



January 25, 2021

Dr. L.B. Nye, Chief of Regional Programs
Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

SUBJECT: 2021 Upper Malibu Creek Trash TMDL Annual Monitoring Report

Dear Dr. Nye:

Enclosed for your review is the tenth Malibu Creek Trash TMDL Annual Monitoring Report covering the period July 2020 – June 2021. This Annual Monitoring Report is being submitted by the City of Thousand Oaks (the City) per the requirements of the Malibu Creek Trash TMDL, Los Angeles Regional Water Quality Control Board Resolution No. R4 2008-007. The report documents the tenth year of implementation of the Malibu Creek Watershed Trash Monitoring and Reporting Plan and Minimum Frequency of Assessment and Collection (TMRP/MFAC) program, submitted by the City on April 30, 2010.

This annual summary report presents monitoring data and results of trash loading from the defined assessment area, an evaluation of the effectiveness of existing Best Management Practices (BMPs) and documentation of on-going maintenance of the full capture devices installed by the City towards point source compliance. The City continues monthly special cleanups within the TMDL area in addition to monthly MFAC/BMP assessment and collection events.

As required by the revised Malibu Creek Trash TMDL Resolution No. R4-2018-006 effective May 6, 2020; and Trash Conditional Waiver, in collaboration with the City, the County and Ventura County Watershed Protection District prepared and submitted revised TMRP Addendum No. 1 to the Regional Water Board on August 6, 2020. The proposed changes included a transition to a visual trash assessment method. The revised TMRP was approved by the Regional Water Board on June 3, 2021, and its implementation began in July 2021. The data for this Annual Monitoring Report (July 1, 2020 through June 30, 2021) was collected under the previous TMRP monitoring protocols in effect till June 31, 2021, but starting in July 2021, TMRP/MFAC program has implemented the approved TMRP Addendum No. 1 including the visual trash assessment.



If you have any comments or questions regarding the attached document, please contact Jason Siegert at (805) 491-8175 or myself at (805) 491-8166.

Sincerely,

A handwritten signature in black ink that reads "Paul Jorgensen". The signature is written in a cursive style with a large, stylized 'P' and 'J'.

Paul Jorgensen
Water Quality Supervisor

CC: Jun Zhu, Los Angeles Regional Water Quality Control Board
Alexander Prescott, Los Angeles Regional Water Quality Control Board
John Minkel, Deputy Director Public Works Operations

Clifford G. Finley
Public Works Director

The City of Thousand Oaks 2021 Upper Malibu Creek Trash TMDL Annual Monitoring Report

This report is a summary of results from Minimum Frequency Assessment and Monitoring (MFAC) done at Lindero Creek during fiscal year 2020-21 in compliance with the Malibu Creek Trash TMDL. It is the last report that adheres to the protocols and guidelines contained in the Trash Reporting and Monitoring Plan submitted to the Los Angeles Regional Water Quality Control Board April 30, 2010.

The reporting period of this report is Fiscal Year (FY) 2020-21 that includes the months from July 2020 until June 2021. The table shows the amounts of trash removed from Lindero Creek (LC1) during MFAC events. As a best management practice, an additional special cleanup is conducted each month. As these special cleanups are not assessments per se, they were not included. This MFAC frequency aligns with that required by the Reconsidered Malibu Creek Trash TMDL (effective May 6, 2020).

Monthly Assessment of Collected Trash at LC1			
Date	Count (pieces)	Vol. (c.f.)	Weight (lbs.)
7/20*	na	na	na
8/20	2	0.05	0.22
9/20	6	0.05	0.09
10/20	25	0.10	0.08
11/20	10	0.05	0.19
12/20*	na	na	na
1/21	41	0.20	4.41
2/21	11	0.25	6.19
3/21	6	0.10	0.34
4/21	5	0.10	0.11
5/21	5	0.05	0.20
6/21	11	0.30	0.39

* Cancelled because of Covid-19 infections

October's piece count spike could be largely attributable to unsupervised activities as part of skate and bicycle recreation at the spillway structure immediately adjacent to assessment area LC-1. This structure and the assessment area are privately owned so it is not possible to restrict entry to the area.

January's spike, in contrast, was just a couple of days after storm event that brought 0.44" of rainfall. A portion of the debris recovered through the MFAC collection was sports equipment and possibly picnic supplies that would seem to implicate upstream activities at North Ranch Playfields, a park and recreational area. Best management practices are being considered for recommendation to the managing agency Conejo Recreation and Parks District.

Annual inspection and maintenance of the full capture devices installed by the City in the stormwater catch basins located in priority areas of the Upper Malibu Creek and surrounding the assessment area is ongoing.

Compliance was maintained during the report period by MFAC collection events whereby all trash, debris, and/or litter was removed from creek areas.



Central Services
Joan Araujo, DirectorEngineering Services
Christopher Cooper, DirectorRoads & Transportation
Anitha Balan, Acting DirectorWater & Sanitation
Joseph Pope, DirectorWatershed Protection
Glenn Shephard, Director

August 26, 2021

VIA EMAIL

Kangshi Wang, Ph.D.
California Regional Water Quality Control Board
Los Angeles Region
Standards & TMDL Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring for County of Ventura, Ventura County Watershed Protection District, and City of Thousand Oaks

Dear Dr. Wang:

Please find attached the report for the results of the weekly monitoring effort required by the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL) Compliance Monitoring Plan (CMP) for the month of July 2021. Sites were sampled weekly on Tuesday (July 6, 13, 20 and 27). Beginning on and following July 23, 2019, Rincon Consultants Inc. has been retained to conduct compliance monitoring activities.

Table 1 presents the weekly sampling results, while Table 2 presents the rolling 30-day geometric means for the sampling locations. Sample collection dates are marked with a diamond (◆) symbol. Sites without results reported were not sampled due to insufficient flow and are labeled "Dry." A map showing the location of the monitoring sites is included below.

Daily geometric means for dry weather are calculated using the past 30 days of the respective sampling data (Table 2). Note that geometric means are not calculated for wet weather samples (collected less than 72 hours after a day with > 0.1" rain). Non-sampling-day values are assigned the value of the most recent sampling event. Half the method reporting limit (MRL) was used to calculate the daily geometric means for sites with results reported as non-detect (ND) [e.g., < 18 most probable number per 100 milliliters (MPN/100 ml)]. Statistics are also calculated for dry events at all sampling locations by assigning a concentration value of half the MRL, as a zero value is undefined logarithmically, and as such would be unusable in the geometric mean calculation.



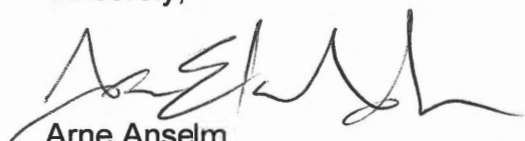
Due to regularly occurring high concentrations in analytical results, a dilution factor of 10 is applied to all samples to quantify results that exceed the standard upper reporting limit of a single dilution. As a result, the MRL for samples analyzed for this program is 18 MPN/100mL.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017.

Fecal coliform monitoring has been discontinued, as approved by the Los Angeles Regional Water Quality Control Board on October 31, 2014, in alignment with the Regional Board's removal of the fecal coliform objective for REC-1 freshwaters from the TMDL on June 7, 2012 and subsequent approval by the U.S. Environmental Protection Agency on July 2, 2014.

If you have any questions regarding this matter, please contact me at (805) 654-3942.

Sincerely,



Arne Anselm
Deputy Director, Watershed Protection

CC: Glenn Shephard, Director, Watershed Protection (via email)
Ewelina Mutkowska, County of Ventura (via email)
Paul Jorgensen, City of Thousand Oaks (via email)
Joe Bellomo, Willdan Associates (via email)
Kelly Fisher, City of Agoura Hills (via email)
Allen Ma, County of Los Angeles (via email)



Table 1. Weekly sampling results

Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
				E. coli	
				(235 MPN)	
MCW-8b (County)	-	7/6/2021 ♦	Dry		Dry
MCW-8b (County)	-	7/13/2021 ♦	Dry		Dry
MCW-8b (County)	-	7/20/2021 ♦	Dry		Dry
MCW-8b (County)	-	7/27/2021 ♦	Dry		Dry
MCW-9 (County)	-	7/6/2021 ♦	Dry		Dry
MCW-9 (County)	-	7/13/2021 ♦	Dry		Dry
MCW-9 (County)	-	7/20/2021 ♦	Dry		Dry
MCW-9 (County)	-	7/27/2021 ♦	Dry		Dry
MCW-12 (County)	-	7/6/2021 ♦	Dry		Dry
MCW-12 (County)	-	7/13/2021 ♦	Dry		Dry
MCW-12 (County)	-	7/20/2021 ♦	Dry		Dry
MCW-12 (County)	-	7/27/2021 ♦	Dry		Dry
MCW-14b (City and County)	1415	7/6/2021 ♦		<	18
MCW-14b (City and County)	1425	7/13/2021 ♦		=	78
MCW-14b (City and County)	1420	7/20/2021 ♦		<	18
MCW-14b (City and County)	1355	7/27/2021 ♦		=	45
MCW-15c (City)*	1335	7/6/2021 ♦		=	170
MCW-15c (City)*	1330	7/13/2021 ♦		<	18
MCW-15c (City)*	1345	7/20/2021 ♦		<	18
MCW-15c (City)*	1445	7/27/2021 ♦		=	1,300
MCW-17 (City and County)	-	7/6/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	7/13/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	7/20/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	7/27/2021 ♦	Dry		Dry
MCW-18 (County)	-	7/6/2021 ♦	Dry		Dry
MCW-18 (County)	-	7/13/2021 ♦	Dry		Dry
MCW-18 (County)	-	7/20/2021 ♦	Dry		Dry
MCW-18 (County)	-	7/27/2021 ♦	Dry		Dry

Notes:

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010.

♦: Date of sampling

-: Time is not applicable, as no sample was collected due to insufficient flow

Dry: Samples were not collected due to insufficient flow

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in a MRL of 18 MPN/100 ml



Table 2. Computation of daily geometric mean

Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-8b (County)	-	7/1/2021	Dry	<	9	11
MCW-8b (County)	-	7/2/2021	Dry	<	9	11
MCW-8b (County)	-	7/3/2021	Dry	<	9	11
MCW-8b (County)	-	7/4/2021	Dry	<	9	11
MCW-8b (County)	-	7/5/2021	Dry	<	9	11
MCW-8b (County)	-	7/6/2021 ♦	Dry	<	9	11
MCW-8b (County)	-	7/7/2021	Dry	<	9	11
MCW-8b (County)	-	7/8/2021	Dry	<	9	11
MCW-8b (County)	-	7/9/2021	Dry	<	9	10
MCW-8b (County)	-	7/10/2021	Dry	<	9	10
MCW-8b (County)	-	7/11/2021	Dry	<	9	10
MCW-8b (County)	-	7/12/2021	Dry	<	9	9
MCW-8b (County)	-	7/3/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	7/14/2021	Dry	<	9	9
MCW-8b (County)	-	7/15/2021	Dry	<	9	9
MCW-8b (County)	-	7/16/2021	Dry	<	9	9
MCW-8b (County)	-	7/17/2021	Dry	<	9	9
MCW-8b (County)	-	7/18/2021	Dry	<	9	9
MCW-8b (County)	-	7/19/2021	Dry	<	9	9
MCW-8b (County)	-	7/20/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	7/21/2021	Dry	<	9	9
MCW-8b (County)	-	7/22/2021	Dry	<	9	9
MCW-8b (County)	-	7/23/2021	Dry	<	9	9
MCW-8b (County)	-	7/24/2021	Dry	<	9	9
MCW-8b (County)	-	7/25/2021	Dry	<	9	9
MCW-8b (County)	-	7/26/2021	Dry	<	9	9
MCW-8b (County)	-	7/27/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	7/28/2021	Dry	<	9	9
MCW-8b (County)	-	7/29/2021	Dry	<	9	9
MCW-8b (County)	-	7/30/2021	Dry	<	9	9
MCW-8b (County)	-	7/31/2021	Dry	<	9	9
MCW-9 (County)	-	7/1/2021	Dry	<	9	9
MCW-9 (County)	-	7/2/2021	Dry	<	9	9
MCW-9 (County)	-	7/3/2021	Dry	<	9	9
MCW-9 (County)	-	7/4/2021	Dry	<	9	9
MCW-9 (County)	-	7/5/2021	Dry	<	9	9
MCW-9 (County)	-	7/6/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	7/7/2021	Dry	<	9	9
MCW-9 (County)	-	7/8/2021	Dry	<	9	9
MCW-9 (County)	-	7/9/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-9 (County)	-	7/10/2021	Dry	<	9	9
MCW-9 (County)	-	7/11/2021	Dry	<	9	9
MCW-9 (County)	-	7/12/2021	Dry	<	9	9
MCW-9 (County)	-	7/13/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	7/14/2021	Dry	<	9	9
MCW-9 (County)	-	7/15/2021	Dry	<	9	9
MCW-9 (County)	-	7/16/2021	Dry	<	9	9
MCW-9 (County)	-	7/17/2021	Dry	<	9	9
MCW-9 (County)	-	7/18/2021	Dry	<	9	9
MCW-9 (County)	-	7/19/2021	Dry	<	9	9
MCW-9 (County)	-	7/20/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	7/21/2021	Dry	<	9	9
MCW-9 (County)	-	7/22/2021	Dry	<	9	9
MCW-9 (County)	-	7/23/2021	Dry	<	9	9
MCW-9 (County)	-	7/24/2021	Dry	<	9	9
MCW-9 (County)	-	7/25/2021	Dry	<	9	9
MCW-9 (County)	-	7/26/2021	Dry	<	9	9
MCW-9 (County)	-	7/27/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	7/28/2021	Dry	<	9	9
MCW-9 (County)	-	7/29/2021	Dry	<	9	9
MCW-9 (County)	-	7/30/2021	Dry	<	9	9
MCW-9 (County)	-	7/31/2021	Dry	<	9	9
MCW-12 (County)	-	7/1/2021	Dry	<	9	29
MCW-12 (County)	-	7/2/2021	Dry	<	9	26
MCW-12 (County)	-	7/3/2021	Dry	<	9	24
MCW-12 (County)	-	7/4/2021	Dry	<	9	22
MCW-12 (County)	-	7/5/2021	Dry	<	9	20
MCW-12 (County)	-	7/6/2021 ♦	Dry	<	9	18
MCW-12 (County)	-	7/7/2021	Dry	<	9	16
MCW-12 (County)	-	7/8/2021	Dry	<	9	15
MCW-12 (County)	-	7/9/2021	Dry	<	9	14
MCW-12 (County)	-	7/10/2021	Dry	<	9	13
MCW-12 (County)	-	7/11/2021	Dry	<	9	12
MCW-12 (County)	-	7/12/2021	Dry	<	9	11
MCW-12 (County)	-	7/13/2021 ♦	Dry	<	9	10
MCW-12 (County)	-	7/14/2021	Dry	<	9	9
MCW-12 (County)	-	7/15/2021	Dry	<	9	9
MCW-12 (County)	-	7/16/2021	Dry	<	9	9
MCW-12 (County)	-	7/17/2021	Dry	<	9	9
MCW-12 (County)	-	7/18/2021	Dry	<	9	9
MCW-12 (County)	-	7/19/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-12 (County)	-	7/20/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	7/21/2021	Dry	<	9	9
MCW-12 (County)	-	7/22/2021	Dry	<	9	9
MCW-12 (County)	-	7/23/2021	Dry	<	9	9
MCW-12 (County)	-	7/24/2021	Dry	<	9	9
MCW-12 (County)	-	7/25/2021	Dry	<	9	9
MCW-12 (County)	-	7/26/2021	Dry	<	9	9
MCW-12 (County)	-	7/27/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	7/28/2021	Dry	<	9	9
MCW-12 (County)	-	7/29/2021	Dry	<	9	9
MCW-12 (County)	-	7/30/2021	Dry	<	9	9
MCW-12 (County)	-	7/31/2021	Dry	<	9	9
MCW-14b (City and County)	1240	7/1/2021		=	20	248
MCW-14b (City and County)	1240	7/2/2021		=	20	223
MCW-14b (City and County)	1240	7/3/2021		=	20	201
MCW-14b (City and County)	1240	7/4/2021		=	20	180
MCW-14b (City and County)	1240	7/5/2021		=	20	162
MCW-14b (City and County)	1415	7/6/2021 ♦		<	9	142
MCW-14b (City and County)	1415	7/7/2021		<	9	124
MCW-14b (City and County)	1415	7/8/2021		<	9	101
MCW-14b (City and County)	1415	7/9/2021		<	9	82
MCW-14b (City and County)	1415	7/10/2021		<	9	67
MCW-14b (City and County)	1415	7/11/2021		<	9	55
MCW-14b (City and County)	1415	7/12/2021		<	9	44
MCW-14b (City and County)	1425	7/13/2021 ♦		=	78	39
MCW-14b (City and County)	1425	7/14/2021		=	78	34
MCW-14b (City and County)	1425	7/15/2021		=	78	33
MCW-14b (City and County)	1425	7/16/2021		=	78	33
MCW-14b (City and County)	1425	7/17/2021		=	78	32
MCW-14b (City and County)	1425	7/18/2021		=	78	32
MCW-14b (City and County)	1425	7/19/2021		=	78	31
MCW-14b (City and County)	1420	7/20/2021 ♦		<	9	29
MCW-14b (City and County)	1420	7/21/2021		<	9	26
MCW-14b (City and County)	1420	7/22/2021		<	9	25
MCW-14b (City and County)	1420	7/23/2021		<	9	23
MCW-14b (City and County)	1420	7/24/2021		<	9	22
MCW-14b (City and County)	1420	7/25/2021		<	9	21
MCW-14b (City and County)	1420	7/26/2021		<	9	20
MCW-14b (City and County)	1355	7/27/2021 ♦		=	45	20
MCW-14b (City and County)	1355	7/28/2021		=	45	20



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-14b (City and County)	1355	7/29/2021		=	45	21
MCW-14b (City and County)	1355	7/30/2021		=	45	21
MCW-14b (City and County)	1355	7/31/2021		=	45	22
MCW-15c (City)*	1200	7/1/2021		=	5,400	80
MCW-15c (City)*	1200	7/2/2021		=	5,400	94
MCW-15c (City)*	1200	7/3/2021		=	5,400	110
MCW-15c (City)*	1200	7/4/2021		=	5,400	129
MCW-15c (City)*	1200	7/5/2021		=	5,400	151
MCW-15c (City)*	1335	7/6/2021 ♦		=	170	158
MCW-15c (City)*	1335	7/7/2021		=	170	165
MCW-15c (City)*	1335	7/8/2021		=	170	153
MCW-15c (City)*	1335	7/9/2021		=	170	142
MCW-15c (City)*	1335	7/10/2021		=	170	131
MCW-15c (City)*	1335	7/11/2021		=	170	122
MCW-15c (City)*	1335	7/12/2021		=	170	113
MCW-15c (City)*	1330	7/13/2021 ♦		<	9	95
MCW-15c (City)*	1330	7/14/2021		<	9	79
MCW-15c (City)*	1330	7/15/2021		<	9	79
MCW-15c (City)*	1330	7/16/2021		<	9	79
MCW-15c (City)*	1330	7/17/2021		<	9	79
MCW-15c (City)*	1330	7/18/2021		<	9	79
MCW-15c (City)*	1330	7/19/2021		<	9	79
MCW-15c (City)*	1345	7/20/2021 ♦		<	9	79
MCW-15c (City)*	1345	7/21/2021		<	9	79
MCW-15c (City)*	1345	7/22/2021		<	9	79
MCW-15c (City)*	1345	7/23/2021		<	9	79
MCW-15c (City)*	1345	7/24/2021		<	9	79
MCW-15c (City)*	1345	7/25/2021		<	9	79
MCW-15c (City)*	1345	7/26/2021		<	9	79
MCW-15c (City)*	1445	7/27/2021 ♦		=	1,300	94
MCW-15c (City)*	1445	7/28/2021		=	1,300	111
MCW-15c (City)*	1445	7/29/2021		=	1,300	106
MCW-15c (City)*	1445	7/30/2021		=	1,300	101
MCW-15c (City)*	1445	7/31/2021		=	1,300	96
MCW-17 (City and County)	-	7/1/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/2/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/3/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/4/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/5/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-17 (City and County)	-	7/6/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	7/7/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/8/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/9/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/10/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/11/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/12/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/13/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	7/14/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/15/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/16/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/17/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/18/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/19/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/20/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	7/21/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/22/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/23/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/24/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/25/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/26/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/27/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	7/28/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/29/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/30/2021	Dry	<	9	9
MCW-17 (City and County)	-	7/31/2021	Dry	<	9	9
MCW-18 (County)	-	7/1/2021	Dry	<	9	9
MCW-18 (County)	-	7/2/2021	Dry	<	9	9
MCW-18 (County)	-	7/3/2021	Dry	<	9	9
MCW-18 (County)	-	7/4/2021	Dry	<	9	9
MCW-18 (County)	-	7/5/2021	Dry	<	9	9
MCW-18 (County)	-	7/6/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	7/7/2021	Dry	<	9	9
MCW-18 (County)	-	7/8/2021	Dry	<	9	9
MCW-18 (County)	-	7/9/2021	Dry	<	9	9
MCW-18 (County)	-	7/10/2021	Dry	<	9	9
MCW-18 (County)	-	7/11/2021	Dry	<	9	9
MCW-18 (County)	-	7/12/2021	Dry	<	9	9
MCW-18 (County)	-	7/13/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	7/14/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-18 (County)	-	7/15/2021	Dry	<	9	9
MCW-18 (County)	-	7/16/2021	Dry	<	9	9
MCW-18 (County)	-	7/17/2021	Dry	<	9	9
MCW-18 (County)	-	7/18/2021	Dry	<	9	9
MCW-18 (County)	-	7/19/2021	Dry	<	9	9
MCW-18 (County)	-	7/20/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	7/21/2021	Dry	<	9	9
MCW-18 (County)	-	7/22/2021	Dry	<	9	9
MCW-18 (County)	-	7/23/2021	Dry	<	9	9
MCW-18 (County)	-	7/24/2021	Dry	<	9	9
MCW-18 (County)	-	7/25/2021	Dry	<	9	9
MCW-18 (County)	-	7/26/2021	Dry	<	9	9
MCW-18 (County)	-	7/27/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	7/28/2021	Dry	<	9	9
MCW-18 (County)	-	7/29/2021	Dry	<	9	9
MCW-18 (County)	-	7/30/2021	Dry	<	9	9
MCW-18 (County)	-	7/31/2021	Dry	<	9	9

Notes:

♦: Date of sampling

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in an MRL of 18 MPN/100 ml

Results of <18 MPN/100 ml are adjusted to use half the MRL (=9) in the calculation of the geometric mean. As such, Table 2 presents a value of 9 MPN/100mL to distinguish the value used for calculation of the 30-day geometric mean

Dry: Samples were not collected due to insufficient flow and a value of 9 MPN/100 ml (half the MRL) was used for calculation of the 30-day geometric mean

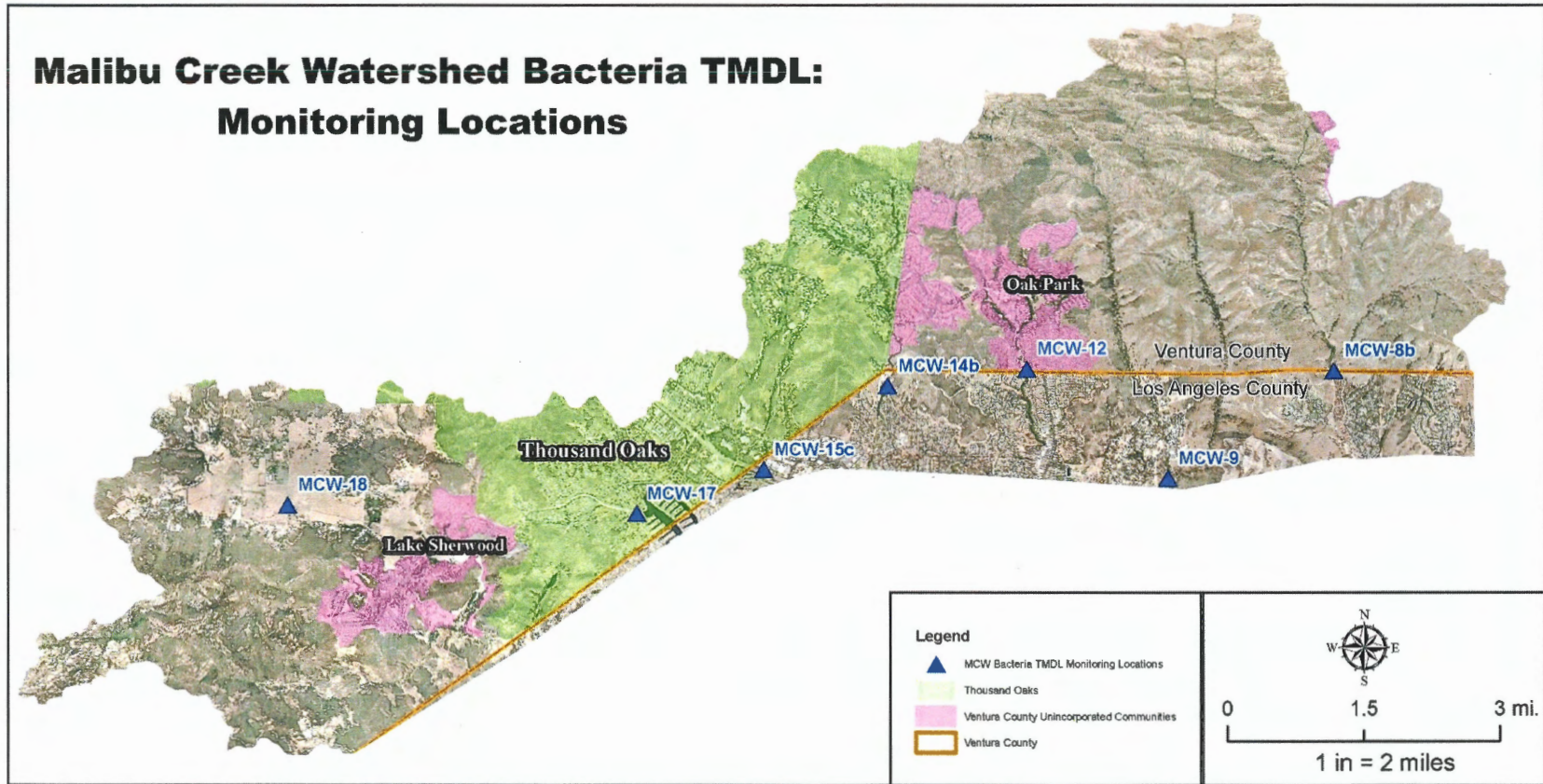
-: Time is not applicable, as no sample was collected due to insufficient flow

Weeks with wet weather samples (collected less than 72 hours after a day with >0.1" rain) use the previous non-rain single sample value to calculate the geometric mean.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010





Central Services
Joan Araujo, DirectorEngineering Services
Christopher Cooper, DirectorRoads & Transportation
Christopher Kurgan, DirectorWater & Sanitation
Joseph Pope, DirectorWatershed Protection
Glenn Shephard, Director

September 27, 2021

VIA EMAIL

Kangshi Wang, Ph.D.
California Regional Water Quality Control Board
Los Angeles Region
Standards & TMDL Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring for County of Ventura, Ventura County Watershed Protection District, and City of Thousand Oaks

Dear Dr. Wang:

Please find attached the report for the results of the weekly monitoring effort required by the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL) Compliance Monitoring Plan (CMP) for the month of August 2021. Sites were sampled weekly on Tuesday (August 3, 10, 17, 24, and 31). Beginning on and following July 23, 2019, Rincon Consultants Inc. has been retained to conduct compliance monitoring activities.

