

2017-2018 Permit Year

Ventura Countywide Stormwater Quality Management Program Annual Report

Attachment D Monitoring Appendices A - E



Camarillo
County of Ventura
Fillmore
Moorpark
Ojai
Oxnard
Port Hueneme
Santa Paula
Simi Valley
Thousand Oaks
Ventura

Ventura County Watershed Protection District

Appendix A: Major Outfall Station Fact Sheets

Camarillo

Waterbody: Camarillo Hills Drain (tributary to

Revolon Slough)

Location: Daily Rd. overcrossing (34°13'10.00"N,

119° 3'58.06"W)

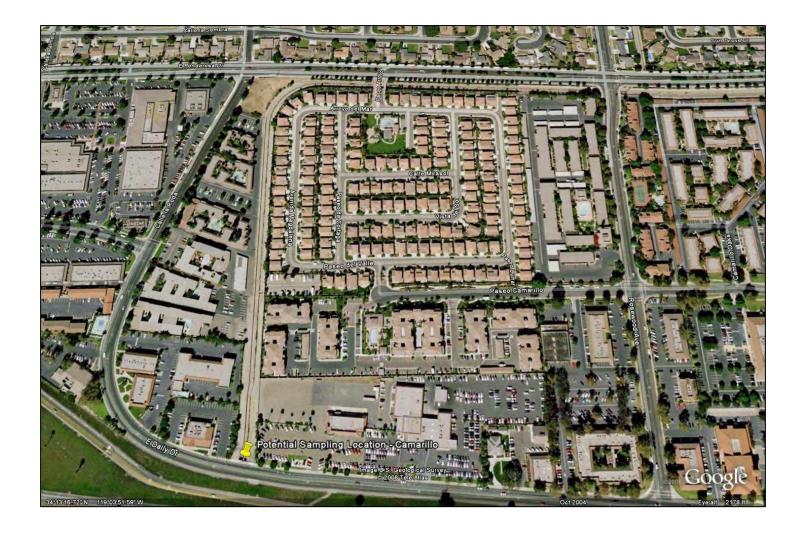
Pros: Likely well-defined rating table **Cons:** Moderate potential for vandalism **Outstanding Site Selection Tasks:** None

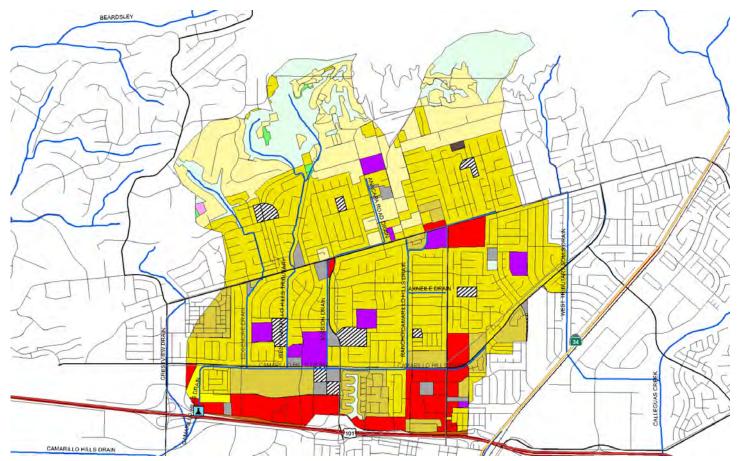
Other Potential Sites: None

Dry Season Flow Potential: Likely intermittent

year-round flow due to urban runoff







Land Use	Acres	% of Total Watershed
Agriculture	1585.8	12.6%
Com_Indus. Mix	12.5	0.1%
Commer.	657.2	5.2%
Extraction	58.4	0.5%
Facility	129.5	1.0%
Industrial_1	32.2	0.2%
Industrial_3	622.6	4.9%
Military_2	5.7	0.1%
No Info Given	202.2	1.6%
Recreation	489.4	3.9%
Res.1	1305.9	10.4%
Res.2	443.4	3.5%
Res.3	3253.5	25.9%
Res.4	525.0	4.2%
Schools	325.0	2.6%
Transportation	954.2	7.6%
Under Construction	294.8	2.3%
Utilities	255.8	2.0%
Vacant Undifferentiated	1423.4	11.4%
Totals	12576.4	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	6.1	0.2%
Commercial	213.5	7.7%
Facility	48.5	1.7%
No Info Given	57.4	2.1%
Res.1	453.4	16.3%
Res.2	235.0	8.5%
Res.3	1365.5	49.1%
Res.4	15.2	0.5%
Schools	80.6	2.9%
Transportation	11.7	0.4%
Under Construction	2.6	0.1%
Utilities	2.3	0.1%
Vacant Undifferentiated	287.4	10.3%
Totals	2779.1	100.0%

Fillmore

Waterbody: North Fillmore Drain (tributary to Sespe Creek)

Location: 75 yds. southwest of Old Telegraph Rd.

(34°24'16.51"N, 118°55'50.47"W)

Pros: Some portion of vegetation could be cleared by

City of Fillmore

Cons: Potential for vandalism

Outstanding Site Selection Tasks: None

Other Potential Sites: C Street Drain and Central

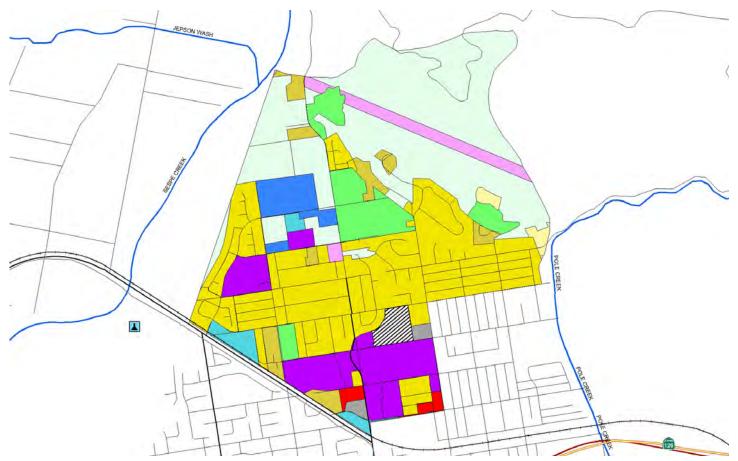
Ave. Drain

Dry Season Flow Potential: Likely intermittent

year-round flow due to urban runoff







Land Use	Acres	% of Total Watershed
Agriculture	274.8	13.0%
Com_Indus. Mix	10.4	1.0%
Commercial	103.2	5.0%
Facility	27.3	1.0%
Industrial_1	31.3	2.0%
Industrial_3	28.7	1.0%
No Info Given	21.9	1.0%
Res.1	52.8	3.0%
Res.2	44.6	2.0%
Res.3	693.1	34.0%
Schools	87.6	4.0%
Transportation	6.4	0.0%
Under Constructoni	58.4	3.0%
Utilities	45.8	2.0%
Vacant Undifferentiated	582.5	28.0%
Totals	2068.7	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	52.5	6.9%
Commercial	6.3	0.8%
Facility	5.1	0.7%
Industrial_1	14.1	1.9%
Industrial_3	23.4	3.1%
No Info Given	9.9	1.3%
Res.1	6.1	0.8%
Res.2	29.7	3.9%
Res.3	255.7	33.6%
Schools	75.3	9.9%
Utilities	23.1	3.0%
Vacant Undifferentiated	260.6	34.2%
Totals	761.7	100.0%

Meiners Oaks (Unincorporated)

Waterbody: Happy Valley Drain (tributary to Ventura River)

Location: Southwest of Lomita Rd. and Rice Rd. intersection (34°26'43.98"N, 119°17'25.18"W)

Pros: Good control, good access, existing stream flow

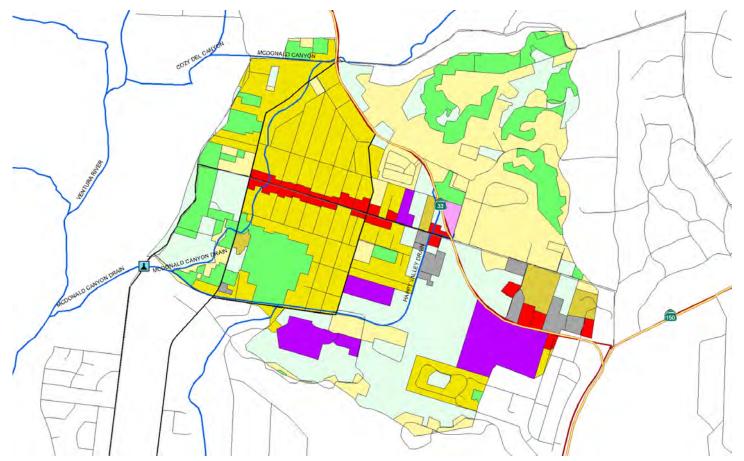
gauge

Dry Season Flow Potential: Unknown at end of rainy

season; unlikely later in summer







Land Use	Acres	% of Total Watershed
Agriculture	658.0	21.5%
Cemeteries	0.0	0.0%
Commercial	33.0	1.1%
Facility	15.5	0.5%
Recreation	29.9	1.0%
Res.1	812.3	26.5%
Res.2	43.9	1.4%
Res.3	463.4	15.1%
Schools	46.5	1.5%
Utilities	19.3	0.6%
Vacant Undifferentiated	945.0	30.8%
Totals	3066.8	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	152.1	14.8%
Commercial	30.8	3.0%
Facility	20.8	2.0%
Res.1	234.0	22.8%
Res.2	22.0	2.1%
Res.3	249.9	24.4%
Schools	63.6	6.2%
Utilities	3.8	0.4%
Vacant Undifferentiated	248.8	24.3%
Totals	1025.9	100.0%

Moorpark

Waterbody: Gabbert Canyon Drain (tributary to

Arroyo Las Posas)

Location: North side of SR 118 near southwest corner of So. Cal. Edison property (34°16'44.29"N, 118°54'19.40"W)

Pros: Likely well-defined rating table

Cons: Aerial deposition from vehicular traffic on

118, potential for vandalism

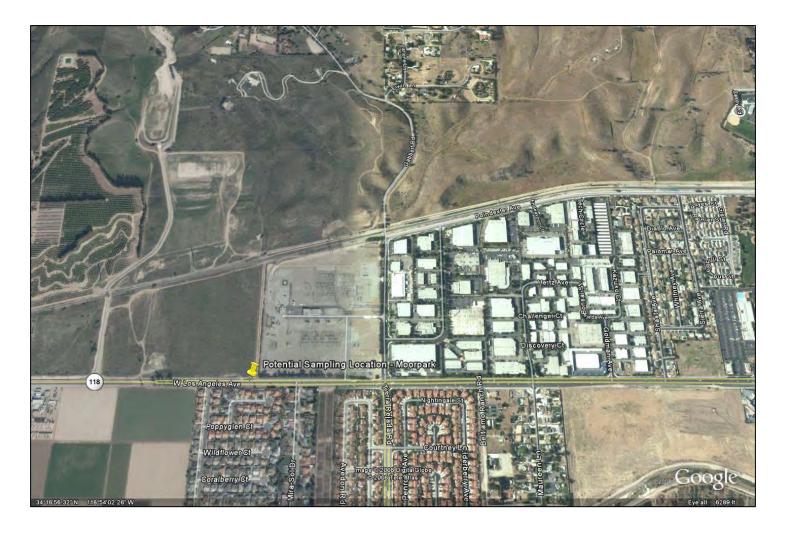
Outstanding Site Selection Tasks: Move sampling

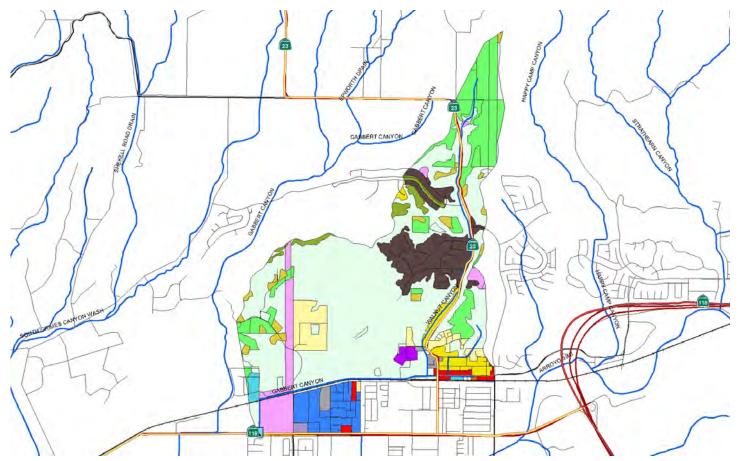
location shown on watershed map

Other Potential Sites: Upstream current location, although site would interfere with access road **Dry Season Flow Potential:** Likely intermittent

year-round flow due to urban runoff







Entire City		
Land Use	Acres	% of Total Watershed
Land Use	Acres	% of Total Watershed
Agriculture	351.7	4.0%
Com_Indus. Mix	9.1	0.0%
Commercial	196.3	2.0%
Extraction	39.2	0.0%
Facility	40.9	1.0%
Industrial_1	21.3	0.0%
Industrial_3	225.2	3.0%
No Info Given	148.3	2.0%
Recreation	186.1	2.0%
Res.1	213.5	3.0%
Res.2	190.4	2.0%
Res.3	1854.6	23.0%
Res.4	106.8	1.0%
Schools	302.1	4.0%
Transportation	198.0	2.0%
Under Construction	472.9	6.0%
Utilities	211.9	3.0%
Vacant Undifferentiated	3213.1	40.0%
Totals	7981.5	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	230.0	12.7%
Commercial	19.9	1.1%
Extraction	5.8	0.3%
Facility	16.8	0.9%
Industrial_1	13.3	0.7%
Industrial_3	90.4	5.0%
Recreation	31.0	1.7%
Res.1	82.3	4.5%
Res.2	37.4	2.1%
Res.3	56.3	3.1%
Res.4	1.5	0.1%
Schools	10.5	0.6%
Transportation	3.1	0.2%
Under Construction	166.2	9.2%
Utilities	100.7	5.5%
Vacant Undifferentiated	950.8	52.4%
Totals	1816.2	100.0%

Ojai

Waterbody: Fox Canyon Barranca (tributary to San

Antonio Creek)

Location: Concrete box channel upstream Ojai Valley Athletic Club and downstream pedestrian walkway (34°26'41.25"N, 119°14'28.43"W)

Pros: Numerous bridges to sample from, located behind

VCWPD gate, likely well-defined rating table

Cons: Some potential for vandalism

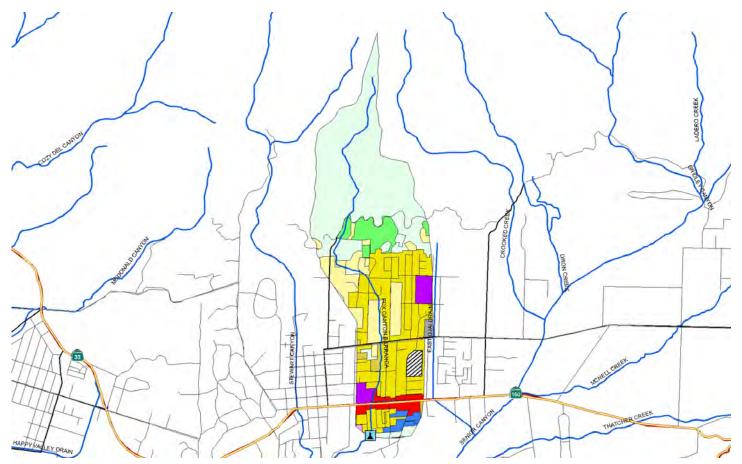
Outstanding Site Selection Tasks: Work with VCWPD O&M to ensure enclosure doesn't interfere with maintenance activities

Other Potential Sites: Downstream where Stewart Canyon crosses beneath Ventura St. (bioassessment #8) Dry Season Flow Potential: Likely intermittent year-

round flow due to urban runoff







Entire Watershed

Land Use	Acres	% of Total Watershed
Agriculture	83.1	3.0%
Cemeteries	3.8	0.1%
Com_Indus. Mix	7.6	0.3%
Commercial	155.1	5.6%
Facility	43.2	1.5%
Industrial_3	13.2	0.5%
No Info Given	55.6	2.0%
Recreation	312.1	11.2%
Res.1	620.7	22.2%
Res.2	61.3	2.2%
Res.3	534.8	19.1%
Res.4	3.3	0.1%
Schools	100.6	3.6%
Utilities	32.9	1.2%
Vacant Undifferentiated	767.1	27.5%
Totals	2794.7	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	37.3	5.0%
Commercial	23.8	3.2%
Facility	4.1	0.6%
Industrial_3	11.4	1.5%
No Info Given	10.0	1.3%
Recreation	0.1	0.0%
Res.1	84.3	11.3%
Res.2	8.0	1.1%
Res.3	210.9	28.2%
Res.4	0.1	0.0%
Schools	20.2	2.7%
Utilities	1.0	0.1%
Vacant Undifferentiated	337.5	45.1%
Totals	748.6	100.0%

Oxnard

Waterbody: El Rio Drain (tributary to Santa Clara

River)

Location: Pedestrian bridge 50 yds. southwest bend of

Winchester Dr. (34°14'10.10"N, 119°11'3.93"W)

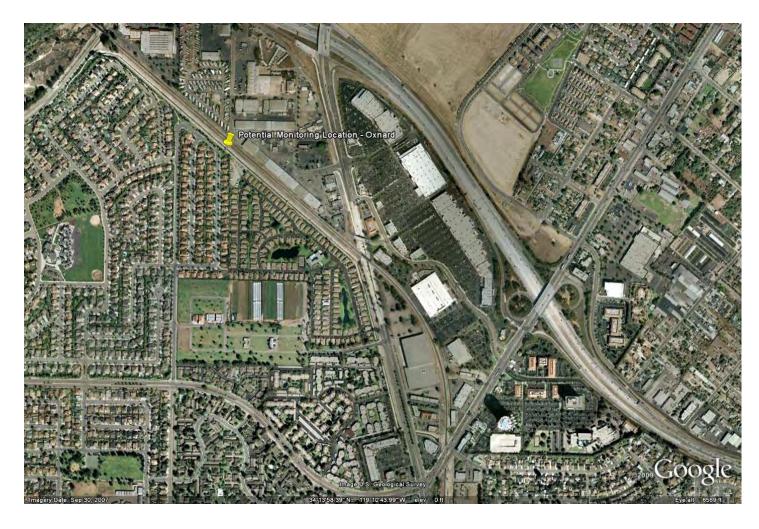
Pros: Likely well-defined rating table **Cons:** High potential for vandalism **Outstanding Site Selection Tasks:** None

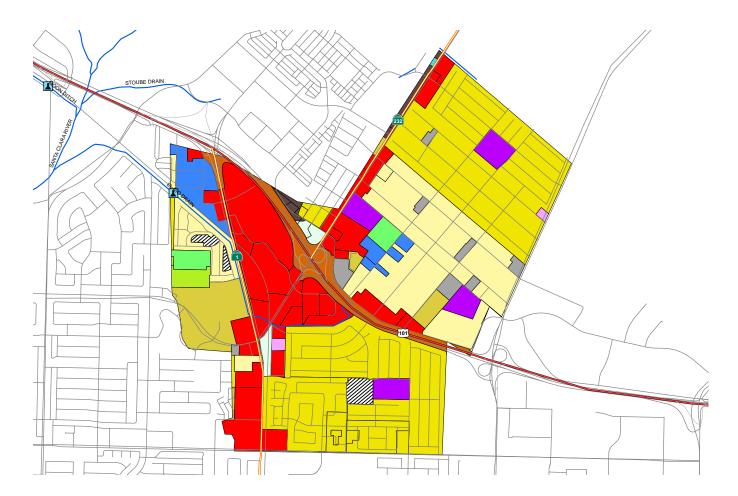
Other Potential Sites: None

Dry Season Flow Potential: Likely intermittent year-

round flow due to urban runoff







Entire City		1
Land Use	Acres	% of Total Watershed
Agriculture	969.4	5.6%
Cemeteries	22.4	0.1%
Com_Indus. Mix	165.1	0.9%
Commercial	1385.9	8.0%
Extraction	227.3	1.3%
Facility	244.8	1.4%
Industrial_1	163.7	1.0%
Industrial_3	1104.0	6.5%
Industrial_4	62.3	0.4%
Military_1	1.7	0.0%
Military_2	4.0	0.0%
No Info Given	371.6	2.2%
Recreation	679.4	3.9%
Res.1	369.1	2.2%
Res.2	1149.3	6.7%
Res.3	5892.4	34.3%
Res.4	163.0	1.0%
Schools	703.5	4.1%
Transportation	560.5	3.3%
Under Construction	802.6	4.7%
Utilities	298.0	1.8%
Vacant Undifferentiated	1740.2	10.1%
Water	82.0	0.5%
Totals	17162.2	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	19.0	1.5%
Cemeteries	9.7	0.7%
Commercial	253.5	19.5%
Facility	22.1	1.7%
Industrial_1	0.7	0.1%
Industrial_3	40.4	3.1%
No Info Given	14.0	1.1%
Res.1	243.3	18.7%
Res.2	69.8	5.4%
Res.3	500.1	38.5%
Schools	42.9	3.3%
Transportation	55.3	4.3%
Under Construction	12.4	1.0%
Utilities	3.5	0.3%
Vacant Undifferentiated	11.7	0.9%
Totals	1298.2	100.0%

Port Hueneme

Waterbody: Hueneme Drain (tributary to Pacific Ocean)

Location: Pump Station 300 yds. downstream Surfside Dr. (34°8'26.91"N, 119°11'17.58"W)

Pros: Grass-covered sides fairly stable

Cons: Lots of activity nearby, high potential for

vandalism, stagnant water

Outstanding Site Selection Tasks: Verify positive

flow

Other Potential Sites: At Surfside Rd. at lower end

of Bubbling Springs Park

Dry Season Flow Potential: Likely year-round flow due to urban runoff and groundwater contribution







Land Use	Acres	% of Total Watershed
Commercial	105.4	3.7%
Facility	20.4	0.7%
Industrial_1	32.5	1.1%
Industrial_3	34.9	1.2%
Military_2	1558.4	54.0%
No Info Given	53.7	1.9%
Recreation	38.5	1.3%
Res.2	308.3	10.7%
Res.3	432.9	15.0%
Res.4	104.3	3.6%
Schools	41.6	1.4%
Transportation	29.7	1.0%
Under Construction	2.1	0.1%
Utilities	6.0	0.2%
Vacant Undifferentiated	35.4	1.2%
Water	83.6	2.9%
Totals	2887.9	100.0%

Land Use	Acres	% of Total Watershed
Commercial	19.2	3.3%
Facility	15.1	2.6%
Industrial_3	10.0	1.7%
Military_2	5.7	1.0%
No Info Given	35.8	6.1%
Res.2	45.5	7.7%
Res.3	359.1	60.9%
Res.4	40.9	6.9%
Schools	32.6	5.5%
Under Construction	2.1	0.4%
Utilities	6.5	1.1%
Vacant Undifferentiated	16.8	2.9%
Totals	589.4	100.0%

Santa Paula

Waterbody: 11th Street Drain (tributary to Santa

Clara River)

Location: Upstream Santa Paula Airport (34°20'54.99"N, 119° 3'19.82"W)

Pros: Excellent flat pad on top of outfall for sampling

equipment

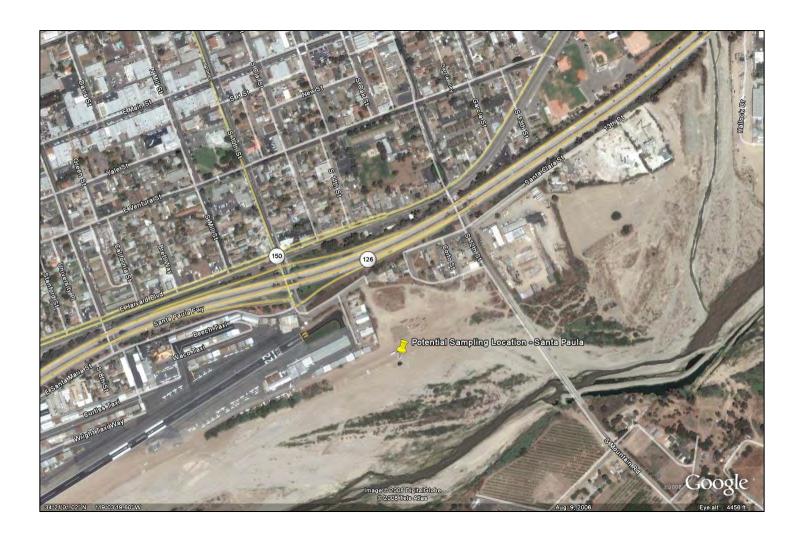
Cons: High potential for vandalism Outstanding Site Selection Tasks: None

