinteria State	3/18/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	3/25/2019	Fecal Coliforms	75	MPN/100ml	FALSE
Carpinteria State	4/1/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	4/8/2019	Fecal Coliforms	121	MPN/100ml	FALSE
Carpinteria State	4/15/2019	Fecal Coliforms	121	MPN/100ml	FALSE
Carpinteria State	4/22/2019	Fecal Coliforms	345	MPN/100ml	FALSE
Carpinteria State	4/24/2019	Fecal Coliforms	86	MPN/100ml	FALSE
Carpinteria State	4/29/2019	Fecal Coliforms	2014	MPN/100ml	TRUE
Carpinteria State	5/1/2019	Fecal Coliforms	20	MPN/100ml	FALSE
Carpinteria State	5/6/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	5/13/2019	Fecal Coliforms	121	MPN/100ml	FALSE
Carpinteria State	5/15/2019	Fecal Coliforms	573	MPN/100ml	TRUE
Carpinteria State	5/20/2019	Fecal Coliforms	473	MPN/100ml	TRUE
Carpinteria State	5/22/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	5/28/2019	Fecal Coliforms	189	MPN/100ml	FALSE
Carpinteria State	5/30/2019	Fecal Coliforms	74	MPN/100ml	FALSE
Carpinteria State	6/3/2019	Fecal Coliforms	74	MPN/100ml	FALSE

Carpinteria State	6/10/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	6/17/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	6/24/2019	Fecal Coliforms	20	MPN/100ml	FALSE
Carpinteria State	7/1/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	7/8/2019	Fecal Coliforms	31	MPN/100ml	FALSE
Carpinteria State	7/15/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	7/22/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	7/29/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/5/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/12/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/19/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/26/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/3/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/9/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/16/2019	Fecal Coliforms	20	MPN/100ml	FALSE
Carpinteria State	9/23/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/30/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/7/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/14/2019	Fecal Coliforms	20	MPN/100ml	FALSE
Carpinteria State	10/21/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/28/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/4/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/12/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/18/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/23/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/2/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/9/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/16/2019	Fecal Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/23/2019	Fecal Coliforms	420	MPN/100ml	TRUE
Carpinteria State	12/26/2019	Fecal Coliforms	1354	MPN/100ml	TRUE

Carpinteria State Beach
Baseline Total Coliform Data

Description	Sample Date	Parameter	Result	Unit	Exceeds 10,000 MPN
Carpinteria State	1/2/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	1/7/2019	Total Coliforms	24196	MPN/100ml	TRUE
Carpinteria State	1/9/2019	Total Coliforms	6131	MPN/100ml	FALSE
Carpinteria State	1/14/2019	Total Coliforms	24196	MPN/100ml	TRUE
Carpinteria State	1/16/2019	Total Coliforms	8164	MPN/100ml	FALSE
Carpinteria State	1/22/2019	Total Coliforms	7701	MPN/100ml	FALSE
Carpinteria State	1/24/2019	Total Coliforms	663	MPN/100ml	FALSE
Carpinteria State	1/28/2019	Total Coliforms	2481	MPN/100ml	FALSE
Carpinteria State	1/31/2019	Total Coliforms	24196	MPN/100ml	TRUE
Carpinteria State	2/4/2019	Total Coliforms	24196	MPN/100ml	TRUE
Carpinteria State	2/6/2019	Total Coliforms	714	MPN/100ml	FALSE
Carpinteria State	2/11/2019	Total Coliforms	1274	MPN/100ml	FALSE
Carpinteria State	2/13/2019	Total Coliforms	1624	MPN/100ml	FALSE
Carpinteria State	2/19/2019	Total Coliforms	959	MPN/100ml	FALSE
Carpinteria State	2/25/2019	Total Coliforms	75	MPN/100ml	FALSE
Carpinteria State	3/4/2019	Total Coliforms	537	MPN/100ml	FALSE
Carpinteria State	3/11/2019	Total Coliforms	571	MPN/100ml	FALSE
Carpinteria State	3/13/2019	Total Coliforms	459	MPN/100ml	FALSE
Carpinteria State	3/18/2019	Total Coliforms	199	MPN/100ml	FALSE
Carpinteria State	3/25/2019	Total Coliforms	882	MPN/100ml	FALSE
Carpinteria State	4/1/2019	Total Coliforms	41	MPN/100ml	FALSE
Carpinteria State	4/8/2019	Total Coliforms	602	MPN/100ml	FALSE
Carpinteria State	4/15/2019	Total Coliforms	2224	MPN/100ml	FALSE
Carpinteria State	4/22/2019	Total Coliforms	3282	MPN/100ml	FALSE
Carpinteria State	4/24/2019	Total Coliforms	1126	MPN/100ml	FALSE
Carpinteria State	4/29/2019	Total Coliforms	24196	MPN/100ml	TRUE
Carpinteria State	5/1/2019	Total Coliforms	122	MPN/100ml	FALSE
Carpinteria State	5/6/2019	Total Coliforms	85	MPN/100ml	FALSE
Carpinteria State	5/13/2019	Total Coliforms	1014	MPN/100ml	FALSE
Carpinteria State	5/15/2019	Total Coliforms	3873	MPN/100ml	FALSE
Carpinteria State	5/20/2019	Total Coliforms	4611	MPN/100ml	FALSE
Carpinteria State	5/22/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	5/28/2019	Total Coliforms	960	MPN/100ml	FALSE
Carpinteria State	5/30/2019	Total Coliforms	228	MPN/100ml	FALSE
Carpinteria State	6/3/2019	Total Coliforms	441	MPN/100ml	FALSE

Carpinteria State	6/10/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	6/17/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	6/24/2019	Total Coliforms	3448	MPN/100ml	FALSE
Carpinteria State	7/1/2019	Total Coliforms	52	MPN/100ml	FALSE
Carpinteria State	7/8/2019	Total Coliforms	52	MPN/100ml	FALSE
Carpinteria State	7/15/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	7/22/2019	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	7/29/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	8/5/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	8/12/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/19/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	8/26/2019	Total Coliforms	63	MPN/100ml	FALSE
Carpinteria State	9/3/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/9/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	9/16/2019	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	9/23/2019	Total Coliforms	1314	MPN/100ml	FALSE
Carpinteria State	9/30/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/7/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/14/2019	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	10/21/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	10/28/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	11/4/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/12/2019	Total Coliforms	20	MPN/100ml	FALSE
Carpinteria State	11/18/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	11/23/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/2/2019	Total Coliforms	10	MPN/100ml	FALSE
Carpinteria State	12/9/2019	Total Coliforms	1106	MPN/100ml	FALSE
Carpinteria State	12/16/2019	Total Coliforms	31	MPN/100ml	FALSE
Carpinteria State	12/23/2019	Total Coliforms	15531	MPN/100ml	TRUE
Carpinteria State	12/26/2019	Total Coliforms	14136	MPN/100ml	TRUE