Table 1 presents the weekly sampling results, while Table 2 presents the rolling 30-day geometric means for the sampling locations. Sample collection dates are marked with a diamond (♦) symbol. Sites without results reported were not sampled due to insufficient flow and are labeled "Dry." A map showing the location of the monitoring sites is included below.

Daily geometric means for dry weather are calculated using the past 30 days of the respective sampling data (Table 2). Note that geometric means are not calculated for wet weather samples (collected less than 72 hours after a day with > 0.1" rain). Non-sampling-day values are assigned the value of the most recent sampling event. Half the method reporting limit (MRL) was used to calculate the daily geometric means for sites with results reported as non-detect (ND) [e.g., < 18 most probable number per 100 milliliters (MPN/100 ml)]. Statistics are also calculated for dry events at all sampling locations by assigning a concentration value of half the MRL, as a zero value is undefined logarithmically, and as such would be unusable in the geometric mean calculation.



Due to regularly occurring high concentrations in analytical results, a dilution factor of 10 is applied to all samples to quantify results that exceed the standard upper reporting limit of a single dilution. As a result, the MRL for samples analyzed for this program is 18 MPN/100mL.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017.

Fecal coliform monitoring has been discontinued, as approved by the Los Angeles Regional Water Quality Control Board on October 31, 2014, in alignment with the Regional Board's removal of the fecal coliform objective for REC-1 freshwaters from the TMDL on June 7, 2012 and subsequent approval by the U.S. Environmental Protection Agency on July 2, 2014.

If you have any questions regarding this matter, please contact me at (805) 654-3942.

Sincerely,



Arne Anselm
Deputy Director, Watershed Protection

CC: Glenn Shephard, Director, Watershed Protection (via email)
Ewelina Mutkowska, County of Ventura (via email)
Paul Jorgensen, City of Thousand Oaks (via email)
Joe Bellomo, Willdan Associates (via email)
Kelly Fisher, City of Agoura Hills (via email)
Allen Ma, County of Los Angeles (via email)



Table 1. Weekly sampling results

Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
					E. coli
					(235 MPN)
MCW-8b (County)	-	8/3/2021 ♦	Dry		Dry
MCW-8b (County)	-	8/10/2021 ♦	Dry		Dry
MCW-8b (County)	-	8/17/2021 ♦	Dry		Dry
MCW-8b (County)	-	8/24/2021 ♦	Dry		Dry
MCW-8b (County)	-	8/31/2021 ♦	Dry		Dry
MCW-9 (County)	-	8/3/2021 ♦	Dry		Dry
MCW-9 (County)	-	8/10/2021 ♦	Dry		Dry
MCW-9 (County)	-	8/17/2021 ♦	Dry		Dry
MCW-9 (County)	-	8/24/2021 ♦	Dry		Dry
MCW-9 (County)	-	8/31/2021 ♦	Dry		Dry
MCW-12 (County)	-	8/3/2021 ♦	Dry		Dry
MCW-12 (County)	-	8/10/2021 ♦	Dry		Dry
MCW-12 (County)	-	8/17/2021 ♦	Dry		Dry
MCW-12 (County)	-	8/24/2021 ♦	Dry		Dry
MCW-12 (County)	-	8/31/2021 ♦	Dry		Dry
MCW-14b (City and County)	1335	8/3/2021 ♦		=	130
MCW-14b (City and County)	1330	8/10/2021 ♦		=	490
MCW-14b (City and County)	1515	8/17/2021 ♦		=	490
MCW-14b (City and County)	1400	8/24/2021 ♦		=	13
MCW-14b (City and County)	1210	8/31/2021 ♦		=	490
MCW-15c (City)*	1410	8/3/2021 ♦		=	3,500
MCW-15c (City)*	1425	8/10/2021 ♦		=	5,400
MCW-15c (City)*	1540	8/17/2021 ♦		=	490
MCW-15c (City)*	1440	8/24/2021 ♦		=	490
MCW-15c (City)*	1250	8/31/2021 ♦		=	700
MCW-17 (City and County)	-	8/3/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	8/10/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	8/17/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	8/24/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	8/31/2021 ♦	Dry		Dry



Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
					E. coli
					(235 MPN)
MCW-18 (County)	-	8/3/2021 ♦	Dry		Dry
MCW-18 (County)	-	8/10/2021 ♦	Dry		Dry
MCW-18 (County)	-	8/17/2021 ♦	Dry		Dry
MCW-18 (County)	-	8/24/2021 ♦	Dry		Dry
MCW-18 (County)	-	8/31/2021 ♦	Dry		Dry

Notes:

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010.

♦: Date of sampling

-: Time is not applicable, as no sample was collected due to insufficient flow

Dry: Samples were not collected due to insufficient flow

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in a MRL of 18 MPN/100 ml



Table 2. Computation of daily geometric mean

Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-8b (County)	-	8/1/2021	Dry	<	9	9
MCW-8b (County)	-	8/2/2021	Dry	<	9	9
MCW-8b (County)	-	8/3/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	8/4/2021	Dry	<	9	9
MCW-8b (County)	-	8/5/2021	Dry	<	9	9
MCW-8b (County)	-	8/6/2021	Dry	<	9	9
MCW-8b (County)	-	8/7/2021	Dry	<	9	9
MCW-8b (County)	-	8/8/2021	Dry	<	9	9
MCW-8b (County)	-	8/9/2021	Dry	<	9	9
MCW-8b (County)	-	8/10/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	8/11/2021	Dry	<	9	9
MCW-8b (County)	-	8/12/2021	Dry	<	9	9
MCW-8b (County)	-	8/13/2021	Dry	<	9	9
MCW-8b (County)	-	8/14/2021	Dry	<	9	9
MCW-8b (County)	-	8/15/2021	Dry	<	9	9
MCW-8b (County)	-	8/16/2021	Dry	<	9	9
MCW-8b (County)	-	8/17/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	8/18/2021	Dry	<	9	9
MCW-8b (County)	-	8/19/2021	Dry	<	9	9
MCW-8b (County)	-	8/20/2021	Dry	<	9	9
MCW-8b (County)	-	8/21/2021	Dry	<	9	9
MCW-8b (County)	-	8/22/2021	Dry	<	9	9
MCW-8b (County)	-	8/23/2021	Dry	<	9	9
MCW-8b (County)	-	8/24/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	8/25/2021	Dry	<	9	9
MCW-8b (County)	-	8/26/2021	Dry	<	9	9
MCW-8b (County)	-	8/27/2021	Dry	<	9	9
MCW-8b (County)	-	8/28/2021	Dry	<	9	9
MCW-8b (County)	-	8/29/2021	Dry	<	9	9
MCW-8b (County)	-	8/30/2021	Dry	<	9	9
MCW-8b (County)	-	8/31/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	8/1/2021	Dry	<	9	9
MCW-9 (County)	-	8/2/2021	Dry	<	9	9
MCW-9 (County)	-	8/3/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	8/4/2021	Dry	<	9	9
MCW-9 (County)	-	8/5/2021	Dry	<	9	9
MCW-9 (County)	-	8/6/2021	Dry	<	9	9
MCW-9 (County)	-	8/7/2021	Dry	<	9	9
MCW-9 (County)	-	8/8/2021	Dry	<	9	9
MCW-9 (County)	-	8/9/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-9 (County)	-	8/10/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	8/11/2021	Dry	<	9	9
MCW-9 (County)	-	8/12/2021	Dry	<	9	9
MCW-9 (County)	-	8/13/2021	Dry	<	9	9
MCW-9 (County)	-	8/14/2021	Dry	<	9	9
MCW-9 (County)	-	8/15/2021	Dry	<	9	9
MCW-9 (County)	-	8/16/2021	Dry	<	9	9
MCW-9 (County)	-	8/17/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	8/18/2021	Dry	<	9	9
MCW-9 (County)	-	8/19/2021	Dry	<	9	9
MCW-9 (County)	-	8/20/2021	Dry	<	9	9
MCW-9 (County)	-	8/21/2021	Dry	<	9	9
MCW-9 (County)	-	8/22/2021	Dry	<	9	9
MCW-9 (County)	-	8/23/2021	Dry	<	9	9
MCW-9 (County)	-	8/24/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	8/25/2021	Dry	<	9	9
MCW-9 (County)	-	8/26/2021	Dry	<	9	9
MCW-9 (County)	-	8/27/2021	Dry	<	9	9
MCW-9 (County)	-	8/28/2021	Dry	<	9	9
MCW-9 (County)	-	8/29/2021	Dry	<	9	9
MCW-9 (County)	-	8/30/2021	Dry	<	9	9
MCW-9 (County)	-	8/31/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	8/1/2021	Dry	<	9	9
MCW-12 (County)	-	8/2/2021	Dry	<	9	9
MCW-12 (County)	-	8/3/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	8/4/2021	Dry	<	9	9
MCW-12 (County)	-	8/5/2021	Dry	<	9	9
MCW-12 (County)	-	8/6/2021	Dry	<	9	9
MCW-12 (County)	-	8/7/2021	Dry	<	9	9
MCW-12 (County)	-	8/8/2021	Dry	<	9	9
MCW-12 (County)	-	8/9/2021	Dry	<	9	9
MCW-12 (County)	-	8/10/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	8/11/2021	Dry	<	9	9
MCW-12 (County)	-	8/12/2021	Dry	<	9	9
MCW-12 (County)	-	8/13/2021	Dry	<	9	9
MCW-12 (County)	-	8/14/2021	Dry	<	9	9
MCW-12 (County)	-	8/15/2021	Dry	<	9	9
MCW-12 (County)	-	8/16/2021	Dry	<	9	9
MCW-12 (County)	-	8/17/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	8/18/2021	Dry	<	9	9
MCW-12 (County)	-	8/19/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-12 (County)	-	8/20/2021	Dry	<	9	9
MCW-12 (County)	-	8/21/2021	Dry	<	9	9
MCW-12 (County)	-	8/22/2021	Dry	<	9	9
MCW-12 (County)	-	8/23/2021	Dry	<	9	9
MCW-12 (County)	-	8/24/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	8/25/2021	Dry	<	9	9
MCW-12 (County)	-	8/26/2021	Dry	<	9	9
MCW-12 (County)	-	8/27/2021	Dry	<	9	9
MCW-12 (County)	-	8/28/2021	Dry	<	9	9
MCW-12 (County)	-	8/29/2021	Dry	<	9	9
MCW-12 (County)	-	8/30/2021	Dry	<	9	9
MCW-12 (County)	-	8/31/2021 ♦	Dry	<	9	9
MCW-14b (City and County)	1355	8/1/2021		=	45	22
MCW-14b (City and County)	1355	8/2/2021		=	45	23
MCW-14b (City and County)	1335	8/3/2021 ♦		=	130	24
MCW-14b (City and County)	1335	8/4/2021		=	130	26
MCW-14b (City and County)	1335	8/5/2021		=	130	28
MCW-14b (City and County)	1335	8/6/2021		=	130	31
MCW-14b (City and County)	1335	8/7/2021		=	130	34
MCW-14b (City and County)	1335	8/8/2021		=	130	37
MCW-14b (City and County)	1335	8/9/2021		=	130	40
MCW-14b (City and County)	1330	8/10/2021 ♦		=	490	46
MCW-14b (City and County)	1330	8/11/2021		=	490	53
MCW-14b (City and County)	1330	8/12/2021		=	490	56
MCW-14b (City and County)	1330	8/13/2021		=	490	60
MCW-14b (City and County)	1330	8/14/2021		=	490	63
MCW-14b (City and County)	1330	8/15/2021		=	490	67
MCW-14b (City and County)	1330	8/16/2021		=	490	72
MCW-14b (City and County)	1515	8/17/2021 ♦		=	490	76
MCW-14b (City and County)	1515	8/18/2021		=	490	81
MCW-14b (City and County)	1515	8/19/2021		=	490	93
MCW-14b (City and County)	1515	8/20/2021		=	490	106
MCW-14b (City and County)	1515	8/21/2021		=	490	121
MCW-14b (City and County)	1515	8/22/2021		=	490	138
MCW-14b (City and County)	1515	8/23/2021		=	490	158
MCW-14b (City and County)	1400	8/24/2021 ♦		=	13	160
MCW-14b (City and County)	1400	8/25/2021		=	13	162
MCW-14b (City and County)	1400	8/26/2021		=	13	155
MCW-14b (City and County)	1400	8/27/2021		=	13	149
MCW-14b (City and County)	1400	8/28/2021		=	13	143



				Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
Location (Jurisdiction)	Time	Date	Rain		E. coli (235 MPN)	E. coli (126 MPN)
MCW-14b (City and County)	1400	8/29/2021		=	13	137
MCW-14b (City and County)	1400	8/30/2021		=	13	131
MCW-14b (City and County)	1210	8/31/2021 ♦		=	490	142
MCW-15c (City)*	1445	8/1/2021		=	1,300	92
MCW-15c (City)*	1445	8/2/2021		=	1,300	87
MCW-15c (City)*	1410	8/3/2021 ♦		=	3,500	86
MCW-15c (City)*	1410	8/4/2021		=	3,500	85
MCW-15c (City)*	1410	8/5/2021		=	3,500	94
MCW-15c (City)*	1410	8/6/2021		=	3,500	104
MCW-15c (City)*	1410	8/7/2021		=	3,500	115
MCW-15c (City)*	1410	8/8/2021		=	3,500	127
MCW-15c (City)*	1410	8/9/2021		=	3,500	140
MCW-15c (City)*	1425	8/10/2021 ♦		=	5,400	158
MCW-15c (City)*	1425	8/11/2021		=	5,400	177
MCW-15c (City)*	1425	8/12/2021		=	5,400	219
MCW-15c (City)*	1425	8/13/2021		=	5,400	271
MCW-15c (City)*	1425	8/14/2021		=	5,400	335
MCW-15c (City)*	1425	8/15/2021		=	5,400	415
MCW-15c (City)*	1425	8/16/2021		=	5,400	514
MCW-15c (City)*	1540	8/17/2021 ♦		=	490	587
MCW-15c (City)*	1540	8/18/2021		=	490	671
MCW-15c (City)*	1540	8/19/2021		=	490	766
MCW-15c (City)*	1540	8/20/2021		=	490	875
MCW-15c (City)*	1540	8/21/2021		=	490	1,000
MCW-15c (City)*	1540	8/22/2021		=	490	1,143
MCW-15c (City)*	1540	8/23/2021		=	490	1,305
MCW-15c (City)*	1440	8/24/2021 ♦		=	490	1,491
MCW-15c (City)*	1440	8/25/2021		=	490	1,704
MCW-15c (City)*	1440	8/26/2021		=	490	1,650
MCW-15c (City)*	1440	8/27/2021		=	490	1,597
MCW-15c (City)*	1440	8/28/2021		=	490	1,546
MCW-15c (City)*	1440	8/29/2021		=	490	1,496
MCW-15c (City)*	1440	8/30/2021		=	490	1,448
MCW-15c (City)*	1250	8/31/2021 ♦		=	700	1,419
MCW-17 (City and County)	-	8/1/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/2/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/3/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	8/4/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/5/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-17 (City and County)	-	8/6/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/7/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/8/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/9/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/10/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	8/11/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/12/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/13/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/14/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/15/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/16/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/17/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	8/18/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/19/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/20/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/21/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/22/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/23/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/24/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	8/25/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/26/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/27/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/28/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/29/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/30/2021	Dry	<	9	9
MCW-17 (City and County)	-	8/31/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	8/1/2021	Dry	<	9	9
MCW-18 (County)	-	8/2/2021	Dry	<	9	9
MCW-18 (County)	-	8/3/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	8/4/2021	Dry	<	9	9
MCW-18 (County)	-	8/5/2021	Dry	<	9	9
MCW-18 (County)	-	8/6/2021	Dry	<	9	9
MCW-18 (County)	-	8/7/2021	Dry	<	9	9
MCW-18 (County)	-	8/8/2021	Dry	<	9	9
MCW-18 (County)	-	8/9/2021	Dry	<	9	9
MCW-18 (County)	-	8/10/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	8/11/2021	Dry	<	9	9
MCW-18 (County)	-	8/12/2021	Dry	<	9	9
MCW-18 (County)	-	8/13/2021	Dry	<	9	9
MCW-18 (County)	-	8/14/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-18 (County)	-	8/15/2021	Dry	<	9	9
MCW-18 (County)	-	8/16/2021	Dry	<	9	9
MCW-18 (County)	-	8/17/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	8/18/2021	Dry	<	9	9
MCW-18 (County)	-	8/19/2021	Dry	<	9	9
MCW-18 (County)	-	8/20/2021	Dry	<	9	9
MCW-18 (County)	-	8/21/2021	Dry	<	9	9
MCW-18 (County)	-	8/22/2021	Dry	<	9	9
MCW-18 (County)	-	8/23/2021	Dry	<	9	9
MCW-18 (County)	-	8/24/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	8/25/2021	Dry	<	9	9
MCW-18 (County)	-	8/26/2021	Dry	<	9	9
MCW-18 (County)	-	8/27/2021	Dry	<	9	9
MCW-18 (County)	-	8/28/2021	Dry	<	9	9
MCW-18 (County)	-	8/29/2021	Dry	<	9	9
MCW-18 (County)	-	8/30/2021	Dry	<	9	9
MCW-18 (County)	-	8/31/2021 ♦	Dry	<	9	9

Notes:

♦: Date of sampling

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in an MRL of 18 MPN/100 ml

Results of <18 MPN/100 ml are adjusted to use half the MRL (=9) in the calculation of the geometric mean. As such, Table 2 presents a value of 9 MPN/100ml to distinguish the value used for calculation of the 30-day geometric mean

Dry: Samples were not collected due to insufficient flow and a value of 9 MPN/100 ml (half the MRL) was used for calculation of the 30-day geometric mean

-: Time is not applicable, as no sample was collected due to insufficient flow

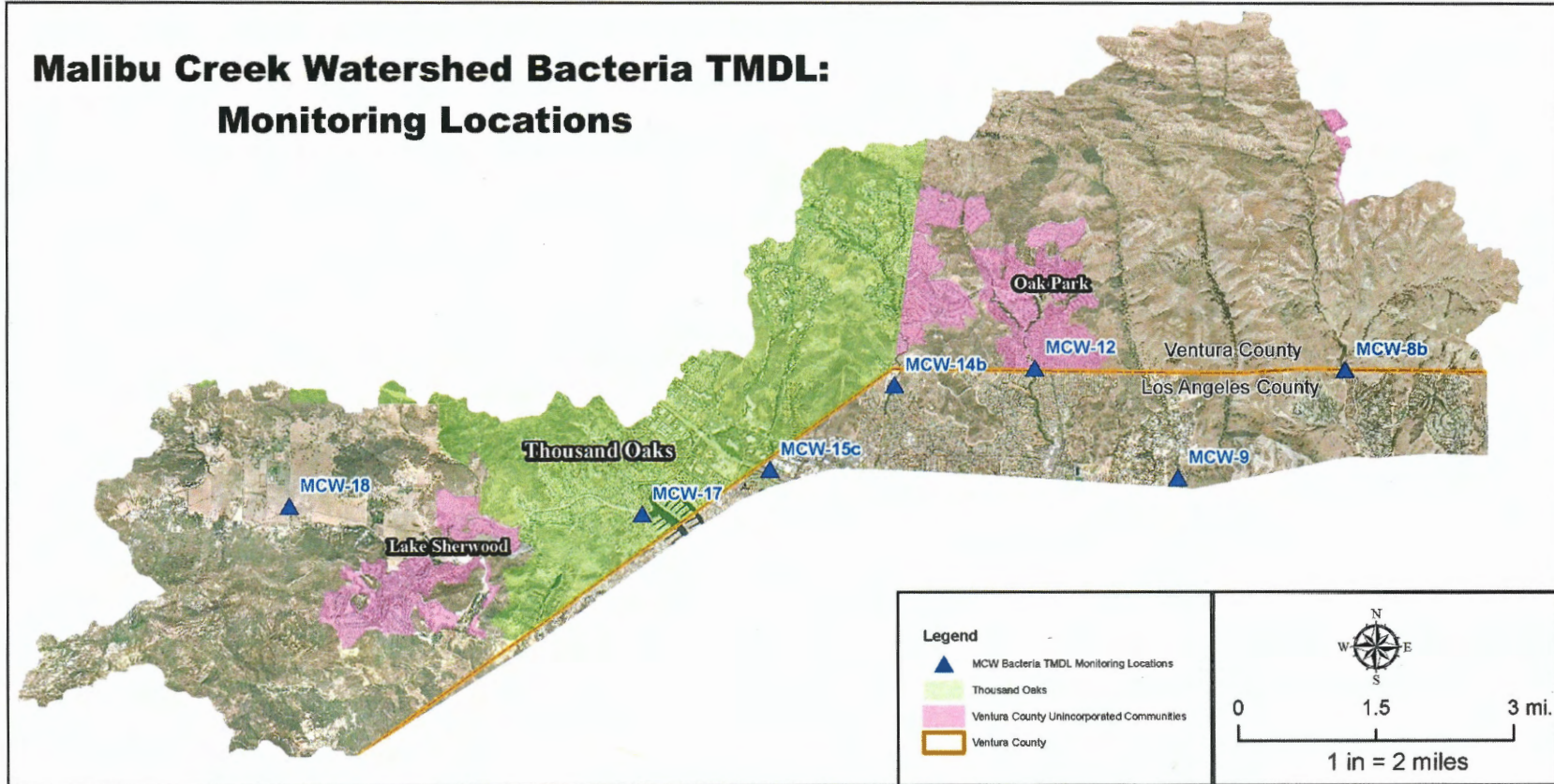
Weeks with wet weather samples (collected less than 72 hours after a day with >0.1" rain) use the previous non-rain single sample value to calculate the geometric mean.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010



Malibu Creek Watershed Bacteria TMDL: Monitoring Locations



Central Services
Joan Araujo, Director

Engineering Services
Christopher Cooper, Director

Roads & Transportation
Christopher Kurgan, Director

Water & Sanitation
Joseph Pope, Director

Watershed Protection
Glenn Shephard, Director

October 27, 2021

VIA EMAIL

Kangshi Wang, Ph.D.
California Regional Water Quality Control Board
Los Angeles Region
Standards & TMDL Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring for County of Ventura, Ventura County Watershed Protection District, and City of Thousand Oaks

Dear Dr. Wang:

Please find attached the report for the results of the weekly monitoring effort required by the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL) Compliance Monitoring Plan (CMP) for the month of September 2021. Sites were sampled weekly (September 7, 14, 22, and 28). Beginning on and following July 23, 2019, Rincon Consultants Inc. has been retained to conduct compliance monitoring activities.

Table 1 presents the weekly sampling results, while Table 2 presents the rolling 30-day geometric means for the sampling locations. Sample collection dates are marked with a diamond (◆) symbol. Sites without results reported were not sampled due to insufficient flow and are labeled "Dry." A map showing the location of the monitoring sites is included below.

Daily geometric means for dry weather are calculated using the past 30 days of the respective sampling data (Table 2). Note that geometric means are not calculated for wet weather samples (collected less than 72 hours after a day with > 0.1" rain). Non-sampling-day values are assigned the value of the most recent sampling event. Half the method reporting limit (MRL) was used to calculate the daily geometric means for sites with results reported as non-detect (ND) [e.g., < 18 most probable number per 100 milliliters (MPN/100 ml)]. Statistics are also calculated for dry events at all sampling locations by assigning a concentration value of half the MRL, as a zero value is undefined logarithmically, and as such would be unusable in the geometric mean calculation.



Due to regularly occurring high concentrations in analytical results, a dilution factor of 10 is applied to all samples to quantify results that exceed the standard upper reporting limit of a single dilution. As a result, the MRL for samples analyzed for this program is 18 MPN/100mL.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017.

Fecal coliform monitoring has been discontinued, as approved by the Los Angeles Regional Water Quality Control Board on October 31, 2014, in alignment with the Regional Board's removal of the fecal coliform objective for REC-1 freshwaters from the TMDL on June 7, 2012 and subsequent approval by the U.S. Environmental Protection Agency on July 2, 2014.

If you have any questions regarding this matter, please contact me at (805) 654-3942.

Sincerely,



Arne Anselm
Deputy Director, Watershed Protection

CC: Glenn Shephard, Director, Watershed Protection (via email)
Ewelina Mutkowska, County of Ventura (via email)
Paul Jorgensen, City of Thousand Oaks (via email)
Joe Bellomo, Willdan Associates (via email)
Kelly Fisher, City of Agoura Hills (via email)
Allen Ma, County of Los Angeles (via email)



Table 1. Weekly sampling results

Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
					E. coli (235 MPN)
MCW-8b (County)	-	9/7/2021 ♦	Dry		Dry
MCW-8b (County)	-	9/14/2021 ♦	Dry		Dry
MCW-8b (County)	-	9/22/2021 ♦	Dry		Dry
MCW-8b (County)	-	9/28/2021 ♦	Dry		Dry
MCW-9 (County)	-	9/7/2021 ♦	Dry		Dry
MCW-9 (County)	-	9/14/2021 ♦	Dry		Dry
MCW-9 (County)	-	9/22/2021 ♦	Dry		Dry
MCW-9 (County)	-	9/28/2021 ♦	Dry		Dry
MCW-12 (County)	-	9/7/2021 ♦	Dry		Dry
MCW-12 (County)	-	9/14/2021 ♦	Dry		Dry
MCW-12 (County)	-	9/22/2021 ♦	Dry		Dry
MCW-12 (County)	-	9/28/2021 ♦	Dry		Dry
MCW-14b (City and County)	1355	9/7/2021 ♦		=	20
MCW-14b (City and County)	1315	9/14/2021 ♦		=	330
MCW-14b (City and County)	1325	9/22/2021 ♦		=	230
MCW-14b (City and County)	1355	9/28/2021 ♦		=	330
MCW-15c (City)*	1425	9/7/2021 ♦		=	3,500
MCW-15c (City)*	1350	9/14/2021 ♦		=	78
MCW-15c (City)*	1250	9/22/2021 ♦		=	20
MCW-15c (City)*	1430	9/28/2021 ♦		=	320
MCW-17 (City and County)	-	9/7/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	9/14/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	9/22/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	9/28/2021 ♦	Dry		Dry
MCW-18 (County)	-	9/7/2021 ♦	Dry		Dry
MCW-18 (County)	-	9/14/2021 ♦	Dry		Dry
MCW-18 (County)	-	9/22/2021 ♦	Dry		Dry
MCW-18 (County)	-	9/28/2021 ♦	Dry		Dry

Notes:

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010.