Other Potential Sites: None

Dry Season Flow Potential: Likely intermittent year-round flow due to urban runoff. No flow at time of

initial observation







Land Use	Acres	% of Total Watershed
Agriculture	210.3	7.0%
Cemeteries	19.4	0.7%
Com_Indus. Mix	4.6	0.2%
Commercial	235.4	7.8%
Extraction	30.5	1.0%
Facility	42.4	1.4%
Industrial_1	73.7	2.4%
Industrial_3	133.0	4.5%
No Info Given	33.5	1.1%
Recreation	4.7	0.2%
Res.1	266.9	8.9%
Res.2	86.8	2.9%
Res.3	1065.9	35.5%
Res.4	46.8	1.6%
Schools	91.7	3.1%
Transportation	166.4	5.5%
Under Construction	8.7	0.3%
Utilities	41.1	1.4%
Vacant Undifferentiated	440.6	14.7%
Totals	3002.4	100.0%

Selected Subwatershed

Land Use	Acres	% of Total Watershed
Commercial	9.4	14.7%
Industrial_1	2.5	4.0%
Res.2	2.8	4.3%
Res.3	30.5	47.7%
Schools	6.4	10.0%
Transportation	6.8	10.6%
Utilities	4.9	7.6%
Vacant Undifferentiated	0.8	1.2%
Totals	64.0	100.0%

Simi Valley

Waterbody: Bus Canyon Drain (tributary to Arroyo Simi)

Location: North of intersection at 5th St. and Los Angeles Ave. (34°16′18.59"N, 118°47′1.51"W) **Pros:** Likely well-defined rating table, located

behind VCWPD gate

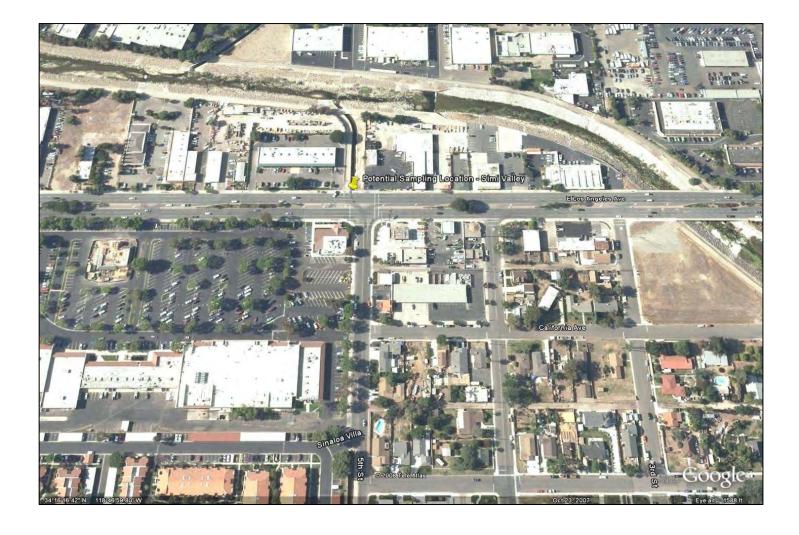
Cons: Pedestrian traffic on levee nearby

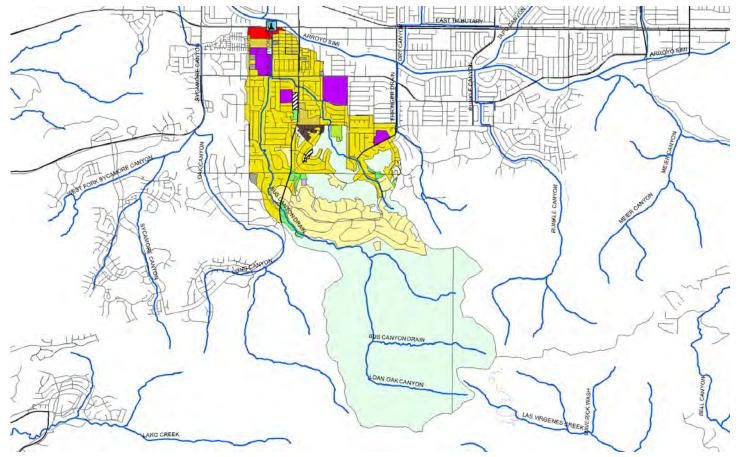
Outstanding Site Selection Tasks: Assess impacts of large groundwater discharge upstream, move sampling location shown on watershed map

Other Potential Sites: Upstream at 5th and Ventura Ave.

Dry Season Flow Potential: Likely year round flow due to urban runoff and groundwater discharge upstream







Land Use	Acres	% of Total Watershed
Agriculture	435.5	1.6%
Cemeteries	34.3	0.1%
Com_Indus. Mix	24.4	0.1%
Commercial	1051.4	3.9%
Extraction	111.8	0.4%
Facility	217.1	0.8%
Industrial_1	50.3	0.2%
Industrial_3	353.3	1.3%
Industrial_4	5.9	0.0%
No Info Given	382.0	1.5%
Recreation	560.9	2.0%
Res.1	1025.0	3.7%
Res.2	586.0	2.2%
Res.3	7947.7	29.5%
Res.4	110.7	0.4%
Schools	517.5	1.9%
Transportation	546.9	2.0%
Under Construction	385.6	1.4%
Utilities	261.0	1.0%
Vacant Undifferentiated	12291.5	45.6%
Totals	26898.6	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	33.0	1.0%
Cemeteries	10.1	0.3%
Commercial	22.6	0.7%
Facility	12.9	0.4%
No Info Given	9.4	0.3%
Res.1	395.5	11.9%
Res.2	40.3	1.2%
Res.3	782.9	23.6%
Schools	96.7	2.9%
Under Construction	15.5	0.5%
Utilities	1.8	0.1%
Vacant Undifferentiated	1900.0	57.2%
Totals	3320.7	100.0%

Thousand Oaks

Waterbody: North Fork Arroyo Conejo (tributary to

Conejo Creek)

Location: Hill Canyon WWTP sampling location R-

1(34°12'49.16"N, 118°55'16.24"W)

Pros: Very secure, helpful staff onsite, fairly welldefined channel, accessible via concrete stairs Cons: Late-night access to WWTP could present

problem

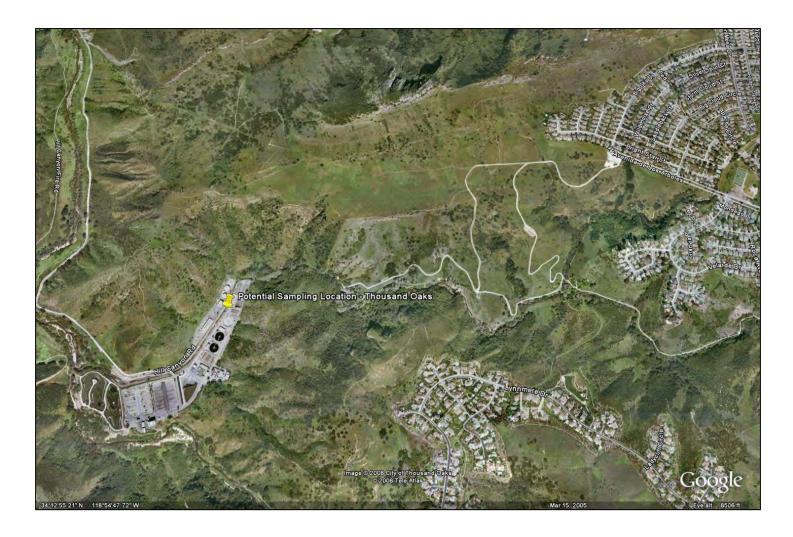
Outstanding Site Selection Tasks: None

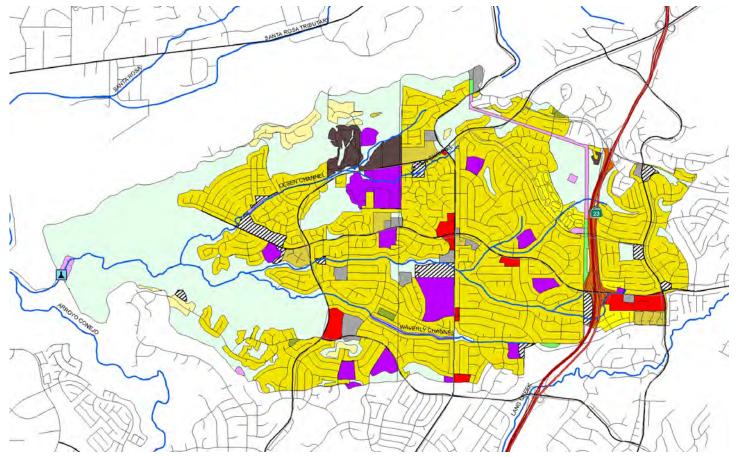
Other Potential Sites: None

Dry Season Flow Potential: Likely year-round flow

due to urban runoff







Entire City	I .	T a t a t a t a t a t a t a t a t a t a
Land Use	Acres	% of Total Watershed
Agriculture	207.0	0.6%
Com_Indus. Mix	23.2	0.1%
Commercial	1499.7	4.2%
Extraction	9.0	0.0%
Facility	291.6	0.8%
Industrial_1	94.3	0.3%
Industrial_3	457.7	1.3%
No Info Given	459.2	1.3%
Recreation	574.2	1.7%
Res.1	1683.9	4.7%
Res.2	1000.3	2.8%
Res.3	9323.6	26.4%
Res.4	288.1	0.8%
Schools	587.6	1.7%
Transportation	605.4	1.7%
Under Construction	281.6	0.8%
Utilities	260.6	0.7%
Vacant Undifferentiated	17465.1	49.7%
Totals	35111.8	100.0%

Land Use	Acres	% of Total Watershed
Agriculture	13.5	0.3%
Commercial	83.5	1.6%
Facility	67.3	1.3%
No Info Given	95.4	1.8%
Recreation	8.7	0.2%
Res.1	89.8	1.7%
Res.2	71.5	1.4%
Res.3	2643.8	51.0%
Res.4	84.0	1.6%
Schools	224.2	4.3%
Transportation	61.5	1.2%
Under Construction	79.4	1.5%
Utilities	53.3	1.0%
Vacant Undifferentiated	1603.6	31.0%
Totals	5179.3	100.0%

Ventura

Waterbody: Moon Ditch (tributary to Santa Clara River)

Location: Between Leland St. and US 101, north of Johnson Dr. (34°14'35.86"N, 119°11'40.86"W)

Pros: Likely well-defined rating table, fairly good

protection (located behind VCWPD gate)

Cons: Wide concrete bottom will spread out low flows, placement of intake somewhat difficult **Outstanding Site Selection Tasks:** None

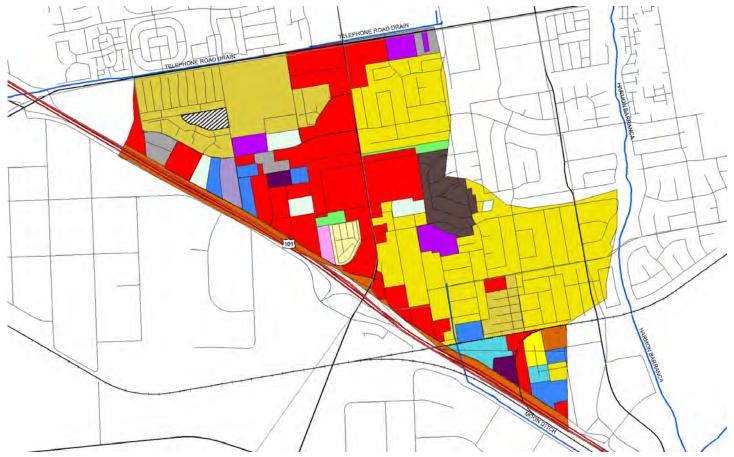
Other Potential Sites: None

Dry Season Flow Potential: Likely intermittent

year-round flow due to urban runoff





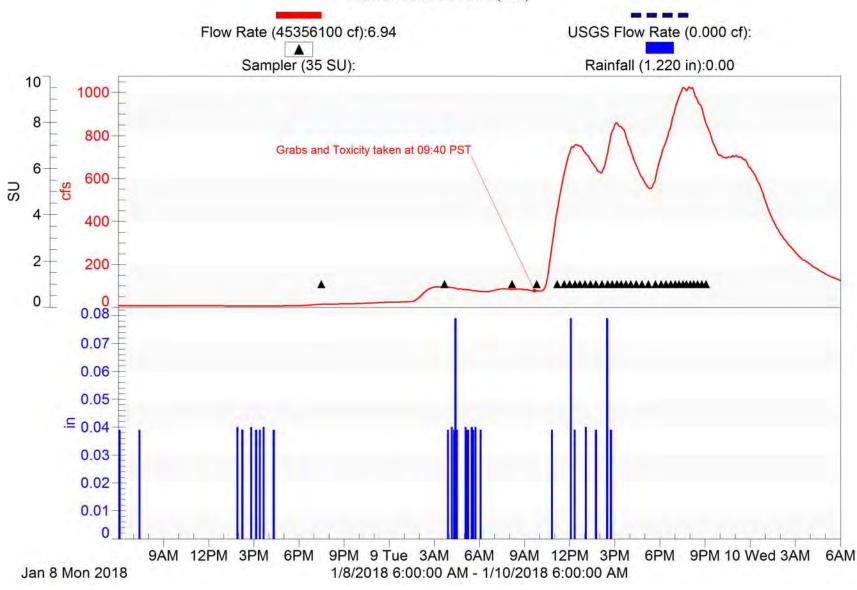


Entire City		
Land Use	Acres	% of Total Watershed
Agriculture	667.6	4.7%
Cemeteries	72.6	0.5%
Com_Indus. Mix	95.4	0.7%
Commercial	1402.9	10.0%
Extraction	39.2	0.3%
Facility	303.8	2.2%
Industrial_1	90.5	0.6%
Industrial_3	619.6	4.5%
Military_2	3.6	0.0%
No Info Given	285.7	2.1%
Recreation	516.3	3.7%
Res.1	361.1	2.6%
Res.2	924.0	6.6%
Res.3	5209.6	37.2%
Res.4	72.4	0.5%
Res.5	2.8	0.0%
Schools	495.8	3.6%
Transportation	570.0	4.1%
Under Construction	73.7	0.5%
Utilities	125.4	0.9%
Vacant Undifferentiated	2018.1	14.4%
Water	61.5	0.4%
Total	s 14011.6	100.0%

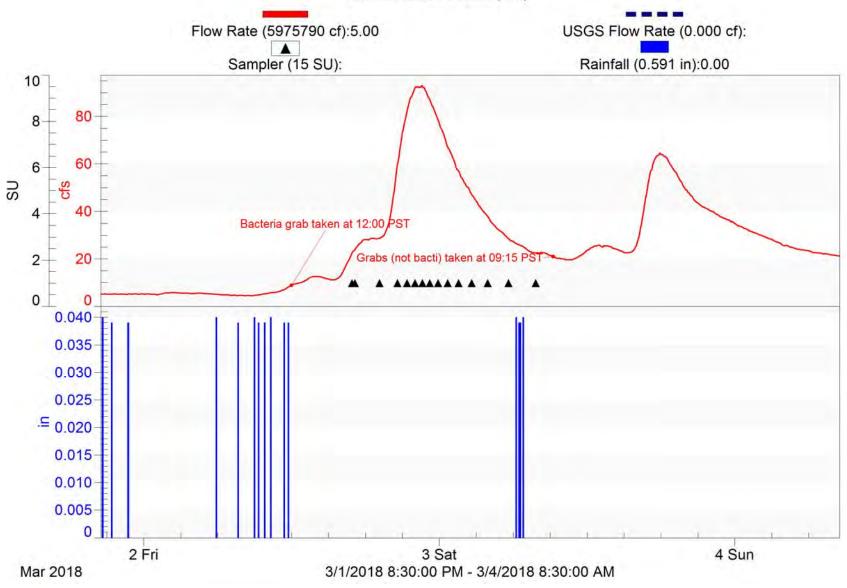
		% of Total
Land Use	Acres	Watershed
Agriculture	5.8	0.8%
Com_Indus. Mix	6.5	0.9%
Commercial	171.7	24.3%
Extraction	6.3	0.9%
Facility	14.6	2.1%
Industrial_1	10.8	1.5%
Industrial_3	23.0	3.2%
No Info Given	5.4	0.8%
Res.1	8.7	1.2%
Res.2	109.1	15.4%
Res.3	234.8	33.2%
Res.4	4.8	0.7%
Schools	18.4	2.6%
Transportation	40.7	5.8%
Under Construction	26.6	3.8%
Utilities	3.5	0.5%
Vacant Undifferentiated	16.3	2.3%
Totals	707.1	100.0%

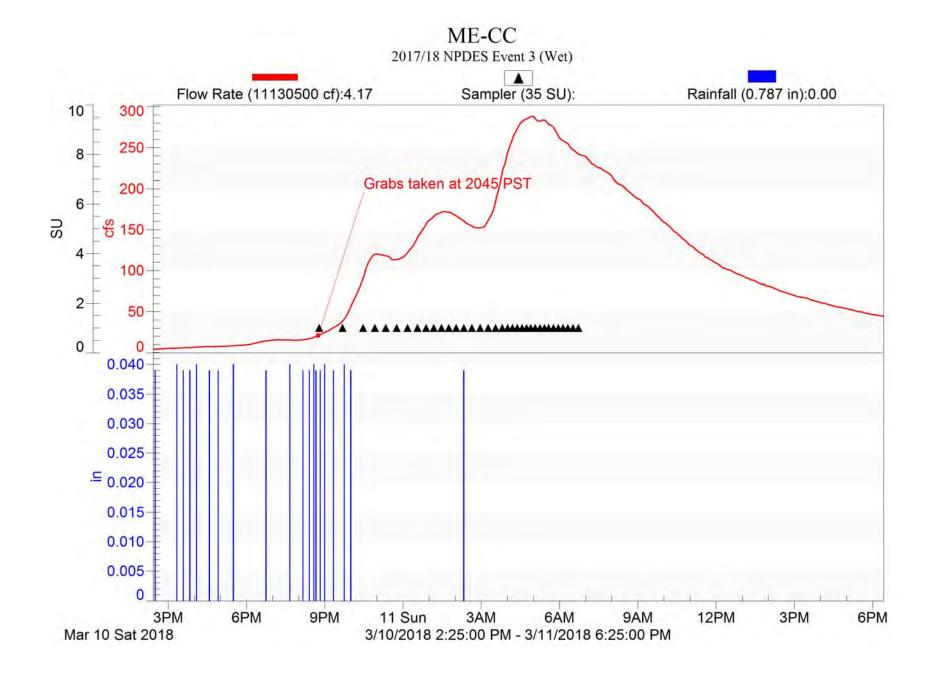
Appendix B. Event Hydrographs

ME-CC 2017/18 NPDES Event 1 (Wet)

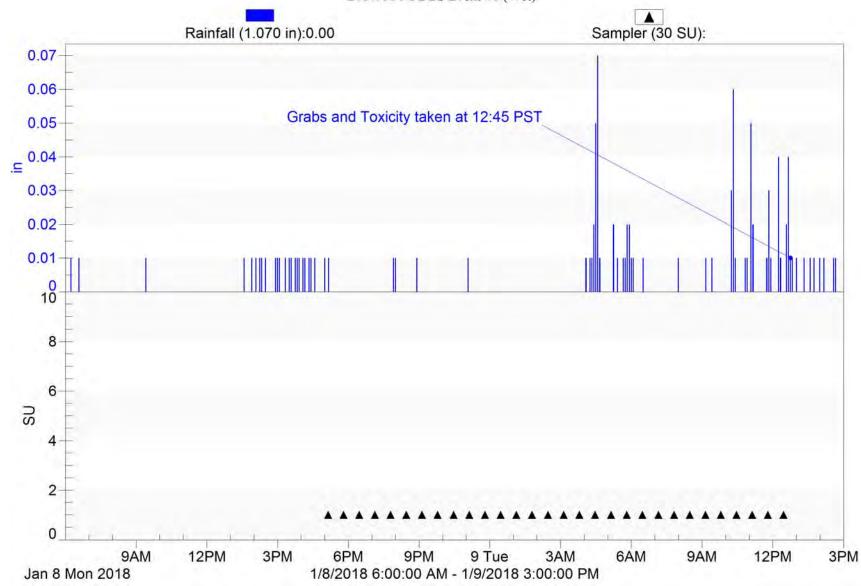


ME-CC 2017/18 NPDES Event 2 (Wet)

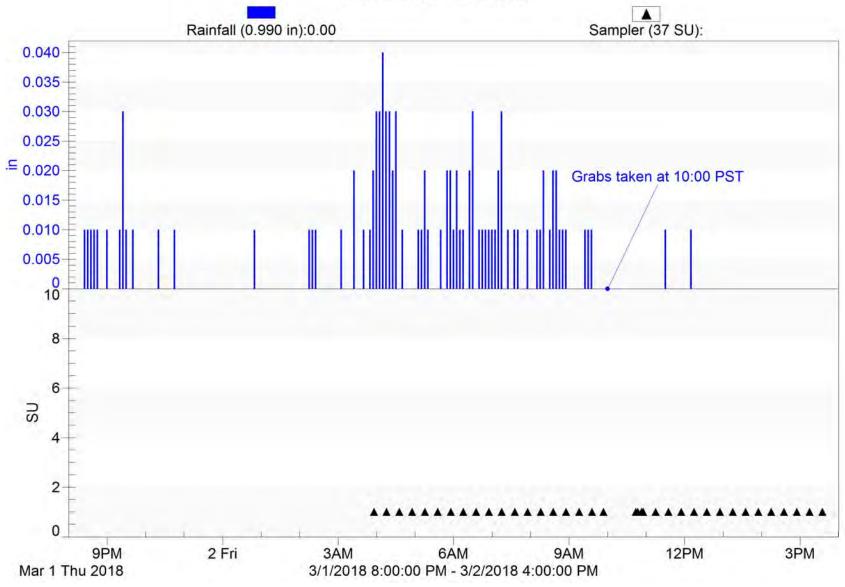




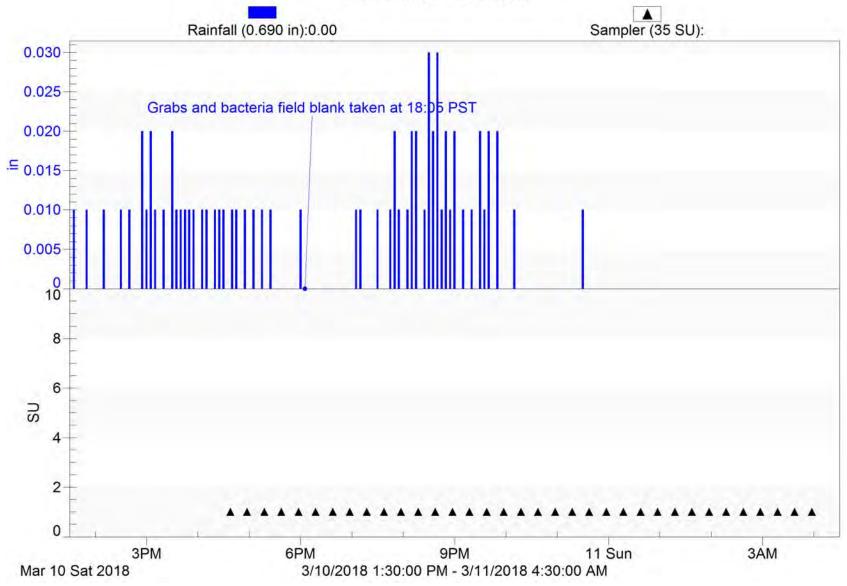
ME-SCR 2017/18 NPDES Event #1 (Wet)