♦: Date of sampling

:- Time is not applicable, as no sample was collected due to insufficient flow

Dry: Samples were not collected due to insufficient flow

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in a MRL of 18 MPN/100 ml



Table 2. Computation of daily geometric mean

Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-8b (County)	-	9/1/2021	Dry	<	9	9
MCW-8b (County)	-	9/2/2021	Dry	<	9	9
MCW-8b (County)	-	9/3/2021	Dry	<	9	9
MCW-8b (County)	-	9/4/2021	Dry	<	9	9
MCW-8b (County)	-	9/5/2021	Dry	<	9	9
MCW-8b (County)	-	9/6/2021	Dry	<	9	9
MCW-8b (County)	-	9/7/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	9/8/2021	Dry	<	9	9
MCW-8b (County)	-	9/9/2021	Dry	<	9	9
MCW-8b (County)	-	9/10/2021	Dry	<	9	9
MCW-8b (County)	-	9/11/2021	Dry	<	9	9
MCW-8b (County)	-	9/12/2021	Dry	<	9	9
MCW-8b (County)	-	9/13/2021	Dry	<	9	9
MCW-8b (County)	-	9/14/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	9/15/2021	Dry	<	9	9
MCW-8b (County)	-	9/16/2021	Dry	<	9	9
MCW-8b (County)	-	9/17/2021	Dry	<	9	9
MCW-8b (County)	-	9/18/2021	Dry	<	9	9
MCW-8b (County)	-	9/19/2021	Dry	<	9	9
MCW-8b (County)	-	9/20/2021	Dry	<	9	9
MCW-8b (County)	-	9/21/2021	Dry	<	9	9
MCW-8b (County)	-	9/22/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	9/23/2021	Dry	<	9	9
MCW-8b (County)	-	9/24/2021	Dry	<	9	9
MCW-8b (County)	-	9/25/2021	Dry	<	9	9
MCW-8b (County)	-	9/26/2021	Dry	<	9	9
MCW-8b (County)	-	9/27/2021	Dry	<	9	9
MCW-8b (County)	-	9/28/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	9/29/2021	Dry	<	9	9
MCW-8b (County)	-	9/30/2021	Dry	<	9	9
MCW-9 (County)	-	9/1/2021	Dry	<	9	9
MCW-9 (County)	-	9/2/2021	Dry	<	9	9
MCW-9 (County)	-	9/3/2021	Dry	<	9	9
MCW-9 (County)	-	9/4/2021	Dry	<	9	9
MCW-9 (County)	-	9/5/2021	Dry	<	9	9
MCW-9 (County)	-	9/6/2021	Dry	<	9	9
MCW-9 (County)	-	9/7/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	9/8/2021	Dry	<	9	9
MCW-9 (County)	-	9/9/2021	Dry	<	9	9
MCW-9 (County)	-	9/10/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-9 (County)	-	9/11/2021	Dry	<	9	9
MCW-9 (County)	-	9/12/2021	Dry	<	9	9
MCW-9 (County)	-	9/13/2021	Dry	<	9	9
MCW-9 (County)	-	9/14/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	9/15/2021	Dry	<	9	9
MCW-9 (County)	-	9/16/2021	Dry	<	9	9
MCW-9 (County)	-	9/17/2021	Dry	<	9	9
MCW-9 (County)	-	9/18/2021	Dry	<	9	9
MCW-9 (County)	-	9/19/2021	Dry	<	9	9
MCW-9 (County)	-	9/20/2021	Dry	<	9	9
MCW-9 (County)	-	9/21/2021	Dry	<	9	9
MCW-9 (County)	-	9/22/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	9/23/2021	Dry	<	9	9
MCW-9 (County)	-	9/24/2021	Dry	<	9	9
MCW-9 (County)	-	9/25/2021	Dry	<	9	9
MCW-9 (County)	-	9/26/2021	Dry	<	9	9
MCW-9 (County)	-	9/27/2021	Dry	<	9	9
MCW-9 (County)	-	9/28/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	9/29/2021	Dry	<	9	9
MCW-9 (County)	-	9/30/2021	Dry	<	9	9
MCW-12 (County)	-	9/1/2021	Dry	<	9	9
MCW-12 (County)	-	9/2/2021	Dry	<	9	9
MCW-12 (County)	-	9/3/2021	Dry	<	9	9
MCW-12 (County)	-	9/4/2021	Dry	<	9	9
MCW-12 (County)	-	9/5/2021	Dry	<	9	9
MCW-12 (County)	-	9/6/2021	Dry	<	9	9
MCW-12 (County)	-	9/7/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	9/8/2021	Dry	<	9	9
MCW-12 (County)	-	9/9/2021	Dry	<	9	9
MCW-12 (County)	-	9/10/2021	Dry	<	9	9
MCW-12 (County)	-	9/11/2021	Dry	<	9	9
MCW-12 (County)	-	9/12/2021	Dry	<	9	9
MCW-12 (County)	-	9/13/2021	Dry	<	9	9
MCW-12 (County)	-	9/14/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	9/15/2021	Dry	<	9	9
MCW-12 (County)	-	9/16/2021	Dry	<	9	9
MCW-12 (County)	-	9/17/2021	Dry	<	9	9
MCW-12 (County)	-	9/18/2021	Dry	<	9	9
MCW-12 (County)	-	9/19/2021	Dry	<	9	9
MCW-12 (County)	-	9/20/2021	Dry	<	9	9
MCW-12 (County)	-	9/21/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-12 (County)	-	9/22/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	9/23/2021	Dry	<	9	9
MCW-12 (County)	-	9/24/2021	Dry	<	9	9
MCW-12 (County)	-	9/25/2021	Dry	<	9	9
MCW-12 (County)	-	9/26/2021	Dry	<	9	9
MCW-12 (County)	-	9/27/2021	Dry	<	9	9
MCW-12 (County)	-	9/28/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	9/29/2021	Dry	<	9	9
MCW-12 (County)	-	9/30/2021	Dry	<	9	9
MCW-14b (City and County)	1210	9/1/2021		=	490	154
MCW-14b (City and County)	1210	9/2/2021		=	490	161
MCW-14b (City and County)	1210	9/3/2021		=	490	168
MCW-14b (City and County)	1210	9/4/2021		=	490	176
MCW-14b (City and County)	1210	9/5/2021		=	490	184
MCW-14b (City and County)	1210	9/6/2021		=	490	192
MCW-14b (City and County)	1210	9/7/2021 ♦		=	20	181
MCW-14b (City and County)	1355	9/8/2021		=	20	170
MCW-14b (City and County)	1355	9/9/2021		=	20	153
MCW-14b (City and County)	1355	9/10/2021		=	20	137
MCW-14b (City and County)	1355	9/11/2021		=	20	123
MCW-14b (City and County)	1355	9/12/2021		=	20	111
MCW-14b (City and County)	1355	9/13/2021		=	20	100
MCW-14b (City and County)	1315	9/14/2021 ♦		=	330	98
MCW-14b (City and County)	1315	9/15/2021		=	330	97
MCW-14b (City and County)	1315	9/16/2021		=	330	96
MCW-14b (City and County)	1315	9/17/2021		=	330	94
MCW-14b (City and County)	1315	9/18/2021		=	330	93
MCW-14b (City and County)	1315	9/19/2021		=	330	92
MCW-14b (City and County)	1315	9/20/2021		=	330	91
MCW-14b (City and County)	1315	9/21/2021		=	330	90
MCW-14b (City and County)	1325	9/22/2021 ♦		=	230	87
MCW-14b (City and County)	1325	9/23/2021		=	230	96
MCW-14b (City and County)	1325	9/24/2021		=	230	106
MCW-14b (City and County)	1325	9/25/2021		=	230	116
MCW-14b (City and County)	1325	9/26/2021		=	230	128
MCW-14b (City and County)	1325	9/27/2021		=	230	141
MCW-14b (City and County)	1355	9/28/2021 ♦		=	330	157
MCW-14b (City and County)	1355	9/29/2021		=	330	175
MCW-14b (City and County)	1355	9/30/2021		=	330	173



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-15c (City)*	1250	9/1/2021		=	700	1,390
MCW-15c (City)*	1250	9/2/2021		=	700	1,317
MCW-15c (City)*	1250	9/3/2021		=	700	1,248
MCW-15c (City)*	1250	9/4/2021		=	700	1,183
MCW-15c (City)*	1250	9/5/2021		=	700	1,121
MCW-15c (City)*	1250	9/6/2021		=	700	1,063
MCW-15c (City)*	1425	9/7/2021 ♦		=	3,500	1,063
MCW-15c (City)*	1425	9/8/2021		=	3,500	1,063
MCW-15c (City)*	1425	9/9/2021		=	3,500	1,048
MCW-15c (City)*	1425	9/10/2021		=	3,500	1,032
MCW-15c (City)*	1425	9/11/2021		=	3,500	1,018
MCW-15c (City)*	1425	9/12/2021		=	3,500	1,003
MCW-15c (City)*	1425	9/13/2021		=	3,500	989
MCW-15c (City)*	1350	9/14/2021 ♦		=	78	858
MCW-15c (City)*	1350	9/15/2021		=	78	745
MCW-15c (City)*	1350	9/16/2021		=	78	701
MCW-15c (City)*	1350	9/17/2021		=	78	659
MCW-15c (City)*	1350	9/18/2021		=	78	620
MCW-15c (City)*	1350	9/19/2021		=	78	583
MCW-15c (City)*	1350	9/20/2021		=	78	549
MCW-15c (City)*	1350	9/21/2021		=	78	516
MCW-15c (City)*	1250	9/22/2021 ♦		=	20	464
MCW-15c (City)*	1250	9/23/2021		=	20	417
MCW-15c (City)*	1250	9/24/2021		=	20	375
MCW-15c (City)*	1250	9/25/2021		=	20	337
MCW-15c (City)*	1250	9/26/2021		=	20	303
MCW-15c (City)*	1250	9/27/2021		=	20	272
MCW-15c (City)*	1430	9/28/2021 ♦		=	320	268
MCW-15c (City)*	1430	9/29/2021		=	320	265
MCW-15c (City)*	1430	9/30/2021		=	320	258
MCW-17 (City and County)	-	9/1/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/2/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/3/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/4/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/5/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/6/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/7/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	9/8/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/9/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/10/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-17 (City and County)	-	9/11/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/12/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/13/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/14/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	9/15/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/16/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/17/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/18/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/19/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/20/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/21/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/22/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	9/23/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/24/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/25/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/26/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/27/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/28/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	9/29/2021	Dry	<	9	9
MCW-17 (City and County)	-	9/30/2021	Dry	<	9	9
MCW-18 (County)	-	9/1/2021	Dry	<	9	9
MCW-18 (County)	-	9/2/2021	Dry	<	9	9
MCW-18 (County)	-	9/3/2021	Dry	<	9	9
MCW-18 (County)	-	9/4/2021	Dry	<	9	9
MCW-18 (County)	-	9/5/2021	Dry	<	9	9
MCW-18 (County)	-	9/6/2021	Dry	<	9	9
MCW-18 (County)	-	9/7/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	9/8/2021	Dry	<	9	9
MCW-18 (County)	-	9/9/2021	Dry	<	9	9
MCW-18 (County)	-	9/10/2021	Dry	<	9	9
MCW-18 (County)	-	9/11/2021	Dry	<	9	9
MCW-18 (County)	-	9/12/2021	Dry	<	9	9
MCW-18 (County)	-	9/13/2021	Dry	<	9	9
MCW-18 (County)	-	9/14/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	9/15/2021	Dry	<	9	9
MCW-18 (County)	-	9/16/2021	Dry	<	9	9
MCW-18 (County)	-	9/17/2021	Dry	<	9	9
MCW-18 (County)	-	9/18/2021	Dry	<	9	9
MCW-18 (County)	-	9/19/2021	Dry	<	9	9
MCW-18 (County)	-	9/20/2021	Dry	<	9	9
MCW-18 (County)	-	9/21/2021	Dry	<	9	9



				Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
Location (Jurisdiction)	Time	Date	Rain		E. coli (235 MPN)	E. coli (126 MPN)
MCW-18 (County)	-	9/22/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	9/23/2021	Dry	<	9	9
MCW-18 (County)	-	9/24/2021	Dry	<	9	9
MCW-18 (County)	-	9/25/2021	Dry	<	9	9
MCW-18 (County)	-	9/26/2021	Dry	<	9	9
MCW-18 (County)	-	9/27/2021	Dry	<	9	9
MCW-18 (County)	-	9/28/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	9/29/2021	Dry	<	9	9
MCW-18 (County)	-	9/30/2021	Dry	<	9	9

Notes:

♦: Date of sampling

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in an MRL of 18 MPN/100 ml

Results of <18 MPN/100 ml are adjusted to use half the MRL (=9) in the calculation of the geometric mean. As such, Table 2 presents a value of 9 MPN/100mL to distinguish the value used for calculation of the 30-day geometric mean

Dry: Samples were not collected due to insufficient flow and a value of 9 MPN/100 ml (half the MRL) was used for calculation of the 30-day geometric mean

-: Time is not applicable, as no sample was collected due to insufficient flow

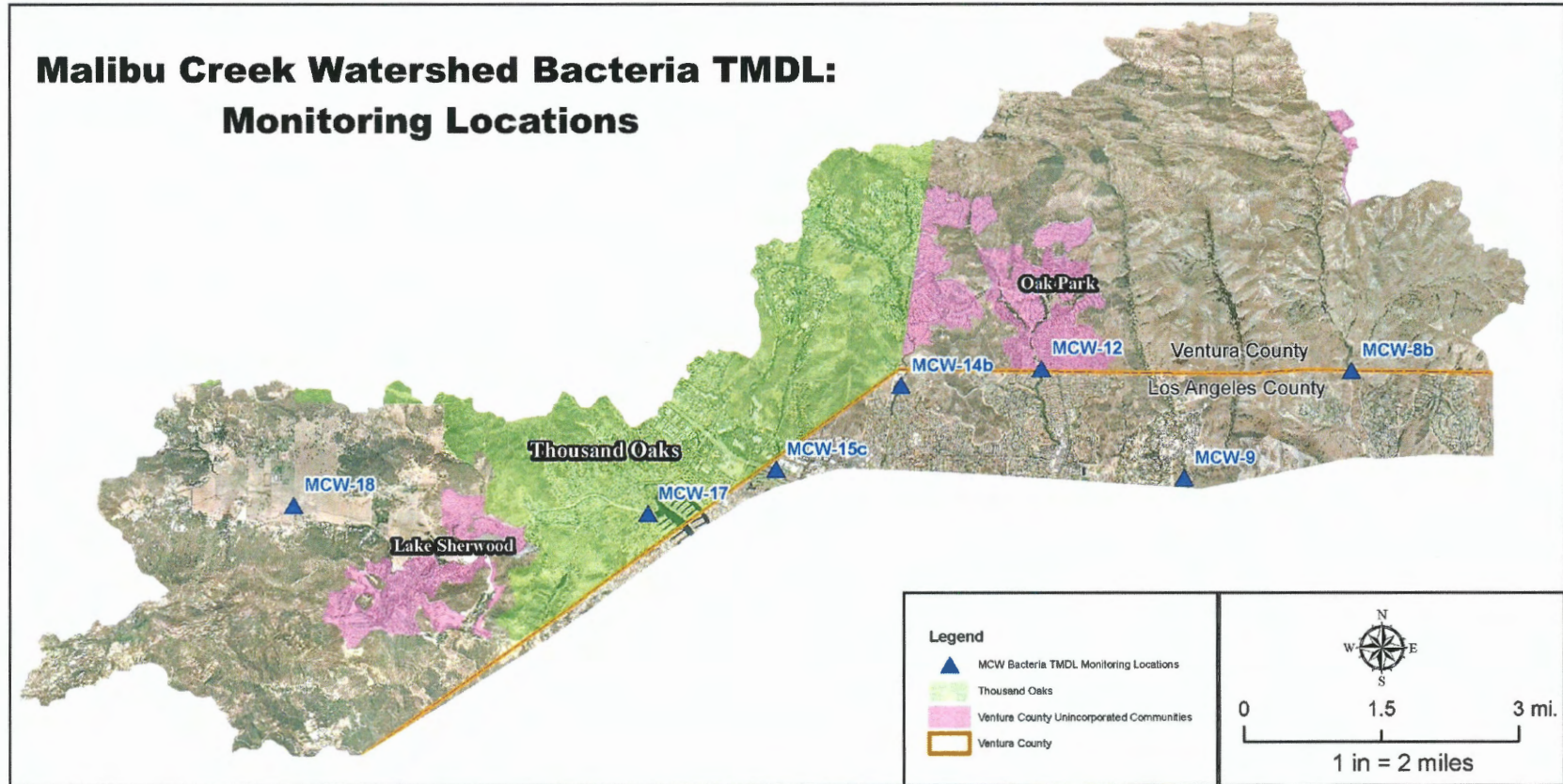
Weeks with wet weather samples (collected less than 72 hours after a day with >0.1" rain) use the previous non-rain single sample value to calculate the geometric mean.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010



Malibu Creek Watershed Bacteria TMDL: Monitoring Locations



Central Services
Joan Araujo, DirectorEngineering Services
Christopher Cooper, DirectorRoads & Transportation
Christopher Kurgan, DirectorWater & Sanitation
Joseph Pope, DirectorWatershed Protection
Glenn Shephard, Director

November 23, 2021

VIA EMAIL

Kangshi Wang, Ph.D.
California Regional Water Quality Control Board
Los Angeles Region
Standards & TMDL Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring for County of
Ventura, Ventura County Watershed Protection District, and City of Thousand
Oaks

Dear Dr. Wang:

Please find attached the report for the results of the weekly monitoring effort required by the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL) Compliance Monitoring Plan (CMP) for the month of October 2021. Sites were sampled weekly (October 5, 12, 19, and 26). Beginning on and following July 23, 2019, Rincon Consultants Inc. has been retained to conduct compliance monitoring activities.

Table 1 presents the weekly sampling results, while Table 2 presents the rolling 30-day geometric means for the sampling locations. Sample collection dates are marked with a diamond (◆) symbol. Sites without results reported were not sampled due to insufficient flow and are labeled "Dry." A map showing the location of the monitoring sites is included below.

Daily geometric means for dry weather are calculated using the past 30 days of the respective sampling data (Table 2). Note that geometric means are not calculated for wet weather samples (collected less than 72 hours after a day with > 0.1" rain). Non-sampling-day values are assigned the value of the most recent sampling event. Half the method reporting limit (MRL) was used to calculate the daily geometric means for sites with results reported as non-detect (ND) [e.g., < 18 most probable number per 100 milliliters (MPN/100 ml)]. Statistics are also calculated for dry events at all sampling locations by assigning a concentration value of half the MRL, as a zero value is undefined logarithmically, and as such would be unusable in the geometric mean calculation.



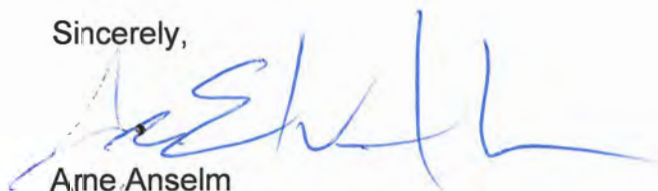
Due to regularly occurring high concentrations in analytical results, a dilution factor of 10 is applied to all samples to quantify results that exceed the standard upper reporting limit of a single dilution. As a result, the MRL for samples analyzed for this program is 18 MPN/100mL.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017.

Fecal coliform monitoring has been discontinued, as approved by the Los Angeles Regional Water Quality Control Board on October 31, 2014, in alignment with the Regional Board's removal of the fecal coliform objective for REC-1 freshwaters from the TMDL on June 7, 2012 and subsequent approval by the U.S. Environmental Protection Agency on July 2, 2014.

If you have any questions regarding this matter, please contact me at (805) 654-3942.

Sincerely,



Arne Anselm
Deputy Director, Watershed Protection

CC: Glenn Shephard, Director, Watershed Protection (via email)
Ewelina Mutkowska, County of Ventura (via email)
Paul Jorgensen, City of Thousand Oaks (via email)
Joe Bellomo, Willdan Associates (via email)
Kelly Fisher, City of Agoura Hills (via email)
Allen Ma, County of Los Angeles (via email)



Table 1. Weekly sampling results

Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
				E. coli	
				(235 MPN)	
MCW-8b (County)	-	10/5/2021 ♦	Dry		Dry
MCW-8b (County)	-	10/12/2021 ♦	Dry		Dry
MCW-8b (County)	-	10/19/2021 ♦	Dry		Dry
MCW-8b (County)	-	10/26/2021 ♦	Rain		Dry
MCW-9 (County)	-	10/5/2021 ♦	Dry		Dry
MCW-9 (County)	-	10/12/2021 ♦	Dry		Dry
MCW-9 (County)	-	10/19/2021 ♦	Dry		Dry
MCW-9 (County)	-	10/26/2021 ♦	Rain		Dry
MCW-12 (County)	-	10/5/2021 ♦	Dry		Dry
MCW-12 (County)	-	10/12/2021 ♦	Dry		Dry
MCW-12 (County)	-	10/19/2021 ♦	Dry		Dry
MCW-12 (County)	1150	10/26/2021 ♦	Rain	>	16,000
MCW-14b (City and County)	1255	10/5/2021 ♦		=	78
MCW-14b (City and County)	1010	10/12/2021 ♦		=	330
MCW-14b (City and County)	1415	10/19/2021 ♦		=	78
MCW-14b (City and County)	1220	10/26/2021 ♦	Rain	>	16,000
MCW-15c (City)*	1235	10/5/2021 ♦		=	790
MCW-15c (City)*	1040	10/12/2021 ♦		=	790
MCW-15c (City)*	1445	10/19/2021 ♦		=	5,400
MCW-15c (City)*	1305	10/26/2021 ♦	Rain	=	9,200
MCW-17 (City and County)	-	10/5/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	10/12/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	10/19/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	10/26/2021 ♦	Rain		Dry
MCW-18 (County)	-	10/5/2021 ♦	Dry		Dry
MCW-18 (County)	-	10/12/2021 ♦	Dry		Dry
MCW-18 (County)	-	10/19/2021 ♦	Dry		Dry
MCW-18 (County)	-	10/26/2021 ♦	Rain		Dry

Notes:

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010.

♦: Date of sampling

-: Time is not applicable, as no sample was collected due to insufficient flow

Dry: Samples were not collected due to insufficient flow

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in a MRL of 18 MPN/100 ml



Table 2. Computation of daily geometric mean

Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-8b (County)	-	10/1/2021	Dry	<	9	9
MCW-8b (County)	-	10/2/2021	Dry	<	9	9
MCW-8b (County)	-	10/3/2021	Dry	<	9	9
MCW-8b (County)	-	10/4/2021	Dry	<	9	9
MCW-8b (County)	-	10/5/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	10/6/2021	Dry	<	9	9
MCW-8b (County)	-	10/7/2021	Dry	<	9	9
MCW-8b (County)	-	10/8/2021	Dry	<	9	9
MCW-8b (County)	-	10/9/2021	Dry	<	9	9
MCW-8b (County)	-	10/10/2021	Dry	<	9	9
MCW-8b (County)	-	10/11/2021	Dry	<	9	9
MCW-8b (County)	-	10/12/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	10/13/2021	Dry	<	9	9
MCW-8b (County)	-	10/14/2021	Dry	<	9	9
MCW-8b (County)	-	10/15/2021	Dry	<	9	9
MCW-8b (County)	-	10/16/2021	Dry	<	9	9
MCW-8b (County)	-	10/17/2021	Dry	<	9	9
MCW-8b (County)	-	10/18/2021	Dry	<	9	9
MCW-8b (County)	-	10/19/2021 ♦	Dry	<	9	9
MCW-8b (County)	-	10/20/2021	Dry	<	9	9
MCW-8b (County)	-	10/21/2021	Dry	<	9	9
MCW-8b (County)	-	10/22/2021	Dry	<	9	9
MCW-8b (County)	-	10/23/2021	Dry	<	9	9
MCW-8b (County)	-	10/24/2021	Dry	<	9	9
MCW-8b (County)	-	10/25/2021	Dry	<	9	9
MCW-8b (County)	-	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-8b (County)	-	10/27/2021	Rain		**Rain**	**Rain**
MCW-8b (County)	-	10/28/2021	Rain		**Rain**	**Rain**
MCW-8b (County)	-	10/29/2021	Rain		**Rain**	**Rain**
MCW-8b (County)	-	10/30/2021	Rain		**Rain**	**Rain**
MCW-8b (County)	-	10/31/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/1/2021	Dry	<	9	9
MCW-9 (County)	-	10/2/2021	Dry	<	9	9
MCW-9 (County)	-	10/3/2021	Dry	<	9	9
MCW-9 (County)	-	10/4/2021	Dry	<	9	9
MCW-9 (County)	-	10/5/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	10/6/2021	Dry	<	9	9
MCW-9 (County)	-	10/7/2021	Dry	<	9	9
MCW-9 (County)	-	10/8/2021	Dry	<	9	9
MCW-9 (County)	-	10/9/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-9 (County)	-	10/10/2021	Dry	<	9	9
MCW-9 (County)	-	10/11/2021	Dry	<	9	9
MCW-9 (County)	-	10/12/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	10/13/2021	Dry	<	9	9
MCW-9 (County)	-	10/14/2021	Dry	<	9	9
MCW-9 (County)	-	10/15/2021	Dry	<	9	9
MCW-9 (County)	-	10/16/2021	Dry	<	9	9
MCW-9 (County)	-	10/17/2021	Dry	<	9	9
MCW-9 (County)	-	10/18/2021	Dry	<	9	9
MCW-9 (County)	-	10/19/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	10/20/2021	Dry	<	9	9
MCW-9 (County)	-	10/21/2021	Dry	<	9	9
MCW-9 (County)	-	10/22/2021	Dry	<	9	9
MCW-9 (County)	-	10/23/2021	Dry	<	9	9
MCW-9 (County)	-	10/24/2021	Dry	<	9	9
MCW-9 (County)	-	10/25/2021	Dry	<	9	9
MCW-9 (County)	-	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/27/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/28/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/29/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/30/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	10/31/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	-	10/1/2021	Dry	<	9	9
MCW-12 (County)	-	10/2/2021	Dry	<	9	9
MCW-12 (County)	-	10/3/2021	Dry	<	9	9
MCW-12 (County)	-	10/4/2021	Dry	<	9	9
MCW-12 (County)	-	10/5/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	10/6/2021	Dry	<	9	9
MCW-12 (County)	-	10/7/2021	Dry	<	9	9
MCW-12 (County)	-	10/8/2021	Dry	<	9	9
MCW-12 (County)	-	10/9/2021	Dry	<	9	9
MCW-12 (County)	-	10/10/2021	Dry	<	9	9
MCW-12 (County)	-	10/11/2021	Dry	<	9	9
MCW-12 (County)	-	10/12/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	10/13/2021	Dry	<	9	9
MCW-12 (County)	-	10/14/2021	Dry	<	9	9
MCW-12 (County)	-	10/15/2021	Dry	<	9	9
MCW-12 (County)	-	10/16/2021	Dry	<	9	9
MCW-12 (County)	-	10/17/2021	Dry	<	9	9
MCW-12 (County)	-	10/18/2021	Dry	<	9	9
MCW-12 (County)	-	10/19/2021 ♦	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-12 (County)	-	10/20/2021	Dry	<	9	9
MCW-12 (County)	-	10/21/2021	Dry	<	9	9
MCW-12 (County)	-	10/22/2021	Dry	<	9	9
MCW-12 (County)	-	10/23/2021	Dry	<	9	9
MCW-12 (County)	-	10/24/2021	Dry	<	9	9
MCW-12 (County)	-	10/25/2021	Dry	<	9	9
MCW-12 (County)	1150	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-12 (County)	1150	10/27/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	1150	10/28/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	1150	10/29/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	1150	10/30/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	1150	10/31/2021	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1355	10/1/2021		=	330	170
MCW-14b (City and County)	1355	10/2/2021		=	330	168
MCW-14b (City and County)	1355	10/3/2021		=	330	166
MCW-14b (City and County)	1355	10/4/2021		=	330	164
MCW-14b (City and County)	1355	10/5/2021 ♦		=	330	162
MCW-14b (City and County)	1255	10/6/2021		=	78	152
MCW-14b (City and County)	1255	10/7/2021		=	78	159
MCW-14b (City and County)	1255	10/8/2021		=	78	167
MCW-14b (City and County)	1255	10/9/2021		=	78	174
MCW-14b (City and County)	1255	10/10/2021		=	78	182
MCW-14b (City and County)	1255	10/11/2021		=	78	191
MCW-14b (City and County)	1010	10/12/2021 ♦		=	330	210
MCW-14b (City and County)	1010	10/13/2021		=	330	230
MCW-14b (City and County)	1010	10/14/2021		=	330	230
MCW-14b (City and County)	1010	10/15/2021		=	330	230
MCW-14b (City and County)	1010	10/16/2021		=	330	230
MCW-14b (City and County)	1010	10/17/2021		=	330	230
MCW-14b (City and County)	1010	10/18/2021		=	330	230
MCW-14b (City and County)	1415	10/19/2021 ♦		=	78	219
MCW-14b (City and County)	1415	10/20/2021		=	78	209
MCW-14b (City and County)	1415	10/21/2021		=	78	199
MCW-14b (City and County)	1415	10/22/2021		=	78	192
MCW-14b (City and County)	1415	10/23/2021		=	78	185
MCW-14b (City and County)	1415	10/24/2021		=	78	179
MCW-14b (City and County)	1415	10/25/2021		=	78	172
MCW-14b (City and County)	1220	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1220	10/27/2021	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1220	10/28/2021	Rain		**Rain**	**Rain**