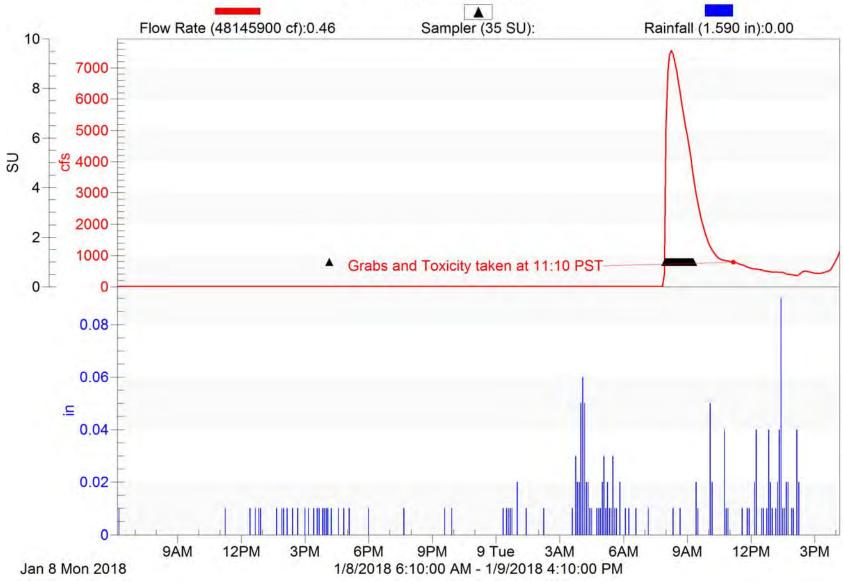
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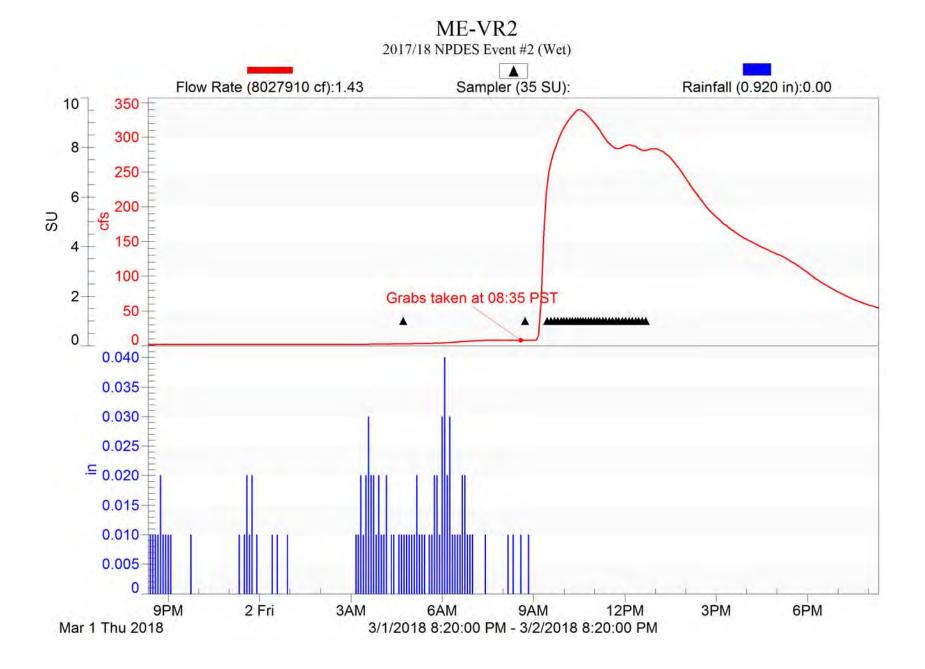


ME-SCR 2017/18 NPDES Event #3 (Wet)

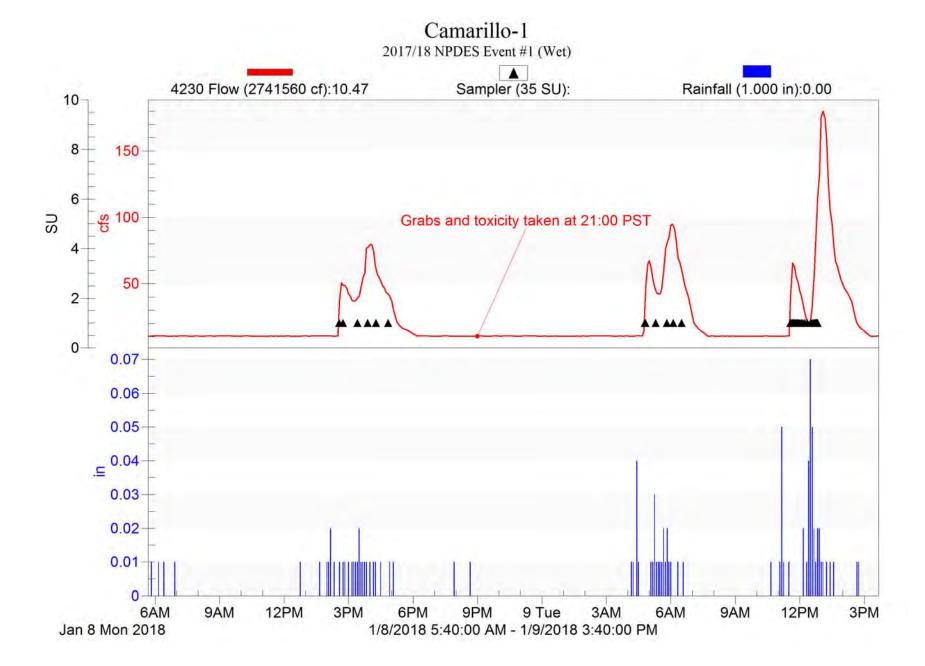


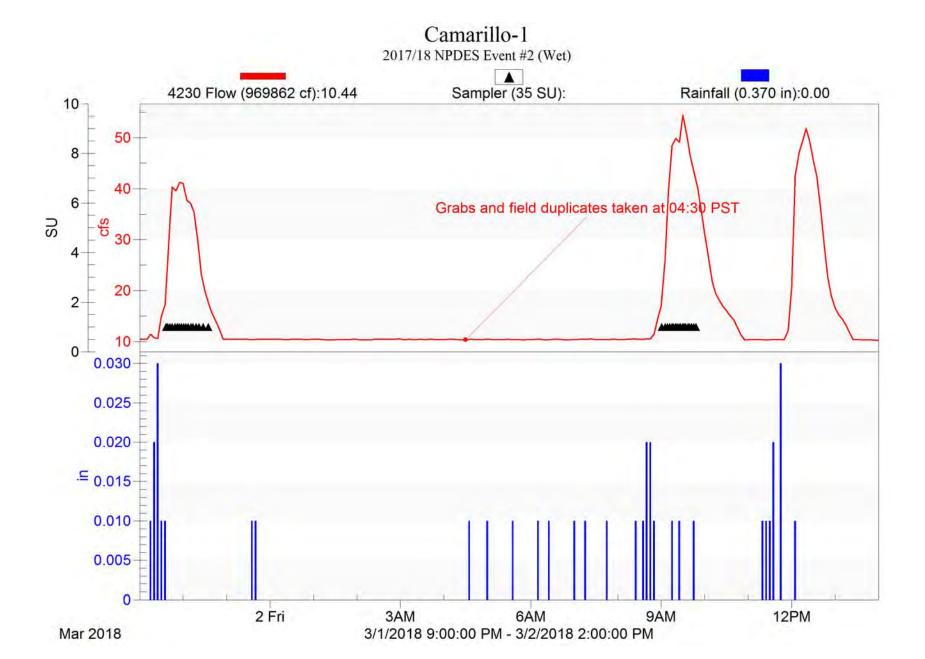
ME-VR2 2017/18 NPDES Event #1 (Wet)

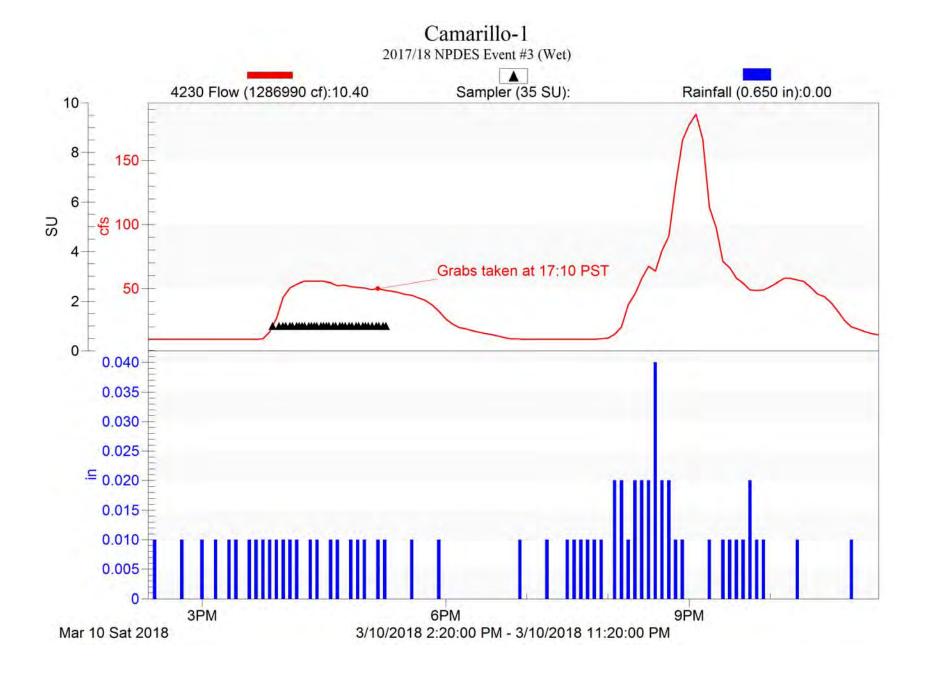


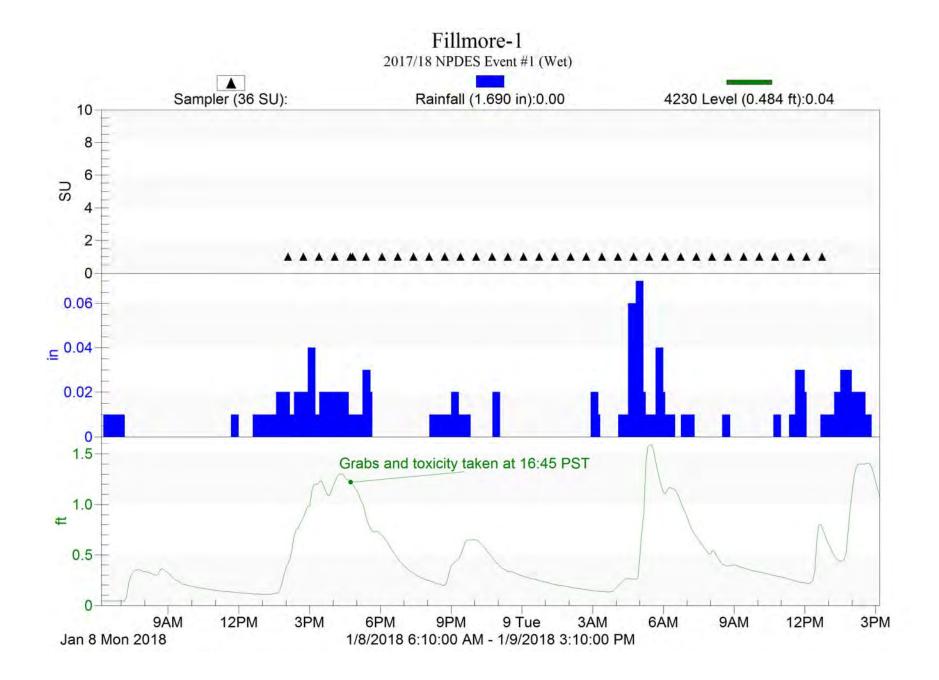


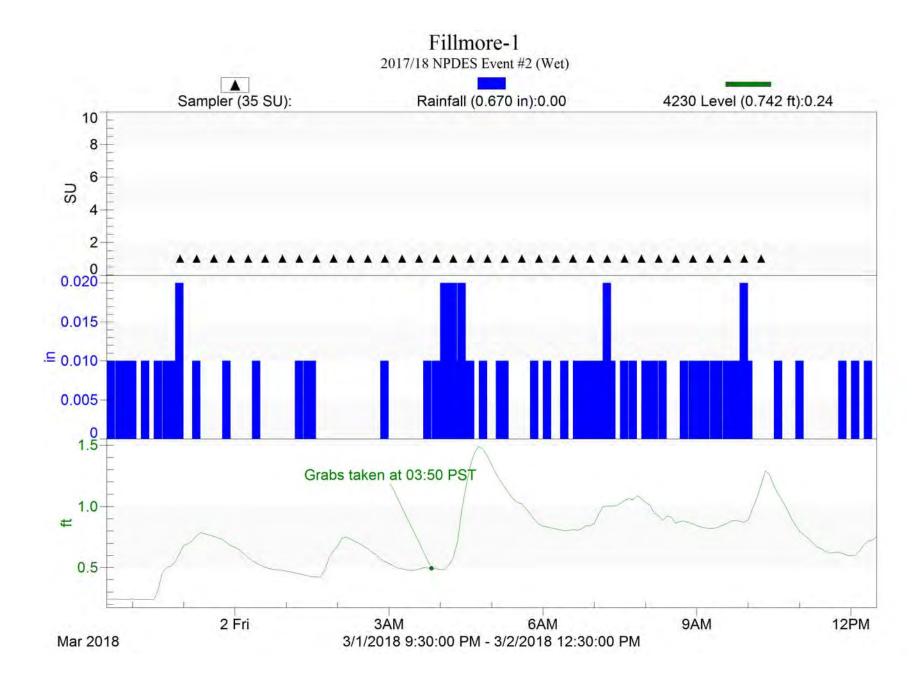
ME-VR2 2017/18 NPDES Event #3 (Wet) Flow Rate (1649230 cf):1.23 Rainfall (0.710 in):0.00 Sampler (35 SU): 10 80 70 8 60 6 SU 4 30 20 2 Grabs taken at 08:50 PST 10 0 0.030 0.025 0.020 .⊑ 0.015 0.010 0.005 11 Sun **3PM** 6PM **3AM** 6AM 9AM 9PM Mar 10 Sat 2018 3/10/2018 1:25:00 PM - 3/11/2018 11:25:00 AM

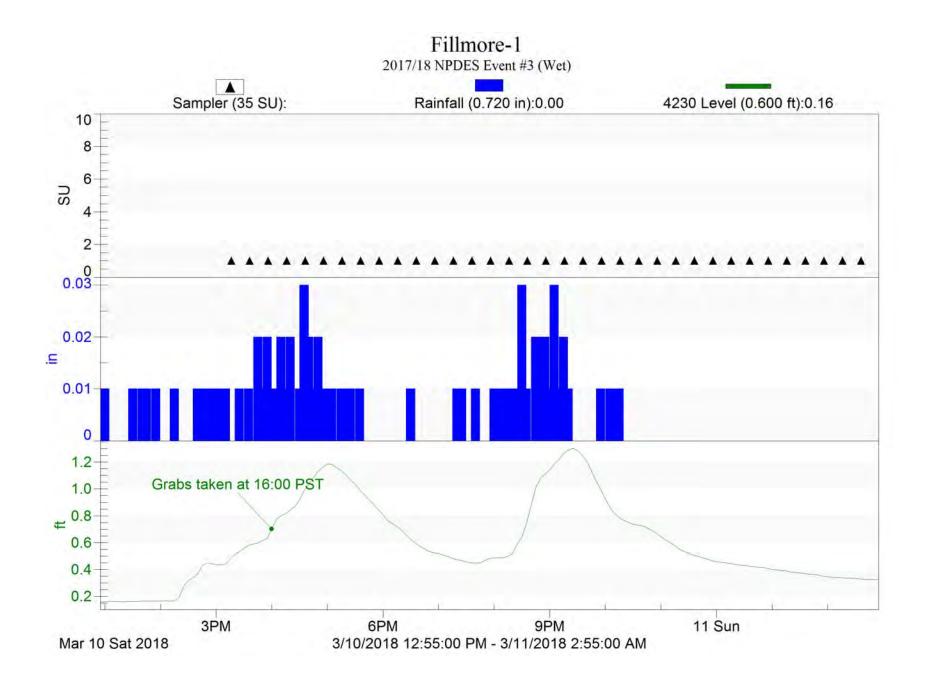




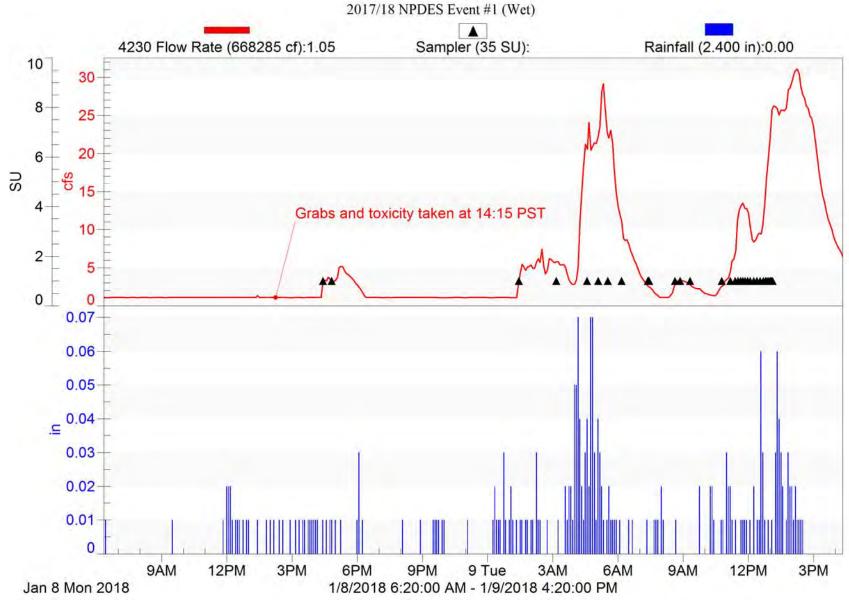


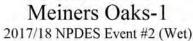


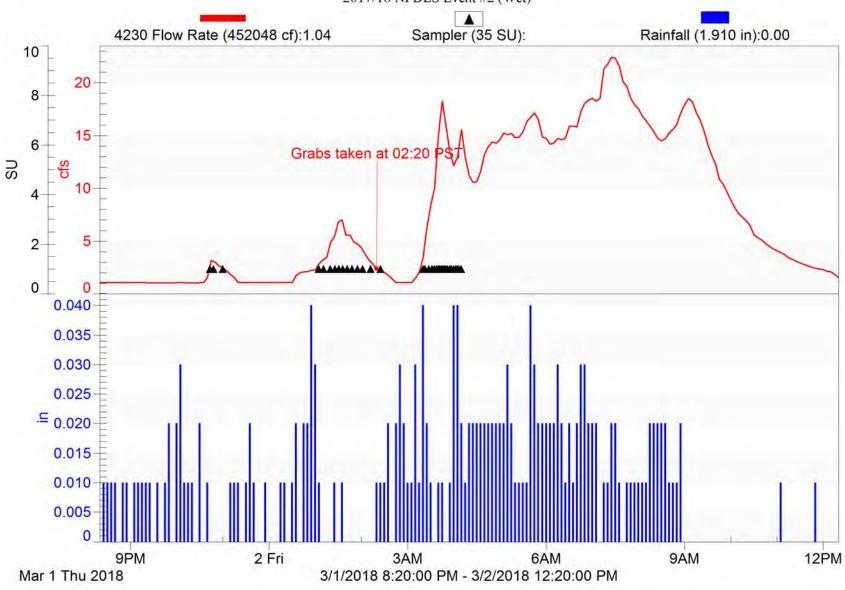


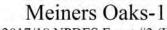


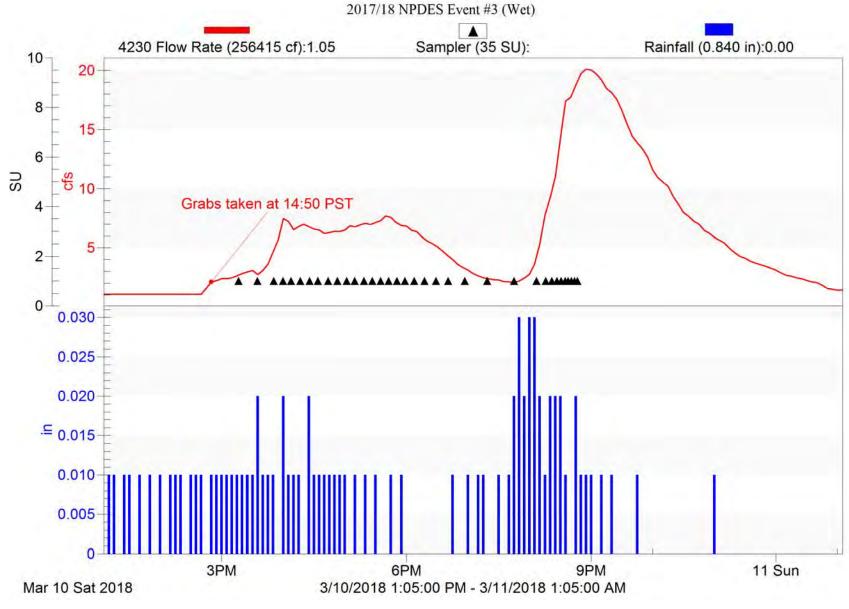
Meiners Oaks-1

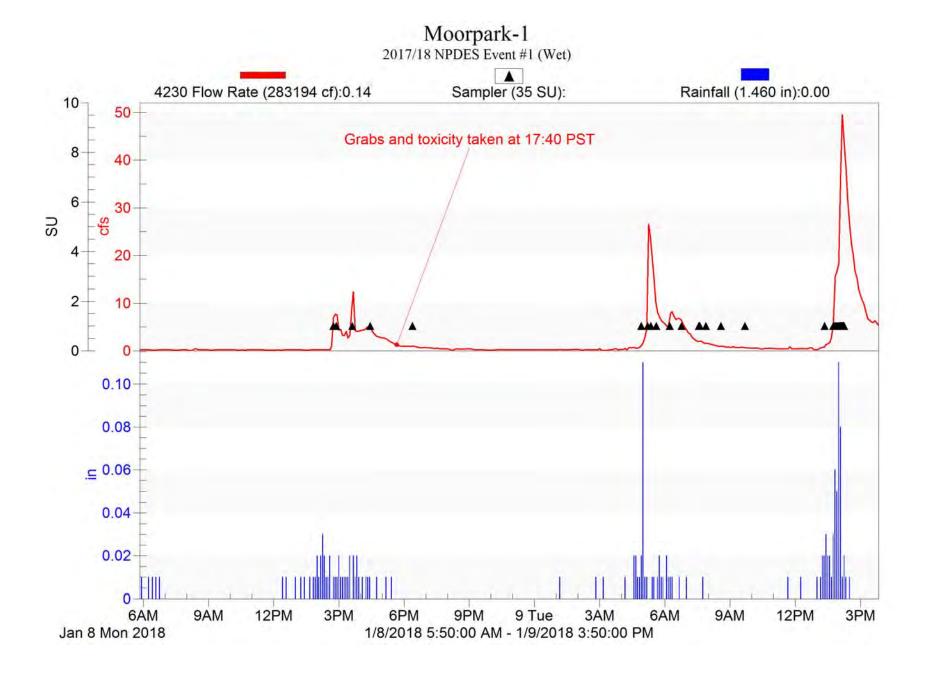




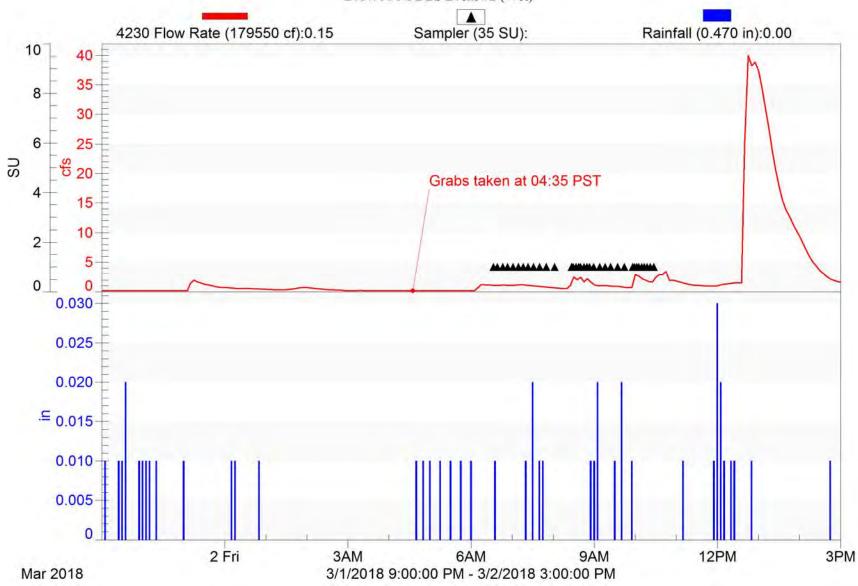


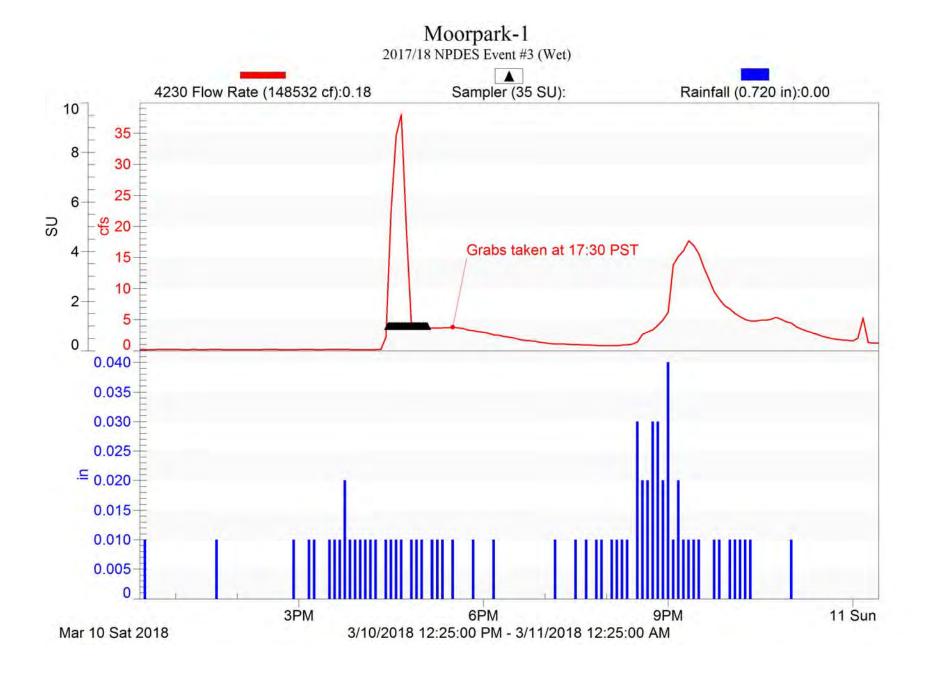






Moorpark-1 2017/18 NPDES Event #2 (Wet)





Ojai-1 2017/18 NPDES Event #1 (Wet) 4230 Flow Rate (1273330 cf):5.26 Rainfall (2.730 in):0.00 Sampler (35 SU): 10 Grabs and toxicity taken at 13:15 PST 80 8 60 6 SC 40 20 0-0.07 0.06 0.05 .⊑ 0.04 0.03 0.02 0.01 9AM 12PM 3PM 6PM 9PM 9 Tue **3AM** 6AM 9AM 12PM 3РМ Jan 8 Mon 2018 1/8/2018 6:15:00 AM - 1/9/2018 3:15:00 PM

Ojai-1 2017/18 NPDES Event #2 (Wet) 4230 Flow Rate (585414 cf):5.21 Rainfall (2.000 in):0.00 Sampler (35 SU): 10 8 30 6 SU Grabs taken at 01:20 PST 20 15 10 0.040 0.035 0.030 0.025 .⊑ 0.020 0.015 0.010 0.005 9PM 2 Fri 3AM 9AM 6AM Mar 1 Thu 2018 3/1/2018 7:50:00 PM - 3/2/2018 9:50:00 AM

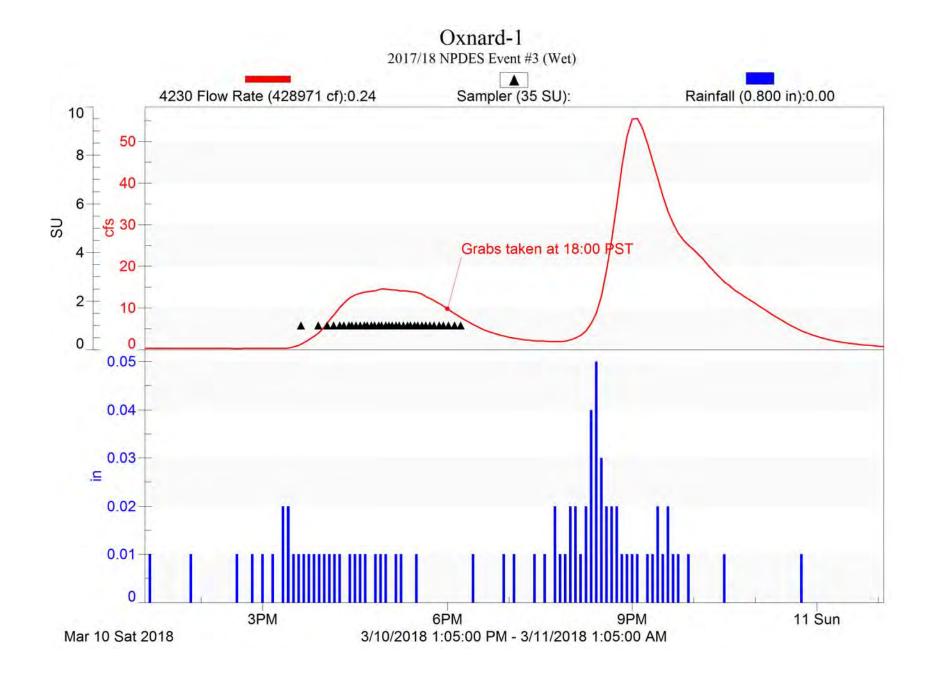
Ojai-1 2017/18 NPDES Event #3 (Wet) 4230 Flow Rate (289164 cf):5.22 Rainfall (1.060 in):0.00 Sampler (35 SU): 10 35-30 8 25 6 S 4 15 Grabs taken at 14:10 PST 10 0.030 0.025 0.020 .⊑ 0.015 0.010 0.005 3PM 9PM 6PM Mar 10 Sat 2018 3/10/2018 12:15:00 PM - 3/10/2018 10:15:00 PM

Oxnard-1 2017/18 NPDES Event #1 (Wet) 4230 Flow Rate (433700 cf):0.25 Rainfall (0.850 in):0.00 Sampler (35 SU): 10 30 Grabs and toxicity at 18:40 PST 25 8 20 6 SU 10 2 0 0 0.05 0.04 0.03 _⊑ 0.02 0.01 0 12PM 9AM 3PM 6PM 9PM 9 Tue **3AM** 6AM 9AM 12PM 3PM

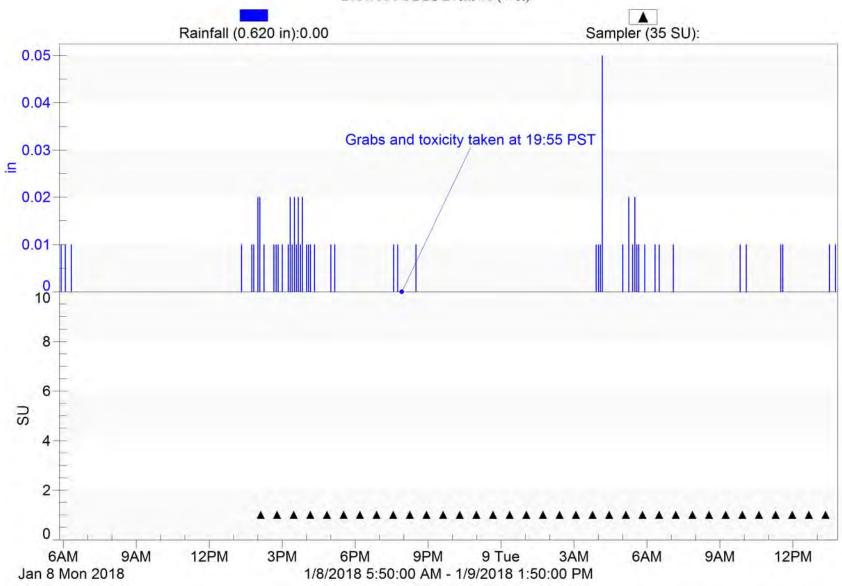
Jan 8 Mon 2018

1/8/2018 6:00:00 AM - 1/9/2018 3:00:00 PM

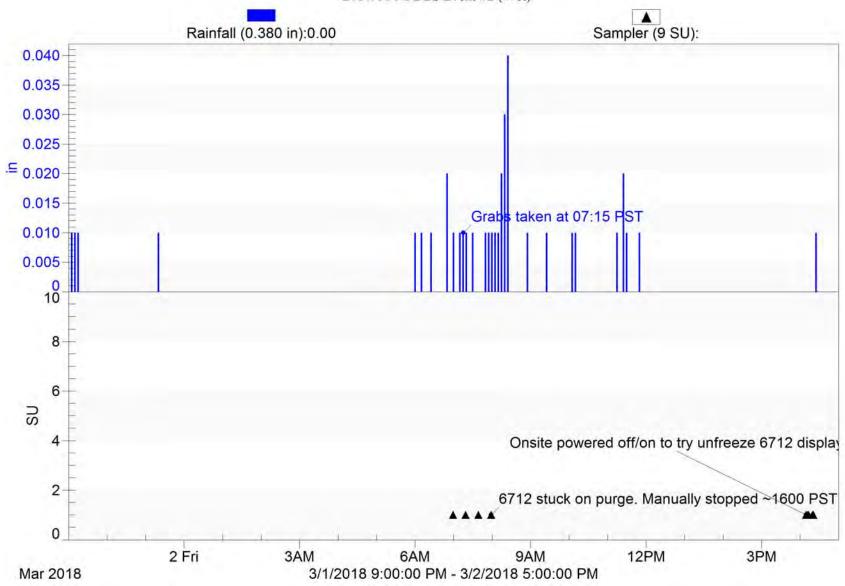
Oxnard-1 2017/18 NPDES Event #2 (Wet) 4230 Flow Rate (101984 cf):0.25 Sampler (24 SU): Rainfall (0.290 in):0.00 10 8 6 SU Grabs taken at 06:15 am 2 0 0 0.020 0.015 .⊆ 0.010 0.005 **3AM** 6AM 9PM 2 Fri 9AM **12PM** 3PM 6PM 9PM 3 Sat **3AM** 6AM 9AM Mar 1 Thu 2018 3/1/2018 8:00:00 PM - 3/3/2018 10:00:00 AM



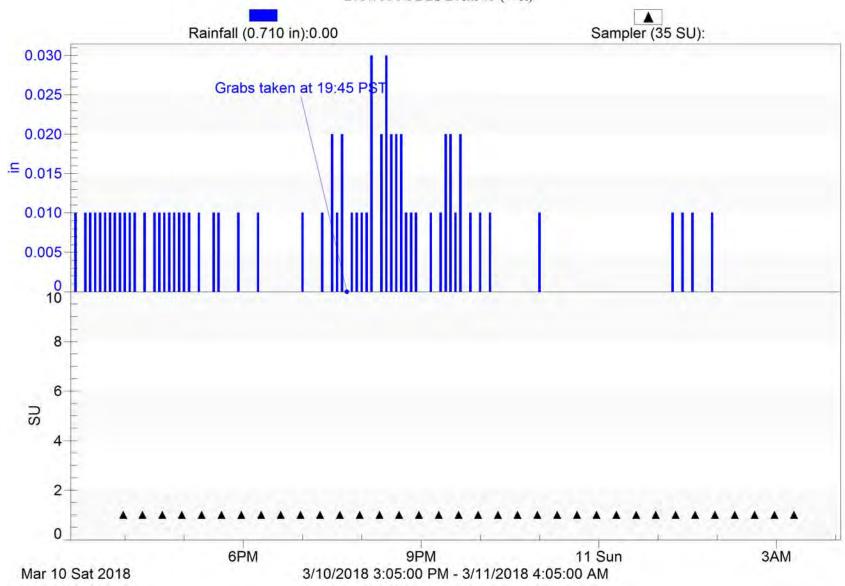
Port Hueneme-1 2017/18 NPDES Event #1 (Wet)



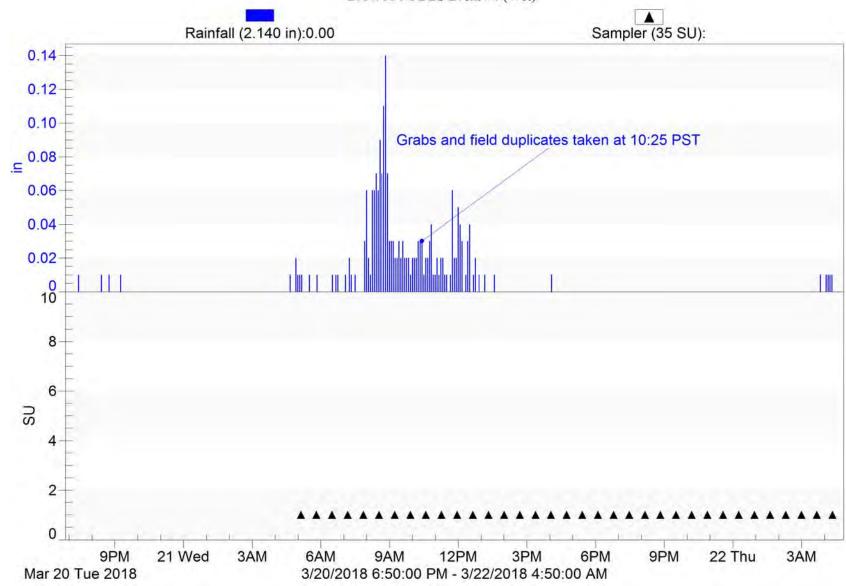
Port Hueneme-1 2017/18 NPDES Event #2 (Wet)



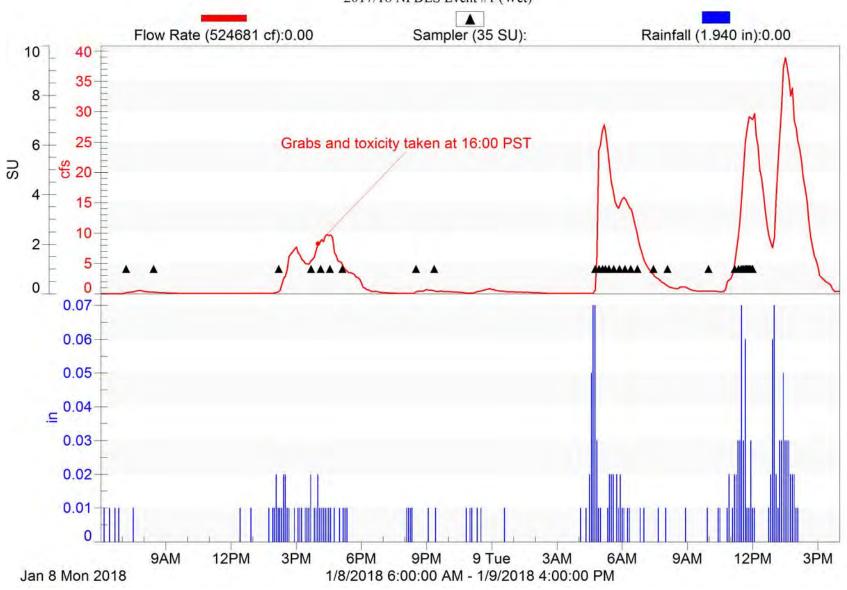
Port Hueneme-1 2017/18 NPDES Event #3 (Wet)



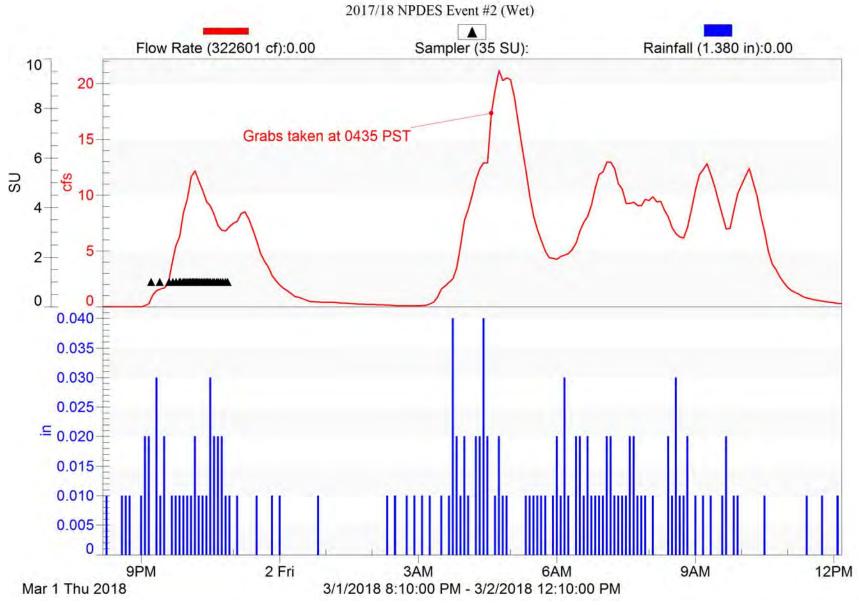
Port Hueneme-1 2017/18 NPDES Event #4 (Wet)



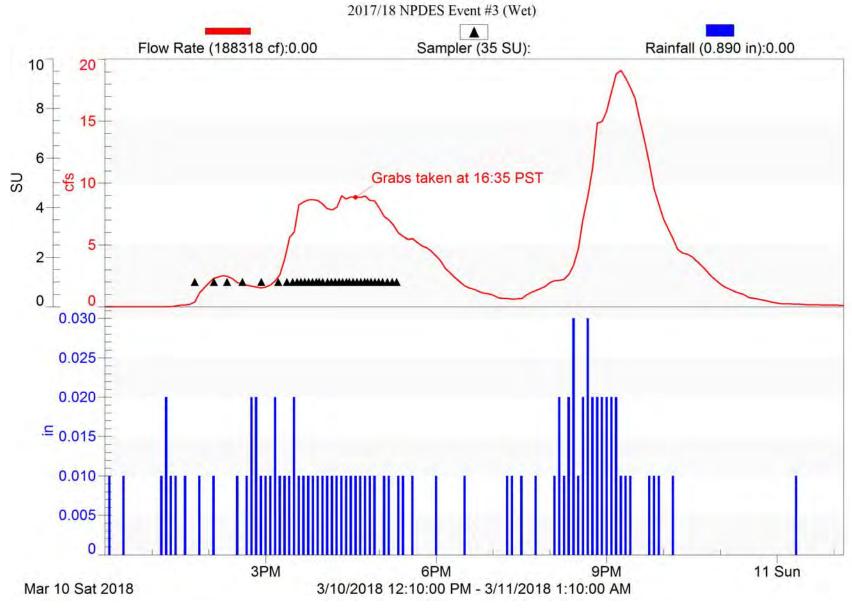
Santa Paula-1 2017/18 NPDES Event #1 (Wet)