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-14b (City and County)	1220	10/29/2021	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1220	10/30/2021	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1220	10/31/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1430	10/1/2021		=	320	251
MCW-15c (City)*	1430	10/2/2021		=	320	245
MCW-15c (City)*	1430	10/3/2021		=	320	238
MCW-15c (City)*	1430	10/4/2021		=	320	232
MCW-15c (City)*	1235	10/5/2021 ♦		=	790	233
MCW-15c (City)*	1235	10/6/2021		=	790	234
MCW-15c (City)*	1235	10/7/2021		=	790	223
MCW-15c (City)*	1235	10/8/2021		=	790	212
MCW-15c (City)*	1235	10/9/2021		=	790	202
MCW-15c (City)*	1235	10/10/2021		=	790	192
MCW-15c (City)*	1235	10/11/2021		=	790	183
MCW-15c (City)*	1040	10/12/2021 ♦		=	790	174
MCW-15c (City)*	1040	10/13/2021		=	790	165
MCW-15c (City)*	1040	10/14/2021		=	790	179
MCW-15c (City)*	1040	10/15/2021		=	790	193
MCW-15c (City)*	1040	10/16/2021		=	790	209
MCW-15c (City)*	1040	10/17/2021		=	790	225
MCW-15c (City)*	1040	10/18/2021		=	790	243
MCW-15c (City)*	1445	10/19/2021 ♦		=	5,400	280
MCW-15c (City)*	1445	10/20/2021		=	5,400	323
MCW-15c (City)*	1445	10/21/2021		=	5,400	372
MCW-15c (City)*	1445	10/22/2021		=	5,400	448
MCW-15c (City)*	1445	10/23/2021		=	5,400	540
MCW-15c (City)*	1445	10/24/2021		=	5,400	651
MCW-15c (City)*	1445	10/25/2021		=	5,400	784
MCW-15c (City)*	1305	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-15c (City)*	1305	10/27/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1305	10/28/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1305	10/29/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1305	10/30/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1305	10/31/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/1/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/2/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/3/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/4/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/5/2021 ♦	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-17 (City and County)	-	10/6/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/7/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/8/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/9/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/10/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/11/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/12/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	10/13/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/14/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/15/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/16/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/17/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/18/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/19/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	10/20/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/21/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/22/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/23/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/24/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/25/2021	Dry	<	9	9
MCW-17 (City and County)	-	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/27/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/28/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/29/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/30/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	10/31/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/1/2021	Dry	<	9	9
MCW-18 (County)	-	10/2/2021	Dry	<	9	9
MCW-18 (County)	-	10/3/2021	Dry	<	9	9
MCW-18 (County)	-	10/4/2021	Dry	<	9	9
MCW-18 (County)	-	10/5/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	10/6/2021	Dry	<	9	9
MCW-18 (County)	-	10/7/2021	Dry	<	9	9
MCW-18 (County)	-	10/8/2021	Dry	<	9	9
MCW-18 (County)	-	10/9/2021	Dry	<	9	9
MCW-18 (County)	-	10/10/2021	Dry	<	9	9
MCW-18 (County)	-	10/11/2021	Dry	<	9	9
MCW-18 (County)	-	10/12/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	10/13/2021	Dry	<	9	9
MCW-18 (County)	-	10/14/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-18 (County)	-	10/15/2021	Dry	<	9	9
MCW-18 (County)	-	10/16/2021	Dry	<	9	9
MCW-18 (County)	-	10/17/2021	Dry	<	9	9
MCW-18 (County)	-	10/18/2021	Dry	<	9	9
MCW-18 (County)	-	10/19/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	10/20/2021	Dry	<	9	9
MCW-18 (County)	-	10/21/2021	Dry	<	9	9
MCW-18 (County)	-	10/22/2021	Dry	<	9	9
MCW-18 (County)	-	10/23/2021	Dry	<	9	9
MCW-18 (County)	-	10/24/2021	Dry	<	9	9
MCW-18 (County)	-	10/25/2021	Dry	<	9	9
MCW-18 (County)	-	10/26/2021 ♦	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/27/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/28/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/29/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/30/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	10/31/2021	Rain		**Rain**	**Rain**

Notes:

♦: Date of sampling

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in an MRL of 18 MPN/100 ml

Results of <18 MPN/100 ml are adjusted to use half the MRL (=9) in the calculation of the geometric mean. As such, Table 2 presents a value of 9 MPN/100mL to distinguish the value used for calculation of the 30-day geometric mean

Dry: Samples were not collected due to insufficient flow and a value of 9 MPN/100 ml (half the MRL) was used for calculation of the 30-day geometric mean

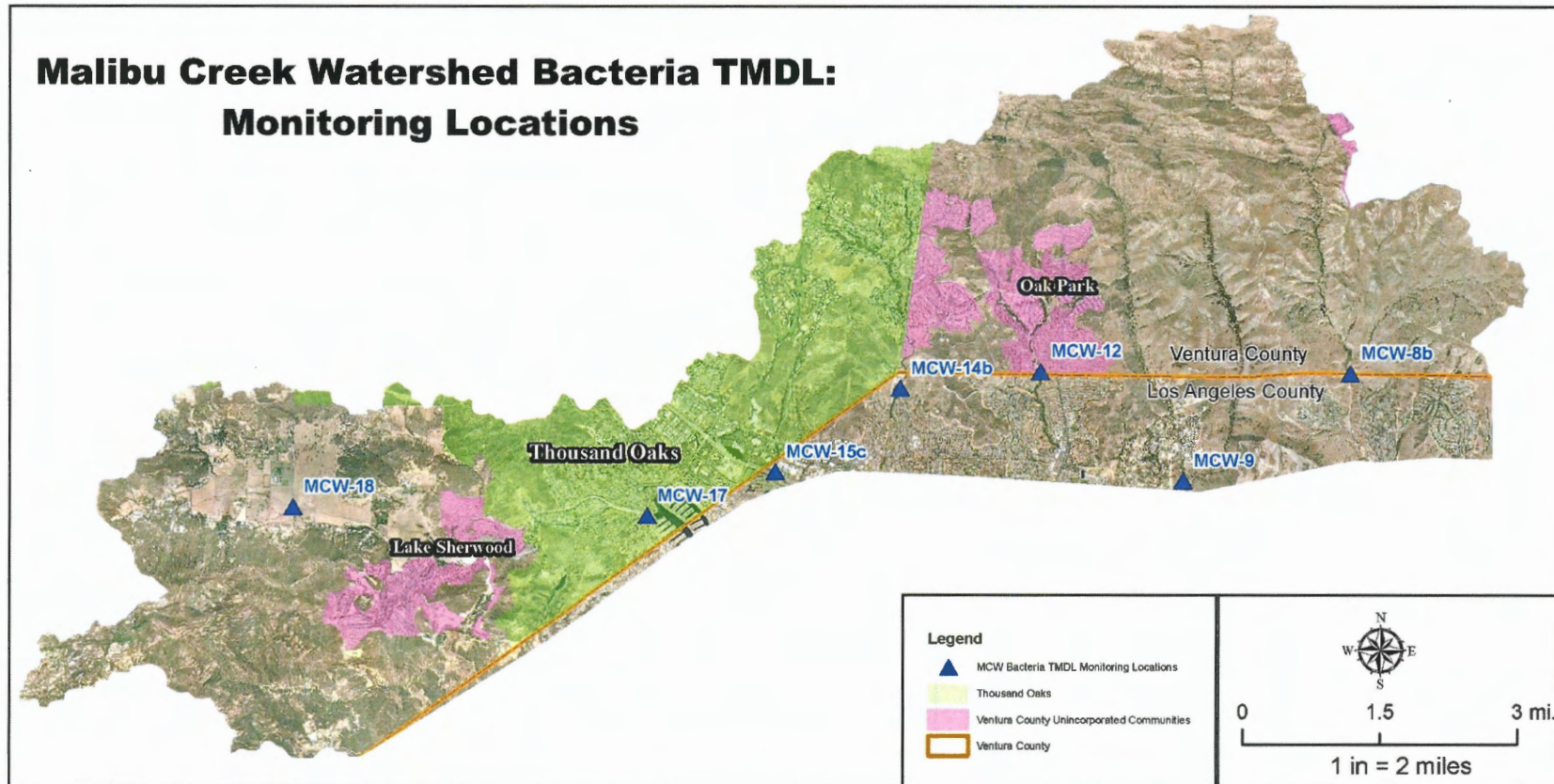
-: Time is not applicable, as no sample was collected due to insufficient flow

Weeks with wet weather samples (collected less than 72 hours after a day with >0.1" rain) use the previous non-rain single sample value to calculate the geometric mean.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010





Central Services
Joan Araujo, DirectorEngineering Services
Christopher Cooper, DirectorRoads & Transportation
Christopher Kurgan, DirectorWater & Sanitation
Joseph Pope, DirectorWatershed Protection
Glenn Shephard, Director

December 27, 2021

VIA EMAIL

Kangshi Wang, Ph.D.
California Regional Water Quality Control Board
Los Angeles Region
Standards & TMDL Unit
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring for County of
Ventura, Ventura County Watershed Protection District, and City of Thousand
Oaks

Dear Dr. Wang:

Please find attached the report for the results of the weekly monitoring effort required by the Malibu Creek and Lagoon Bacteria Total Maximum Daily Load (TMDL) Compliance Monitoring Plan (CMP) for the month of November 2021. Sites were sampled weekly (November 2, 9, 16, 23, and 30). Beginning on and following July 23, 2019, Rincon Consultants Inc. has been retained to conduct compliance monitoring activities.

Table 1 presents the weekly sampling results, while Table 2 presents the rolling 30-day geometric means for the sampling locations. Sample collection dates are marked with a diamond (◆) symbol. Sites without results reported were not sampled due to insufficient flow and are labeled "Dry." A map showing the location of the monitoring sites is included below.

Daily geometric means for dry weather are calculated using the past 30 days of the respective sampling data (Table 2). Note that geometric means are not calculated for wet weather samples (collected less than 72 hours after a day with > 0.1" rain). Non-sampling-day values are assigned the value of the most recent prior sampling event. Half the method reporting limit (MRL) was used to calculate the daily geometric means for sites with results reported as non-detect (ND) [e.g., < 18 most probable number per 100 milliliters (MPN/100 ml)]. Statistics are also calculated for dry events at all sampling locations by assigning a concentration value of half the MRL, as a zero value is undefined logarithmically, and as such would be unusable in the geometric mean calculation.




Due to regularly occurring high concentrations in analytical results, a dilution factor of 10 is applied to all samples to quantify results that exceed the standard upper reporting limit of a single dilution. As a result, the MRL for samples analyzed for this program is 18 MPN/100mL.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017.

Fecal coliform monitoring has been discontinued, as approved by the Los Angeles Regional Water Quality Control Board on October 31, 2014, in alignment with the Regional Board's removal of the fecal coliform objective for REC-1 freshwaters from the TMDL on June 7, 2012 and subsequent approval by the U.S. Environmental Protection Agency on July 2, 2014.

If you have any questions regarding this matter, please contact me at (805) 654-3942.

Sincerely,



Arne Anselm
Deputy Director, Watershed Protection

CC: Glenn Shephard, Director, Watershed Protection (via email)
Ewelina Mutkowska, County of Ventura (via email)
Paul Jorgensen, City of Thousand Oaks (via email)
Joe Bellomo, Willdan Associates (via email)
Kelly Fisher, City of Agoura Hills (via email)
Allen Ma, County of Los Angeles (via email)



Table 1. Weekly sampling results

Location (Jurisdiction)	Time	Date	Rain	Single Sample (as sampled)	
					E. coli
					(235 MPN)
MCW-8b (County)	-	11/2/2021 ♦	Dry		Dry
MCW-8b (County)	-	11/9/2021 ♦	Dry		Dry
MCW-8b (County)	-	11/16/2021 ♦	Dry		Dry
MCW-8b (County)	-	11/23/2021 ♦	Dry		Dry
MCW-8b (County)	-	11/30/2021 ♦	Dry		Dry
MCW-9 (County)	-	11/2/2021 ♦	Dry		Dry
MCW-9 (County)	-	11/9/2021 ♦	Dry		Dry
MCW-9 (County)	-	11/16/2021 ♦	Dry		Dry
MCW-9 (County)	-	11/23/2021 ♦	Dry		Dry
MCW-9 (County)	-	11/30/2021 ♦	Dry		Dry
MCW-12 (County)	-	11/2/2021 ♦	Dry		Dry
MCW-12 (County)	-	11/9/2021 ♦	Dry		Dry
MCW-12 (County)	-	11/16/2021 ♦	Dry		Dry
MCW-12 (County)	-	11/23/2021 ♦	Dry		Dry
MCW-12 (County)	-	11/30/2021 ♦	Dry		Dry
MCW-14b (City and County)	1205	11/2/2021 ♦		=	330
MCW-14b (City and County)	1230	11/9/2021 ♦		=	170
MCW-14b (City and County)	1330	11/16/2021 ♦		=	78
MCW-14b (City and County)	1430	11/23/2021 ♦		=	1,400
MCW-14b (City and County)	1350	11/30/2021 ♦		=	210
MCW-15c (City)*	1245	11/2/2021 ♦		=	790
MCW-15c (City)*	1315	11/9/2021 ♦		=	5,400
MCW-15c (City)*	1430	11/16/2021 ♦		=	110
MCW-15c (City)*	1400	11/23/2021 ♦		=	140
MCW-15c (City)*	1430	11/30/2021 ♦		<	18
MCW-17 (City and County)	-	11/2/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	11/9/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	11/16/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	11/23/2021 ♦	Dry		Dry
MCW-17 (City and County)	-	11/30/2021 ♦	Dry		Dry
MCW-18 (County)	-	11/2/2021 ♦	Dry		Dry
MCW-18 (County)	-	11/9/2021 ♦	Dry		Dry
MCW-18 (County)	-	11/16/2021 ♦	Dry		Dry
MCW-18 (County)	-	11/23/2021 ♦	Dry		Dry
MCW-18 (County)	-	11/30/2021 ♦	Dry		Dry

Notes:

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010.



◆: Date of sampling

-: Time is not applicable, as no sample was collected due to insufficient flow

Dry: Samples were not collected due to insufficient flow

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in a MRL of 18 MPN/100 ml

Table 2. Computation of daily geometric mean

Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-8b (County)	-	11/1/2021	Rain		**Rain**	**Rain**
MCW-8b (County)	-	11/2/2021 ◆	Dry	<	9	9
MCW-8b (County)	-	11/3/2021	Dry	<	9	9
MCW-8b (County)	-	11/4/2021	Dry	<	9	9
MCW-8b (County)	-	11/5/2021	Dry	<	9	9
MCW-8b (County)	-	11/6/2021	Dry	<	9	9
MCW-8b (County)	-	11/7/2021	Dry	<	9	9
MCW-8b (County)	-	11/8/2021	Dry	<	9	9
MCW-8b (County)	-	11/9/2021 ◆	Dry	<	9	9
MCW-8b (County)	-	11/10/2021	Dry	<	9	9
MCW-8b (County)	-	11/11/2021	Dry	<	9	9
MCW-8b (County)	-	11/12/2021	Dry	<	9	9
MCW-8b (County)	-	11/13/2021	Dry	<	9	9
MCW-8b (County)	-	11/14/2021	Dry	<	9	9
MCW-8b (County)	-	11/15/2021	Dry	<	9	9
MCW-8b (County)	-	11/16/2021 ◆	Dry	<	9	9
MCW-8b (County)	-	11/17/2021	Dry	<	9	9
MCW-8b (County)	-	11/18/2021	Dry	<	9	9
MCW-8b (County)	-	11/19/2021	Dry	<	9	9
MCW-8b (County)	-	11/20/2021	Dry	<	9	9
MCW-8b (County)	-	11/21/2021	Dry	<	9	9
MCW-8b (County)	-	11/22/2021	Dry	<	9	9
MCW-8b (County)	-	11/23/2021 ◆	Dry	<	9	9
MCW-8b (County)	-	11/24/2021	Dry	<	9	9
MCW-8b (County)	-	11/25/2021	Dry	<	9	9
MCW-8b (County)	-	11/26/2021	Dry	<	9	9
MCW-8b (County)	-	11/27/2021	Dry	<	9	9
MCW-8b (County)	-	11/28/2021	Dry	<	9	9
MCW-8b (County)	-	11/29/2021	Dry	<	9	9
MCW-8b (County)	-	11/30/2021 ◆	Dry	<	9	9
MCW-9 (County)	-	11/1/2021	Rain		**Rain**	**Rain**
MCW-9 (County)	-	11/2/2021 ◆	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-9 (County)	-	11/3/2021	Dry	<	9	9
MCW-9 (County)	-	11/4/2021	Dry	<	9	9
MCW-9 (County)	-	11/5/2021	Dry	<	9	9
MCW-9 (County)	-	11/6/2021	Dry	<	9	9
MCW-9 (County)	-	11/7/2021	Dry	<	9	9
MCW-9 (County)	-	11/8/2021	Dry	<	9	9
MCW-9 (County)	-	11/9/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	11/10/2021	Dry	<	9	9
MCW-9 (County)	-	11/11/2021	Dry	<	9	9
MCW-9 (County)	-	11/12/2021	Dry	<	9	9
MCW-9 (County)	-	11/13/2021	Dry	<	9	9
MCW-9 (County)	-	11/14/2021	Dry	<	9	9
MCW-9 (County)	-	11/15/2021	Dry	<	9	9
MCW-9 (County)	-	11/16/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	11/17/2021	Dry	<	9	9
MCW-9 (County)	-	11/18/2021	Dry	<	9	9
MCW-9 (County)	-	11/19/2021	Dry	<	9	9
MCW-9 (County)	-	11/20/2021	Dry	<	9	9
MCW-9 (County)	-	11/21/2021	Dry	<	9	9
MCW-9 (County)	-	11/22/2021	Dry	<	9	9
MCW-9 (County)	-	11/23/2021 ♦	Dry	<	9	9
MCW-9 (County)	-	11/24/2021	Dry	<	9	9
MCW-9 (County)	-	11/25/2021	Dry	<	9	9
MCW-9 (County)	-	11/26/2021	Dry	<	9	9
MCW-9 (County)	-	11/27/2021	Dry	<	9	9
MCW-9 (County)	-	11/28/2021	Dry	<	9	9
MCW-9 (County)	-	11/29/2021	Dry	<	9	9
MCW-9 (County)	-	11/30/2021 ♦	Dry	<	9	9
MCW-12 (County)	1150	11/1/2021	Rain		**Rain**	**Rain**
MCW-12 (County)	-	11/2/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	11/3/2021	Dry	<	9	9
MCW-12 (County)	-	11/4/2021	Dry	<	9	9
MCW-12 (County)	-	11/5/2021	Dry	<	9	9
MCW-12 (County)	-	11/6/2021	Dry	<	9	9
MCW-12 (County)	-	11/7/2021	Dry	<	9	9
MCW-12 (County)	-	11/8/2021	Dry	<	9	9
MCW-12 (County)	-	11/9/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	11/10/2021	Dry	<	9	9
MCW-12 (County)	-	11/11/2021	Dry	<	9	9
MCW-12 (County)	-	11/12/2021	Dry	<	9	9
MCW-12 (County)	-	11/13/2021	Dry	<	9	9



				Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
Location (Jurisdiction)	Time	Date	Rain		E. coli (235 MPN)	E. coli (126 MPN)
MCW-12 (County)	-	11/14/2021	Dry	<	9	9
MCW-12 (County)	-	11/15/2021	Dry	<	9	9
MCW-12 (County)	-	11/16/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	11/17/2021	Dry	<	9	9
MCW-12 (County)	-	11/18/2021	Dry	<	9	9
MCW-12 (County)	-	11/19/2021	Dry	<	9	9
MCW-12 (County)	-	11/20/2021	Dry	<	9	9
MCW-12 (County)	-	11/21/2021	Dry	<	9	9
MCW-12 (County)	-	11/22/2021	Dry	<	9	9
MCW-12 (County)	-	11/23/2021 ♦	Dry	<	9	9
MCW-12 (County)	-	11/24/2021	Dry	<	9	9
MCW-12 (County)	-	11/25/2021	Dry	<	9	9
MCW-12 (County)	-	11/26/2021	Dry	<	9	9
MCW-12 (County)	-	11/27/2021	Dry	<	9	9
MCW-12 (County)	-	11/28/2021	Dry	<	9	9
MCW-12 (County)	-	11/29/2021	Dry	<	9	9
MCW-12 (County)	-	11/30/2021 ♦	Dry	<	9	9
MCW-14b (City and County)	1220	11/1/2021	Rain		**Rain**	**Rain**
MCW-14b (City and County)	1205	11/2/2021 ♦		=	330	175
MCW-14b (City and County)	1205	11/3/2021		=	330	177
MCW-14b (City and County)	1205	11/4/2021		=	330	177
MCW-14b (City and County)	1205	11/5/2021		=	330	177
MCW-14b (City and County)	1205	11/6/2021		=	330	177
MCW-14b (City and County)	1205	11/7/2021		=	330	177
MCW-14b (City and County)	1205	11/8/2021		=	330	177
MCW-14b (City and County)	1230	11/9/2021 ♦		=	170	173
MCW-14b (City and County)	1230	11/10/2021		=	170	169
MCW-14b (City and County)	1230	11/11/2021		=	170	165
MCW-14b (City and County)	1230	11/12/2021		=	170	170
MCW-14b (City and County)	1230	11/13/2021		=	170	174
MCW-14b (City and County)	1230	11/14/2021		=	170	179
MCW-14b (City and County)	1230	11/15/2021		=	170	183
MCW-14b (City and County)	1330	11/16/2021 ♦		=	78	183
MCW-14b (City and County)	1330	11/17/2021		=	78	183
MCW-14b (City and County)	1330	11/18/2021		=	78	175
MCW-14b (City and County)	1330	11/19/2021		=	78	167
MCW-14b (City and County)	1330	11/20/2021		=	78	159
MCW-14b (City and County)	1330	11/21/2021		=	78	151
MCW-14b (City and County)	1330	11/22/2021		=	78	144
MCW-14b (City and County)	1430	11/23/2021 ♦		=	1,400	151
MCW-14b (City and County)	1430	11/24/2021		=	1,400	159



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-14b (City and County)	1430	11/25/2021		=	1,400	175
MCW-14b (City and County)	1430	11/26/2021		=	1,400	192
MCW-14b (City and County)	1430	11/27/2021		=	1,400	212
MCW-14b (City and County)	1430	11/28/2021		=	1,400	233
MCW-14b (City and County)	1430	11/29/2021		=	1,400	257
MCW-14b (City and County)	1350	11/30/2021 ♦		=	210	266
MCW-15c (City)*	1305	11/1/2021	Rain		**Rain**	**Rain**
MCW-15c (City)*	1245	11/2/2021 ♦		=	790	886
MCW-15c (City)*	1245	11/3/2021		=	790	1,002
MCW-15c (City)*	1245	11/4/2021		=	790	1,033
MCW-15c (City)*	1245	11/5/2021		=	790	1,064
MCW-15c (City)*	1245	11/6/2021		=	790	1,097
MCW-15c (City)*	1245	11/7/2021		=	790	1,130
MCW-15c (City)*	1245	11/8/2021		=	790	1,165
MCW-15c (City)*	1315	11/9/2021 ♦		=	5,400	1,280
MCW-15c (City)*	1315	11/10/2021		=	5,400	1,406
MCW-15c (City)*	1315	11/11/2021		=	5,400	1,499
MCW-15c (City)*	1315	11/12/2021		=	5,400	1,598
MCW-15c (City)*	1315	11/13/2021		=	5,400	1,704
MCW-15c (City)*	1315	11/14/2021		=	5,400	1,817
MCW-15c (City)*	1315	11/15/2021		=	5,400	1,937
MCW-15c (City)*	1430	11/16/2021 ♦		=	110	1,814
MCW-15c (City)*	1430	11/17/2021		=	110	1,699
MCW-15c (City)*	1430	11/18/2021		=	110	1,591
MCW-15c (City)*	1430	11/19/2021		=	110	1,489
MCW-15c (City)*	1430	11/20/2021		=	110	1,395
MCW-15c (City)*	1430	11/21/2021		=	110	1,306
MCW-15c (City)*	1430	11/22/2021		=	110	1,223
MCW-15c (City)*	1400	11/23/2021 ♦		=	140	1,154
MCW-15c (City)*	1400	11/24/2021		=	140	1,090
MCW-15c (City)*	1400	11/25/2021		=	140	965
MCW-15c (City)*	1400	11/26/2021		=	140	854
MCW-15c (City)*	1400	11/27/2021		=	140	756
MCW-15c (City)*	1400	11/28/2021		=	140	670
MCW-15c (City)*	1400	11/29/2021		=	140	593
MCW-15c (City)*	1430	11/30/2021 ♦		<	9	479
MCW-17 (City and County)	-	11/1/2021	Rain		**Rain**	**Rain**
MCW-17 (City and County)	-	11/2/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	11/3/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/4/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain	Single Sample (adjusted for rain, dry and NDs)		Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-17 (City and County)	-	11/5/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/6/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/7/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/8/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/9/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	11/10/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/11/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/12/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/13/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/14/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/15/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/16/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	11/17/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/18/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/19/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/20/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/21/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/22/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/23/2021 ♦	Dry	<	9	9
MCW-17 (City and County)	-	11/24/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/25/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/26/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/27/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/28/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/29/2021	Dry	<	9	9
MCW-17 (City and County)	-	11/30/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	11/1/2021	Rain		**Rain**	**Rain**
MCW-18 (County)	-	11/2/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	11/3/2021	Dry	<	9	9
MCW-18 (County)	-	11/4/2021	Dry	<	9	9
MCW-18 (County)	-	11/5/2021	Dry	<	9	9
MCW-18 (County)	-	11/6/2021	Dry	<	9	9
MCW-18 (County)	-	11/7/2021	Dry	<	9	9
MCW-18 (County)	-	11/8/2021	Dry	<	9	9
MCW-18 (County)	-	11/9/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	11/10/2021	Dry	<	9	9
MCW-18 (County)	-	11/11/2021	Dry	<	9	9
MCW-18 (County)	-	11/12/2021	Dry	<	9	9
MCW-18 (County)	-	11/13/2021	Dry	<	9	9
MCW-18 (County)	-	11/14/2021	Dry	<	9	9
MCW-18 (County)	-	11/15/2021	Dry	<	9	9



Location (Jurisdiction)	Time	Date	Rain		Single Sample (adjusted for rain, dry and NDs)	Geometric Mean
					E. coli (235 MPN)	E. coli (126 MPN)
MCW-18 (County)	-	11/16/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	11/17/2021	Dry	<	9	9
MCW-18 (County)	-	11/18/2021	Dry	<	9	9
MCW-18 (County)	-	11/19/2021	Dry	<	9	9
MCW-18 (County)	-	11/20/2021	Dry	<	9	9
MCW-18 (County)	-	11/21/2021	Dry	<	9	9
MCW-18 (County)	-	11/22/2021	Dry	<	9	9
MCW-18 (County)	-	11/23/2021 ♦	Dry	<	9	9
MCW-18 (County)	-	11/24/2021	Dry	<	9	9
MCW-18 (County)	-	11/25/2021	Dry	<	9	9
MCW-18 (County)	-	11/26/2021	Dry	<	9	9
MCW-18 (County)	-	11/27/2021	Dry	<	9	9
MCW-18 (County)	-	11/28/2021	Dry	<	9	9
MCW-18 (County)	-	11/29/2021	Dry	<	9	9
MCW-18 (County)	-	11/30/2021 ♦	Dry	<	9	9