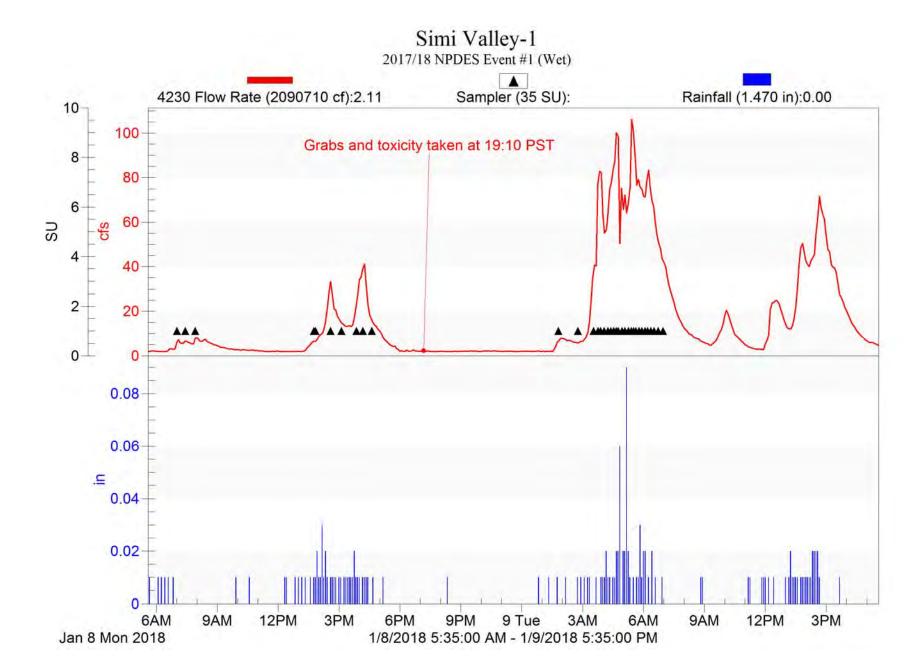


Santa Paula-1

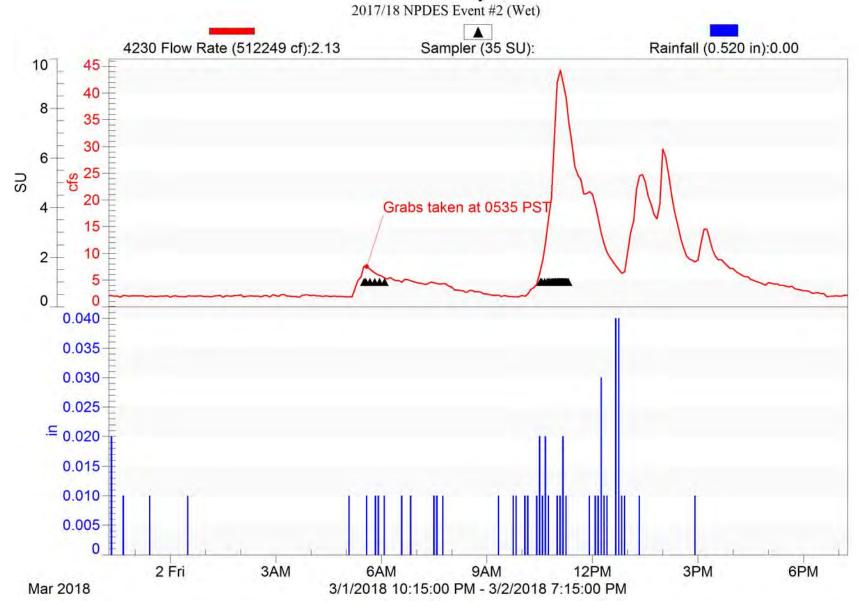


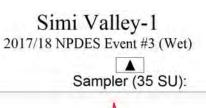
Santa Paula-1

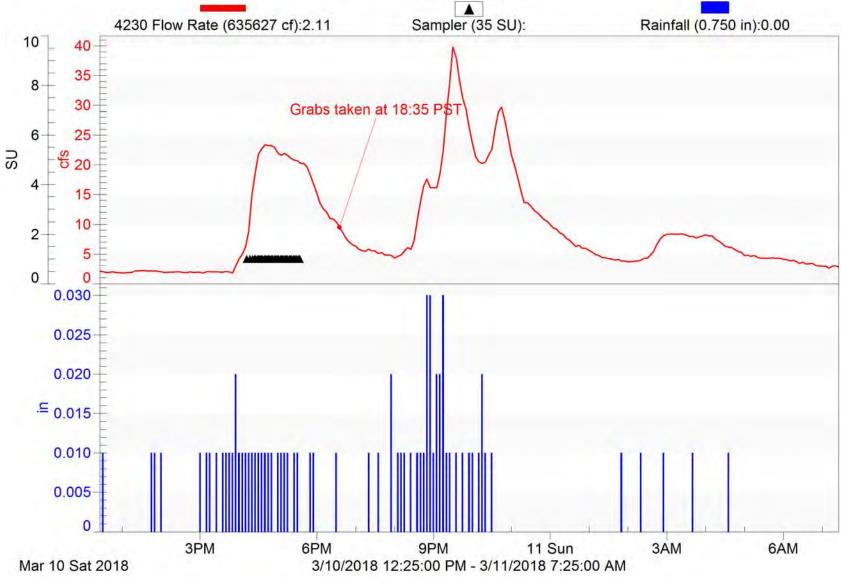


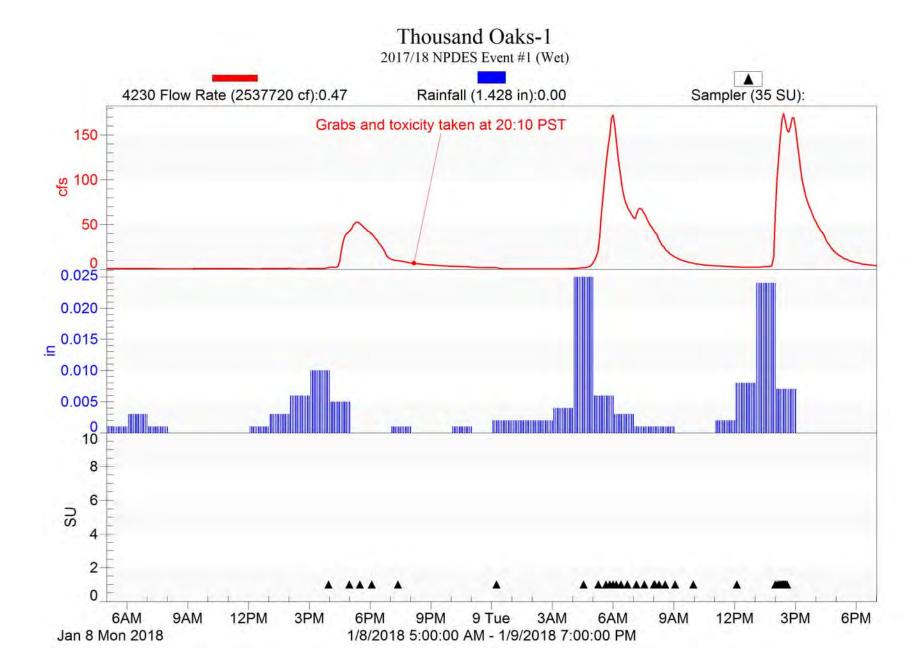


Simi Valley-1

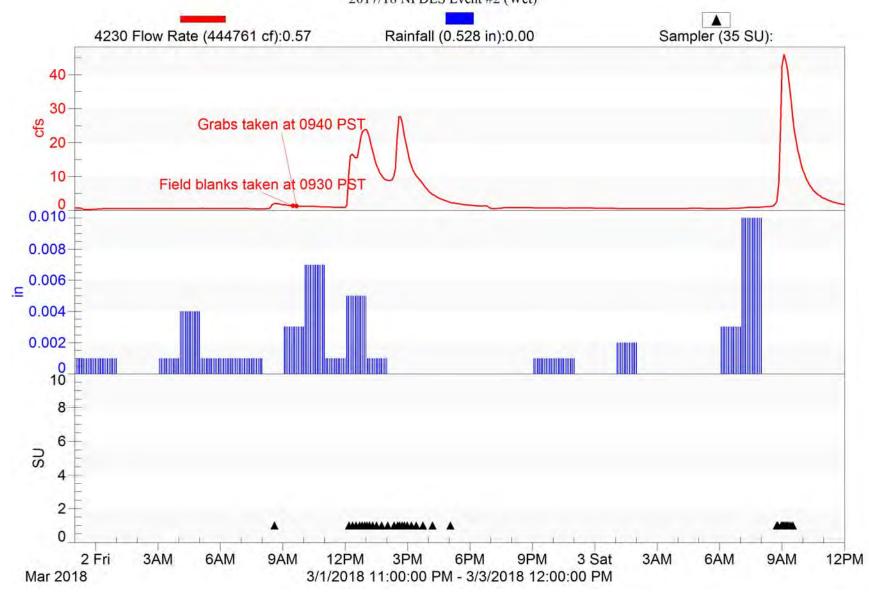


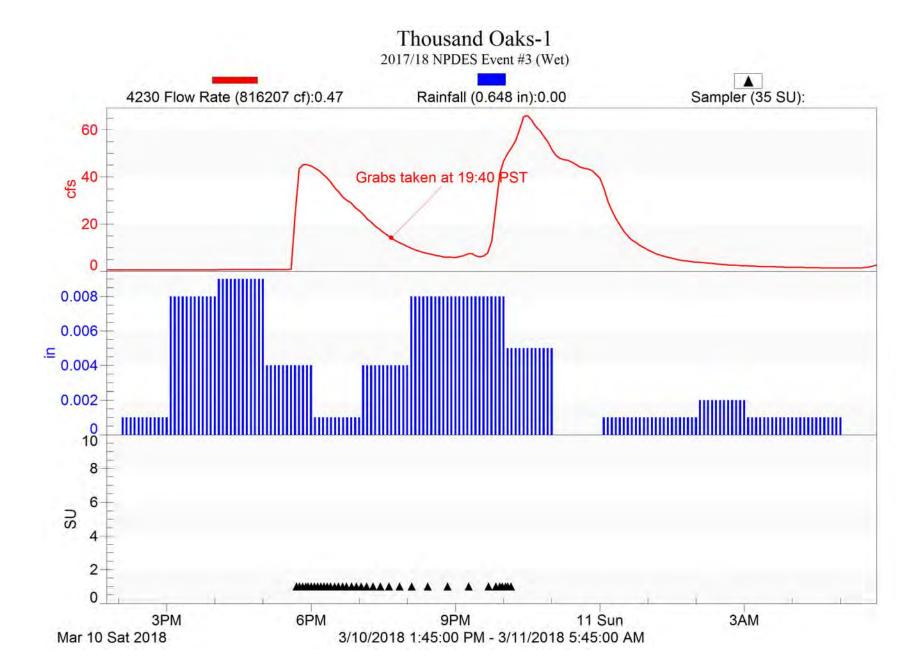






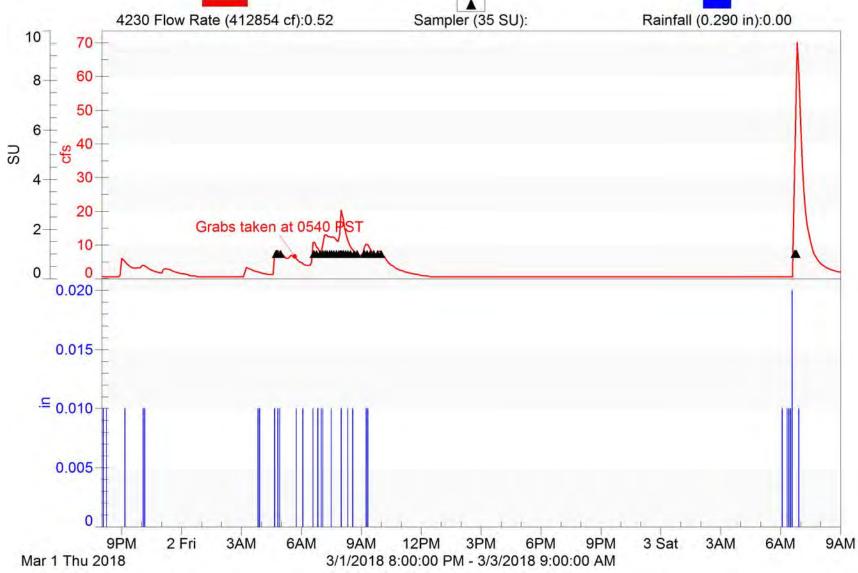
Thousand Oaks-1 2017/18 NPDES Event #2 (Wet)

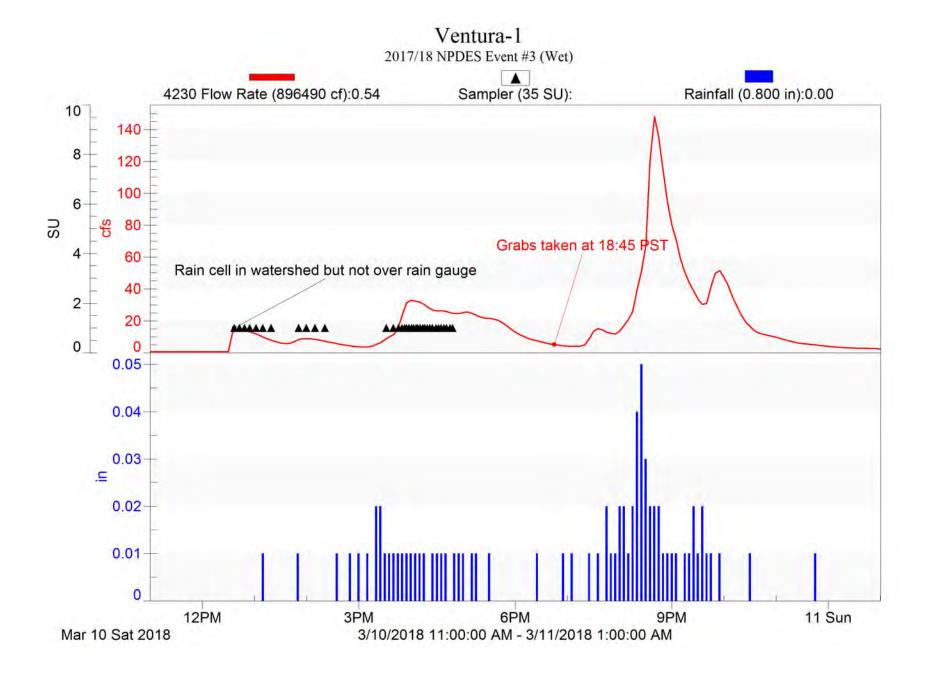




Ventura-1 2017/18 NPDES Event #1 (Wet) 4230 Flow Rate (1083950 cf):0.52 Sampler (35 SU): Rainfall (0.850 in):0.00 10 80 70 8 60 Grabs and toxicity taken at 17:20 PST 50 6 S કુ 40 4 30 20 2 10 0 0 0.05 0.04 0.03 .⊑ 0.02 0.01 0 9AM **12PM 3PM** 6PM 9PM 9 Tue 3AM 9AM 12PM 3PM 6AM Jan 8 Mon 2018 1/8/2018 6:00:00 AM - 1/9/2018 5:00:00 PM

Ventura-1
2017/18 NPDES Event #2 (Wet)
Sampler (35 SU):





Appendix	C. NRCS Curv	ve Number M	ethodology l	Discussion	



Ventura County Watershed Protection District

Planning & Regulatory Hydrology Section MEMORANDUM

DATE: September 4, 2009 Updated August 12, 2010

TO: Tommy Liddell

VIA: Bruce Rindahl

FROM: Mark Bandurraga

SUBJECT: NPDES Monitoring Site Yield Evaluation

Per your request, we have used the land use and watershed information you provided to prepare a spreadsheet that can be used to estimate the runoff quantities from storm forecasts. The runoff quantity is estimated using the NRCS Curve Number approach that is a common method in hydrology. The results show that the weighed Curve Numbers estimated from the evaluation range from a low of about 74 for the rural Fox Canyon Drain watershed in Ojai to a high of about 91 for the urbanized watershed in the City of Ventura. The methodology and files used to calculate the Curve Numbers are described in this memo for the watersheds shown in Figures 1-4.

In August 2010 you requested results for another 7 monitoring sites across the county. This memo describes the additional work done for that request.

Curve Number Calculation Methodology

Land Use Data

Land Use data used in the study were provided by the Water Quality Section already clipped to the monitoring site boundaries and in a geodatabase. The land use data were extracted from the Assessor's Parcel database which is considered to be current as of the date of extraction (Feb 12, 2009). The various classifications in the file based on the assessor's 4-digit site use codes were sorted and assigned hydrologic land use names associated with the various classifications contained in the Curve Number (CN) Table from the Hydrology Manual (2006) as shown in Table

- 1. The categories in the land use file corresponded well with the land uses in the VCWPD CN Table with the following exceptions:
 - 1. Vacant undifferentiated land was assumed be open brush in fair condition in rural areas and open space with 50% grass cover in urban areas.
 - 2. Mixed urban land uses were assumed to correspond to commercial properties with 50% effective impervious.
 - 3. Fire stations, public buildings, and schools were assigned to the low industrial use category with an effective impervious value of 36% due to the potential for large landscaped areas.

Table 1 Land Uses In NPDES Database (Assessor's Land Uses)

	Tarrana	
KVM_CAT1	SHORT_	Name
Agriculture	Abandoned Orchards and Vineyards	Orchard
Agriculture	Horse Ranches	open
Agriculture	Nurseries	Orchard
Agriculture	Orchards and Vineyards	Orchard
Agriculture	Vacant With Limited Improvements	open
Com_Indus. Mix	Mixed Commercial and Industrial	Comm
Commer.	Commercial Recreation	Comm
Commer.	Commercial Storage	Comm
Commer.	Low- to Medium-Rise Major Office Use	comm
Commer.	Modern Strip Development	comm
	Retail Centers (Non-Strip with Contiguous Interconnected	
Commer.	Off-Street Parking)	comm
Extraction	WHOLESALING AND WAREHOUSING	indhigh
Facilitiy	Fire Stations**	indlow
Facilitiy	Government Offices	indlow
Facilitiy	Major Medical Health Care Facilities	comm
Facilitiy	Other Public Facilities	indlow
Facilitiy	Other Special Use Facilities	indlow
Facilitiy	Police and Sheriff Stations**	indlow
Facilitiy	Religious Facilities	indlow
Facilitiy	Special Care Facilities	indlow
Industrial 1	Open Storage	indlow
Industrial 1	Packing Houses and Grain Elevators	indlow
Industrial 3	Manufacturing, Assembly, and Industrial Services	indhigh
No Info Given	inanananan g, ricconnorj, ana madalian comico	open
Recreation	Other Open Space and Recreation	open
Res.1	Low Density Single Family Residential	reslow
Res.1	Trailer Parks and Mobile Home Courts, High Density	reshigh
1103.1	Trailer Farks and Mobile Florite Godito, Flight Beholty	reariigii
Res.2	Low-Rise Apartments, Condominiums, and Townhouses	reshigh
Res.2	Rural Residential Low Density	resrural
Res.3	High Density Single Family Residential	reshigh
1165.5	Duplexes, Triplexes, and 2- or 3-Unit Condominiums and	resnign
Res.4	Townhouses	rochigh
Res.4	Medium-Rise Apartments and Condominiums	reshigh reshigh
Res.4	Mixed Urban	
		comm
Schools	Elementary Schools**	indlow
Schools	Junior High Schools** Senior High Schools**	indlow
Schools		indlow
Transportation	Freeways and Major Roads	paved
Transportation	Mixed Transportation	paved
Transportation	Truck Terminals	paved
Under Constructi	Under Construction	indlow
Utilities	Electrical Power Facilities	indlow
Vacant Undiffere	Vacant Undifferentiated (rural)	brushfair
Vacant Undiffere	Vacant Undifferentiated (city)	open

Soils Information

The soils information was obtained from the District soils shapefile that groups the soil info into categories 1 through 7 corresponding to the NRCS soil categories D through A, respectively. The soils info was clipped to the watershed boundaries using the watershed shapefile. The areas

obtained from the soils files were checked against the total watershed areas to make sure they were identical.

Combined Soils and Land Use Information and Weighted Curve Numbers

The soils and land use shapefiles were then unioned in GIS to obtain the combinations of soil type and land uses in the watersheds. The resulting table was imported into excel and sorted to group the various land uses. The land uses were then assigned a name associated with the data in the District CN Table. Based on the name and soil number, excel functions "match" and "offset" were used to obtain a CN from the CN Table. The weighted soil number and Curve Number for each watershed were calculated using the areas, soil numbers, and CN's. The weighted soil types were checked against the data in the original watershed soil files and were found to be the same. The weighted Curve Numbers were linked to a summary worksheet to be used to calculate the yields by the Water Quality Section. This procedure was also applied to the 7 additional watersheds added to the study in August 2010.

The results are shown in Table 2.

Table 2: Storm Yield Results- Weighted Average Curve Numbers

1 4510 2: 5(6)111 1			1			\C	
	Size	Compo-	Rain	Initial Abs	Rain cutoff	Yield	
Watershed Name	ac	site CN	(in)	S (no units)	(in)	(in)	% Yield
Camarillo	2,779	85.12	5.00	1.75	0.35	3.38	68%
Happy Valley	1,026	77.29	5.00	2.94	0.59	2.65	53%
Fox	749	74.19	5.00	3.48	0.70	2.38	48%
Ventura	707	90.93	5.00	1.00	0.20	3.97	79%
Fillmore	762	74.77	5.00	3.37	0.67	2.43	49%
Port Hueneme	589	85.60	5.00	1.68	0.34	3.43	69%
Moorpark	1,816	63.34	5.00	5.79	1.16	1.53	31%
Oxnard	1,374	84.07	5.00	1.89	0.38	3.28	66%
Simi Valley	3,321	71.04	5.00	4.08	0.82	2.12	42%
Santa Paula	64	80.07	5.00	2.49	0.50	2.90	58%
Thousand Oaks	5,179	81.54	5.00	2.26	0.45	3.04	61%

Between the first request and present, the Hydrology Section has updated their Curve Number tables to make them more consistent with reported infiltration rates in the Hydrology Manual. The resultant CNs were used in the study to see the effect on the yields as shown in Table 3.

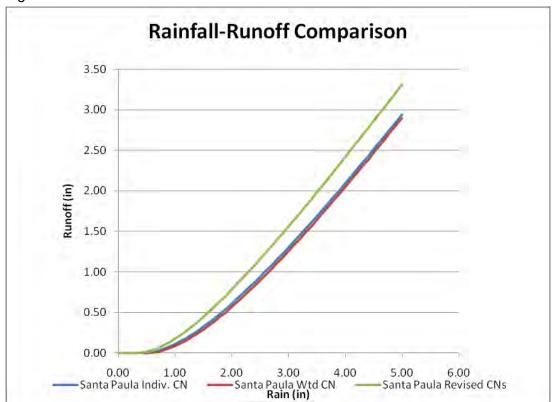
Table 3: Storm Yield Results- Weighted Average Curve Numbers with Updated CNs

1 4510 01 0 (01111 1	0.4 . 100	<u> </u>	1100711	o. ago	110111201011		aatoa o.
	Size	Compo-	Rain	Initial Abs	Rain Cutoff	Yield	
Watershed Name	ac	site CN	(in)	S (no units)	(in)	(in)	% Yield
Camarillo	2,779	84.72	5.00	1.80	0.36	3.34	67%
Happy Valley	1,026	77.22	5.00	2.95	0.59	2.64	53%
Fox	749	73.48	5.00	3.61	0.72	2.32	46%
Ventura	707	91.24	5.00	0.96	0.19	4.01	80%
Fillmore	762	74.39	5.00	3.44	0.69	2.40	48%
Port Hueneme	589	86.14	5.00	1.61	0.32	3.48	70%
Moorpark	1,816	64.63	5.00	5.47	1.09	1.63	33%
Oxnard	1,374	84.01	5.00	1.90	0.38	3.27	65%
Simi Valley	3,321	71.11	5.00	4.06	0.81	2.13	43%
Santa Paula	64	84.22	5.00	1.87	0.37	3.29	66%
Thousand Oaks	5,179	81.27	5.00	2.30	0.46	3.01	60%

The results showed that the revised CNs provided yields that were 1 or 2% higher than the 2006 CN set except for the Santa Paula watershed. This watershed was soil type 6, which had CNs that were more affected by the updates than most of the CNs for the other soils.

While working on the 2nd request, it was realized that the Hydrology Section could provide more precise estimates of flow at lower rainfall levels by analyzing each soil/land use combination individually and summing the results rather than using a weighted average CN in the runoff equation. So the individual CN results were calculated and summed for both the 7 sites in this update and the previous 4 sites. The resultant spreadsheets provide tables of runoff vs rainfall data. Figure 1 shows a comparison of the rainfall and runoff from a highly developed watershed Camarillo using the weighted average CN, individual CNs, and revised individual CNs.





Conclusions and Limitations

The provided weighted CNs can be used to estimate runoff from low to moderately saturated watersheds. It has been our experience that it is necessary to use Antecedent Moisture Condition III CNs for highly saturated watersheds which only occurs after many days of heavy rainfall such as January 10, 2005. The provided CNs probably will overpredict the runoff coming from the first storms of the season due to the very dry antecedent moisture conditions present then. If necessary further work can be done to provide CNs representing AMC I conditions. Also, the CNs assigned to the various land uses can be calibrated after enough storms have occurred to evaluate the predictive accuracy of the current yield equations provided to the NPDES group. It should also be possible to provide forecasts of runoff from the HSPF forecast model of the Ventura River watershed that more accurate reflect saturated/unsaturated conditions.

List of Files in Work Directory K:\PR\hydrology\Watersheds\NPDES\Monitoring_Sites

Filename	Description
GIS	Contains GIS files used in evaluation
GIS2010	Contains 2010 GIS files used in updated evaluation
ClippedLandUse.mdb	Geodatabase with land uses clipped to watershed boundaries
	provided by WQ section
*_SelectedWatershed.shp	shapefiles showing boundaries of monitoring watersheds
*soils.shp	soils shapefiles clipped to watershed boundaries
*soilsunion.shp	Union of soils and land use data shapefile for watersheds
Allsoil.shp	VCWPD soils shapefile showing numbers for hydrology calcs
NPDES_MonitoringSitesR	9-09 CN data
unoff9-09.xls	
NPDES_MonitoringSitesR	8-10 updated analysis for 11 sites total
unoff8-10.xls	
NPDES_MonitoringSitesR	8-10 analysis using revised CNs
unoff8-10RevCNs.xls	
MonitoringSites9-09.mxd	ArcMap project file for analysis

Ventura Watershed



Figure 2

Meiners Oaks Happy Valley Watershed



Figure 3

Ojai Fox Watershed

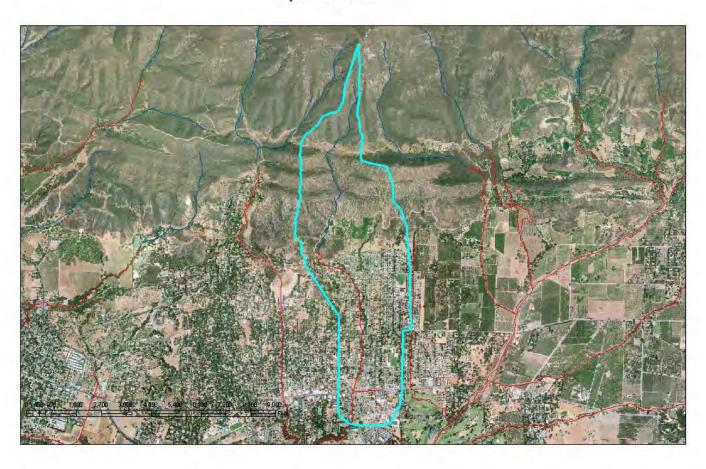


Figure 4

Camarillo Hills Drain Watershed



Figure 5

Simi Valley Watershed

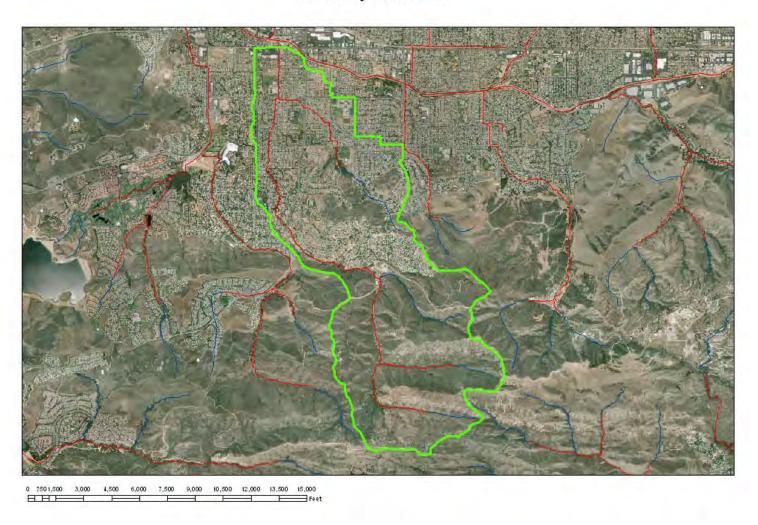


Figure 6

Oxnard Watershed



Figure 7

Moorpark Watershed



Figure 8

Port Hueneme Watershed



Figure 9

Fillmore Watershed

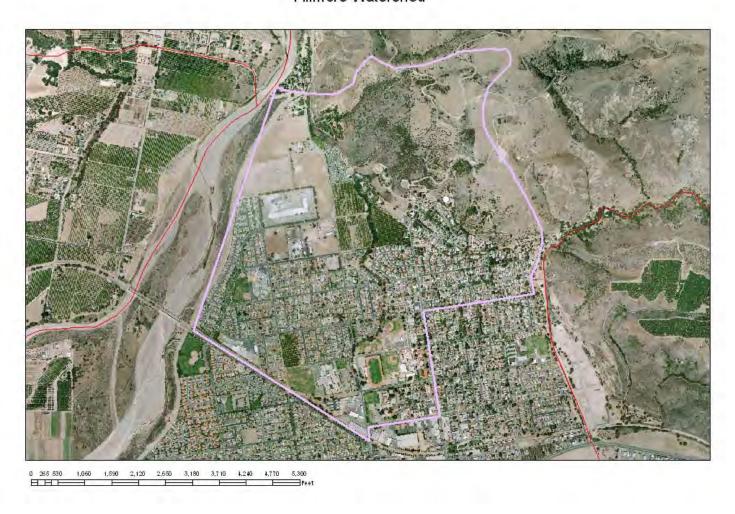


Figure 10

Thousand Oaks Watershed

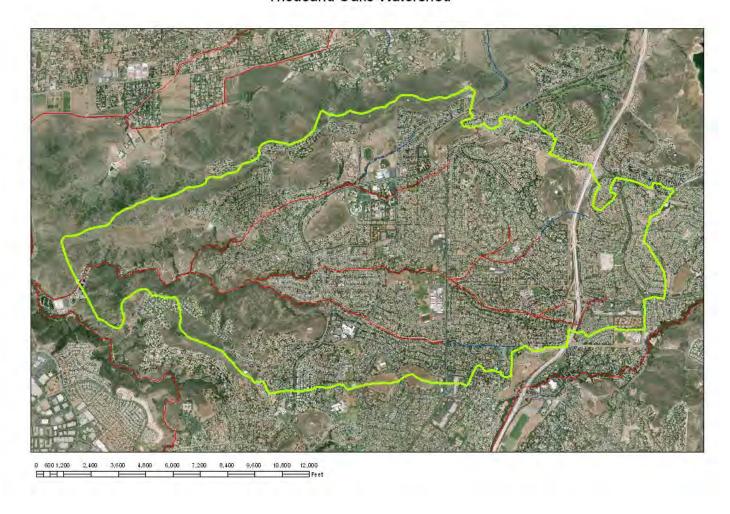


Figure 11

Santa Paula Watershed



Figure 12

Appendix D. Event Summaries

<u>Site</u>	Event	<u>Visit</u>	<u>Staff</u>	<u>Date</u>	Arrival Time	PST/ PDT	Flowmeter Level (feet)	Flowmeter Flow (cfs)	Outside Staff (ft)	Fridge T °C Turned	Flush (L)	Pump Count	Program/6712 Display Flow: 1 pulse/500mlx35, program	Comp bottle status/ Estimated Vol (L)	Comp Duration (nearest half hrs)	Comp Time		Toxicity Time	- <u>Notes</u>
ME-CC ME-CC	1 1	1 2	LM JM,TS	1/7/2018 1/9/2018	1625 0940	PST PST	1.059 1.575	5 75		on 15	4L Distilled	109,716	disabled Sample 4 after 1 pulse	Bottle in, lid off			0940	0940	Left grab & tox bottles Fridge fuse ok. Added ice to fridge. Drained fridge. Turned fridge off, propped it
ME-CC	1	3	LM,DW	1/10/2018	1030	PST	1.504	59		1	2L Distilled	491,787	Program done	Overflowed		1035			open.
ME-VR2 ME-VR2	1 1	1 2	KH,DL JM,TS	1/7/2018 1/9/2018	1300 1110	PST PST	1.088 4.504	NA NA	~1.11	1 3	4L Distilled		Flow: 1 pulse/500mlx35, program disabled Program done.	Bottle in, lid off Full/overflowed		1110	1110	1110	Left grab & tox bottles
ME-VR2	1	3	KH,DL	1/10/2018	1155	PST	2.82	NA	~3' in sediment		4L Distilled	383,590	Program done.				1200		High water mark ~9'. Collected grabs for Regional Board. Intake location currently unknown (due to ~3' sediment deposition)
ME-SCR	1	1	LM	1/7/2018	1735	PST	5.795	NA	NA	2	4L Distilled	55,590	Time: 41 min/500mlx35, program started, so changed start time to 0800 Connected 6712 to 2105.	Bottle in, lid off					Left grab & tox bottles. Left outside light on. Lowered swing arm and removed rope (put in house).
ME-SCR ME-SCR	1 1	2	WBC JM,TS	1/8/2018 1/9/2018	0752 1245	PST PST	5.976			3			Reprogrammed for no delay to start, program disabled Sample 31 in 21 min	Bottle full		1245	1245	1245	Collected grabs for Regional Board
MO-OJA MO-OJA	1 1	1 2	KH,DL WBC,TS	1/7/2018 1/8/2018	1155 1300	PST PST	0.101 0.101	5 5	<0.1 cfs 5 cfs est	2 1	4L Distilled		Flow: 1 pulse/500mlx35, program disabled Program disabled	Bottle in, lid off OL			1315	1315	Left grab & tox bottles
MO-OJA MO-OJA	1 1	3	WBC WBC	1/9/2018 1/10/2018	0300 1030	PST PST	0.22 0.1	5	NR	2	2L Distilled	105,933	Sample 3 in 1 pulse Program done.	Bottle full		1030			Stage hadn't risen so visited site to check if debris was clogging bubbler. Stage rose while on way to site. Turned 6712 off
MO-MEI MO-MEI	1	1 2	KH,DL WBC,TS	1/7/2018 1/8/2018	1227 1415	PST PST	0.08 0.75	1	Dry ~0.75	Turned on 0	4L Distilled		Flow: 1 pulse/500mlx35, program disabled Program disabled	Bottle in, lid off OL			1415	1415	Left grab & tox bottles. Cleared debris from near bubbler/intake.
MO-MEI	1	3	WBC	1/10/2018	0950	PST	0.081	1		2	2L Distilled	96,486	Program done.	18.5L		0950			Turned fridge off and propped open with positioning rack.
MO-FIL	1	1	LM	1/7/2018	1230	PST	0.044	NA		Turned on	4L Distilled	25,699	Time: 40 min/500mlx35, program disabled	Bottle in, lid off					Left grab & tox bottles
MO-FIL	1	2	WBC,TS KH,DL	1/8/2018 1/10/2018	1645 0907	PST PST	1.24 0.151	NA NA		0	4L Distilled	184,435	Sample 5 in 00:07:30 Program done.	2.5L 18.5L		0910	1645	1645	Sample 5 delivered 0mL so stopped program, took 6712 grab sample (delivered correctly), restarted program Turned fridge off and propped open with positioning rack. Turned 6712 off.
IVIO TIE	-		KII,DE	1/10/2010	0307	131	0.151	IVA			4E Distilled	104,433	rrogram done.	10.02		0310			-
MO-OXN MO-OXN	1	1 2	KH,DL JM,DL	1/7/2018 1/8/2018	1520 1835	PST PST	0.108 0.225	0.2 1.4	Dry ~0.27	Turned on 4	4L Distilled		Flow: 1 pulse/500mlx35, program disabled Sample 5 after 1 pulse	Bottle in, lid off			1840	1835	Left grab & tox bottles. Bubbler line torqued 90 degrees into air. Bent back to $^{\sim}$ 0.05' from toe. Needs fixed after event.
MO-OXN	1	3	KH,DL	1/10/2018	1035	PST	0.109	0.2	<0.1 cfs	-4	4L Distilled	154,013	Program done. Errors have occurred (power failed/restored 1/8/18 @ 18:31).	17L		1035			Turned fridge off and propped open with positioning rack. Turned 6712 off.
MO-CAM MO-CAM	1 1	1 2	KH,DL JM,DL	1/7/2018 1/8/2018	1450 2047	PST PST	0.035 0.033	10 10	<0.1 cfs	Turned on 0	4L Distilled		Flow: 1 pulse/500mlx35, program disabled Program disabled	Bottle in, lid off 3.5L			2047	2100	Left grab & tox bottles
MO-CAM	1	3	KH,DL	1/10/2018	1007	PST	0.031	10	<0.1	-2	4L Distilled	109,137	Program done.	17L + 2L ice		1010			Turned fridge off and propped open with positioning rack. Turned 6712 off.
MO-SIM MO-SIM	1	1 2	LM LM,PD	1/7/2018 1/8/2018	1430 1905	PST PST	0.141 0.145	2 2	wet to toe	Turned on 3	4L Distilled	15,703	Flow: 1 pulse/500mlx35, program disabled Program disabled	Bottle in, lid off 4L			1910	1910	Left grab & tox bottles
MO-SIM	1	3	SG,DL	1/9/2018	1241	PST	0.412	22	0.4	4	4L Distilled	86,982	Program done.	18L		1240			Fridge needs turned off and propped open.
МО-МРК	1	1	LM	1/7/2018	1330	PST	0.069	0.2	<0.1 cfs	Turned on	4L Distilled	20,390	Flow: 1 pulse/500mlx35, program disabled	Bottle in, lid off					Left grab & tox bottles

I													Sample 5 after 1 pulse, Errors					
MO-MPK	1	2	LM,PD	1/8/2018	1730	PST	0.145	1.5		4			have occurred.	2L		1740	1740	Used bucket to fill samples (safety)
MO-MPK	1	3	LM,DW	1/10/2018	0905	PST	0.071	0.1		2	2L Distilled	177,060	Program done.	90% full	0910			Turned fridge off and propped it open.
													Flow: 1 pulse/500mlx35, progra	m				
MO-THO	1	1	LM	1/7/2018	1535	PST	2.041	0	2	0.5	4L Distilled	27,555	disabled	Bottle in, lid off				Left grab & tox bottles
MO-THO	1	2	LM,PD	1/8/2018	2008	PST	2.456	7	~2.5	2			Sample 6 after 1 pulse	4L		2010	2010	
MO-THO	1	3	LM,DW	1/10/2018	0945	PST	2.064	1	1.9	5	2L Distilled	187,363	Program done.	Full	0950			High water mark ~8'
													Flow: 1 pulse/500mlx35, progra	m				
MO-VEN	1	1	KH,DL	1/7/2018		PST					2L Distilled		disabled	Bottle in, lid off				Left grab & tox bottles
MO-VEN	1	2	JM,DL	1/8/2018	1707	PST	0.259	10		1			Sample 4 after 1 pulse	2L		1720	1707	
MO-VEN	1	3	SG,DL	1/9/2018	1345	PST	0.182	6		0	4L Distilled	95,745	Program done	18L	1345			Fridge needs turned off and propped open.
													Time: 40 min/500mlx35, progra	m				
MO-HUE	1	1	KH,DL	1/7/2018	1400	PST	NA	NA		2	4L Distilled		disabled	Bottle in, lid off				Left grab & tox bottles
MO-HUE	1	2	JM,DL	1/8/2018	1945	PST	NA	NA		3			Sample 10	3.5L		1945	1955	
																		program display? Site needs flushed, pump
MO-HUE	1	3	JM,TS	1/9/2018	1500	PST	NA	NA				NR	NR	NR	1500			counts, etc.
										Turned			Flow: 1 pulse/500mlx35, progra	m				
MO-SPA	1	1	LM	1/7/2018	1200	PST	NA	NA	No flow	on	4L Distilled	26,990	disabled	Bottle in, lid off				Left grab & tox bottles
MO-SPA	1	2	WBC,TS	1/8/2018	1600	PST	NA	NA	NA	2			Sample 5 after 1 pulse	2L		1600	1600	
									Flow									
MO-SPA	1	3	SG,DL	1/9/2018	1430	PST	NA	NA	present	-2	4L Distilled	177,411	Program done.	18L	1430			Fridge needs turned off and propped open.

Event Notes:

NR: Not recorded

All times are recorded here in PST

Forecast Rain: 2-4" coast and valleys, 1.5-6.5" mountains

Actual Rainfall: 0.6-2.5 coasts and valleys,

Storm Control: Kelly Hahs

Sample Tracking:

Bacteria samples to VCHCA:

01/08/2018 @ 17:40 (MEI/OJA/SPA/FIL) by WB Carey

01/08/2018 @ 21:15 (SIM/MPK/THO) by Lara Meeker

01/08/2018 @ 21:35 (VEN/OXN/HUE/CAM) by Jim McCrory and Dave Laak

01/09/2018 @ 13:55 (VR2/SCR/CC) by Jim McCrory

Toxicity samples to Pacific EcoRisk (via FedEx Custom Critical):

01/09/2018 @ 15:12 (All sites) by Kelly Hahs

Chemistry samples to Weck Laboratories, Inc. (via Weck-provided courier):

01/09/2018 @ 16:10 (All grabs plus composites for SCR/VR2/VEN/SPA/SIM/HUE) to Hector Sanchez by Kelly Hah:

01/10/2018 @ 12:45 (Composites for SCR/VR2/VEN/SPA/SIM/HUE) to Einar Honegger by Bill Care

Meters:

MEI/OJA/SPA/FIL: Beckman 255 # 2151, YSI 85 # 05E1126 THO/SIM/MPK: Beckman 255 # 2151, YSI 85 #05E1042 VEN/OXN/HUE/CAM: Beckman 410 #NR, YSI 85 #NR CC/SCR/VR2: Beckman 255 #2554, YSI 85 #05E1042

Deg F	Deg C	Deg C
29	-2	-1.667
30	-1	-1.111
31	-1	-0.556
32	0	0
33	1	0.556
34	1	1.111
35	2	1.667
36	2	2.222
37	3	2.778
38	3	3.333
39	4	3.889
40	4	4.444
41	5	5.000
42	6	5.556
43	6	6.111
44	7	6.667
45	7	7.222

Comp Flowmeter Comp bottle Duration Arrival PST/ Level Flowmeter Outside Fridge T Pump status/ (nearest Comp Grab Toxicity Event Visit Staff Date Time PDT (feet) Flow (cfs) Staff (ft) °C Flush (L) Count Program/6712 Display Estimated Vol (L) half hrs) Time Time Added Flow: 1 pulse/500mlx35, program Left grab bottles. Replaced 4230 external ME-CC KH,DL 2/28/2018 1245 PST 1.145 10 1.14 ice 4L Distilled 498,927 disabled Bottle in, lid off 1200 1200* ME-CC 2 2 JM(GC),TS 3/2/2018 PST 1.155 11 3 Program disabled Empty *Bacteria sample only 1.28 WBC,PD 3/3/2018 0915 PST 1.275 20 0 2L Distilled 669,299 Sample 16 after 1 pulse 18L 0915 0915** All but bacteria MF-CC 383,590 Calibrated 6712. Left grab bottles + Replaced Flow: 1 pulse/500mlx35, program Regional Board sample bottles KH,DL 2/28/2018 1.101 1.2 3 4L Distilled auxiliary disabled Bottle in, lid off (ThomasFireRunoff). Replaced desiccant ME-VR2 JM(GC),TS 3/2/2018 0835 1.518 0 Sample 2 after 1 pulse 0.5L 0835 ^OSS at pond at wing wall (not currently in equilibrium with main channel where 1.994 2.59^ 2L Distilled 377,790 Program done. Overflowed 0907 bubbler orifice is. HWM ~3'(?) KH,DL 3/3/2018 0900 PST Left grab bottles + Regional Board sample Time: 20 min/500mlx35, program bottles (ThomasFireRunoff). Swing arm ME-SCR 2 1 KH,AS 3/1/2018 1155 PST 5.018 4L Distilled 279,262 disabled Bottle in, lid off already lowered Remixed sample, dumped half, recalibrated 6712, reprogrammed for 17 samples. MF-SCR 2 JM(GC),TS 3/2/2018 1000 PST 5.356 Sample 19 10:00 Restarted program WBC,PD 3/3/2018 0759 PST 10.294 4 2L Distilled Program done 16L 0758 Raised swing arm Left grab bottles + Regional Board sample Flow: 1 pulse/500mlx35, program bottles (ThomasFireRunoff). Replaced 4230 MO-OJA 2 1 WBC 3/1/2018 1015 PST 0.1 5 Trickle 3 4L Distilled 117,829 disabled Bottle in, lid off desiccant. 0 0108 PST 0.114 MO-OIA 2 2 SG,AS 3/2/2018 5 Program disabled Empty 0120 MO-OJA JM(GC),TS 3/2/2018 0720 PST 0.212 15 2 2L Distilled Program done. 0720 208.397 Turned Left grab bottles + Regional Board sample Flow: 1 pulse/500mlx35, program MO-MEI 2 1 WBC 2/28/2018 1458 PST 0.081 1 Dry on 4L Distilled 106,841 disabled Bottle in, lid off bottles (ThomasFireRunoff) MO-MEI 2 2 SG,AS 3/2/2018 0213 PST 0.133 3 0 Sample 14 after 1 pulse 20-30% full 0220 MO-MFI JM(GC).TS 3/2/2018 0755 PST 0.308 18 2L Distilled 190.848 Program done. NR 0755 Left grab bottles. Replaced 4230 external Turned Time: 20 min/500mlx35, program desiccant. Cleared debris near MO-FII KH,AS 3/1/2018 1055 PST 0.28 189,694 intake/bubbler orifice 41 Distilled disabled Bottle in lid off 1 on MO-FIL 2 SG,AS 3/2/2018 0343 PST 0.496 -4 30% full 0350 2 Sample 16 in 00:07 MO-FIL WBC 3/2/2018 1106 PST 0.727 -3 2L Distilled Program done. 18.5L 1110 Left grab bottles. Replaced 4230 external dry +small Turned Flow: 1 pulse/500mlx35, program MO-OXN KH,DL 2/28/2018 1400 PST 0.106 0.2 4L Distilled disabled Bottle in, lid off on MO-OXN 2 2 DL,PD 3/2/2018 0608 PST 0.109 0.2 0.1 0 Program disabled Empty 0615 2L Distilled 252,740 Sample 25 after 1 pulse 0.38 12.5L Bubbler still needs resecured to wall MO-OXN KH,DL 3/3/2018 0756 PST 0.296 2.4 5 0800 Flow: 1 pulse/500mlx35, program Left grab bottles and field duplicate bottles. Turned MO-CAM 2 1 KH,DL 2/28/2018 1334 PST 0.036 10 <0.1 cfs on 4L Distilled 114,861 disabled Bottle in, lid off Replaced 4230 external desiccant MO-CAM DL,PD 3/2/2018 0423 0.033 10 0.1 4L 0430 PST 3 Program disabled <toe ~8cfs 202,951 Program done. 171 0839 MO-CAM WBC,PD 3/3/2018 0839 PST 0.033 2L Distilled 3 Left grab bottles and field blanks Turned Flow: 1 pulse/500mlx35, program (+blankwater). Replaced 4230 external 2/28/2018 0.137 2 MO-SIM KH,DL 1105 PST on 4L Distilled 96,622 disabled Bottle in, lid off desiccant 0.2 LM,JM(RE) 3/2/2018 0526 PST 0.218 6 Program disabled Empty 0535 MO-SIM LM,JM(RE) 3/3/2018 0847 PST 0.252 0.2 4 4L Distilled 172,492 Program done. Full 0850 Left grab bottles. Replaced 4230 external <bubbler Turned Flow: 1 pulse/500mlx35, program desiccant. Cleared plant debris from near MO-MPK KH.DL 2/28/2018 1000 PST 0.077 0.2 <0.1 cfs on 41 Distilled 182.562 disabled Bottle in, lid off intake+ bubbler 0426 PST 0.071 0.1 4 MO-MPK 2 LM.JM(RF) 3/2/2018 Program disabled Empty 0435 2 иО-МРК LM,JM(RE) 3/3/2018 0800 PST 0.646 30.7 0.6 4L Distilled 321.498 Program done. 0805 Flow: 1 pulse/500mlx35, program мо-тно KH,DL 2/28/2018 1200 0 1.95 2 4L Distilled 192,881 disabled Bottle in, lid off Left grab bottles 3/2/2018 MO-THO 2 LM,JM(RE) 0625 PST 2.045 0 4 <1L No flow. Will come back later for grabs MO-THO 2 LM,JM(RE) 3/2/2018 0926 PST 2.174 1 2.08 2 Program disabled 2L 0940 Field blanks at 0930 HWM ~3'. мо-тно 2 3 LM,JM(RE) 3/3/2018 0937 PST 2.795 23 2.8 2 21 Distilled NR Program done. Full 0940

MO-VEN MO-VEN	2 2	1 2	KH,DL DL,PD	2/28/2018 3/2/2018	1435 0521	PST PST	0.041 0.195	1 6	Dry 0.2	Turned on 2	4L Distilled	105,584	Flow: 1 pulse/500mlx35, prograu disabled Program disabled	m Bottle in, lid off 1L	0540	Left grab bottles + Regional Board sample bottles (ThomasFireRunoff). Replaced 4230 external desiccant
MO-VEN	2	3	KH,DL	3/3/2018	0824	PST	0.125	3	0.1	5	2L Distilled	202,774	Program done. Errors occurred [sample 23, 28 (08:48, 09:38) No more liquid detected].) 17.5L	0830	
													Time: 20 min/500mlx35, program			Left grab bottles + FWS pyrethroids study
MO-HUE	2	1	KH,AS	3/1/2018	1255	PST	NA	NA	NR	2	4L Distilled	169,199	disabled	Bottle in, lid off		grab bottle
MO-HUE	2	2	DL,PD	3/2/2018	0700	PST	NA	NA	NR	2			Sample 2 in 00:12	<1L	0715	
																6712 purging since 0800. Had to disconnect
													VOID EVENT DUE TO 6712			power cable to power down. Keypad
MO-HUE	2	3	WBC	3/2/2018	1600	PST	NA	NA					MALFUNCTION			unresponsive
										Turned			Flow: 1 pulse/500mlx35, prograi	m		Left grab bottles + Regional Board sample
MO-SPA	2	1	KH,AS	3/1/2018	1005	PST	NA	NA	Dry	on	4L Distilled	185,824	disabled	Bottle in, lid off		bottles (ThomasFireRunoff)
MO-SPA	2	2	SG,AS	3/2/2018	0428	PST	NA	NA	Flow	0	2L Distilled	338,947	Program done	85 % full	0520 0435	

Event Notes:

NR: Not recorded

All times are recorded here in PST

Forecast Rain: Varied, mostly 1-3" mountains. Less for east county.