Notes:

♦: Date of sampling

A dilution factor of 10 is applied to all samples analyzed for this program, resulting in an MRL of 18 MPN/100 ml

Results of <18 MPN/100 ml are adjusted to use half the MRL (=9) in the calculation of the geometric mean. As such, Table 2 presents a value of 9 MPN/100mL to distinguish the value used for calculation of the 30-day geometric mean

Dry: Samples were not collected due to insufficient flow and a value of 9 MPN/100 ml (half the MRL) was used for calculation of the 30-day geometric mean

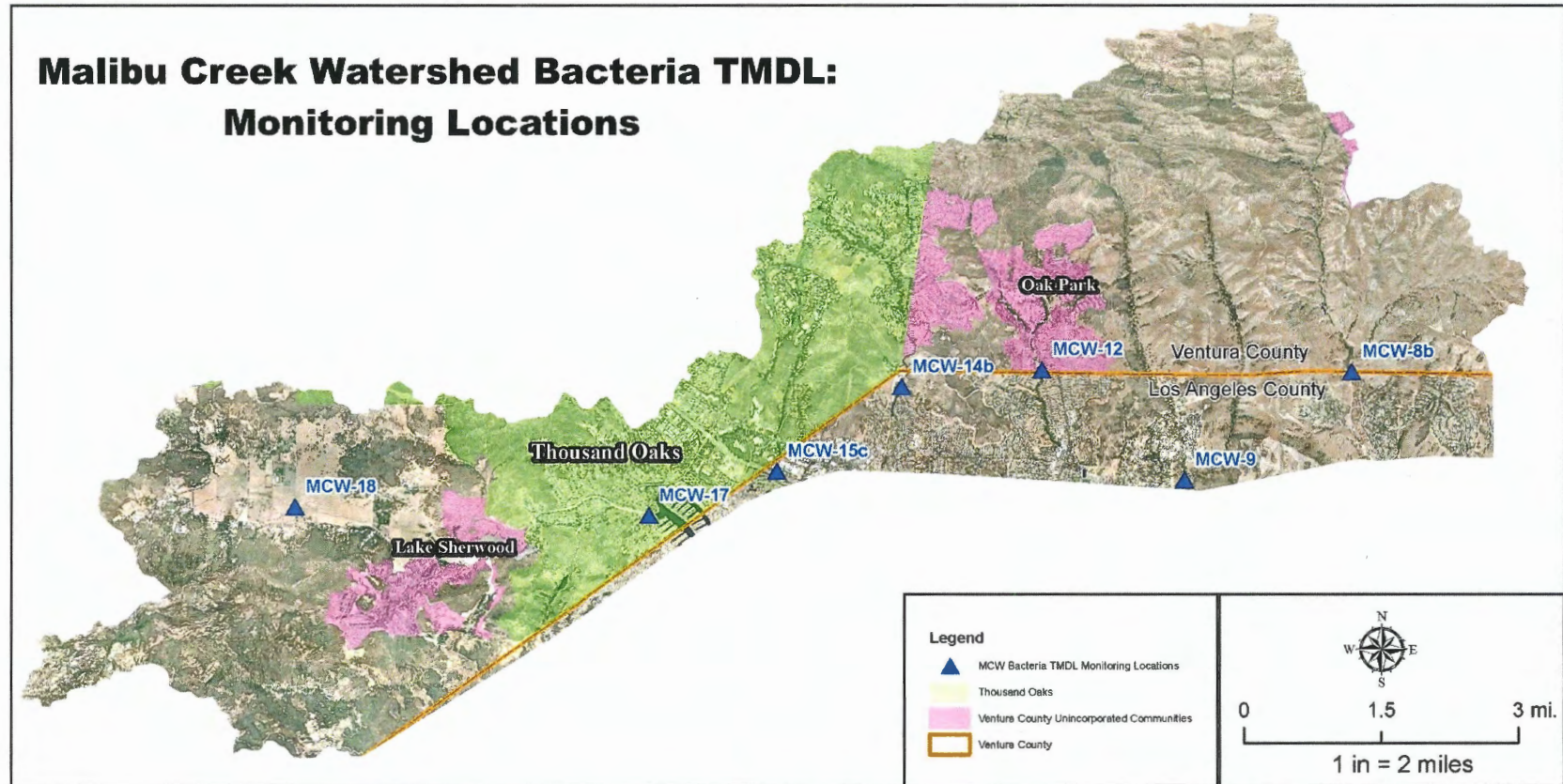
-: Time is not applicable, as no sample was collected due to insufficient flow

Weeks with wet weather samples (collected less than 72 hours after a day with >0.1" rain) use the previous non-rain single sample value to calculate the geometric mean.

Coliform tables from SM9221 in standard methods 22nd and 23rd have been adopted thus changing the reporting limit from 2.0 MPN/100 ml to 1.8 MPN/100 ml as of November 7, 2017

*: The RWQCB granted permission to replace site MCW-15b with site Special-05 (renamed MCW-15c) on August 11th, 2010







Watershed
Protection



December 15, 2021

Dr. LB Nye, Regional Program Chief
Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Subject: 2021 ANNUAL MONITORING REPORT FOR SANTA CLARA RIVER BACTERIA
TOTAL MAXIMUM DAILY LOAD

Dear Dr. Nye,

The Santa Clara River (SCR) Estuary and Reaches 3, 5, 6, and 7 Indicator Bacteria Total Maximum Daily Load (Bacteria TMDL) was adopted by the Los Angeles Regional Water Quality Control Board (Regional Water Board) on July 8, 2010 and came into effect on March 21, 2012. The Bacteria TMDL incorporates the reaches listed on the 303(d) list, Reach 3 which was added to the 303(d) list in the 2016 Integrated Report, and all tributaries to the impaired SCR reaches.

The Cities of Fillmore, Oxnard, Santa Paula, and Ventura, and the County of Ventura are working collaboratively to implement Bacteria TMDL requirements for the lower SCR to address impairments to the SCR Estuary and Reach 3. The Bacteria TMDL required an in-stream compliance bacteria water quality Monitoring Plan, as well as an Implementation Plan (including an Outfall Monitoring Plan) to outline how the TMDL Responsible Agencies will achieve compliance with the Bacteria TMDL Waste Load Allocations and Load Allocations for the lower Santa Clara River. In accordance with the *Bacteria TMDL final in-stream Compliance Monitoring Plan* (CMP), in-stream monitoring for the Reach 3 (SCRR3-RW1) and SCR Estuary (SCRE-R005) has been conducted since October 11, 2016. The Regional Water Quality Control Board accepted the *Implementation Plan for the Lower Santa Clara River Watershed* (Implementation Plan) in a letter dated December 26, 2017, and following an extension granted by Ms. Newman on May 25, 2018, the outfall monitoring has been conducted in accordance with the Implementation Plan's Outfall Monitoring Plan at five jurisdictional outfalls since September 18, 2018.¹

In accordance with the Regional Phase I Municipal Stormwater NPDES Permit Order No. R4-2021-0105 effective September 11, 2021, Ventura County Watershed Protection District (VCWPD) was included as a responsible party in the SCR Bacteria TMDL. Effective October 4,

¹ One jurisdictional outfall was selected per agency in Fillmore, Santa Paula, Ventura, Oxnard, and County unincorporated Saticoy (MO-FIL, -SPA, -VEN, -SRG, and -SAT respectively)

2021, VCWPD joined the County of Ventura and Cities of Fillmore, Oxnard, Santa Paula, and Ventura to collaboratively implement TMDL monitoring and reporting requirements.

This annual report presents monitoring results for sampling events completed between November 3, 2020 and October 26, 2021. The attached Table 1 summarizes the results of weekly monitoring required by the CMP and monthly monitoring required by the Outfall Monitoring Plan. Weekly sampling is scheduled to occur on Tuesdays at in-stream receiving water monitoring locations, and monthly at the six jurisdictional outfall monitoring locations (in coordination with in-stream receiving water monitoring activities).

Table 1 displays the annual sampling results for both in-stream receiving water and outfall monitoring locations, as well as rolling 30-day geometric means for the in-stream receiving water monitoring locations. In accordance with Attachment M of the Regional Phase I Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit, the geometric mean is calculated on a weekly basis using no less than 5 samples equally spaced over a 30-day period. Note that flow occurred throughout the monitoring period and samples were collected at the receiving water monitoring locations during each weekly event.

Samples were collected by Rincon Consultants, Inc. at SCRE-R005 (Estuary), SCRR3-RW1 (Reach 3), MO-FIL, MO-SPA, MO-VEN, MO-SRG, and MO-SAT for bacteria analysis by Fruit Growers Laboratory, Inc. (FGL). This report was prepared by Rincon Consultants, Inc.

If you have any questions regarding the results or activities related to the lower SCR Bacteria TMDL monitoring, please contact me at (805) 645-1382.

Sincerely,

Ewelina Mutkowska
Senior Stormwater Manager,
Ventura County Public Works Agency

CC: Jun Zhu, Regional Water Quality Control Board
Jessica Pearson, Regional Water Quality Control Board
Jeff Pratt, Ventura County Public Works Agency
David Fleisch, Ventura County Public Works Agency
Glenn Shephard, Ventura County Public Works Agency Watershed Protection
Arne Anselm, Ventura County Public Works Agency Watershed Protection
Joe Yahner, City of Ventura
Peter Shallenberger, City of Ventura
Roxanne Hughes, City of Fillmore
Kelsey Reed, City of Fillmore
Clete J. Saunier, City of Santa Paula
Gerhardt Hubner, City of Santa Paula
Jan Hauser, City of Oxnard
Badaoui Mouderrres, City of Oxnard
Heather D'Anna Nichols, City of Oxnard

Table 1.
Sampling Results for Receiving Water (Weekly), Outfalls (Monthly) and
Geomean Data for Weekly Sampling Results for Santa Clara River Reach 3 (SCRR3-RW1) and Estuary (SCRE-R005)

Location	Time	Date	Rain		Single Sample	30-Day Geomean		Single Sample	30-Day Geomean		Single Sample	30-Day Geomean		Single Sample	30-Day Geomean
					E.coli (MPN/100mL)			Total Coliform (MPN/100mL)			Fecal Coliform (MPN/100mL)			Enterococcus (MPN/100mL)	
					(235 MPN)	(126 MPN)		(10,000 MPN)	(1,000 MPN)		(400 MPN)	(200 MPN)		(104 MPN)	(35 MPN)
Santa Clara River Reach 3															
SCRR3-RW1	8:20	11/3/2020	Dry	=	56.5	63.0		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	8:30	11/10/2020	Wet	=	57.5	67.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:20	11/17/2020	Dry	=	58.5	68.7		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	9:40	11/24/2020	Dry	=	59.5	65.8		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	12:45	12/1/2020	Dry	=	60.5	58.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	13:30	12/8/2020	Dry	=	61.5	59.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	9:00	12/15/2020	Dry	=	62.5	60.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	8:30	12/22/2020	Dry	=	63.5	61.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	8:30	12/29/2020	Wet	=	64.5	62.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:40	1/5/2021	Dry	=	65.5	63.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	8:55	1/12/2021	Dry	=	66.5	64.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:15	1/19/2021	Dry	=	67.5	65.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	9:55	1/26/2021	Wet	=	68.5	66.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	9:00	2/2/2021	Dry	=	69.5	67.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:40	2/9/2021	Dry	=	70.5	68.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:40	2/16/2021	Dry	=	71.5	69.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	9:20	2/23/2021	Dry	=	72.5	70.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:30	3/2/2021	Dry	=	73.5	71.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	12:30	3/9/2021	Dry	=	74.5	72.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:20	3/16/2021	Wet	=	75.5	73.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:10	3/23/2021	Dry	=	76.5	74.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:30	3/30/2021	Dry	=	77.5	75.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:50	4/6/2021	Dry	=	78.5	76.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:30	4/13/2021	Dry	=	79.5	77.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:55	4/20/2021	Dry	=	80.5	78.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:20	4/27/2021	Dry	=	81.5	79.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:20	5/4/2021	Dry	=	20.1	60.7		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:40	5/11/2021	Dry	=	33.6	51.2		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:30	5/18/2021	Dry	=	65.0	49.2		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:35	5/25/2021	Dry	=	32.7	41.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:20	6/1/2021	Dry	=	79.4	40.9		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:30	6/8/2021	Dry	=	55.4	50.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:30	6/15/2021	Dry	=	66.3	57.3		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:30	6/22/2021	Dry	=	101.9	62.7		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:15	6/29/2021	Dry	=	79.4	74.9		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:50	7/6/2021	Dry	=	139.6	83.9		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:40	7/13/2021	Dry	=	60.5	85.4		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:20	7/20/2021	Dry	>	2,419.6	175.3		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:40	7/27/2021	Dry	=	42.6	147.2		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:30	8/3/2021	Dry	=	27.5	119.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:40	8/10/2021	Dry	=	110.6	113.7		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	12:15	8/17/2021	Dry	=	90.6	123.2		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	12:00	8/24/2021	Dry	=	128.1	68.5		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	14:55	8/31/2021	Dry	=	61.3	73.6		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:55	9/7/2021	Dry	=	93.3	94.0		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:30	9/14/2021	Dry	=	110.0	93.9		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	12:30	9/21/2021	Dry	>	2,419.6	181.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	11:40	9/28/2021	Dry	=	81.3	165.4		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	10:55	10/5/2021	Dry	=	104.6	184.0		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	14:35	10/13/2021	Dry	=	72.7	175.1		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	13:25	10/19/2021	Dry	=	65.7	157.9		n/a	n/a		n/a	n/a		n/a	n/a
SCRR3-RW1	15:35	10/26/2021	Wet	=	1,046.2	133.6		n/a	n/a		n/a	n/a		n/a	n/a
Santa Clara River Estuary															
SCRE-R005	7:45	11/3/2020	Dry		n/a	n/a	=	700.0	1,526.9	=	49.0	59.1	=	36.9	22.8
SCRE-R005	8:00	11/10/2020	Wet		n/a	n/a	=	630.0	943.3	=	46.0	54.3	=	33.3	21.9
SCRE-R005	11:20	11/17/2020	Dry		n/a	n/a	=	3,300.0	1,023.0	=	490.0	93.2	=	81.6	25.1
SCRE-R005	8:40	11/24/2020	Dry		n/a	n/a	=	24,000.0	1,649.9	=	1,100.0	173.7	=	13.2	26.6
SCRE-R005	11:45	12/1/2020	Dry		n/a	n/a	=	790.0	1,941.6	=	110.0	168.0	=	9.7	26.4
SCRE-R005	13:00	12/8/2020	Dry		n/a	n/a	=	13,000.0	3,482.8	=	94.0	191.3	=	33.6	25.9
SCRE-R005	7:05	12/15/2020	Dry		n/a	n/a	=	11,000.0	6,170.7	=	46.0	191.3	=	90.6	31.7
SCRE-R005	7:45	12/22/2020	Dry		n/a	n/a	=	2,800.0	5,971.3	=	130.0	146.7	=	58.6	29.6
SCRE-R005	8:00	12/29/2020	Wet		n/a	n/a	=	54,000.0	7,022.7	=	3,300.0	182.8	>	2,420.0	84.0
SCRE-R005	10:00	1/5/2021	Dry		n/a	n/a	=	1,100.0	7,503.4	=	110.0	182.8	=	43.1	113.2
SCRE-R005	8:20	1/12/2021	Dry		n/a	n/a	=	4,900.0	6,173.1	=	330.0	235.0	=	68.9	130.7
SCRE-R005	11:30	1/19/2021	Dry		n/a	n/a	=	4,900.0	5,251.3	=	170.0	305.2	=	214.3	155.3
SCRE-R005	9:20	1/26/2021	Dry		n/a	n/a	=	4,900.0	5,873.2	=	40.0	241.1	=	37.7	142.2
SCRE-R005	8:10	2/2/2021	Dry		n/a	n/a	=	17,000.0	4,661.1	=	130.0	126.3	=	88.8	73.4
SCRE-R005	10:05	2/9/2021	Dry		n/a	n/a	=	1,100.0	4,661.1	=	14.0	83.6	=	20.9	63.5
SCRE-R005	9:20	2/16/2021	Dry		n/a	n/a	=	3,300.0	4,306.7	=	31.0	52.1	=	22.8	50.9
SCRE-R005	8:30	2/23/2021	Dry		n/a	n/a	=	230.0	2,335.9	=	23.0	34.9	=	8.1	26.4
SCRE-R005	9:45	3/2/2021	Dry		n/a	n/a	=	3,300.0	2,158.3	=	46.0	35.9	=	3.0	15.9
SCRE-R005	10:50	3/9/2021	Dry		n/a	n/a	=	92,000.0	3,025.4	=	110.0	34.7	=	4.1	8.6
SCRE-R005	9:20	3/16/2021	Wet		n/a	n/a	=	790.0	2,831.6	=	22.0	38.0	=	20.6	8.6
SCRE-R005	9:30	3/23/2021	Dry		n/a	n/a	=	26.0	1,074.8	=	7.8	28.8	=	2.0	5.3
SCRE-R005	8:40	3/30/2021	Dry		n/a	n/a	=	140.0	973.2	=	4.5	20.8	=	3.0	4.3
SCRE-R005	10:00	4/6/2021	Dry		n/a	n/a	=	63.0	440.9	<	1.8	10.9	=	1.0	3.5
SCRE-R005	10:40	4/13/2021	Dry		n/a	n/a	=	1,700.0	198.5	=	170.0	11.9	=	5.1	3.6

Table 1.
Sampling Results for Receiving Water (Weekly), Outfalls (Monthly) and
Geomean Data for Weekly Sampling Results for Santa Clara River Reach 3 (SCRR3-RW1) and Estuary (SCRE-R005)

Location	Time	Date	Rain	Single Sample	30-Day Geomean		Single Sample	30-Day Geomean		Single Sample	30-Day Geomean		Single Sample	30-Day Geomean	
				E.coli			Total Coliform			Fecal Coliform			Enterococcus		
				(MPN/100mL)			(MPN/100mL)			(MPN/100mL)			(MPN/100mL)		
				(235 MPN)	(126 MPN)		(10,000 MPN)	(1,000 MPN)		(400 MPN)	(200 MPN)		(104 MPN)	(35 MPN)	
SCRE-R005	9:10	4/20/2021	Dry	n/a	n/a	=	4,300.0	278.5	=	2.0	7.4	=	3.0	2.5	
SCRE-R005	9:35	4/27/2021	Dry	n/a	n/a	=	4,300.0	773.7	<	1.8	5.5	=	1.0	2.1	
SCRE-R005	10:20	5/4/2021	Dry	n/a	n/a	=	54,000.0	2,545.8	=	17.0	7.2	=	3.1	2.2	
SCRE-R005	10:05	5/11/2021	Dry	n/a	n/a	=	430.0	3,738.1	=	17.0	11.2	=	5.2	3.0	
SCRE-R005	9:30	5/18/2021	Dry	n/a	n/a	=	24,000.0	6,347.5	=	33.0	8.1	=	2.0	2.5	
SCRE-R005	10:05	5/25/2021	Dry	n/a	n/a	=	160,000.0	13,083.8	=	6.8	10.3	=	3.0	2.5	
SCRE-R005	9:20	6/1/2021	Dry	n/a	n/a	=	1,100.0	9,961.3	=	14.0	15.5	=	7.4	3.7	
SCRE-R005	10:00	6/8/2021	Dry	n/a	n/a	>	160,000.0	12,378.3	=	79.0	21.1	=	12.1	4.9	
SCRE-R005	9:20	6/15/2021	Dry	n/a	n/a	=	7,900.0	22,156.1	=	17.0	21.1	=	2.0	4.0	
SCRE-R005	10:00	6/22/2021	Dry	n/a	n/a	=	1,100.0	11,960.0	=	4.5	14.2	=	9.8	5.5	
SCRE-R005	9:30	6/29/2021	Dry	n/a	n/a	=	3,300.0	5,503.1	=	14.0	16.4	=	4.1	5.9	
SCRE-R005	11:10	7/6/2021	Dry	n/a	n/a	=	123.0	3,550.7	=	2.0	11.1	<	1.0	4.0	
SCRE-R005	11:00	7/13/2021	Dry	n/a	n/a	=	700.0	1,198.1	=	21.0	8.5	=	3.0	3.0	
SCRE-R005	8:40	7/20/2021	Dry	n/a	n/a	=	54,000.0	1,759.8	=	4.5	6.5	=	2.0	3.0	
SCRE-R005	11:15	7/27/2021	Dry	n/a	n/a	=	8,400.0	2,642.6	=	6.8	7.1	=	15.8	3.3	
SCRE-R005	11:05	8/3/2021	Dry	n/a	n/a	=	17,000.0	3,668.0	=	17.0	7.4	=	1.0	2.5	
SCRE-R005	11:10	8/10/2021	Dry	n/a	n/a	=	1,700.0	6,202.0	=	79.0	15.4	=	5.2	3.5	
SCRE-R005	10:25	8/17/2021	Dry	n/a	n/a	=	4,900.0	9,152.8	=	33.0	16.8	=	24.6	5.3	
SCRE-R005	11:25	8/24/2021	Dry	n/a	n/a	=	1,700.0	4,583.2	=	4.5	16.8	=	238.2	13.7	
SCRE-R005	14:25	8/31/2021	Dry	n/a	n/a	=	1,700.0	3,329.6	=	33.0	23.1	=	3.1	9.9	
SCRE-R005	11:10	9/7/2021	Dry	n/a	n/a	=	490.0	1,638.1	=	9.2	20.4	=	3.1	12.4	
SCRE-R005	10:50	9/14/2021	Dry	n/a	n/a	=	1,360.0	1,566.6	=	2.0	9.8	=	3.1	11.2	
SCRE-R005	9:40	9/21/2021	Dry	n/a	n/a	=	4,300.0	1,526.2	=	4.5	6.6	=	2.0	6.8	
SCRE-R005	11:00	9/28/2021	Dry	n/a	n/a	=	35,000.0	2,794.8	=	13.0	8.1	>	2,420.0	10.8	
SCRE-R005	10:15	10/5/2021	Dry	n/a	n/a	=	160,000.0	6,935.5	=	4.5	5.5	=	6.3	12.4	
SCRE-R005	14:05	10/13/2021	Dry	n/a	n/a	=	160,000.0	22,073.1	=	17.0	6.2	=	3.1	12.4	
SCRE-R005	11:35	10/19/2021	Dry	n/a	n/a	=	54,000.0	46,092.9	=	14.0	9.1	=	2.0	11.4	
SCRE-R005	15:00	10/26/2021	Wet	n/a	n/a	=	2,800.0	42,303.1	=	23.0	12.6	=	6.3	14.3	
Fillmore Outfall															
MO-FIL	9:50	11/17/2020	Dry	=	1,203.3	n/a	=	7,900.0	n/a	=	1,700.0	n/a	>	2,420.0	n/a
MO-FIL	8:35	12/15/2020	Dry	=	248.1	n/a	=	4,900.0	n/a	=	790.0	n/a	=	1,986.3	n/a
MO-FIL	9:45	1/19/2021	Dry	=	1,732.9	n/a	=	4,900.0	n/a	=	1,300.0	n/a	>	2,420.0	n/a
MO-FIL	11:00	2/16/2021	Dry	=	686.7	n/a	>	2,419.6	n/a	=	490.0	n/a	=	1,986.3	n/a
MO-FIL	11:40	3/16/2021	Wet	>	2,419.6	n/a	=	92,000.0	n/a	=	7,900.0	n/a	>	2,420.0	n/a
MO-FIL	10:30	4/20/2021	Dry	=	167.0	n/a	=	24,000.0	n/a	=	330.0	n/a	>	2,420.0	n/a
MO-FIL	10:50	5/18/2021	Dry	=	88.2	n/a	=	7,900.0	n/a	=	230.0	n/a	=	686.7	n/a
MO-FIL	10:55	6/15/2021	Dry	=	1,986.3	n/a	=	13,000.0	n/a	=	1,400.0	n/a	>	2,420.0	n/a
MO-FIL	10:50	7/20/2021	Dry	=	488.4	n/a	=	13,000.0	n/a	=	940.0	n/a	=	1,011.2	n/a
MO-FIL	12:45	8/17/2021	Dry	>	2,419.6	n/a	=	35,000.0	n/a	=	24,000.0	n/a	>	2,420.0	n/a
MO-FIL	12:00	9/21/2021	Dry	=	1.0	n/a	=	2.0	n/a	<	1.8	n/a	=	3.0	n/a
MO-FIL	12:55	10/18/2021	Dry	=	1,553.1	n/a	=	35,000.0	n/a	=	1,300.0	n/a	>	2,420.0	n/a
Santa Paula Outfall															
MO-SPA	-	11/17/2020	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	12/15/2020	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	1/19/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	2/16/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	10:50	3/16/2021	Wet	=	727.0	n/a	=	54,000.0	n/a	=	790.0	n/a	>	2,420.0	n/a
MO-SPA	-	4/20/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	5/18/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	11:55	6/15/2021	Dry	>	2,419.6	n/a	=	24,000.0	n/a	=	3,300.0	n/a	>	2,420.0	n/a
MO-SPA	-	7/20/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	8/17/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	9/21/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-SPA	-	10/18/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
Ventura Outfall															
MO-VEN	-	11/17/2020	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	12/15/2020	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	1/19/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	2/16/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	3/16/2021	Wet		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	4/20/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	5/18/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	6/15/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	7/20/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	-	8/17/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a
MO-VEN	10:55	9/21/2021	Dry	=	166.4	n/a	=	3,500.0	n/a	=	230.0	n/a	=	613.1	n/a
MO-VEN	-	10/18/2021	Dry		n/s	n/a		n/s	n/a		n/s	n/a		n/s	n/a

Table 1.
Sampling Results for Receiving Water (Weekly), Outfalls (Monthly) and
Geomean Data for Weekly Sampling Results for Santa Clara River Reach 3 (SCRR3-RW1) and Estuary (SCRE-R005)

Location	Time	Date	Rain	Single Sample	30-Day Geomean	Single Sample	30-Day Geomean	Single Sample	30-Day Geomean	Single Sample	30-Day Geomean
				E.coli (MPN/100mL)		Total Coliform (MPN/100mL)		Fecal Coliform (MPN/100mL)		Enterococcus (MPN/100mL)	
				(235 MPN)	(126 MPN)	(10,000 MPN)	(1,000 MPN)	(400 MPN)	(200 MPN)	(104 MPN)	(35 MPN)
Oxnard Outfall											
MO-SRG	-	11/17/2020	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	12/15/2020	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	1/19/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	2/16/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	3/16/2021	Wet	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	4/20/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	5/18/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	6/15/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	9:00	7/20/2021	Dry	=	328.2	n/a	=	17,000.0	n/a	=	2,419.6
MO-SRG	10:50	8/17/2021	Dry	>	2,419.6	n/a	=	92,000.0	n/a	=	24,000.0
MO-SRG	-	9/21/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SRG	-	10/18/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
Saticoy Outfall											
MO-SAT	-	11/17/2020	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	12/15/2020	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	1/19/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	2/16/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	3/16/2021	Wet	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	4/20/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	5/18/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	6/15/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	7/20/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	8/17/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	9/21/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a
MO-SAT	-	10/18/2021	Dry	n/s	n/a	n/s	n/a	n/s	n/a	n/s	n/a

Notes:

Wet weather samples are those collected within 72 hours after a day with >0.1" rainfall

Rain gages H245 – Wilson Ranch and H066 – Ventura City Hall are referenced to determine wet and dry days for Reach 3 and the Estuary, respectively. Data can be found at <http://www.vcwatershed.net/fws/gmap.html>.