Actual Rainfall: 0.2-4 across the county

Storm Control: Kelly Hahs

Sample Tracking:

Bacteria samples to VCHCA:

03/02/2018 @ 06:25 (MEI/OJA/SPA/FIL) by Steven Greer

03/02/2018 @ 10:30 (SIM/MPK/THO+FB) by Lara Meeker

03/02/2018 @ 07:50 (VEN/OXN/HUE/CAM+FD) by Dave Laak

03/02/2018 @ 12:42 (VR2/SCR/CC) by Jim McCrory

Chemistry samples to Weck Laboratories, Inc. (via Weck-provided courier):

03/02/2018 @ 13:55 (All grabs except CC plus composites for MEI/OJA/SPA/FIL) to Hector Sanchez by Bill Care

03/03/2018 @ 12:00 (Grabs for CC plus composites for CC/SCR/VR2/CAM/VEN/OXN/SPA/SIM/MPK/THO) to Jaime Posadas by Bill Care

Meters:

MEI/OJA/SPA/FIL: NR

THO/SIM/MPK: Beckman 410 #130240875, YSI 85 #03D0379

VEN/OXN/HUE/CAM: Beckman 255 #2151, YSI 85 #05E1042

SCR/VR2: Beckman 410 #110341139, YSI 85 #01G0625

Deg F	Deg C	Deg C
29	-2	-1.667
30	-1	-1.111
31	-1	-0.556
32	0	0
33	1	0.556
34	1	1.111
35	2	1.667
36	2	2.222
37	3	2.778
38	3	3.333
39	4	3.889
40	4	4.444
41	5	5.000
42	6	5.556
43	6	6.111
44	7	6.667
45	7	7.222
•		

Flowmeter Comp bottle Duration Arrival PST/ Level Flowmeter Outside Fridge T Pump status/ (nearest Comp Grab Toxicity Event Visit Staff Date Time PDT (feet) Flow (cfs) Staff (ft) °C Flush (L) Count Program/6712 Display Estimated Vol (L) half hrs) Time Time Added Flow: 20 pulse/500mlx35, Calibrated 6712. Left grab bottles + field ME-CC KH 3/9/2018 1402 PST 0.998 ~1 ice 4L Distilled 718,325 program disabled Bottle in, lid off Added a little ice, didn't need much. 2040 ME-CC 3/10/2018 PST 1.282 21 5 2045 Collected field dups 3 2 LM,AS Sample 1 while onsite Empty Change tubing CC. Emptied ice from fridge, propped open to drain, fridge light staying KH,LM 3/11/2018 1024 1.855 176 ~1.8 2L Distilled 1,089,954 Program done Full 1025 -1, turned Flow: 128 pulse/500mlx35, slightly Left grab bottles + Regional Board sample ME-VR2 3/9/2018 1238 PST 1.123 4L Distilled 411,119 Bottle in, lid off bottles (ThomasFireRunoff) 3 1 LM.DL cooler program disabled Program disabled Reprogrammed to 40 pulses. DL,JM 3/10/2018 2037 PST 1.185 4 Sample 1 while onsite 2050 ME-VR2 2 Empty Took photos of Program done, Warning replace Full, overflowed a Change both pump tubes before next HWM ME-VR2 3 DL.PD 3/11/2018 0956 1.941 2L Distilled 743,316 pump tubing little 1000 event. 3 5, turned Lowered swing arm, calibrated sampler, left slightly Time: 20 min/500mlx35, program grab bottles (+bacti field blank) + Regional ME-SCR LM,DL 3/9/2018 0940 PST 6.198 cooler 4L Distilled NR disabled Bottle in, lid off Board sample bottles (ThomasFireRunoff) ME-SCR 3 2 SG,PD 3/10/2018 1800 PST 6.081 0 Sample 6 in 14:45 NR 1805 Collected bacti field blank Program done 121 Raised swing arm 3/11/2018 1118 6.282 ME-SCR KH,LM 21 Distilled 785.796 1125 <OSS, Flow: 7 pulse/500mlx35, program Left grab bottles + Regional Board sample <0.1 cfs bottles (ThomasFireRunoff) MO-OJA 3 LM,DL 3/9/2018 1130 PST 0.1 5 2 4L Distilled 213,902 disabled Bottle in, lid off 1 <OSS MO-OJA 3/10/2018 1400 PST ~3 cfs 0 1410 SG.PD 0.1 <OSS, ~0.5 CFS Full MO-OJA DL.PD 3/11/2018 0900 0.101 5 2L Distilled 304,639 Program done 0905 Flow: 7 pulse/500mlx35, program Turned Left grab bottles + Regional Board sample IM DI 3/9/2018 1210 PST 0.082 1 195 803 disabled Bottle in, lid off MO-MFI Dry 41 Distilled bottles (ThomasFireRunoff) on MO-MEI 2 SG,PD 3/10/2018 1440 PST 0.081 1450 3 At toe -2 Program disabled 1 <OSS, ~0.5 CFS Full MO-MEI 3 3 DL.PD 3/11/2018 0923 0.08 2L Distilled 279,951 Program done 0925 Time: 20 min/500mlx35, program MO-FIL 3 1 КН 3/9/2018 1055 PST 0.202 4L Distilled 347,655 disabled Bottle in, lid off Left grab bottles MO-FII 3 2 SG,PD 3/10/2018 1550 PST 0.746 -2 Sample 4 15-20% full 1600 0848 Program done 0850 MO-FIL KH.LM 3/11/2018 0.302 2L Distilled 499.007 Turned Flow: 6 pulse/500mlx35, program MO-OXN 3 1 DL 3/10/2018 0805 PST 0.108 0.2 on 4L Distilled 257,527 disabled Bottle in, lid off Left grab bottles. Light burnt out in house. Bubbler still needs resecured to channel, therefore 4230 stage Finished while on site. Program 0.8 16L reads low -2 MO-OXN DL,JM 3/10/2018 1752 PST 0.673 11.3 2L Distilled 389,464 done 1815 1800 Turned Flow: 15 pulse/500mlx35, MO-CAM 3/9/2018 1513 PST 0.035 10 <0.01 cfs program disabled 3 КН on 41 Distilled 208.607 Bottle in, lid off Left grab bottles Finished while on site. Program MO-CAM DL,JM 3/10/2018 1701 PST 0.342 51 0.3 5 2L Distilled 296,046 1725 1710 Wet at Turned Flow: 6 pulse/500mlx35, program 3/9/2018 135 PST 0.139 2 bubbler on 4L Distilled 177,719 disabled Bottle in, lid off Left grab bottles MO-SIM LM,AS 3/10/2018 1820 PST 0.297 11 0.25 2 2L Distilled 251,844 Program done Full 1850 1835 Turned Flow: 1 pulse/500mlx35, program Left grab bottles. 2105 direct connect to set NR Bottle in, lid off MO-MPK 3 1 КН 3/9/2018 1135 PST 0.075 <0.01 cfs on 4L Distilled 326,460 disabled MO-MPK 2 LM,AS 3/10/2018 1715 PST 0.213 3.7 0.2 2L Distilled 464.137 Program done 1725 1730 3 Flow: 20 pulse/500mlx35, Bottle in, lid off MO-THO 3 KH 3/9/2018 1320 PST 2.013 NR ~2.1 2 4L Distilled 359,009 program disabled Left grab bottles 1 мо-тно 3 2 LM,AS 3/10/2018 1930 PST 2.69 16 2.6 3 Sample 23 after 10 pulses 1/2 full 1940 MO-THO KH,LM 3/11/2018 0945 2.21 NR 2.18 4 2L Distilled Program done 18L 0945 High water mark ~3.5' <OSS Left grab bottles + Regional Board sample (thalweg Turned Flow: 10 pulse/500mlx35, bottles (ThomasFireRunoff). Cleared debris MO-VEN 3 1 DL 3/10/2018 0723 PST 0.04 1 only) 4L Distilled 207,493 program disabled Bottle in, lid off from intake

Comp

MO-VEN	3	2	DL,JM	3/10/2018	1837	PST	0.185	6	0.19	4	2L Distilled	304,294	Program done. Errors have occurred.	18L	1907	1845	
													Time: 20 min/500mlx35, prograi	n			Left grab bottles + UCSB bottle (pyrethroids
MO-HUE	3	1	DL	3/10/2018	0852	PST	NA	NA		4	4L Distilled	6,100	disabled	Bottle in, lid off			study)
MO-HUE	3	2	DL,JM	3/10/2018	1937	PST	NA	NA	4.4	3			Sample 13 in 00:17	1/3 full		1945	
MO-HUE	3	3	DL,PD	3/11/2018	1051	PDT	NA	NA		2	2L Distilled	158,628	Program done	Full	1055	-	
										Turned			Flow: 5 pulse/500mlx35, prograi	n			Left grab bottles + Regional Board sample
MO-SPA	3	1	KH	3/9/2018	1015	PST	NA	NA	<0.001 cfs	on	4L Distilled	343,956	disabled	Bottle in, lid off			bottles (ThomasFireRunoff)
													Sample 26 after 2 pulses,				
MO-SPA	3	2	SG,PD	3/10/2018	1629	PST	NA	NA	Flowing	0	2L Distilled	497,277	program done	NR, 17L	1725	1635	

Event Notes:

Times in PDT not PST

NR: Not recorded

3/11/2018 started PDT. Times prior to 3/11 are PST. Times on 3/11 are PDT

Forecast Rain: 0.25-1" across County, with wettest being west county (up to SLO) southwest facing slopes receiving up to 1-3

Actual Rainfall: 0.6-1.2" across county

Storm Control: Kelly Hahs

Sample Tracking:

Bacteria samples to VCHCA (to Lauren Stead):

03/10/2018 @ 18:51 PST (MEI/OJA/SPA/FIL/SCR+FB) by S Greer

03/10/2018 @ 21:42 (SIM/MPK/THO/CC+FD) by Lara Meeker

03/10/2018 @ 21:45 (VEN/OXN/HUE/CAM/VR2) by D Laak

Chemistry samples to Weck Laboratories, Inc. (via Weck-provided courier):

03/11/2018 @ 14:00 (All grabs and composites for all sites) to Hugo Chavez (Essential Courier) by Kelly Hah:

Meters:

MEI/OJA/SPA/FIL/SCR:

THO/SIM/MPK/CC: Beckman 255 #2151, YSI 85 #05E1042

VEN/OXN/HUE/CAM/VR2: Beckman 255 #2554, YSI 85 #05E1126

Deg F	Deg C	Deg C
29	-2	-1.667
30	-1	-1.111
31	-1	-0.556
32	0	0
33	1	0.556
34	1	1.111
35	2	1.667
36	2	2.222
37	3	2.778
38	3	3.333
39	4	3.889
40	4	4.444
41	5	5.000
42	6	5.556
43	6	6.111
44	7	6.667
45	7	7.222

															COIIIP				
							Flowmeter							Comp bottle	Duration				
					Arrival	PST/	Level	Flowmeter	Outside	Fridge T		Pump		status/	(nearest	Comp	Grab	Toxicity	
Site	Event	Visit	Staff	<u>Date</u>	Time	PDT	(feet)	Flow (cfs)	Staff (ft)	<u>°C</u>	Flush (L)	Count	Program/6712 Display	Estimated Vol (L)	half hrs)	<u>Time</u>	<u>Time</u>	<u>Time</u>	<u>Notes</u>
MO-HUE	4	1	KH	3/20/2018	0920	PDT	NA	NA		2	4L Distilled	164,574	Time: 41 min/500mlx35, program disabled	n Bottle in, lid off					Grab bottles + field duplicates + UCSB bottle (pyrethroids study) prepped for site Water very dark. Pumphouse pumps
MO-HUE	4	2	DL,LM	3/21/2018	117	PDT	NA	NA		4				4.5L			1125		running.
MO-HUE	4	3	WBC,KH	3/22/2018	0818	PDT	NA	NA		4	2L Distilled	318,122	Program done	17.5L		0820			

Eve		

Times in PDT not PST

NR: Not recorded

Forecast Rain:2-6" coast and valleys over several days

Actual Rainfall: 2.5-6" across county

Storm Control: Kelly Hahs

Sample Tracking:

Bacteria samples to VCHCA (to Nadia West):

03/21/2018 @ 12:20 PDT (HUE) by Lara Meeker

Chemistry samples to Weck Laboratories, Inc. (via Weck courier):

03/22/2018 @ 09:05 PDT (HUE grabs and composite) to Hector Sanchez by Kelly Hahs

Meters:

HUE: Beckman 410 #110341139, YSI 85 #05E1126

Deg F	Deg C	Deg C
29	-2	-1.667
30	-1	-1.111
31	-1	-0.556
32	0	0
33	1	0.556
34	1	1.111
35	2	1.667
36	2	2.222
37	3	2.778
38	3	3.333
39	4	3.889
40	4	4.444
41	5	5.000
42	6	5.556
43	6	6.111
44	7	6.667
45	7	7.222

Flowmeter Duration Arrival PST/ Level Flowmeter Outside Fridge T Pump Comp bottle status/ (nearest Comp Grab Toxicity Site Event Visit Staff Date Time PDT (feet) Flow (cfs) Staff (ft) °C Flush (L) Count Program/6712 Display Estimated Vol (L) half hrs) Time Time Time Notes Lowered swing arm and secured to rail to ME-SCR KH,WBC 6/5/2018 1040 PDT 6.525 4L Distilled 792,669 Time: 41 min/500mlx35 Sample 1 vol good. keep above sediment in channel. Fridge stuck on so turned off. Raised swing WBC.AS 6/6/2018 1037 PDT 6.552 -10 2L Distilled 989,182 Program done 10L 1040 1045 ME-SCR Cleared sediment in channel from near Bottle in, lid off. Turned intake and bubbler to redirect flow past MO-FII 1 KH,WBC 6/5/2018 0800 PDT 0.391--> 0.354 4L Distilled 504,928 Time: 41 min/500mlx35 Sample 1 vol good. them. 4230 dessicant pink. on MO-FIL 5 2 WBC.AS 6/6/2018 0742 PDT 0.316 Δ 4L Distilled Program done Full 0745 0745 Turned fridge and 6712 off. Time: 30 min/500mlx35, delay start 6 hrs. Channel completely dry. Delayed start 6 Program"Start 15:50 TU 5hours in case flow starts. Used silicone dam Channel Turned 1 KH,WBC 6/5/2018 0930 PDT 0.109 0.2 Dry 4L Distilled 394,924 JUN". Bottle in, lid off for sampling. Channel Program done. Errors have Program errors: No liquid detected sample WBC,AS 6/6/2018 0957 PDT 0.11 Dry 634,978 occurred. Bottle in, lid off, Used silicone dam and calibration line for <<oss Turned MO-VEN 5 KH,WBC 6/5/2018 0855 PDT 0.041 (trickle) 4L Distilled 310,288 Time: 41 min/500mlx35 Sample 1 vol good. Program done, Errors have <<oss MO-VFN WRC AS 6/6/2018 0905 PDT 0.098 (trickle) 41 Distilled occurred 0915 0920 Turned fridge and 6712 off. Removed dam Programmed to sample Turned MO-SPA 6/5/2018 0730 PDT DRY DRY 4L Distilled 503,265 every 1 pulse. Bottle in, lid off Used silicone dam in case of overnight flow. KH.WBC on No flow so no samples taken. Turned off 6/6/2018 0720 PDT DRY DRY NR Sample 1 after 1 pulse. DRY fridge and 6712. 4L Distilled Broken. Added Bottle in, lid off. 5/29/2018 1012 PDT ME-CC KH.WBC NR ice. 4L Distilled Replaced Time: 41 min/500mlx35 Sample 1 vol good. Calibrated sample volume. Removed ice from fridge, propped lid open. Overflowed Turned 6712 off. ME-CC KH,LM 5/30/2018 1043 PDT 1.055 4L Distilled 409,178 Program done 1045 1055 <<0ss Turned Bottle in, lid off. Used silicone dam and calibration line for 5/29/2018 1105 PDT MO-CAM 0.033 (trickle) on 303,198 Time: 41 min/500mlx35 Sample 1 vol good. sampling. <<oss (trickle) Turned fridge and 6712 off. Removed dam. MO-CAM KH,LM 5/30/2018 1130 PDT 0.035 10 4L Distilled 393,443 Program done. 1135 1145 Bottle in, lid off. Turned 2 Sample 1 vol good. MO-SIM 1 KH WRC 5/29/2018 0835 PDT 0.153 ~0.15 on 41 Distilled 258 094 Time: 41 min/500mlx35 Used calibration line for sampling. KH,LM 5/30/2018 0830 PDT 0.167 0 4L Distilled 335,531 Program done. 17L 0900 0840 MO-SIM 3 <<oss Turned Bottle in, lid off. Used silicone dam and calibration line for MO-MPK 5 KH,WBC 5/29/2018 0755 PDT 0.075 0.2 (trickle) 4L Distilled 469,323 Time: 41 min/500mlx35 Sample 1 vol good. sampling. Unplugged 6712 from 2015ci. Program done. Errors have occurred: No liquid Channel was scraped. Equipment was detected Sample 7-35 moved. Flow stopped sometime overnight No flow 681.919 (11:10-06:18) so no grabs. Limited volume sample. MO-MPK KHIM 5/30/2018 0750 PDT 0.072 0.2 41 Distilled 0800 Drv 5 Bottle in, lid off. MO-THO 5 1 KH,WBC 5/29/2018 0917 PDT 2.032 0 4L Distilled 526,140 Time: 41 min/500mlx35 Sample 1 vol good. One YSI reading erratically so switched to other meter for measurements. Turned 6712 off. 5/30/2018 0945 PDT n 4L Distilled 691,428 Program done. 18L MO-THO 5 2 KH.LM 2 02 0950 0950 Bottle in, lid off, MO-HUE 5 KH, WBC 5/29/2018 1148 PDT NA 3 4L Distilled Time: 41 min/500mlx35 Sample 1 vol good. Stuck in purge cycle sample 23. Smell burning rubber. Unplugged power to 6712 (keypad not Dead bird at steps near grab sample area. 1245 1255 Can't flush lines or check programming. KHIM 5/30/2018 1245 PDT NΑ working). MO-HUE 5 2 NA NA Replaced upper and Bottle in, lid off. Replaced dessicant external 4230 and ME-VR2 KH,WBC 6/20/2018 0920 PDT 1.073 4L Distilled lower tubes Time: 41 min/500mlx35 Sample 1 vol good. internal 2105ci. Calibrate amount good.

Comp

ME-VR2	5	2	KH,WBC	6/21/2018	1110	PDT	1.051			4	4L Distilled	354,696	Program done.	18L but evidence of overflow.		1110	1115	Crack in comp bottle base resulting in leakage. Inverted, transported to shop and transferred to undamaged comp bottle for shipment to laboratory.
MO-OJA	5	1	KH,WBC	6/20/2018	0820	PDT	0.101	5	< <oss (trickle)</oss 	2	4L Distilled	310,256	Time: 41 min/500mlx35	Bottle in, lid off. Sample 1 vol good.				Cleared debris and leaf litter from area near intake. Used silicone dam and calibration line for sampling.
MO-OJA	5	2	KH,WBC	6/21/2018	0920	PDT	0.099	5	< <oss (trickle)</oss 	4	4L Distilled	404,757	Program done.	18L		0925	0925	Turned fridge and 6712 off. Removed dam.
MO-MEI	5	1	KH,WBC	6/20/2018		PDT	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	Has been dry for weeks. No evidence of recent flow Has been dry for weeks. No evidence of
MO-MEI	5	2	KH,WBC	6/21/2018		PDT	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	recent flow
06/06/18 (06/21/18 (mplicabl corded acking: mples @ 13:44 @ 11:40	to VCH 4 PDT () PDT () PDT (CC/CAM/SIN SCR/FIL/VEN VR2/OJA) by	л/тно/ние) b I) by WB Carey Kelly Hahs		Hahs									Deg F 29 30 31 32 33 34 35 36 37 38	-2	Deg C -1.667 -1.111 -0.556 0 0.556 1.111 1.667 2.222 2.778 3.333	
	ompos	ite san	ples to Wed				ovided courier by Kelly Hahs to		(Reliable Mes	ssenger S	Service¦				39 40 41 42 43	4 4 5 6 6	3.889 4.444 5.000 5.556 6.111	
	_	,		I) by WB Carey Kelly Hahs to		, ,	eliable Messer Weck Labs	nger Service							44 45	7 7	6.667 7.222	

Appendix E. Chain-of Custody Forms



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

7411065

Project: NPDES Stormwater Wet Season

Pre-season - Weck Laboratories. Invoice Contract No. AE17-001

Sampling Date:	8/10/				n/i	_	Proj	ect N	Num	ber:	2017/18-PRE
Sampling Team:	K. HA	116,W	<u>8</u>	CVA	REY						of Philosophy Const.
		A	525.2	EPA 625-CTR	EPA 200.8* (total only, see list in side bar) EPA 245.1. Hg (total only)		No action required	Clean with detergent and HNO3 (see notes #2)	Please dispose of per Lab SOP	Bottle Quantity	* Metals by EPA 200.8, Total: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn
SAMPLE ID	DATE/TIME C		·				Š	Cle	Ple		NOTES
EB lines	18/10/17	10:15	[2	#	ļ	ļ			7	See note #1
EB composite	8/11/17	10:30) X	Х	X					1	To be split in lab. See note #1
· · · · · · · · · · · · · · · · · · ·			_								
										<u></u>	
20 L carboy and lid								Х		1	Please place tape or plastic bag over top
Blue cube cooler						<u> </u>	Х			1	
Black bag			L				Х			1	
Waste Dilute HNO3											
Relinquished	Printed Name		Ce	الح	Habs						
	Signature		Ti	ille.	CHI.						
	Affiliation	VCWPD					Date	e/Tir	me		8/11/17/1034
Received	Printed Name	_/	9	v)k	5 JX	√ Ç.	110	<u>`</u>			
	Signature		41	4	100	and the same of th		بك			
	Affiliation	Weck La	bs				Date	e/Tir	me ,		8/11/17/1034
Other Notes:	1. Please use f	or MS/MS	D ar	alys	is when sam	ple	volu	me p	erm	iits.	/
	2. Please clear	with dete	erge	yt, n	tric acid, an	d de	ioni	ed v	wate	r pe	er SOP.
		16			Jac.	۷	~	2	<	3/	11/17 307 1.30
Ventura County Management P	wide Stormwater or rogram 2017/18 A	Quality nnual Repo	fm	161	6	4		Sõ	分	•	Attachment D Appendix E

703115



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season

Pre-season - Weck Laboratories. Invoice Contract No. AE17-001

Sampling Date:	10/2/17	Project Number: 2017/18-PRE
Sampling Team:	K.HAHS	
		Bottle Quantity Salo
SAMPLE ID	DATE/TIME COLLECTED	
Bottle 1	10/2/17 13:25	. X 1 EB lines X 1 EB composite
Bottle 2	13:27	LLY HAHS
Relinquished	Printed Name Signature Affiliation VCWPD	Date/Time 10/3/17 1400
Received	Printed Name Signature Affiliation Weck Labs	Date/Time 10/3/17 / 1400
Other Notes: Ventura County Management P	1- Please use for MS/M3D a wide Stormwater Quarty M g rogram 2017/18 Annual Report	Page DE - 3 0/3/17 17: US Attachment D Appendix E



Ventura County Watershed Protection District
NPDES Stormwater Monitoring Program
Project: NPDES Stormwater Wet Season
Bacteriological - VCHCA Lab (SIDE A of 2) | 0 f /

Sampling Date: 1-8-2018 Project Number: 2017/18-1 (Wet) Sampling Team: Lara Meeker & Peter Doran Total Coliform (Tray Method - WQ IDEXX Enterococcus (Tray Method - WQ IDEXX Total Coliform (25 Tube Method - MPNX) Fecal Coliform (25 Tube Method - MPNX E. coli (Tray Method - WQ IDEXX) Number of Bottles LAB USE DATE/TIME ONLY SAMPLE ID COLLECTED NOTES MO SPA 1 MO-FIL 19:10 1/8/18 X X MO-SIM X X 1 MO-MPK X X X X 1 MO-THO X X X X 1 1/8/18 20:10 MO-OXN X 1 X X X MO-HUE X 1 Relinquished Printed Name Lava Meeller Signature Affiliation Date/Time Received Printed Name Signature Affiliation Date/Time Other Notes: Perform bacteriological analyses within 6 hours of sample collection time 1:10 1:100, and 1:1000 dilutions for Entercescus and E. coli



Chain of Custody Record Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date:	1/8/18	3		Pro	ject	Nun	nber:	2017/	18-1	(Wet)
Sampling Team	:	ccroy, D. Laa	K							
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	Berger (Anny Parenton - W.C. IDENTE)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	NOTES
	ME-CC		X		2	X			1	-
-	ME-SCR		Х	X	3	X	Х		1	
-	ME-VR2		X	X	1	-X-	X		1	
	MO-CAM	1/8/18 2047	х	X		Х	Х		1	
	мо-оја		X	X	A	X	Х		-1	
-	MO-MEI		X	х		X	х	36	15	
	MO-VEN	1/8/18 1720	X	х		X	X		1	
	FB-1		X	X		х	х	-	1	
Relinquished Received	Printed Name Signature Affiliation Printed Name Signature Affiliation	David Lauk Venpo Nadra Un	1	Date	30	~~	1/	18/18	18	21:35 7135
Other Notes:	The second second	al analyses within 6 hours of	sam	ple	colle		n time	e	-	