MPN: most probably number

TMDL: Total Maximum Daily Load

E.coli: Escherichia coli

n/s: not sampled due to dry conditions

n/a: not applicable to site

>: greater than

<: less than

=: equal to



December 15, 2021

Dr. L.B. Nye, Chief of Regional Programs
Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

**Subject: 2021 Annual Monitoring Report for Ventura River Estuary Trash
TMDL (Resolution No. R4-2007-008) and Trash Conditional Waiver**

Dear Dr. Nye,

Enclosed for your review and consideration is the Ventura River Estuary Trash Total Maximum Daily Load (TMDL) Annual Monitoring Report for October 2020 – September 2021 monitoring period. This 12th Annual Monitoring Report is being submitted per the requirements of the Ventura River Estuary Trash TMDL, Los Angeles Regional Water Quality Control Board (Regional Water Board) Resolution No. R4-2007-008 and Conditional Waiver of Waste Discharge Requirements for Discharges of Trash from Nonpoint Sources in Waterbodies Subject to Total Maximum Daily Loads for Trash or Debris adopted on September 10, 2020.

This document is being submitted on behalf of the following responsible parties: County of Ventura, Ventura County Watershed Protection District, City of Ventura, Ventura County Fairgrounds, California Department of Transportation, California Department of Parks and Recreation-Channel Coast District, and participants in the Ventura County Agricultural Irrigated Lands Group, which is a subdivision of the Farm Bureau of Ventura County.

During the 2013-2014 monitoring year, the responsible parties developed a revised Trash Monitoring and Reporting Plan (TMRP–Addendum No. 1) to include a new MFAC/BMP Program that utilizes visual trash assessments and targeted clean ups of the parcels located within the Estuary, coupled with BMPs implemented in the Estuary and on the land areas adjacent to the Estuary. The Addendum No. 1 dated October 22, 2014 was prepared by the consultant Larry Walker & Associates and submitted on November 11,

2014 reflective of the input received from Regional Board staff during the June 17, 2014 meeting between the Responsible Parties and Regional Water Board staff. The responsible parties are still waiting for approval of the Addendum No. 1; however, Regional Board staff indicated the responsible parties should implement the revised TMRP program while awaiting the approval.

This 12th Annual Monitoring Report summarizes the results of the sixth year of implementation of the revised TMRP and MFAC/BMP Program.

If you have any comments or questions regarding the attached document, please contact me at (805) 645-1382 or Ewelina.Mutkowska@ventura.org.

Sincerely,

Ewelina Mutkowska
Senior Stormwater Manager
Ventura County Public Works Agency

cc: Jun Zhu, Los Angeles Regional Water Quality Control Board
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DECEMBER 15, 2021

2021 Ventura River Estuary Trash TMDL Annual Monitoring Report

prepared by

VENTURA LAND TRUST

submitted to

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
LOS ANGELES REGION

submitted by

CITY OF VENTURA, COUNTY OF VENTURA, VENTURA COUNTY
WATERSHED PROTECTION DISTRICT, PARTICIPANTS IN THE VENTURA
COUNTY AGRICULTURAL IRRIGATED LANDS GROUP, CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE, CALIFORNIA DEPARTMENT
OF STATE PARKS, AND CALIFORNIA DEPARTMENT OF TRANSPORTATION



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Introduction

This Annual Report is being submitted to fulfill the compliance requirements of the Amendments to the Water Quality Control Plan – Los Angeles Region for the Ventura River Estuary Trash Total Maximum Daily Load (Trash TMDL), Resolution No. R4-2007-008 (effective March 6, 2008). The purpose of this report is to present the results of the monitoring efforts conducted in accordance with the Trash Monitoring Reporting Plan (TMRP) and Minimum Frequency Assessment Collection/Best Management Practice (MFAC/BMP) Program developed to meet the requirements of the Trash TMDL.

The initial TMRP, which was approved in 2009 by the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), was revised to more effectively target the disbandment of homeless encampments in the Ventura River Estuary (Estuary), which have been determined to be the primary source of trash in the TMDL compliance area.

Initially, the responsible parties submitted a TMRP revision request letter, dated October 9, 2013, asking for additional time to develop the details of the monitoring approach, particularly the most effective locations to implement the patrols and visual assessments. As such, the responsible parties proposed implementing an interim MFAC/BMP Program to begin in October 2013 while the responsible parties developed the revised MFAC/BMP Program and Regional Board staff reviewed and approved the revised MFAC/BMP Program. An interim MFAC/BMP Program was necessary to support development of some aspects of the monitoring approach, facilitate transition to a more effective clean-up and trash prevention program, and avoid the necessity of continuing to count pieces of trash while the responsible parties developed the detailed TMRP. The interim MFAC/BMP Program implemented by the responsible parties was as follows:

1. Conducted clean-up of all Estuary parcels within the TMDL compliance area by mid-November 2013 as the initial quarterly event.
2. Began initial patrols to determine the route(s) that will be used for visual assessments and identified the preferred routes by January 2014.
3. Formalized Memorandum of Agreement with Ventura Hillside Conservancy to organize and manage volunteer cleanup events and conduct trash monitoring activities.
4. Conducted regularly scheduled clean-up events in the Estuary beginning in March 2014, which were additional to the required collection events for the MFAC/BMP Program.

In addition, the responsible parties conducted several initial assessments in May and June 2014 and an initial collection event in May 2014 to test the applicability of the revised MFAC/BMP Program.

An Addendum No. 1 to the TMRP was submitted on April 30, 2014 and a revised Addendum was submitted on October 22, 2014 addressing comments from Regional Board staff. In a meantime, the revised MFAC/BMP Program began in July 2014. The TMRP and MFAC/BMP Program are designed to prioritize the use of resources to implement actions effective in reducing trash in the Estuary, while still providing a monitoring approach that will allow for an evaluation of the effectiveness of the MFAC/BMP Program and support identification of any needed adjustments to the MFAC/BMP Program. The responsible parties are still waiting for approval of

the Addendum No. 1; however, Regional Board staff indicated the responsible parties should implement the revised TMRP program while awaiting approval.

On September 10, 2020, Regional Water Quality Control Board – Los Angeles Region (Los Angeles Water Board) adopted Conditional Waiver of Waste Discharge Requirements for Discharges of Trash from Nonpoint Sources in Waterbodies Subject to Total Maximum Daily Loads for Trash or Debris (Trash Conditional Waiver). This Conditional Waiver required submittal of annual TMRP reports by December 15, therefore in order to meet reporting requirements of both Trash TMDL and Conditional Waiver, this Annual Report is submitted on December 15, 2021.

This Annual Report includes the following information from twelfth-year monitoring conducted under the revised TMRP and MFAC/BMP Program:

- Monitoring Summary
- MFAC Events/BMP Implementation Summary
- MFAC/BMP Program Evaluation and Revision Recommendations

The efforts to implement the Trash TMDL are being completed on behalf of the responsible parties to the Trash TMDL as listed in **Table 1**. The efforts to implement the Trash TMDL requirements for nonpoint sources are focused within the Estuary and the parcels adjacent to the Estuary.

Table 2 presents the names of the parcels within the Estuary, which were grouped into four MFAC areas identified for the MFAC/BMP Program implementation. **Figure 1** shows the locations of the parcels within the Estuary. Per 2014 revised MFAC/BMP Program, the cleanup and monitoring efforts included the whole TMDL compliance area including areas that are not part of the eight parcels listed in Table 2 and shown in **Figure 1** including the area under the Main Street Bridge, the area under the US 101 Bridge, and the area under the railroad bridge between MFAC Area 1 and MFAC Area 2. In addition, both County of Ventura and City of Ventura installed required full trash capture devices within their respective jurisdictions draining to the MS4 within the Trash TMDL Staff Report-defined Estuary Sub-watershed area.

Table 1. Responsible Parties Participating in the TMRP and MFAC/BMP Program

Responsible Party	Nonpoint Source (NPS)	Point Source (PS)
City of Ventura (City)	X	X
County of Ventura (County)	X	X
Ventura County Watershed Protection District (VCWPD)	X	X
California Department of Food & Agriculture (Ventura Fairgrounds)	X	X
California Department of Transportation ¹ (Caltrans)		X
California Department of Parks and Recreation	X	--
Participants in the VCAILG ²	X	--

1. Caltrans was not assigned a Load Allocation, yet it is participating in the MFAC/BMP Program to meet the Trash TMDL goals.

2. Ventura County Agricultural Irrigated Lands Group.

Table 2. Estuary Parcels by MFAC Area

	MFAC Area 1	MFAC Area 2	MFAC Area 3	MFAC Area 4
Parcel Owner	State of California Department of Parks and Recreation	State of California Department of Parks and Recreation	Ventura Beach RV Resort, Inc.	Wood-Claeysens Foundation
	City of San Buenaventura	State of California Department of Parks and Recreation	Ventura Land Trust (formerly Ventura Hillside Conservancy)	Ventura County Watershed Protection District



Figure 1. MFAC/BMP Program Monitoring Area and Assessment/Patrol Route

Monitoring Summary

ASSESSMENTS AND COLLECTION EVENTS

The responsible parties implemented the revised MFAC/BMP Program (as of July 2014) from the October 2020 to September 2021 reporting period. Upon implementation of the revised MFAC/BMP Program, the responsible parties conducted regular visual trash assessment surveys along a pre-defined route in the Estuary on a rotating schedule each month to ensure the entire Estuary, as defined in the Trash TMDL, was covered on a quarterly basis. The assessment route was designed to include historic in-Estuary TMRP monitoring locations in addition to other areas on all parcels of the Estuary to reflect the new MFAC/BMP Program. The assessment route is shown in **Figure 1**. The visual trash assessment surveys were conducted in accordance with the revised TMRP. However, the responsible parties conducted significantly more assessments than required in the revised TMRP, which is one assessment per quarter. This frequency of assessments is an effort to stay on top of the trash levels, some of which stem from homeless activity.

The responsible parties also conducted trash collection events utilizing information from the monitoring program and from the assessments to determine the locations to focus trash collection efforts.

In addition, the responsible parties conducted regularly scheduled patrols along the assessment route as shown in **Figure 1**. The patrols were conducted to relocate existing abandoned homeless encampments and prevent the establishment of new homeless encampments and to assess trash levels, as homeless individuals and homeless encampments are the main nonpoint sources of trash for the Estuary. The responsible parties averaged up to two patrols per week in areas exhibiting large homeless populations and averaged up to two patrols per month in areas exhibiting small homeless populations. The responsible parties conducted 73 patrols from October 2020 to September 2021.

A summary of the assessment dates, the collection event dates, and the patrol dates is presented in **Table 3**. **Appendix 1** contains the Trash Visual Survey Worksheets and the Collection Event Worksheets for all MFAC Events conducted between October 2020 to September 2021.

Table 3. Assessment, Collection, and Patrol Dates for October 2020-September 2021

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	Q1			Q2			Q3			Q4		
Assessment Dates												
MFAC Area 1	10/06/20	11/05/20	12/02/20	1/06/21	2/01/21	3/02/21	4/02/21	5/06/21	6/10/21	7/07/21	8/04/21	9/02/21
MFAC Area 2	10/06/20	11/05/20	12/02/20	1/06/21	2/01/21	3/02/21	4/02/21	5/06/21	6/10/21	7/07/21	8/04/21	9/02/21
MFAC Area 3	10/06/20	11/05/20	12/02/20	1/06/21	2/01/21	3/02/21	4/02/21	5/06/21	6/10/21	7/07/21	8/04/21	9/02/21
MFAC Area 4	10/06/20	11/05/20	12/02/20	1/06/21	2/01/21	3/02/21	4/02/21	5/06/21	6/10/21	7/07/21	8/04/21	9/02/21
Collection Dates												
MFAC Area 1	10/13/20	11/11/20	12/28/20	1/12/21	2/05/21	3/05/21	4/06/21	5/12/21	6/29/21	7/08/21	8/11/21	9/08/21
MFAC Area 2	10/13/20	11/11/20	12/28/20	1/12/21	2/05/21	3/05/21	4/06/21	5/12/21	6/29/21	7/08/21	8/11/21	9/08/21
MFAC Area 3	10/13/20	11/11/20	12/28/20	1/12/21	2/05/21	3/05/21	4/06/21	5/12/21	6/29/21	7/08/21	8/11/21	9/08/21
MFAC Area 4	10/13/20	11/11/20	12/28/20	1/12/21	2/05/21	3/05/21	4/06/21	5/12/21	6/29/21	7/08/21	8/11/21	9/08/21
Patrol Dates												
10/06/20	12/02/20	1/26/21	2/26/21	3/23/21	4/20/21	5/24/21	7/08/21	9/17/21				
10/13/20	12/11/20	1/29/21	3/02/21	3/24/21	4/22/21	6/01/21	7/14/21					
10/20/20	12/14/20	2/01/21	3/05/21	3/26/21	4/26/21	6/02/21	7/21/21					
10/22/20	12/22/20	2/05/21	3/08/21	3/29/21	4/27/21	6/10/21	8/04/21					
10/28/20	12/28/20	2/08/21	3/11/21	4/02/21	4/30/21	6/15/21	8/11/21					
11/05/20	1/06/21	2/16/21	3/12/21	4/06/21	5/03/21	6/24/21	8/18/21					
11/11/20	1/12/21	2/19/21	3/17/21	4/13/21	5/04/21	6/29/21	9/02/21					
11/17/20	1/19/21	2/23/21	3/18/21	4/16/21	5/06/21	6/30/21	9/08/21					
11/24/20	1/22/21	2/25/21	3/20/21	4/17/21	5/12/21	7/07/21	9/15/21					

ASSESSMENT FINDINGS

The goal of the MFAC/BMP Program is to ensure the parcels in the Estuary are at a Category 1 level of trash based on the information collected during Estuary visual assessments.

The three Trash Assessment Categories of the MFAC/BMP Program are:

- Category 1 – Represents the SWAMP Category “Optimal”
- Category 2 – Represents the SWAMP Category “Suboptimal”
- Category 3 – Represents the SWAMP Category “Poor”

The definition of Category 1 is:

- “On first glance, no trash is visible. Little or no trash (<10 pieces) evident when streambed and stream banks are closely examined for litter and debris, for instance by looking under leaves.”

The definition of Category 2 is:

- “On first glance, low to medium levels of trash are evident (10 – 100 pieces). Stream, bank surfaces, and riparian zone contain some litter and debris. Possible evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing.”

The definition of Category 3 is:

- “On first glance, medium to high levels of trash (>100 pieces) are visible at stream, bank surfaces, and immediate riparian zone contain substantial levels of litter and debris. Evidence of site being used frequently by people: many cans, bottles, and food wrappers, blankets, or clothing.”

There were multiple locations on the parcels within the four MFAC Areas that were assessed during the MFAC Events. These areas were located along the assessment route and in other areas of the Estuary identified through the patrols. Based on the trash conditions at the multiple assessed locations, the Ventura Land Trust determined the overall percentage of the MFAC Areas that were in each of the Trash Assessment Categories. **Table 4** presents a summary of the Trash Assessment Categories for MFAC Areas resulting from the assessments conducted during 2020-2021 monitoring period. These percentages were determined after estimating the amount of trash per quarter, within each MFAC area, after visually evaluating and averaging the category and amount of trash observed per each Trash Visual Survey conducted. **Appendix 1** contains the Trash Visual Survey Worksheets and MFAC Events Worksheets conducted during 2020-2021 monitoring period.

Table 4. Percent of MFAC Area by Assessment Category for October 2020 - September 2021

Quarter 1				
Assessment Area	Category 1	Category 2	Category 3	Notes
MFAC Area 1	94%	2%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 2	97%	2%	1%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 3	90%	2%	8%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 4	96%	2%	2%	Homeless activity responsible for Category 3 trash amount.
Quarter 2				
Assessment Area	Category 1	Category 2	Category 3	Notes
MFAC Area 1	92%	4%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 2	95%	2%	3%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 3	90%	6%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 4	96%	2%	2%	Homeless activity responsible for Category 3 trash amount.
Quarter 3				
Assessment Area	Category 1	Category 2	Category 3	Notes
MFAC Area 1	93%	2%	5%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 2	96%	2%	2%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 3	92%	4%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 4	95%	3%	2%	Homeless activity responsible for Category 3 trash amount.
Quarter 4				
Assessment Area	Category 1	Category 2	Category 3	Notes
MFAC Area 1	90%	4%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 2	95%	3%	2%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 3	94%	2%	4%	Homeless activity responsible for Category 3 trash amount.
MFAC Area 4	96%	2%	2%	Homeless activity responsible for Category 3 trash amount.

MFAC Events/BMP Implementation Summary

To ensure the parcels are all within Category 1, the MFAC/BMP Program is continuously evaluated and modified using the following adaptive management approach:

1. Estuary parcels in Category 1 for the monitoring event conducted prior to a scheduled MFAC Event are noted and any trash observed is collected during the visual survey. If no potential high trash generating areas are identified through the patrol of the parcel, the MFAC Event is not conducted. If potential high trash generating areas are identified by

the patrols, then the MFAC Event focusing on those areas of the parcel that require clean-up is conducted.

2. Monitoring sites in Category 2 are evaluated to determine if additional BMPs are needed to reduce the accumulation of trash between monitoring events (i.e., visual surveys). The types of trash, likely sources, and observed trends in trash amounts are considered in determining if modifications to the MFAC/BMP Program are necessary to move these sites to Category 1.
3. MFAC parcels that have Category 3 levels of trash for two consecutive quarters are targeted for more frequent patrols and/or more frequent clean-ups (depending on the identified primary source of trash) until the parcels reach Category 1 levels of trash for two consecutive visual surveys.

This following section provides the results of the collection events and the results of the BMPs implemented related to reducing trash within the Estuary and from adjacent land areas.

MFAC COLLECTION EVENTS AND ADDITIONAL CLEAN-UP EVENTS

One facet of the MFAC/BMP Program is to clean up any trash found through the assessments. This is done to ensure zero pieces of trash are found after the assessment. **Table 5** presents the trash collected during all collection events during the 2020 – 2021 reporting period. **Appendix 1** contains the Collection Event Worksheets for MFAC Events conducted during 2020-2021. Third Saturday of the month volunteer clean up events and numerous mid-week clean ups have MFAC Event Worksheets. Another facet of the MFAC/BMP Program is to conduct additional clean-ups in the Estuary if it is found that trash is accumulating in deleterious amounts between assessments. The Ventura Land Trust and volunteers conducted 33 clean-ups in the Estuary to address high trash accumulation areas. Parcels 1, 2, and 3 were known to have legacy trash issues, and therefore were targeted for additional clean-ups from the beginning of the 2020-2021 monitoring year. Clean-up photos provided in **Appendix 2** include the types of trash removed during collection events and additional clean-up events.

Table 5. Summary of Trash Collected during the MFAC Collection and Additional Clean-up Events

Date	MFAC Area 1 (lbs*)	MFAC Area 2 (lbs*)	MFAC Area 3 (lbs*)	MFAC Area 4 (lbs*)
10/06/20	25	100	425	50
10/12/20			1,750	
10/13/20	25	100	375	25
10/20/20			500	25
10/28/20	25	50	350	
11/03/20		25	200	25
11/05/20	25	125	375	
11/11/20	25	175	250	
11/17/20	25	75	125	25
11/24/20	25	75	250	25
12/02/20	25	100	350	50
12/07/20			600	
12/11/20			750	
12/14/20		50	250	
12/18/20		100	250	
12/22/20			1,000	
12/28/20	25	75	275	25
01/06/21	25	100	200	25
01/12/21	50	250	375	25
01/19/21	25	350	425	
01/22/21			750	
01/26/21		125	125	
02/01/21		125	175	50
02/05/21		50	100	50
02/08/21		75	100	
02/16/21	25	100	150	25
02/19/21		100	75	
02/23/21		250	75	
02/25/21		125	25	
02/26/21	25	25	75	
03/02/21	25	150	50	
03/05/21		25	25	
03/08/21	25	75	75	
03/11/21		350		
03/12/21		300		
03/17/21		100	50	

lbs = pounds (total weight was estimated using number of collected trash bags; Each trash bag was estimated to weigh 25 lbs)

Table 6. Summary of Trash Collected during the MFAC Collection and Additional Clean-up Events

Date	MFAC Area 1 (lbs*)	MFAC Area 2 (lbs*)	MFAC Area 3 (lbs*)	MFAC Area 4 (lbs*)
03/18/21		100	125	
03/20/21		1,125		
03/23/21	25	100	50	
03/24/21	50	150	150	
03/26/21		75	75	
03/29/21		25	50	
04/02/21		50	75	
04/06/21		125	125	
04/13/21	100	50	200	
04/16/21	25		25	
04/17/21	625			
04/20/21		50	100	25
04/22/21	25	150	150	
04/26/21		75	125	
04/27/21	25	50	50	
04/30/21		50	75	
05/03/21			250	
05/04/21		125	200	
05/06/21		25	75	
05/12/21		100	100	
05/24/21		50	175	
06/01/21	50			
06/02/21		25		25
06/04/21	2,500			
06/10/21			200	25
06/15/21	25	50	175	
06/24/21		25	250	25
06/29/21	75	100	250	25
07/02/21			1,875	
07/07/21	100		150	
07/08/21	25	25	50	25
07/09/21			50	
07/14/21	25	25	75	
07/21/21	25	25	100	
08/04/21	125	50	300	25
08/11/21	100	50	100	25
lbs = pounds (total weight was estimated using number of collected trash bags; Each trash bag was estimated to weigh 25 lbs)				

Table 7. Summary of Trash Collected during the MFAC Collection and Additional Clean-up Events

Date	MFAC Area 1 (lbs*)	MFAC Area 2 (lbs*)	MFAC Area 3 (lbs*)	MFAC Area 4 (lbs*)
08/18/21	150		75	25
09/02/21	25		125	
09/08/21	25	25	100	25
09/10/21	1,750			
09/15/21	50	50	100	25
09/18/21	250	1,750		
Total	6,600	8,400	17,075	700
lbs = pounds (total weight was estimated using number of collected trash bags; Each trash bag was estimated to weigh 25 lbs)				

BMP IMPLEMENTATION

This section describes the BMPs implemented by the responsible parties within the Estuary and on land areas adjacent to the Estuary.

City of Ventura Litter Management Program BMPs

- Installation of required Full Capture Catch Basin Trash Excluders completed in October 2014 to achieve 100% point-source compliance.
 - Installation of certified Stormtek Full Capture Catch Basin Trash Excluder Devices (CPS Devices) to achieve 100% reduction of trash from Baseline WLA, for all of the MS4 areas within the City of Ventura that drain to the Ventura River estuary.
- Street Sweeping
 - Residential Streets swept at least once a month.
 - Commercial Streets swept two to four times per month.
 - Information encouraging residents/businesses to move parked cars for sweeping.
 - Over 15,000 miles of total curb area are swept in City of Ventura's jurisdiction on an annual basis.
- Catch Basin Inlet-Cleaning and Placarding
 - City-maintained catch basin inlets are inspected and cleaned of trash and debris one to three times per year depending on the priority categorization of the catch basin.
 - Information encouraging residents/businesses to report trash filled inlets.
 - "Don't Dump – Drains to Oceans – Only Rain Down the Drain" stencils or placards placed on storm drain inlets.

- Trash Collection in Public Areas
 - The City installed 3 ‘bear proof’ trash containers along the bike path directly adjacent to the river to promote the proper disposal of refuse and prevent the spread of litter by providing locked, secure containers.
 - Trash and recycling containers are installed at all transit shelters and maintained at least once per week to remove litter and to verify that containers are functioning properly.
 - Special event permit language requires additional trash and recycling containers to be set out during street fairs and art walks, along with litter clean-up following events.
 - Collection of trash from 18 public trash receptacles located within the watershed two or three times per week depending on the locations of the receptacles.
- Cigarette Butt Collection Receptacle Installation
 - The City, in collaboration with Surfrider Ventura County Chapter, began installing cigarette butt collection receptacles in high generating cigarette butt areas.
 - Over 90 cigarette butt collection receptacles have been installed.
 - Surfrider Ventura County Chapter reported over 200,000 cigarette butts collected and recycled since December 2016.
- Trash Collection and Bulky Item Pickup
 - Residents and businesses are provided with trash and recycling collection services.
 - Residential customers are allowed to set out two “bulky items” for free collection once per year as part of their regular trash collection service.
- Inspection, Planning and Enforcement Support
 - The City identifies and requires corrective measures for litter or litter sources found during commercial, industrial, and construction site inspections.
 - New development and redevelopment projects are required to install trash enclosures with doors and covers to reduce litter as well as incorporate certified trash capture devices into storm drains for new development projects.
 - The Ventura Police Department conducts periodic “enforcement sweeps” through the portion of the Estuary that is adjacent to the City limits.
 - Litter laws that prohibit the accumulation of trash on private property are enforced by the City Code Enforcement and County Environmental Health Department. Private properties are required to remove all trash from their premises at least once every seven days.
- Outreach
 - Litter prevention outreach is included in classroom presentations and stormwater pollution prevention advertisements/announcements.
 - Several half-hour TV programs produced by the City encourage residents to prevent litter.

- Volunteer Ventura
 - The City, along with our dedicated community partners, host one-time and recurring volunteer events to support a wide variety of programs and services offered to our community. Monthly volunteer events include beach, harbor and inland area cleanups as well as other events that focus on natural resource education, preservation and restoration.
 - Residential and commercial best management practices brochures are dispersed at tabling/outreach events throughout the year that focus on decreasing pollutant loading in local watersheds.
- City-Initiated Clean-Up Events
 - The City will initiate clean-up events, as necessary, in response to observed elevated trash levels.
- City Expanded Polystyrene (EPS) Ordinance Ban
 - Effective July 1, 2021 the City prohibited the use of expanded polystyrene (EPS) containers used by food and beverage providers. Reusable and EPS alternative food and beverage containers are required to be utilized by businesses that provide prepared food or beverages for public consumption. EPS food containers are a prevalent form of litter found in storm drains, creeks, rivers, beaches, parks, and open spaces and this ordinance is aimed at reducing pollution in our waterways.
- City-Sponsored Clean-Up Events
 - The City sponsors various clean-up events throughout the City that may include one or more of the following events during any given year: Earth Day beach clean-up; Coastal Clean-Up Day; and Ventura Charter School clean-ups.
 - The City hosts quarterly Community Cleanup Events for City residents. These events give residents the opportunity to dispose of solid waste for free. Solid waste from events are brought to a centralized location where it is sorted and recycled.
- Work Plan to Eliminate Homeless Encampments (Safe and Clean Program)
 - The Ventura City Council initiated the development of a work plan in September 2012 to eliminate encampments in the Estuary and to implement an on-going enforcement program as a component of the City's Safe and Clean Program. The work plan included organizing stakeholder partners, conducting civil engagement, developing an action plan and corresponding follow-up steps, posting camps, conducting camp removal, and launching post-camp removal strategies. Additional components of the City's Safe and Clean Program that reduce trash accumulation in City watersheds include maintaining clean public spaces, strengthening collaboration with neighboring agencies and bolstering social services to the homeless community with local partners.

County of Ventura and VCWPD Litter Management Program BMPs

- 100% Point-Source Compliance - Installation of required full trash capture devices in County's MS4 catch basins was completed in October 2014. Certified Stormtek Connector Pipe Screen (CPS) devices were installed for all Ventura County Unincorporated areas draining to the County's MS4 within the Ventura River Estuary

subwatershed to comply with the trash TMDL requirements. The County's Certification Report with installation details was provided in the 2013-2014 Annual Report.

- Development and Implementation of Full Trash Capture Operation and Maintenance Plan (O&M Plan) – An O&M Plan including schedule for regular maintenance and reporting of debris/trash removed for all CPS devices installed within the watershed was developed and signed by the responsible Department Heads. Training was provided to maintenance staff in both the classroom and field to ensure proper cleanout and reporting methods and procedures. Maintenance and proper documentation are on-going. Additionally, the County is developing an ArcGIS Survey123 app to track catch basin inspections and cleanings. Survey123 allows field staff to collect data via a mobile device and enables staff to efficiently analyze the catch basin inspection results.
- Regular Maintenance and Reporting for the CPS Devices – Per the Full Trash Capture O&M Plan, County staff inspect and perform necessary maintenance of each catch basin with CPS devices installed a minimum of three times per fiscal year: (1) One inspection before the wet season, (2) one inspection during the wet season and (3) one inspection after the wet season. Debris depth is recorded and all debris is removed. Volume and type of debris is recorded and documented. During the 2020-2021 monitoring year, the County removed 36 cubic feet of trash from full capture devices within the Ventura River Watershed. During storm season, all drainage facilities are inspected more frequently if needed, and cleaned as necessary.
- As a part of the Happy Valley Bioswale project, a Full Capture Device, a baffle box, was installed in Spring of 2016 to capture and separate trash in urban runoff from 40% or 37 acres of urban area within the County unincorporated Meiners Oaks community. During this TMDL reporting period, County completed two cleanout events in February 2021 and May 2021 per the project's O&M Plan.
- Catch Basin Cleaning – Catch basins are inspected at least once per year and cleaned when filled to 25% or more of the catch basin's capacity as required by the Ventura MS4 Permit. The County has been cleaning all inspected catch basins regardless of what percent of catch basin capacity is filled up with vegetation debris and occasional trash. During the wet season, all drainage facilities are inspected and cleaned as necessary.
- Catch Basin Labeling – All County's catch basins are labeled with "No Dumping" stencil or label; catch basin stencils and labels are inspected annually to verify legibility; in an event if stencil or label is illegible, the catch basin is re-stenciled or re-labeled within 15 days of inspection per 2010 Ventura Municipal Stormwater Permit.
- Open Channel Storm Drain Maintenance – All VCWPD owned and maintained channels are cleared, inspected, and cleaned as required at least once per year.
- Trash Management at Public Events – A plan for the proper management of trash and litter is required when obtaining a permit for staging public events. This plan requires adequate facilities for trash collection and disposal.
- Trash Collection in Public Areas – Trash receptacles have been placed within high trash generation areas. These devices are cleaned and maintained regularly to prevent trash overflow.
- Ventura County Ordinance No. 4450 – This County ordinance (Section 6942 "Reduction of Litter/Trash" and Section 6954 "County Storm Drain System Protection") prohibits the

disposal and accumulation of trash in public areas, private driveways, parking areas, streets, alleys, sidewalks, or components of the storm drain or any watercourse.

- Inspections – The County conducts commercial, industrial, and construction facility/site inspections to ensure proper pollution prevention BMPs have been applied and to educate employees on the importance of pollution prevention.
- Anti-Littering Signage – The County has installed anti-dumping and anti-littering signage at key locations including high trash generating areas, as well as at known illegal dumping locations.
- Foster Park Trash Management – The County manages Foster Park, which is situated along the Ventura River upstream of the Estuary, to ensure that trash originating from the park does not enter the river and deposit in the Estuary. Management actions include:
 - Park host and rangers removing trash and enforcing the litter ordinance;
 - Increased enforcement and collection during high trash generating events (e.g., during holidays);
 - Covered trash containers and frequent trash pick-up and removal;
 - Continued evaluation of trash management practices to determine whether current practices are sufficient; and
 - Continued evaluation of existing litter-related signage to determine whether current signage is adequate
- Watershed Friendly Gardens – In Fall 2016, the County sponsored a series of five, free, open to the public, Watershed Friendly Garden Hands-On-Workshops in Meiners Oaks. The workshops focused on how to construct your own Watershed Friendly Garden, designed to help prevent stormwater pollutants, including trash, from entering the storm drains, creeks and rivers. The class culminated with the construction of a Watershed Friendly Garden at Meiners Oaks Elementary School. Project photos were provided in the 2017 Annual Report.
- Countywide Outreach – The County and VCWPD continue to participate in the Countywide Outreach Program. Which retains the services of a professional advertisement group that designs and conducts countywide, bilingual outreach programs advocating proper trash disposal. The most recent addition to the outreach program is trash prevention and protection of storm water quality education using Facebook® and other forms of social media. Examples of outreach materials are provided in Appendix 3.

Targeted Outreach – The County conducts targeted outreach to schools within the area covered by the Trash TMDL to educate students, staff, and faculty on the importance of pollution prevention specifically regarding trash.

Caltrans Litter Management Program BMPs

- Ventura River Estuary – State Highway 33, between Post Mile 0.0 and 5.55, has litter removed approximately twice per month and is mechanically swept approximately once per month, as needed. This highway is also open to 'Adopt-A-Highway' groups and there are groups who currently have adoptions and perform litter removal twice per month.

Additional Trash Management Plans/BMPs in place for Caltrans:

- Caltrans currently uses a variety of methods to educate the public about the importance of managing stormwater. These are intended to change public behavior regarding the release of potential pollutants (e.g., litter, spilled loads, and oil leaks).
 - The outreach program consists of a variety of written materials, monthly and quarterly bulletins, websites, workshops, and Caltrans's Adopt-a-Highway Program, as described below.
- Caltrans installs "No Dumping" and "Litter Fine" signs at selected locations on highways and freeways. Stenciled warnings prohibiting discharges to drain inlets at state-owned park-and-ride lots, rest areas, vista points, and other areas with pedestrian traffic are also used to increase public awareness.
- Litter and debris removal activities include sweeping of shoulders, paved medians, etc., and litter removal along the roadsides.
- Caltrans uses venues such as public schools, community-sponsored clean-up events, Bring Your Child to Work Day, and Earth Day to educate the public about the importance of excluding pollutants from stormwater.
- Caltrans's Adopt-A-Highway program is an opportunity for volunteers to make a tangible contribution to community and roadside aesthetics, and acts as a way to inform the public about the stormwater problems related to illegal dumping of litter and debris. As part of this program, signs are posted along roadways acknowledging groups that have volunteered to plant wildflowers, trees and/or shrubs, collect litter, or remove graffiti from structures.
- In the metropolitan portions of Los Angeles, San Diego, Orange, and Ventura Counties, storm drain inlets are inspected and cleaned annually prior to the rainy season. Those storm drain inlets that contain 12 inches or more of accumulated material will be cleaned.
- Litter and debris are periodically collected from Caltrans's rights-of-way and removed from drainage grates, trash racks, and ditch lines. Maintenance supervisors inspect highways in their assigned sections for the accumulation of litter. Signs may be installed where litter accumulation is a concern. The Caltrans NPDES Permit assigns a baseline wasteload allocation (WLA) of 2,049.86 gallons/year. In essence, if Caltrans BMPs address at least 2,049.86 gallons per year of trash, then they will be in compliance with the 100 percent reduction from the baseline WLA. During the 2019-2020 monitoring year, Caltrans removed 46,947 gallons (232.44 cu yards) of trash through the implemented trash control measures, a volume much greater than the estimated baseline of 11,215.5 gallons of trash baseline WLA.
- "Protect Every Drop" is a statewide Caltrans education and outreach pollution reduction public program that has been conducted since March 2016. The program uses public service announcements through various media such as television and radio broadcasts, billboards, newspapers, public outreach events, banners, posters, tip cards etc., and focuses on behavior changes. The program encourages the public to learn more about sources and pathways of stormwater pollution and teaches motorists what to do to reduce pollutants like trash. Caltrans promotes public action to stop pollution at the source by: (1) properly disposing of trash and other items containing pollutants, (2) covering truckloads that may fall or blow off during transport, and (3) perform routine vehicle and

tire maintenance. For more information, please refer to website www.protecteverydrop.com.

- Within the Estuary, Caltrans has constructed five (5) Gross Solids Removal Devices-Inclined Screen (EA: 2750U4) on Route 33 (PM 1.96/5.15).

In addition to local anti-litter ordinances, Caltrans relies on Sections 23112, 23113, 23114, and 23115 of the Vehicle Code as legal authority to prevent spills, dumping or disposal of materials on the highways and freeways under its jurisdiction, as enforced by the California Highway Patrol.

- Section 23112 states:

No person shall throw or deposit, nor shall the registered owner or the driver, if such owner is not then present in the vehicle, aid or abet in the throwing or depositing upon any highway any bottle, can, garbage, glass, nail, offal, paper, wire, any substance likely to injure or damage traffic using the highway, or any noisome, nauseous, or offensive matter of any kind.

No person shall place, deposit, or dump, or cause to be placed, deposited, or dumped, any rocks, refuse, garbage, or dirt in or upon any highway, including any portion of the right-of-way thereof, without the consent of the state or local agency having jurisdiction over the highway.

- Section 23113 states:

Any person who drops, dumps, deposits, places or throws, or causes or permits to be dropped, dumped, deposited, placed or thrown, upon any highway or street any material described in Section 23112 or in subdivision (d) of Section 23114 shall immediately remove the material or cause the material to be removed.

If the person fails to comply with subdivision (a), the governmental agency responsible for the maintenance of the street or highway on which the material has been deposited may remove the material and collect, by civil action, if necessary, the actual cost of the removal operation in addition to any other damages authorized by law from the person made responsible under subdivision (a).

- Section 23114 states (in pertinent part):

No vehicle shall be driven or moved on any highway unless the vehicle is so constructed, covered, or loaded as to prevent any of its contents or load other than clear water or feathers from live birds from dropping, sifting, leaking, blowing, spilling, or otherwise escaping from the vehicle.

- Section 23115 of the Vehicle Code states (in pertinent part):

No vehicle loaded with garbage, swill, cans, bottles, waste papers, ashes, refuse, trash, or rubbish, or any other noisome, nauseous, or offensive matter, or anything being transported to a dump site for disposal shall be driven or moved upon any highway unless the load is totally covered in a manner which will prevent the load or any part of the load from spilling or falling from the vehicle.

Ventura County Fairgrounds Litter Management BMPs

Ventura County Fair's BMP for Litter Maintenance Non-Fair Time

Description of Action	Daily	Weekly	Monthly	Annually	Before Event	During Event	After Event	As Needed
Litter pickup Main Parking Lot	X					X	X	X
Litter pickup Beach Lot		X			X	X	X	X
Overflow Lot		X				X	X	X
Area Around Event		X			X	X	X	X
Trash Cans emptied	X					X	X	X
Recycle bins emptied		X						X
40 Yard dens emptied		X						X
Straw and Hay Removal								X
Power Sweep			X					X
Storm Drain Maintenance				October				X
Wash Rack Maintenance				June & Aug				X

Ventura County Fair's BMP for Litter Maintenance Fair Time

Description of Action	Daily	Weekly	Monthly	Annually	Before Event	During Event	After Event	As Needed
Litter pickup Main Parking Lot	X				X	X	X	X
Litter pickup Beach Lot	X				X	X	X	X
Overflow Lot	X				X	X	X	X
Area Around Event (Harbor to Calif., Promenade and Beach, Garden St. to Main St. and surrounding area).	X				X	X	X	X
Trash Cans emptied	X				X	X	X	X
Recycle bins emptied	X				X	X	X	X
40 Yard dens emptied	X				X	X	X	X
Straw and Hay Removal	X				X	X	X	X
Power Sweep	X				X	X	X	X
Storm Drain Maintenance				Storm Drain Diverted to Sewer during Fair July- August				
Wash Rack Maintenance				June & Aug.				

California Department of Parks and Recreation (State Parks) BMPs

- Designated Public Use Areas

- Increased trail maintenance and fall/winter vegetation reduction improves access for patrol and trash removal. Small, motorized vehicles are able to access the trail and haul out larger volumes of trash. Increase in trail use by park personnel and the public discourages illegal camping near the trail.
- Trash containers are installed at all visitor activity areas within developed park areas. Containers are kept in good working order and are emptied as needed by Park personnel.
- State Parks keeps one 40-yard roll-off container onsite to collect and dispose of trash. Approximately 25.16 tons of trash was removed between October 2020 and September 2021.
- Park personnel and camp hosts routinely collect loose trash within developed park areas as a part of their daily duties. In addition, park personnel conduct weekly sweeps to identify, and remove trash accumulation in vegetated areas along the established trail system east of the campground.

- Undeveloped Areas

- Litter and debris are periodically collected from park backcountry lands, water courses, and roadways. Maintenance supervisors inspect park roads in their assigned sections for the accumulation of litter.
- Signs may be installed where litter concentration is repetitive and at known illegal dumping locations.
- Catch basins are inspected and cleaned at least once per year. During storm season, drainage facilities are inspected before significant storm events.
- In May 2019, State Parks received a grant from Cal Fire that will provide extra crew labor over a period of 2 years for removal of exotic vegetation such as, Arundo, Tree tobacco, Castor bean, and Myoporum. Work will increase accessibility to illegal campsites for work crews thus making trash cleanup efforts more efficient.
- In May of 2020, State Parks hired a team of Forestry Aides to lead trash and exotic vegetation removal efforts from within the California Department of Parks and Recreation (CDPR) parcel. The team of Forestry Aides worked a total of 80 days between October 2020 to September 2021 conducting exotic vegetation and trash removal from within the CDPR parcel.
- Between October 2020 and September 2021, State Parks personnel, and CalFire crews conducted large exotic vegetation removal efforts within the CDPR parcel. A total of 25.55 tons of Arundo vegetation, and a total of 15.60 tons of mixed exotic vegetation were removed from the CDPR parcel. There was a total of 13 CalFire Crew days working within the CDPR parcel between October 2020 and September 2021.
- Along with exotic vegetation removal efforts, State Parks personnel have removed a total 25.16 tons of trash between October 2020 and September 2021, from within the CDPR parcel.

- State parks has worked closely with the City of Ventura to remove exotic vegetation from within the river mouth peninsula which occurs on City property. This exotic vegetation removal effort was established to create easy access for trash removal efforts to be conducted. State Parks personnel and CalFire had 3 crew days on 9/15/21, 9/16/21, and 9/22/21 to remove the desired exotic vegetation from within the city parcel of land. A total of 3.39 tons of Arundo were removed, and a total of 2.05 tons of exotic green waste were removed from this area.
- On 01/07/21 and on 06/04/21, State Parks personnel worked with the Ventura Police Department to conduct trash cleanup days on the City of Ventura's land parcel, west of the Ventura River. A total of 4.13 tons of trash was removed on these two trash cleanup days.
- The number of illegal campsites found within CDPR parcel have been significantly reduced, with weekly enforcement patrols being conducted. There are no long-standing illegal campsites found within our park property, and any new illegal campsite that is found is immediately notified to move. Any remaining trash that is left by the illegal campsite is immediately cleaned up and disposed of.
- An ArcGIS map was created to accompany the trash and exotic vegetation removal project. This map is used to flag illegal campsites, mark existing trash piles, indicate where exotic vegetation is found, and indicate where exotic vegetation has since been removed.
- Volunteer Events and Public Outreach
 - State Parks sponsors various Earth Day and Coastal Cleanup events throughout the district and participates in special cleanup events to address observed elevated trash levels.
 - Routine and random river bottom patrols are conducted by law enforcement at a minimum of once per week to discourage establishment of illegal camp sites.
 - Camper outreach and education is implemented year-round in an effort to limit trash dispersal by wind and wildlife.
- Construction Projects and Special Events
 - All special events permits issued on State Park property require a plan for the proper management of trash. This plan requires adequate facilities and patrols for trash collection and disposal.
 - All contractors that work on State property are required to implement BMPs to keep job site clean and litter free.

VCAILG Litter Management Program BMPs

- Conditional Waiver – The *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region* (“Conditional Waiver,” Order No. R4-2021-0045) requires VCAILG to provide educational classes focused on improving water quality, including identifying trash as an impairment of water quality.

- VCAILG members are required to maintain trash control BMPs for agricultural areas. In its role, VCAILG will continue to assist members with implementation of additional BMPs for trash control, as necessary, following the adaptive process identified in the group's Water Quality Management Plan (WQMP).
- Outreach – During VCAILG outreach activities, the Trash TMDL is highlighted and a connection made for the need to control trash in order to meet the requirements of the Trash TMDL. In 2021, nine education and outreach workshops were conducted. All of these outreach events focused on management practices important to protect water quality.
- Responsibility Area Compliance Summaries – Concise summaries of compliance requirements are provided to growers in each Responsibility Area (RA). These compliance summaries include a listing of water quality impairments and TMDLs specific to the RA and provide a prioritized list of suggested BMPs that growers can implement.
- Ventura River Trash TMDL Fee – VCAILG members are assessed a fee, based on acreage farmed, to further reinforce through a fiscal measure that trash in the watershed needs addressing.
- Plastics Recycling – Local farmers will recycle agricultural plastic used to cover strawberry beds and used in some vegetable fields during the growing season. Collection and recycling of plastic is an effective method for reducing plastic trash from entering the Ventura River and the Estuary.
- Taylor Ranch (Wood-Claeysens Foundation), a VCAILG member with property beginning immediately upstream of the Ventura River Main Street bridge, is an active participant in the Trash TMDL program by regularly cleaning and patrolling their property. Through the efforts of the Wood-Claeysens Foundation, it is estimated that approximately 55 tons of trash were removed from the Taylor Ranch Ventura River bottom from transient/homeless camps through March 2012. Since that time, 5 to 10 tons of trash has been collected annually. Taylor Ranch continues to be successful in maintaining the cleanliness of the property and protecting water quality by employing the following practices:
 - Regular monitoring and patrolling of the area adjacent to the river was increased to an average of every two weeks in 2016 to intercept homeless camps more quickly and prevent the cycle of trash accumulation.
 - As camps are discovered, clean-up is initiated as soon as possible in order to convey the message that the area is being actively monitored. Law enforcement assistance is requested, as needed.
 - Both the Ventura Police Department and the Ventura County Sheriff's Department have responded in the past with Rangers from the California State Parks systems also helping with this effort.

MFAC/BMP Program Evaluation and Revision Recommendations

The TMRP states the responsible parties will: “Evaluate effectiveness of BMPs and recommended changes to TMRP Addendum No. 1 and MFAC/BMP Program, as necessary.” Under the previous MFAC/BMP Program and TMRP, the following steps were used to assess MFAC/ BMP Program effectiveness:

1. A review of BMP implementation, including identification of BMPs, location of BMPs, and time frame (*e.g.*, when an activity was implemented or installed); and
2. A comparison of monitoring results between monitoring locations and between events before and after BMP implementation.
3. Comprehensive review and assessment of MFAC/BMP Program

Given the broad nature of most of the BMPs implemented (*e.g.*, education programs, ordinances, street sweeping), the highly variable amounts of trash collected, and the relatively short time frame that full capture devices were installed, the responsible parties could not identify trends in the monitoring data that could be used to determine effectiveness of individual BMPs implemented. Based on the results of the previous evaluation and the structure of the new MFAC/BMP Program, the responsible parties utilized an approach based on the visual assessments.

The responsible parties utilized parcel rankings by Category as a means to assess effectiveness of the MFAC/BMP Program. That is, if there was an overall trend of parcels starting out and remaining in Category 1, or parcels moving from Category 2 or Category 3 to Category 1, then no modifications to the MFAC/BMP Program are needed. Conversely, if there was an overall trend of parcels moving from Category 1 to Category 2 or Category 3 over the course of the implementation year, then modifications to the MFAC/BMP Program would be considered.

As a result, the responsible parties are not conducting an assessment of the program or proposing any revisions to the MFAC/BMP Program during this annual report. The focus on removing remaining legacy trash in the Estuary during the monitoring year does not allow for development of an assessment of the baseline MFAC/BMP Program this year. Once the legacy trash is removed and the MFAC/BMP Program has been implemented without the legacy trash, the responsible parties will have a clearer understanding of the effectiveness of the baseline MFAC/BMP Program. However, through the initial implementation of the revised MFAC/BMP Program, it is clear that the revised MFAC/BMP Program is a better use of resources and much more effective at removing trash from the Estuary compared to the previous MFAC/BMP Program. If warranted, the responsible parties will provide any revisions that were made or will be made to the MFAC/BMP Program, in the next Annual Report, which will be submitted in December 2022.

Appendix 1.

VLT Assessment and Collection Worksheets

available at

https://countyofventuracamy.sharepoint.com/:f:/g/personal/ewelina_mutkowska_ventura_org/EgtVC3xvRe5JrVIY_Tg9nXMBXtXJHTcjmpk1iMTFMT1GNA?e=NbU3DX

Appendix 2.

VLT Clean-Up Photos

available at

https://countyofventuracamy.sharepoint.com/:f:/g/personal/ewelina_mutkowska_ventura_org/EgtVC3xvRe5JrVIY_Tg9nXMBXtXJHTcjmpk1iMTFMT1GNA?e=NbU3DX

Cleanup Photos



October 12th, 2020: Bicycle theft in Ventura is a big issue, and many of the stolen bikes end up in the Ventura River. Ventura Land Trust contacts VPD if a bike is in working order and has a registration sticker on it. For other bicycles, Ventura Land Trust will donate the frames or working parts to the Ventura Bike Hub.



November 3rd, 2020: Bridges continue to be built across the Ventura River for access from the east side of the river to the west. Bridges are problematic because they restrict water flow and can alter the bathymetry of the river channel. Ventura land Trust regularly removes bridges, however they come back quickly.



December 7th, 2020: Before



December 7th, 2020: After. This trash area is hard to reach and had to be loaded out through Ventura Beach RV Resort. For an unknown reason, many people living in the Ventura River dump their trash here.



January 12th, 2021: The effects of mental illness can be seen in wide swaths throughout the Ventura River. Here, someone had collected as many cigarette butts as they could and appeared to be building some sort of model structure out of them, until the wind knocked the whole thing over.



January 26th, 2021: More often than not, trash finds it's way into the Ventura river. Here, a VLT staff member pulls a bicycle directly from the river channels.



February 23rd, 2021: Fire continues to plaque the lower Ventura River. An abundance of non-native, highly combustible species mixed with human interaction often results in accidental ignitions. This area of the Ventura River Estuary, in MFAC area #1, was covered in Arundo prior to the fire. Arundo is highly flammable. The flammability of invasive species just makes another case for the removal of these problematic nonnative species.



March 20th, 2021: Before.



March 20th, 2021: After.



March 20th, 2021: Never underestimate the power of a small group of committed people to clean up the river! This group of Navy Sailors from Naval Station Point Magu helped haul over 1,000 lbs of trash from the hard to reach “island” area in MFAC area #2. Volunteers are critical to the success of the lower Ventura River.



April 17th, 2021: Before.



April 17th, 2021: After. This area of the Ventura River Estuary is difficult to reach, and therefore, folks like camping there. Luckily, VLT can keep a close eye on this area and clean up as necessary.



May 4th, 2021: Ventura Land Trust continues to use the notice system for people living in the Ventura river. Once a notice is posted, folks have 72 hours to move their belongings. After that window, VLT comes in and cleans up whatever remains in the area.



June 15th, 2021: One individual continues to build a rock and mud hut underneath the 101 bridge within the Ventura River channel. CALTRANS has been made aware of this situation. The difficulty in removing this structure lies around access, as it is very difficult to get to. VLT expects that a crane may be needed to remove this structure. This will not be the first time that CALTRANS has had to remove a structure built by this individual.



July 2nd, 2021: When just one person is permitted to camp in an area, the situation often grows significantly in a short period of time. This camp, for example, went from one person to six people in a two-day period. With this in mind, it is important to act quickly when posting notices for people to move along.



August 4th, 2020: Frequently, rather than collecting their trash and hauling it out, people will burn their trash in the Ventura River. This makes collection more difficult.



September 10th, 2021: Ventura Land Trust continues to invest significant time into community outreach around the Ventura River. By engaging with community members and increasing awareness of the Ventura River, VLT hopes to initiate change centered around homelessness. Additionally, VLT has invested in enhanced collaboration with stakeholders like VPD and State Parks to increase consistency across management strategies. By working together, we have a better chance of reducing the amount of trash that ends up in the Ventura River.



The Ventura Land Trust Land Truck (2001 Toyota Tacoma with 304,000 miles) has hauled thousands of pounds of trash out of the Ventura River. Unfortunately, in August of 2021, the truck was totaled in a car accident. VLT is still trying to raise funds to purchase a replacement truck. If you, or anyone you know, might be interested in supporting the purchase of another truck, please contact Ventura Land Trust.

Appendix 3.

Countywide Outreach Materials

available at

https://countyofventuracamy.sharepoint.com/:f:/g/personal/ewelina_mutkowska_ventura_org/EgtVC3xvRe5JrVIY_Tg9nXMBXtXJHTcjmpk1iMTFMT1GNA?e=NbU3DX

Outreach by Ventura Land Trust

Throughout the 2020-2021 invoicing period, Ventura Land Trust engaged in various forms of public outreach around the Ventura River Estuary Trash TMDL.

Ventura Land Trust regularly engages with users of the Ventura – Ojai bike path while performing cleanup work under the MOA. Most frequently, bike path users ask VLT staff and volunteers who they work for. Most people think VLT staff and volunteers are City of Ventura employees. VLT staff members most frequently educate bike path users about the TMDL contract, and how this is a consolidation of efforts from multiple agencies to minimize the impacts of trash on the Ventura River Watershed. Most bike path users find this information enlightening, and often these types of interactions turn into volunteer solicitation opportunities, where the bike path user will offer to help the next time VLT staff is working in the river. This type of organic outreach is meaningful and helps educate the community on the importance of the work that the RP's and Ventura Land Trust are doing in the Ventura River.

Throughout the 2020-2021 invoicing period, Ventura Land Trust has worked to build relationships with both California State Parks, and Ventura Police Department. In terms of State Parks, Ventura Land Trust has increased the efficiency of communication with the whole state parks team, frequently updating them when a camp pops up or a trash situation needs to be dealt with. On a planning basis, VLT and State Parks have executed several large cleanups in partnership throughout the invoicing period. VLT Land Steward Katie Daniels has worked extensively to improve communications with State Parks and the progress is inspiring.


Additionally, Ventura Land Trust has been working extensively with VPD throughout the invoicing period. Ahead of cleanups, VPD will assist VLT in passing notices out to camps, and encouraging individuals to vacate the area ahead of cleanups. The security and legitimacy offered by VPD goes a long way in encouraging campers to cooperate with VLT requests. Furthermore, VPD has volunteered their 4x4 machine to help VLT haul trash out of hard to reach campsites. This frees up VLT staff to more closely interact and educate with volunteers, many of whom are eager to learn about the TMDL contract and how everything works.

With the waning and waxing of the Covid-19 pandemic, Ventura Land trust was able to execute some business partner volunteer days in the Ventura River. A corporate volunteer day with Amazon resulted in 60 volunteers, and a volunteer day with Glass House Brands added another 20 more volunteers. While coordinating and executing these volunteer events can be time consuming, the opportunity to interact and educate these volunteers about the work being done by the TMDL group is incredibly valuable. As Covid continues to wane, VLT hopes to secure more business volunteer events.

Lastly, Ventura Land Trust regularly uses social media for outreach to the community regarding upcoming volunteer opportunities. Given the 2020 COVID-19 pandemic, volunteer solicitation has slowed down due to the limitations on group size in Ventura County. In an effort to obey these rules, Ventura Land trust has not hosted any large scale volunteer cleanups in 2020, and

instead has worked in smaller groups to carry out the river work. These small groups of 4 to 6 volunteers are able to move through the river efficiently, surveying and collecting trash.

Examples of Digital Outreach by VLT:

 VolunteerMatch

FIND OPPORTUNITIESMY ACCOUNTBUSINESS SOLUTIONSRECRUIT VOLUNTEERSSIGN OUT





Virtual OpportunitiesHelp With COVID-19 >

Find Volunteer OpportunitiesOrganizations

0 Favorites

Ventura River Cleanup

VENTURA LAND TRUST




DONATE TO THIS ORGANIZATION

I Want to Help

A group opportunity. Invite your friends.

27 people are interested



Starting in 2012, VLT with assistance from many of our partners, began cleaning up the Willoughby property to maximize environmental and community benefits. Since that time, we have removed over 100 tons of waste from the site, as well as huge amounts of invasive species. The results of this restoration have been astounding. Bobcats, coyotes, and deer have been spotted using the newfound habitat; a recent plant survey found over 120 species living on the preserve; the amount of trash reaching the river has been reduced by approximately 99%.

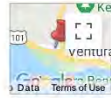
Efforts to maintain the property are ongoing. We need additional support to continue our patrols and cleanups in the river bottom. Help us keep the Ventura River Estuary clean and safe!

WHEN

We'll work with your schedule.

WHERE

376 west main street
ventura, CA 93001



DATE POSTED

September 16, 2021

SKILLS

Habitat Restoration
Environmental Education
Facilities Management
Environmental Science
Counseling / Mental Health
People Skills

GOOD FOR

Group

REQUIREMENTS

Must be at least 18

12/9/21, 12:19 PM

Ventura Land Trust Mail - Volunteers Needed: VLT + VPD + City Safe & Clean Estuary Cleanup Friday, June 4th



Katie Daniels <katie@venturahillsides.org>

Volunteers Needed: VLT + VPD + City Safe & Clean Estuary Cleanup Friday, June 4th

Katie Daniels <katie@venturahillsides.org>
To: Katie Daniels <katie@venturalandtrust.org>

Mon, May 24, 2021 at 11:19 AM

Hello Friends of Ventura Land Trust,

Join us in our mission to keep the Ventura River Estuary safe and clean!

On **Friday, June 4th**, (9AM-12PM) Ventura Land Trust will be partnering with Ventura Police Patrol Task Force and the city's Safe & Clean Team to address a problem area in the Ventura River Estuary. We are hoping to gather up to 20 volunteers to assist with this cleanup effort.

This work may not be suitable for everyone. We are looking for volunteers age 18+ who are comfortable working in close proximity to homeless individuals and encampments. We do not judge; we seek to educate and compassionately manage a very complex problem in our watershed. Ahead of the event, VLT, VPD, and our westside social worker will be notifying campers of the cleanup, and offering services to help folks transition out of river residency.

We are proud of this collaboration, and we hope you will join us in our effort to keep our community and watershed safe and clean.

HELPFUL LINKS:

What does cleanup work in the river look like? Check out this [short video](#) on YouTube.

[RSVP HERE](#)

[City of Ventura Safe & Clean Program](#)

[City of Ventura Police Department](#)

Participants will receive additional details as we get closer to the event. In the meantime, feel free to contact me if you have any questions.

Thank you for your time and consideration.

Best,
Katie Daniels
Land Steward
Volunteer Coordinator
(609) 682-0463





Volunteer Gigs 29w
From Create Mode >



JOIN US!

Saturday, June 05, 2021 at 09:00 AM · 1 rsvp
Seaside Wilderness Park in Ventura , CA

Ventura River Estuary Cleanup



River restoration and cleanup events are a part of VLT's ongoing efforts to bring the Ventura River back to its natural state and make it more welcoming to human and wildlife visitors ali ([show all](#))

RSVP

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to protect the sensitive riparian habitat... more

May 29



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May 28





VENTURA LAND TRUST

CSUCI Volunteer Fair

Presented by: Katie Daniels
VLT Land Steward & Volunteer Coordinator (and CSUCI alumni)
katie@venturalandtrust.org

Visit our website www.venturalandtrust.org

City of Ventura Outreach

The City sponsored and hosted 3 free Community Cleanup & Recycling Events throughout the year including free dropoff of unwanted items. The City sponsored and hosted 2 free compost workshops and a very successful March Mulch Madness giveaway event. In addition to our Green Business Certification Program, our Environmental Excellence Award and Green School Award are outreach tools to reward businesses and schools for their best environmental practices. Videos highlighting the winners are posted on our City website as models for other businesses and schools. Outreach materials were also provided at monthly Household Hazardous Waste (HHW) collection events. Technical assistance was provided to businesses and schools through waste assessments and specific requests. Environmental Sustainability division in Public Works reviews and updates a wide variety of educational materials circulated to residents, multifamily dwellings, businesses, and schools. The City produces advertising and other outreach for various media outlets including VC Star website and newspaper, the local movie theater, billboard advertisements, Cumulus Media, My Ventura magazine, our e-newsletter, our waste haulers newsletter, digital advertising avenues, and social media. These messages range from recycling, HHW, DIY oil change, oil recycling, stormwater pollution prevention, and litter management. Side panels on City Big Belly machines offers highly visible locations for environmental messaging. We also offer residents texting for messages related to stormwater pollution prevention, HHW events, oil recycling, and other community events. We also distribute reusable shopping bags, straws, utensils, and water bottles to encourage residents to reduce single-use plastic use. On average, the City local community education and outreach program is able to make over 2.5 million contacts and impressions in a given year related to stormwater pollution prevent.



CALIFORNIA COASTAL CLEANUP MONTH

We're staying close to home these days, but we're all connected, from the mountains to the ocean. Every Saturday in September, grab your family or housemates to clean up your street, park, local shoreline or anywhere that makes up your happy place.

For more information & guidance visit:
WWW.VCCOASTCLEANUP.ORG/GET-INVOLVED/

Download and use the Clean Swell data collection app to record and report your cleanup.

 Ventura County Annual Coastal Cleanup Day
 @vccoastcleanupday

LAST YEAR OVER 74,000 CALIFORNIANS CLEARED MORE THAN 80,000 POUNDS OF TRASH AND RECYCLABLES FROM OUR STATE'S BEACHES AND WATERWAYS - ALL IN A MATTER OF HOURS.

CALIFORNIA COASTAL CLEANUP 2020



PHOTO BY TODD TETZEL

We're staying close to home these days, but we're all connected from the mountains to the ocean. This year, California Coastal Cleanup Day will become Coastal Cleanup Month. Every Saturday in September, grab your family and housemates to clean up your street, park, local shoreline, or anywhere else that makes up your happy place.

Remember, beach cleanups start at our own front doors. Trash can travel through storm drains, creeks, and rivers to become beach and ocean pollution.

Download and use the Clean Swell data collection app to record and report your cleanup.

For more information & guidance visit:
WWW.VCCOASTCLEANUP.ORG/GET-INVOLVED/

Before heading out check Ventura County Health and Safety Guidelines:
WWW.VENTURACOUNTYRECOVERS.ORG

 Ventura County Annual Coastal Cleanup Day
 @vccoastcleanupday

Thank you to our sponsors!







- ◆ Harrison Industries
- ◆ Ventura Breeze
- ◆ Public Works Water & Sanitation






2020 Coastal Cleanup Day Posters



kathj13

Street clean-up this morning with @vtajogclub
@vcoastcleanupday



2020 Coastal Cleanup Day Photos

EYE ON THE ENVIRONMENT | COASTAL CLEAN-UP DAY CUSTOMIZED FOR COVID

Sep 16, 2020 | David Goldstein, Eye on the Environment, News, Ojai, Ventura, Ventura County | 0 ● | ★★★★★



Twitter 0 Facebook 0

by David Goldstein, VCPWA, IWMD

For decades, the third Saturday in September has been designated “Coastal Cleanup Day.” Crowds of volunteers worked in teams at designated collection sites, gathering litter into bins at centralized spots. This year, the California Coastal Commission, which leads cleanup efforts in California, decentralized the event to allow social distancing.

The commission urges volunteers to mobilize from 9 a.m. to noon each Saturday this month, focusing on neighborhood streets, local parks, local streams and rivers as well as the coast. Since litter washes downhill into storm drains and creeks, and from waterways out to the ocean, California Coastal Cleanup Day included inland cleanup sites years ago.

This year, volunteers can participate in a solo cleanup or team up with their family or housemates. As always, one of the goals of the annual California Coastal Cleanup is to collect data on the items collected. Data collection will be accomplished this year through the free Clean Swell data collection app, available in English and Spanish. For those unable to download the app, paper data collection cards are available, in English or Spanish, through www.vccoastcleanup.org, which also has other guidelines and resources. Also, share your cleanup experiences on social media, using the hashtags #coastalcleanupday and #protectyourhappyplace.

The inauguration of this annual event was in 1986, when Linda Maraniss and Kathy O'Hara, working for the nonprofit Ocean Conservancy, organized 2,800 volunteers for an event in Texas. The Ocean Conservancy, together with nonprofit organizations and government entities in over 112 countries, grew the event into the annual International Coastal Cleanup Day, regularly organizing over half a million volunteers per year, according to the conservancy's count at oceanconservancy.org.



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VCReporter 11-4-2021



Last year, on Sept. 19, over 3,795 volunteers in Ventura County collected 16,210 pounds of trash and 1,117 pounds of recyclables from 50 miles of local beaches and inland waterways as part of International Coastal Cleanup Day.

Ventura County Coastal Cleanup coordinator Lara Meeker urges people who hike this month to bring a glove and a bag and collect litter for the cleanup. Some of Ventura County's most prized nature areas, such as the Punch Bowls trail near Santa Paula and Wildwood Park in Thousand Oaks, have been so affected by litter in recent months that they have been shut down. Volunteers are barely holding back a similar fate for other sites. For example, crowds littered areas around Ojai's river trails so badly, the Ojai Valley Land Conservancy had to hire workers to act as docents in sensitive areas. Also, volunteers based in Fillmore are organizing through Facebook so they can mobilize to combat litter in the Sespe Wilderness.

Cortney Rasura, who lives in Ojai and hikes Ventura County trails at least once per week, stresses the importance of hikers joining the litter cleanup effort, especially this month. "If you hike, you may not realize it, but you could be part of the problem," she explained. "For example, a few weeks ago, I ate a granola bar while hiking, and I put the wrapper in the outer pocket of my backpack. Later, when I opened the pocket to get a Chapstick, the wrapper was gone. It must have fallen out. So I pick up litter that isn't mine, and if I accidentally litter, I hope someone will help correct my mistake."

Site captains like Kate Furlong, of the Ventura Land Trust, and others associated with the Surfrider Foundation, will stay focused on some of the traditional sites where past organized cleanup events have recovered the most trash. "After the hot Labor Day weekend, we had lots of trash left on our beaches," noted Meeker, the Ventura County coordinator. "And sites like the Ventura River mouth are still affected by urban runoff and litter upstream, so we definitely still need volunteers down at the beaches. Until it's safe to gather in large groups, we are going spread out, and we will clean up starting at our own front doors to focus on preventing litter in our own neighborhoods from washing down to the coast in the first place."

For more information:
www.coastal.ca.gov/publiced/ccd/ccd.html
www.vccoastcleanup.org/
www.oceanconservancy.org

Eye on the Environment is written by David Goldstein, an environmental resource analyst for the Ventura County Public Works Agency. He can be reached at 805-658-4312 or david.goldstein@ventura.org

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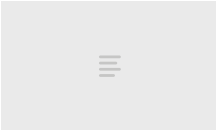
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California Coastal Cleanup Day

[venturabreeze.com/2020/09/09/california-coastal-cleanup-day-2/](https://www.venturabreeze.com/2020/09/09/california-coastal-cleanup-day-2/)



Each year, California Coastal Cleanup Day welcomes more than 70,000 volunteers who pick up hundreds of thousands of pounds of trash and recyclables from beaches, lakes, and waterways. The 3rd Saturday of September has been California Coastal Cleanup Day since 1985! The event brings awareness to the marine litter problem and provides a way for community members to become directly involved in caring for their local environment and natural resources.

This marks the 35th annual event, however, due to health and safety orders, the state event organizers, the California Coastal Commission, and local organizers, the Ventura County Coalition for Coastal and Inland Waterways, have made some adjustments. Instead of organizing a volunteer event, these groups are encouraging the Ventura County community to get out and clean up their local "happy places" every Saturday in September in celebration of the annual event.

This means beach cleanups start at our own front doors. Trash can travel through storm drains, creeks, and rivers to become beach pollution. Consider joining every Saturday in September to help clean the beach by cleaning up in our own neighborhoods and local natural areas. Follow the Ventura County Coalition for Coastal and Inland Waterways on social media for safety tips and ways to win prizes for photo contest submissions and more!

Learn more at www.vccoastcleanup.org. Or follow on Facebook @Ventura County Annual Coastal Cleanup Day and Instagram @VCCoastCleanupDay.

Ready To Go Solar? Solarize is Back.

Many of us are spending more time at home lately, so it's no surprise that home improvement projects are booming. If you've considered adding home solar or battery systems in the past, now may be the perfect time to take the leap.

CEC's Solarize Ventura County is a program that makes it easier and more affordable for local homeowners to go solar. We use a group purchasing model and pass the savings on so that homeowners can install solar electricity and battery storage systems at a discounted price through a streamlined and hassle-free process. Previous Solarize Ventura County programs have already helped 225 homeowners go solar.

Please join CEC and Ventura County Regional Energy Alliance in celebrating Clean Air Day at our Solarize Webinar on October 7th to learn more.

County of Ventura Outreach



Public Works Week 2021 - Ventura

vcpublicworks.org/npww/

HOME ABOUT THE AGENCY OUR DEPARTMENTS ONLINE SERVICES CONTACT **REPORT A CONCERN**

WATERSHED PROTECTION

The Piru Stormwater Capture for Groundwater Recharge Project

Did you know our Watershed Protection District connected the County storm drain system and United Water Conservation District water infiltration basin to capture stormwater for groundwater recharge?

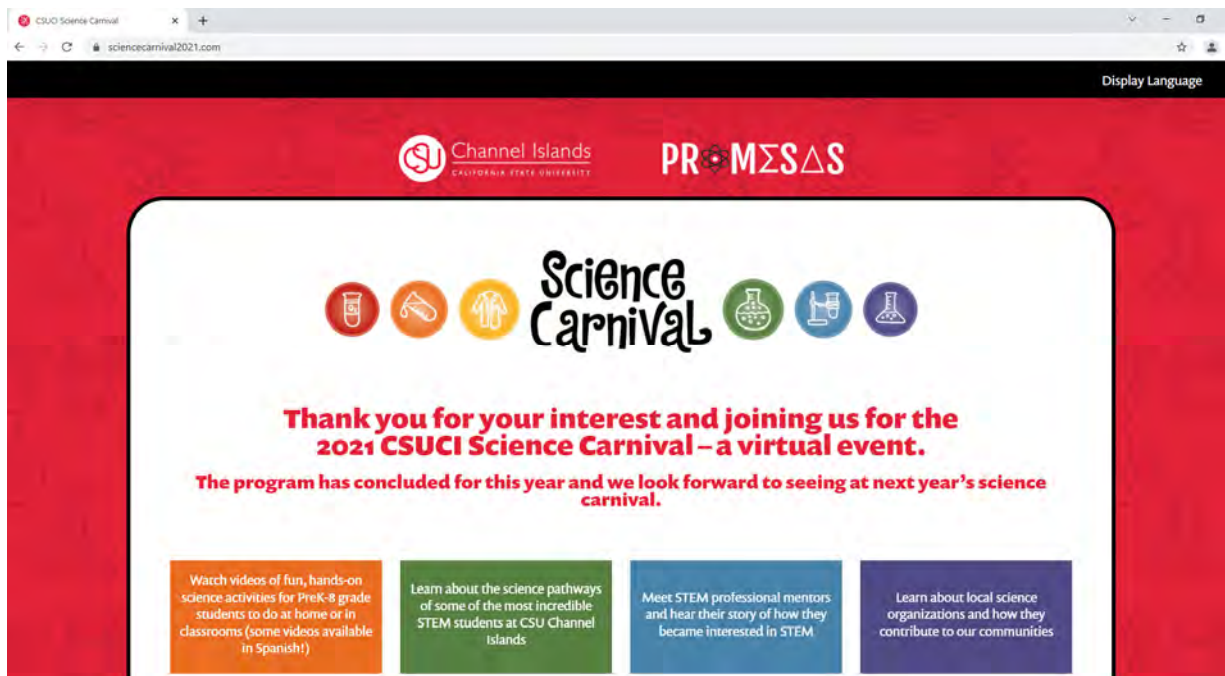
In short, this means that before water enters the infiltration basin, it is filtered and cleaned in a hydrodynamic separator. Everything that stormwater picks up in Piru streets ends up in the separator and is removed for a proper disposal to keep Piru Creek clean! We've discovered a variety of things so far, including hundreds of plastic eggs after Easter egg hunts and disposable plastic bottles, which is why it's important to throw away your trash and recycle!

Resources: [Pollutants Worksheet](#) | [Watershed Coloring Book](#) | [Groundwater Foundation Resources](#) | [Groundwater at Geography4Kids](#)

During 2021 Annual Public Works Week, the County Stormwater Program and 1st grade “intern” prepared bilingual, in English and Spanish, presentation about pervious concrete. The movie is available at <https://www.vcpublishworks.org/npww/>



The County Stormwater Program with help from the 1st grade “intern” prepared bilingual, in English and Spanish, presentation about pervious concrete and stormwater pollution prevention. The movie was featured during the 2021 Science Carnival organized by University of Southern California – Channel Island available at <https://sciencecarnival2021.com/>



Virtual CSU Channel Islands Science Carnival in April 2021

Social Media Posts

Community for a Clean Watershed ...
November 28, 2019 at 11:00 AM · 🌐

#KeepVenturaBeautiful during the rain by properly disposing your trash. Put it in the bin. 😊👤



9 1 Comment 4 Shares

Like Comment Share

Community for a Clean Watershed ...
July 13 at 3:00 PM · 🌐

Did you know cigarette butts make up over half of littered objects? Cigarette butts and other kinds of litter (like bottles and cans) take years to decompose, polluting our local waters. 🌊 Help #KeepVenturaBeautiful by making sure your litter ends up in the proper bins




3 3 Shares

Like Comment Share

Community for a Clean Watershed ...
December 9, 2019 at 2:00 PM · 🌐

Trash that is left on the ground gets carried into storm drains by rain, and those storm drains flow off into the waterways and water bodies you love. 💧 #KeepVenturaBeautiful




12 1 Share

Like Comment Share

Community for a Clean Watershed ...
March 31 at 3:01 PM · 🌐

No one likes litter, especially our watersheds! Keep our watersheds clean and happy by picking up any litter you see while you're practicing #socialdistancing and enjoying our watersheds. 🌱 #MyCleanWatershed



7 1 Comment

Like Comment Share



Ventura County Star
50 mins · 🌐

To catch people unlawfully dumping garbage, the Ventura County Public Works Agency installed motion-activated, hidden cameras along rural roads.



VCSTAR.COM
Eco-tip: Stopping illegal dumping through enforcement, prevention

👍❤️😂 84
14 Comments
9 Shares

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💬 Comment
➦ Share



Community for a Clean Watershed
June 8 at 10:00 AM · 🌐

Litter is preventable. Keep litter off our streets and parks and out of our rivers, creeks, and ocean. Do your part by putting trash and recyclables in the proper bin. 🗑️ Remember, Ventura County watersheds are yours to enjoy, yours to protect! Visit CleanWatershed.org. #MyCleanWatershed



👍 4
1 Share

👍 Like
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Officials crack down on illegal dumping

| June 10, 2021

By David Goldstein
Special to The Acorn



DROP OFF—Cameras installed by the Ventura County Public Works Agency are keeping track of illegal dumping on roadways. Violators will be cited.

The Ventura County Public Works Agency has taken steps to bring under control the persistent scofflaws who dump garbage along area roadways.

The agency recently installed a series of motion-activated hidden cameras in strategic locations along rural roads. The cameras upload images of people dumping old mattresses, garbage bags, used furniture and other trash illegally. The public works staff uses the pictures to identify vehicle makes and license plate numbers.

The information enables the Public Works Agency to file a police report, which is investigated by the Ventura County Sheriff's Office. In most cases, citations are issued and the responsible parties are required to appear in court.

Steve Mattern, an environmental specialist with the Ventura

County district attorney's office, has assisted prosecutors in handling complaints against six people accused of illegal dumping since the cameras were installed. The complaints charged the defendants with violating the county's anti-dumping ordinance.



Courtesy photos

Although the trash dumping on public roads is usually a misdemeanor, consequences from the activity can be serious. The court holds defendants responsible for restitution to Ventura County.

In addition to paying the costs of cleanup, the defendants are subject to court costs, fines and community service for the Public Works Agency.

But despite the enforcement, illegal dumping continues.

In 2020, public works crews and their contractors collected 278 mattresses that had been illegally dumped along county roads, said Anitha Balan, Ventura County's deputy director of operations and maintenance.

Officials note that some of the dumping could be the result of a misunderstanding about where unwanted items can be left legally and where they cannot. For example, county residents can drop off mattresses for free at four mattress recycling sites.

Information is available at byebyemattress.com.

Sometimes illegal dumping is done by individuals trying to make a quick buck by using their truck to haul for others. Residents can prevent illegal dumping by hiring legal haulers only.

The company collecting residential refuse is the one that should be called for bulky item disposal as well. For tires, choose a registered waste tire hauler at the CalRecycle website at www.calrecycle.ca.gov/tires/haulers.

Mattresses, sofas and other bulky items too big to fit into curbside bins will often be collected by the refuse hauler at no extra charge.

Waste company contracts with area cities generally require the hauler to accept two to four bulky items per year from each home at no charge. In some cities, residents are allowed two separate collection days, while in most areas outside cities, contracts specify up to two items on a single visit once per year.

Community cleanup days are another way to easily discard bulky items without cost. Although the cleanup program was suspended during the pandemic, most city and county contracts with haulers require them to provide annual events where residents can drop off material for free.

In Oxnard, neighborhood groups request the service and arrange for bins on their street. In other areas, city or county staff rent a church, park or school parking lot for several hours on a Saturday and send flyers to the surrounding neighborhood, notifying residents of the opportunity. This program will resume soon.

In the meantime, waste service customers in some areas have been mailed passes for use of the Simi Valley Landfill and Recycling Center or a transfer station sending material to the landfill.

The three East County cities have long had such an arrangement with the Simi Landfill, which accepts material from residents on specified days at no charge.

Officials say if anyone sees illegal dumping, avoid confrontation but make a note of the license plate number, vehicle type and the dumper's appearance and call the sheriff's department's nonemergency number at (805) 654-9511.

David Goldstein, environmental analyst with Ventura County Public Works, can be reached by calling (805) 658-4312 or email david.goldstein@ventura.org.

<https://www.theacorn.com/articles/officials-crack-down-on-illegal-dumping/>



Officials cracking down on illegal dumping

| June 10, 2021

By David Goldstein
Special to The Acorn

Eye on the Environment: Coastal cleanup day on Saturday, Sept. 18, features new Ojai site

By David Goldstein, *Special to the Ojai Valley News*

Coastal Cleanup Day is Saturday, Sept. 18, and organizers are offering both designated sites for groups as well as options for people who want to do their own self-guided cleanups. The event website, at <https://www.vccoastcleanup.org/cleanup-sites/>, lists 11 Ventura County beaches and eight inland sites chosen for accessibility and amount of litter, for group cleanups on Sept. 18. Those participating in self-guided cleanups, can pick their own sites and dates in September and record their results on the Clean Swell app. Search for the Clean Swell app at the App Store or on Google Play.

The Ocean Conservancy has on its web site, at <https://oceanconservancy.org/trash-free-seas/international-coastal-cleanup/cleanswell/>, a downloadable poster with instructions for using the Clean Swell app. This free app features icons to conveniently record what you find, snap photos, provide details (such as who you are with), and post to social media. Volunteers working at their own sites miss out on the free T-shirts available at group sites but can earn an electronic badge instead. After users input data, the app provides the badge, along with congratulations for “a job whale done.”

For those unable to download the app, paper data collection cards are available, in English or Spanish, through www.vccoastcleanup.org, which also has guidelines and resources. Also, even without the app, participants are encouraged to share cleanup experiences on social media, using the hashtags #coastalcleanupday and #protectyourhappyplace.

The group options, from 9 a.m. to noon at the specified sites, require participants to follow the most recent Ventura County Public Health orders, which are updated regularly at <https://www.venturacountyrecovers.org/>. Social distance where possible, and expect to wear a mask, at least when gathering for supplies and drop-off of collected litter. To further reduce close interaction, print and sign the waiver available on the web site, and bring it with you when you arrive.

In consideration of a different kind of health and safety, wear a hat and apply sunscreen before arriving. To reduce waste, whether participating at the group sites or on your own, bring your own reusable bucket, gloves, and water bottle.

Since inland litter often ends up at the ocean, the inland sites organized for group cleanup events are generally along waterways, including Calleguas Creek, in Camarillo; Sespe Creek, in Fillmore; Conejo Creek, in Thousand Oaks; Arroyo Simi, in Simi Valley; and the Santa Clara River, in Ventura.

Those have also been sites in past years, but a group site in Ojai is new this year. Volunteers are meeting at 9 a.m. at a location to be revealed by the Ojai Valley Land Conservancy only in response to RSVPs, which should be sent to adam@ovlc.org

From the meeting site, up to 20 volunteers will proceed to the Ventura River Confluence Preserve, where San Antonio Creek meets with the Ventura River. When water flows, litter is deposited on the shores of that area, but the entire site is dry now, creating a good opportunity for litter removal, according to Adam Morrison, the Conservancy's Volunteer and Events Coordinator. There is some poison oak by the stream, so the Conservancy will provide litter collection tools, but volunteers should wear long sleeves, long pants, and closed-toe shoes.

Morrison said he hopes Coastal Cleanup volunteers will enjoy the experience enough to return for year-round volunteer opportunities with the conservancy. Although volunteer work in the organization's office was suspended as a COVID-19 protection, and the conservancy already has enough help with its plant propagation nursery, Morrison has upcoming opportunities for volunteers to help with field projects such as trail building, trail maintenance, and plant restoration.

Litter cleanup at sites protected by the Ojai Land Conservancy became increasingly important last year, as some of Ventura County's most prized nature areas became crowded with people excluded from closed hiking spots in Los Angeles. Some Ventura County sites affected by the influx of people and litter, such as the Punch Bowls Trail near Santa Paula, and Paradise Falls in Thousand Oaks, shut down. Crowds also swarmed and littered Ojai's trails. The Ojai Valley Land Conservancy hired extra workers to act as docents in sensitive areas.

Those participating in Coastal Cleanup on their own this year are encouraged by Coastal Cleanup Day outreach material to "Protect your happy place," wherever that may be. This could be a nearby park or your own neighborhood.

Last year, the event was entirely self-guided, with no central organization of group cleanup sites. Ventura County had 1,046 registered participants. This was far more than comparable counties and almost as many volunteers as Los Angeles.

The California Coastal Commission leads efforts statewide; Lara Shellenbarger, of the Ventura County Public Works Agency's Watershed Protection District, is the countywide coordinator for Ventura County; and each site has its own site captain. As always, data collection is one of the priorities of organizers.

Eben Schwartz, Marine Debris program manager of California Coastal Commission, stressed the importance of the data collection element of Coastal Cleanup Day, "The data have been used to

identify the most problematic types of litter, resulting in legislative initiatives.” As examples, he cited California’s ban on single-use, plastic, grocery bags, and Assembly Bill 1080, which is currently stalled in the Legislature but is expected to be considered again. Also, in 2022, California voters will consider an initiative requiring new regulations to reduce single-use plastic packaging and enacting a 1-cent per item fee on single-use packaging and foodware, according to www.Ballotpedia.org.

For more information:

www.coastal.ca.gov/publiced/ccd/ccd.html

www.vccoastcleanup.org/

www.oceanconservancy.org

— *David Goldstein, an environmental resource analyst with Ventura County Public Works, can be reached at 805-658-4312 or david.goldstein@ventura.org.*

<https://www.ojaivalleynews.com/?view=article&id=20828:eye-on-the-environment-coastal-cleanup-day-on-saturday-sept-18-features-new-ojai-site&catid=856>