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Bacteriological - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	1/8			-		ect l	Vum	ber:	2017	/18	3-1 (Wet)
Sampling Team:		•	see so	alle	1				_			
LAB USE ONLY	SAMPLE ID	DATE/ COLLE		Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	Enterococcus (Tray Method - WQ IDEXX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)			Number of Bottles	NOTES
	MO-SPA			X	X		X	X	-		-1-	
	MO-FIL			X	X		X	X			_1	
	MO-SIM			X	X		X	X			T	
	MO-MPK	1		X-	X		X	X			1	
_	мо-тно	-		X	X		X	_X_			-1	
	MO-OXN	1/8/18	1840	X	X		X	X			1	
	MO-HUE	1/8/18	1945	X	X		X	X			1	
Relinquished	Printed Name								/	_		
	Signature				_	/						
	Affiliation			/	Dat	e/T	me		_		/	
Received	Printed Name		/	5	19			/				
	Signature	/	ge	/	/							
	Affiliation		/	. 7	Dat	e/T	ime					
Other Notes:	Perform bacteriologic	cal analyses with	in 6 hours o	f sar	nple	coll	ectic	on tir	ne			
	1:10 1:100, and 1:100	0 dilutions for l		o and	ŧΕ.	coli						



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 1)

Sampling Date:	1/9/1	8		Project Number: 2017/18-1 (Wet)								
Sampling Team	: J.Mc	they DING	J.	Mc	Cron	4	T. 5	chmic	4+			
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	NOTES			
	ME-CC	19-18/9:40	X	х	х	Х		1				
	ME-SCR	1-9-18/12:45	X	х	X	X		1				
	ME-VR2	19-18/11:10	X	Х	X	X		1				
	FD-1		X	X	X	X		1				
								-				
				k ju			M	li		ij		
Relinquished	Printed Name Signature Affiliation	JIM MCCI JM GCE) EVENDS		Date/1	l'ime	1.5	9-18	1/11	53	_		
	Printed Name Signature Affiliation	Nucia Var PH LAB			Ner		5918	13	55	_		
Other Notes:	Perform bacteriologic	al analyses within 6 hours o	of sam	ple col	lection	i time						
	1:10 1:100, and 1:1000	dilutions for E. coli										



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date:	1-8-18			Proj	ect	Num	ber:	2017	/18-	1 (W	et)
Sampling Team:	WBC & TS					_					
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	(transportation of the state o	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)			Number of Bottles	NOTES
	ME-CC		X	X	+	X	X	1		1	
	ME-SCR		X	X	+	X	X	-	-	1	
_	ME-VR2		x	X	1	X	X		-	1	
,_	MO-CAM		X	X		X	X		+	1	
	мо-оја	1/8/18 13:15	X	X		X	X			1	
, A	MO-MEĪ	21:41 81/8/1	X	X		X	X			1	
	MO-VEN		X	X		X	X			T	
_	FB-1		х	X	[1]	X	-х	-	1	1	
Relinquished	Printed Name Signature Affiliation	W.B. CAREY W.B. Carey VCWPP		Dat		ime		-8	-18	3/	1740
Received	Printed Name Signature Affiliation	Nadia Un		Dat		ime	_	<i>C</i> 3	10	916	C C 1740
Other Notes:	Perform bacteriologic	cal analyses within 6 hours of	f san	nple	coll		n tir	me	\ <u></u>		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Bacteriological - VCHCA Lab (SIDE 2 of 2)

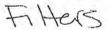
Sampling Date:	1-8-18			. 5	Proj	ect l	Vum	ber:	2017/18	-1 (Wet)
Sampling Team:	NOC & TS										
LAB USE ONLY	SAMPLE ID		/TIME ECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	Enterococcus (Tray Method - WQ IDEXX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	NOTES
	MO-SPA	118/18	16:00	X	X		X	X		1	
	MO-FIL	118/18	16:45	х	X	Ā	Х	X		1	
* .	MO-SIM			X	X		X	X		1	
	MO-MPK			X	-X	- 1	X	-X-		1	
-	MO-THO			X	X		X	X	_	1	
	MO-OXN		_	X	X	-	X	X		1	
	MO HUE			X	X		X	X		7	
Relinquished	Printed Name Signature	W-B.	CAREY	3	D	· /T	ime		-8-18		1740
Received	Affiliation Printed Name Signature Affiliation	Nadia PH	U Lah	<u>Cr</u>	A	>	ime B	Cyc		1/8	2 1740
Other Notes:	Perform bacteriologic	cal analyses wi	thin 6 hours o	of sai	mple	coll	lectio	on tir	me		
	1:10 1:100, and 1:100	0 dilutions for	Emerous	- 41	Æ.	coli					



Chain of Custody Record Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season
DNA FILTERS - VCHCA Lab (SIDE 2 of 2) \ of \ \

LAB USE		DATE/TIME	DNA Filter			Number of Bottles	
ONLY	SAMPLE ID	COLLECTED				_	NOTES
	MO-SPA		X			1	2 DNA Filters
	MO-FIL		X			1	2 DNA Filters
	MO-SIM	1/8/18 19:10 V8/18 17:40	X			1	2 DNA Filters
	MO-MPK	V8/18 17:40	X			1	2 DNA Filters
	мо-тно	1/8/18 20:10	X			1	2 DNA Filters
	MO- OXN		X			1	2 DNA Filters
	MO-HUE	,	x		EE	1	2 DNA Filters
					7 (1)		
	Printed Name Signature Affiliation Printed Name Signature Affiliation	Lara Meeke WPD Nadia Uan P	Dat	e/Time (000	21:15





Chain of Custody Record Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

Sampling Date	: 1-8-18		Pr	oject Number	: 2017/18-1	(Wet)
Sampling Team	n: WBC F.	15				
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES
	ME-ee	COLLECTED	×		1	**************************************
	ME-SCR		X			2 DNA Filters
-	ME-VR2		x		14	2 DNA Filters
-	мо-сам		×		1	2 DNA Filters
	MO-OJA	1/8/18 13:15	х		1	2 DNA Filters
	MO-MEI	1/8/18 14:15	х		1	2 DNA Filters
	MO-VEN		x		1	2-DNA Filters
	FB-I		x			2 DNA Filters
	PD-1		x		1	2-DNA Filters
linquished	Printed Name Signature	W.B. CAREY				
	Affiliation	NCWPD	Date	e/Time	1-8-18	11740
ceived	Printed Name	Nadia Va	~	Bur	en	ş
	Signature	1	>			1231012011110012011100120111001100110011
	Affiliation	PHICH	Date	e/Time(3/08/18	0 1740
her Notes:	Perform bacteriologic	al analyses within 6 hours of	sample	collection tim	e	



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	1-3-18		Pr	oject Numb	er: 2017/	18-1 ((Wet)
Sampling Team:	WBC & TS	-					1.0
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter			Number of Bottles	NOTES
0.122	MO-SPA	1/8/18 16:00	x			1	2 DNA Filters
	MO-FIL ,	118118 16:45	x			1	2 DNA Filters
_	MO-SIM		X.			1	2 DNA Filters
_	MO MPK		X			1	2 DNA Filters
l-u-	MO-THO		-X			T	2 DNA Filters
300000	MO-OXN		X			1	2 DNA Filters
	MO-HUE		ж			1	2 DNA Filters
Test (
telinquished	Printed Name Signature Affiliation	W.B. CAREY W.B. Carey NCWPD	-1	nte/Time _	1-2-1	8	1740
eccived	Printed Name Signature Affiliation	XX	D:	By Me	0/08	3/6	2 @ 174C
ther Notes:	Perform bacteriologi	cal analyses within 6 hours o	f sampl	e collection	time		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

DNA FILTERS

Sampling Date:				oject Nun	nber: 2 01	6/17-1	(Wet) 2017/18-1 (Wet)
Sampling Team	J. Mc	Croy Tevin Schr	nidt				
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter			Number of Bottles	NOTES
	ME-CC	19-18 9:40	x			1	2DNA Filters
	ME-SCR	1-9-18 11:70	x			1	2DNA Filters
	ME-VR2	1-9-18 12:45	Х			1	2DNA Filters
			a B				
Relinquished	Printed Name	Jim McCR	ORY				
	Signature	11/4					
	Affiliation	(GCE) VIWI) Dat	re/Time _	1-9-1	8	11:54
Received	Printed Name	Nadia U	S	Bu	ven		
	Signature						
	Affiliation	PH Lab	Dat	e/Time _	01	091	E 1355
Other Notes:	Perform bacteriologic	eal analyses within 6 hours of	sample	collection	time		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

Sampling Date	1/8/19	3	P	roject N	umber:	2017/18-	1 (Wet)	
Sampling Team		crory, D. Laak						
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter				Septod to the second of the se	
	ME-CC		X				2 DNA Filters	
-	ME-SCR		X				2 DNA Filters	
_	ME-VR2		X				2 DNA Filters	
	MO-CAM	1/8/18 2047	x				2 DNA Filters	
_	мо-ојл		X				2 DNA Filters	
	MO-MEI		X				2 DNA Filters	
	MO-VEN	1/8/18 1720	X		HT.	1	2 DNA Filters	
	FB-1		-X			1	2 DNA Filters	
	F D-1		X			1	2 DNA Filters	
inquished eeived	Printed Name Signature Affiliation Printed Name	David Laa VCWPD Nadia U	4	te/Time		/4/18	2135	
	Signature Affiliation	04100	-	/T	0	1021	8 2135	
		*() (C.)		te/Time		(00)	0 0157	
er Notes:	Perform bacteriologica	al analyses within 6 hours of	sample	collecti	on time			



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	1/8/1	18	Pro	oject Number: 20	17/18-1 ((Wet)
Sampling Team:		See side !				
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES
- 0.142	MO-SPA		X		7	2 DNA Filters
	MO-FIL		x		1	2 DNA Filters
	MO-SIM		X		1	2 DNA Filters
	MO-MPK		X		1-1-	2 DNA Filters
	MO-THO		-X-		-1-	2 DNA Filters
	MO-OXN	1/8/18 1840	x		1	2 DNA Filters
	MO-HUE	1/8/18 1945	X		1	2 DNA Filters
Relinquished Received	Printed Name Signature Affiliation Printed Name		900	ate/Time	*	
	Signature Affiliation	150		ate/Time		
Other Notes:	Perform bacteriologic	cal analyses within 6 hours	of sampl	e collection time	5	



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 2)

	DATE/TIME	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits						Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
SAMPLE ID	COLLECTED						+		+	+	+		NOTES
ME-CC	1/9/18 0940	2	1	2	3	1	-		+		+	9	Jim M / Tevins
ME-SCR	1245	2	1	2	3	1	+		+			9	
ME-VR2	1110	2	1	2	3	1	-			4	1	9	<u> </u>
MO-CAM	1/8/18-2000	3	1	2	3	1	\perp					10	Jim M/ David Lagi
MO-OJA	118118 13:12	2	1	2	3	1						9	Terin S / William B.C.
MO-MEI	1/8/18 14:15	2	1	2	3	1						9	Tevin S/William B.C
MO-VEN	1/8/18 7707	2	1	2	3	1						9	Jimm/ Dave L
MO-OXN	1/8/18 18:35	12	1	2	3	1						9	Vin m/David La
D1	.¥ 1840	2	1	2	3	1					_	9	-
Relinquished		الر	72 74	ah		VE				34,	1/10	/18	
Received	Affiliation Printed Name		Ver	28	D	an	Da	re/Ti	me _	1,	19/1	8/	16:10
	SignatureAffiliation4_	G Cr	13	B	<u>C</u>		Da	te/Ti	me _	1	_0	-1	8 16:10
Other Notes:	Travel blanks are only to EPA 624 has replaced E		_		_	-			MTI	BE or	2-CI	EVE	5.72



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 2 of 2)

Sampling Date:	1/8/18 +			5		-	Project Number	2017/18-1 (Wet) Grabs
Sampling Team:	see si	da	1						,
SAMPLE ID	DATE/TIME COLLECTED	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits		Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
MO-SPA	1/8/18 16:00	2	1	2	3	1		9	Tevin S. / William B.C.
MO-FIL	1/8/18 16:45	2	1	2	3	1		9	Teven S. /William B.
MO-SIM	1/8/18 19:10	2	1	2	3	1		9	Lan M/Peter D
MO-HUE	1/8/18 19:50 Mm	45	1	2	3	1		9	Simm / Dave L
МО-ТНО	1/8/18 20:10	2	1	2	3	1		9	Laram/PeterD
MO-MPK	1/8/18 17:40	2	1	2	3	1		9	Lana M Peter D
Relinquished	Printed Name Signature Affiliation						Date/Time		
Received	Printed Name Signature Affiliation		58	1		5	Date/Time		
Other Notes:	Travel blanks are only to EPA 624 has replaced E		_	_		_	have hits of MTBE	E or 2-CLEVI	Ξ)

Attachment D Appendix E



Ventura Countywide Stormwater Quality Management Program 2017/18 Annual Report

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Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 1 of 2)

1/9/18 Sampling Date: Project Number: 2017/18-1 (Wet) Composites Tevin Jim Mc Crory Schmidt Scott Greer Dave Lank Sampling Team: Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, (total only) Dissolved Inorganic Carbon and Dissolved Organic Carbon Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for ubsample for imazapyr and NID as CTAS (see V-11 Metals, total & dissolved (+ Hardness), & Barium NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics Hardness calc.), AND Na, K 625-CTR, 8270SIM-PAH, 8270SIM-Phenols COD, MBAS, TKN, Ammonia, TOC Cond 608 include alpha- & 547-Glyphosate, 608-CTR gamma-chlordane VSS. * Same extraction with Phosphorus-P Total & Dissolved NO3-N, Total Chlorine Residual low-level spike for 3 TSS, methods: 625CTR, TDS, 8270SIM-PAH, & 8270SIM-PHENOLS Turb, (EPA Bottles Lab to select samples for MS/MSD where extra DRO/ORO CL04. volume permits (all test 515.3-Herb Number of BOD, DATE/TIME SAMPLE ID COLLECTED NOTES ME-CC X ME-SCR 1/9/18 X X X X X X X X X 1245 1 TS ML ME-VR2 X X X 1110 X X X X X X X X 1/9/18 1 JM.TS MO-CAM MO OJA MO MEI 1/9/18 13:45 X X MO-VEN X X X X X X X X X 1 SG, DL Relinquished Printed Name Signature 1/9/18/16:10 Affiliation Date/Time Received Printed Name Signature 6:10 + G115 LA 135 Affiliation Date/Time 1) Filter for dissolved metals and perform conductivity analyses immediately. 2) Please do not dilute limited volume samples when enacting priority list (low reporting limits are important). 3) Imazapyr (EPA 538) and NID as CTAS (SM 5540D) are to be processed under a separate COC

Page DE 18



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 2 of 2)

Sampling Date: Sampling Team:	-							,			DCI.		.,		Wet) Composites
SAMPLE ID	DATE/TIME COLLECTED		red Organic Carl	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
MO-SPA	1/9/18 14:30		$\overline{}$	X	X	X	X		X	X	-	X	X	1	SG,DL
MO-FIL	17.7.5 11.10	-	X	X	X	X	X	X	X	X	X	X	X	-	
MO-SIM	1/9/18 12:40		X	X	X	X	X	Х	X	X	Х	X	Х	1	SG, DL
MO MPK	173		X	X	X	X	X	X	X	X	X	X	X	1	1
MO THO			X	X	X	X	X	X	X.	Х	X	X	X	-1-	
MO-OXN			х	X	X	X	X	X	X	X	X	X	X	-1-	
MO-HUE			X	X	X	X	X	X	X	Х	X	X	Х	-1-	
MO-HUE	1/9/18* 15:00		X	×	×	×	×	×	×	x	×	×	×	١	JM, TS
Relinquished	Printed Name	provide		1			-	ults	te/T			/			
Received	Printed Name Signature		/	/		_									
	Affiliation						Ti	Dat	te/T	ime					
Other Notes:	1) Filter for dissolved m	etals and	d ne			1						diat	elv		



8410050

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 1 of 1)

Sampling Date:		1/10/	8							-	Proje	ect N	Vum	ber:	201	7/18	3-1 (Wet) Composites
Sampling Team:		K. Hoh	ם , כ)حح	<u>. L</u>	aal	k,	L.	M	EE	KE	R	D.	WI	LK	110	<u>50</u>	N, Bill Carey
						olved Organic Carbon), & Barium (total only)		тос	. Phenolics		nenols *				Cond		Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- &
					NO3-N, Total Chlorine Residual	Dissolved Inorganic Carbon and Dissolved Organic Carbon	Metals, total & dissolved (+ Hardness),		BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	CLO4, Turb, TDS, TSS, VSS,	Number of Bottles	* Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
SAMPLE ID		ATE/TIM DLLECTE			N03	Disso	Meta	Cr+6	BOD	NO3	Phos	625-(515.3	525.2	DRO	ALK,	Num	NOTES
ME-CC	1/10	/18 10:	35				x	X	X	X	Х	X	X	X	X	X	1	LM,DW
MO-MPK		9:				x	х	X	Х	X	X	X	Х	Х	Х	Х	1	LM. DW
мо-тно		9:5				x	Х	X	Х	X	Х	X	Х	х	X	х	1	LM, DW
МО-ОЈА		10:	1			Х	х	Х	х	Х	X	X	X	х	Х	X	1	WBC
MO-MEI		9:5	0			x	х	X	Х	Х	X	X	Х	Х	Х	X	1	WBC
MO-CAM		101	n		Ţ	х	Х	X	X	X	Х	X	X	X	X	X	1	BUKH, DL
MO-FIL		09				x	х	X	х	X	х	X	x	Х	Х	X	1	KH DL
MO-OXN		/ 10:	1		1	×	×	~	×	×	Х	×	×	×	×	×	١	KH, DL
Relinquished	Printe Signat	d Name	W	-8. -8.	C	A	€	Y										
	Affilia	ition _	V	Cin	/P(<u> </u>					Dat	e/T	ime	į.	-(0	~(6	3	1245
Received	Printe	d Name	E	بهد ل	Z	14	ಌ	इ <u>स्</u>	ZG		<u>ر .</u>						·	
	Signat	ure _		۷.	o	~	7	<u> </u>										
••	Affilia	ition <u>[</u>	ne	in	-						Dat	e/T	ime	1-	-16	7- İ	ن	12:45
Other Notes:		er for disso																
2) Please do not dil	ute limit	ted volume	samp	les w	hen (enac	ting	pn	ority	list	(low	rep	ortic	ıg lir	nits	. 4		
		<u></u>					•				C m	<u>~</u>	MV)	Ø\		1 1	o ()(8 1440
			1									1						

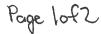


BA10050

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (<u>Contract AE17-001</u>)
Equipment - Weck Laboratories

Sampling Date:	1/10/18				Project I	Number	: <u>2017/18-1 (W</u>	et) Cleaning	
Sampling Team:	wbc								
	•	1		1		1	1		
			Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	A margine and a			
	EQUIPMENT		Clea	Clea	No.			NOTES	
18.5 L wide neck			2						op and note on wrap
Blue cube coole r			8						
Black bags			8						
20 L narrow neck	carboy, 2 lids, attac	hment assembly	6					or plastic bag over to led with methanol.	op and note on wrap
					ŀ				
Relinquished	Printed Name	W.B. C	KR ET	<u> </u>			<u></u>		
	Signature	W-B - C	ore	1			a at-		
	Affiliation	VCWPD	·	·	Date/T	ime —	1-10-18	1245	· ·
Received	Printed Name	EINAR	Ho	NEGO	<u> </u>	_			
	Signature	\$		<u>-</u>					
	Affiliation	weck			Date/7	lime	10/2018	17:4	5
Other Notes:	* Please clean w	ith detergent, nitr	ic, and 1	nethanol	and do	not rins	e after methanol	l step (allow to a	ir dry after
	methanol cleani	ng to avoid organ	ics cont	amination	ı). Reco				
					· [)0	und men	110118 14	10





Pacific EcoRisk 2250 Cordelia Rd., Fairfield, CA 94534

(707) 207-7760 FAX (707) 207-7916

CHAIN-OF-CUSTODY RECORD

Results To:	Ventura Co	unty Wa	atersh	ed Protectio	n District	Invoice To:	Ventura Cou	nty Public Works Agend	4			RE	QUEST	ED ANAL	YSIS		
Address:	800 South V	7ictoria	Ave.,	L#1610		Address:	Engineering	Services Division		0	gal	g g	0.0				
	Ventura, CA	1 93009	-1610				800 South V	ictoria Ave, L#1670	<u>ي</u>	Purple Urchin (S. purpuratus) Sperm Fertilization, EPA 1008.0	Selenastrum Capricornutum Algal Growth, EPA 1003.0	Ceriodaphnia dubia Survival and Reproduction, EPA 1002.0	(as)		1 1		
							Ventura, CA	93009-1670	(Atherinops affinis) nd Growth, EPA	ratu	ntrn	2.0 Z	A A		1 1		
Phone:	(805) 658-4	375				Phone:			s al	EP/	0.41	Sul 50	<u> </u>		1 1		1
	Kelly Hahs					Attn:	Victoria Esc	oto	herinops Growth,	on,	pric 03.0	PA P	9. ž		1 1		-0
E-mail:	Kelly.Hahs@	<u> Dventu</u>	ra.org			E-mail:			G Per	zati	2.5	, E	§ 2		1 1		70
Project Name:	NPDES Sto	rmwate	r Mon	itoring Prog	gram - 201	7/18-1 (Wet)			and Af	夏量	EP A	tion	ğ Zi		1 1		1-4
P.O.#/Ref:	Contract No	o. AE18	-015					Ti	al a	7 4	astr th, E	dab	ad la				Collect
	ample ID	****	nple	Sample	Sample	Grab/		Container	Topsmelt Survival	lg F	lowor	eproe	ig ig				0
			ate	Time	Matrix*	Comp	Number	Type	⊨ જ	<u>q</u> 0	N O	O W	щũ		\rightarrow	_	
	-CC	1/9	18	0940	FW	Grab	2	2.5-gal jerrican	Х						\perp		3M
ME-	-SCR			1245	FW	Grab	2	2.5-gal jerrican		X							
ME-	-VR2		/	1110	FW	Grab	2	2.5-gal jerrican	X							-	
MO-	-CAM	1/8	18	2100	FW	Grab	2	2.5-gal jerrican			-		Х				
МО	-OJA			1315	FW	Grab	2	2.5-gal jerrican					X				
MO	-MEI			1415	FW	Grab	2	2.5-gal jerrican					Х				
MO-	-VEN	1	/	1707	FW	Grab	2	2.5-gal jerrican				Х					
								1									
Samples coile	cted by:																
Comments/Sp		ion:					RELINQUI	SHED BY: KEL	Y	HAH	5	REC	IVED	Y:	98 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	.0000000	
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							Date:	ewater): (STRMW = 5	Time				1/10			Time: O	142

^{*}Example Matrix Codes: (EFF - Effluent) (FW = Freshwater); (SW = Saltwater); (WW = Wastewater); (STRMW = Stormwater); (SED = Sediment); or other

CHAIN-OF-CUSTODY RECORD

Pacific EcoRisk 2250 Cordelia Rd., Fairfield, CA 94534 (707) 207-7760 FAX (707) 207-7916

Results To:	Ventura Cou	inty Waters	ned Protection	on District	Invoice To:	Ventura Cou	inty Public Works Agend	1			RE	QUES	TED ANAI	YSIS		
Address:	800 South V	ictoria Ave	L#1610		Address:	Engineering	g Services Division			gal	ō	0.0				1
	Ventura, CA	93009-161	0				Victoria Ave., L#1670	inis) A	Purple Urchin (S. purpuratus) Sperm Fertilization, EPA 1008.0	Capricornutum Algal 1003.0	Ceriodaphnia dubia Survival and Reproduction, EPA 1002.0	Fathead Minnow (<i>P. promelas</i>) Survival and Growth, EPA 1000.0				
Phone:	(805) 658-43	375			Phone:			E aff	M Ad	mu	20 gr	oror EP.		1 1		1 1
Attn:	Kelly Hahs				Attn:	Victoria Esc	coto	go 4,	pu'.	3.0	ya S	(<i>P.</i> /				
E-mail:	Kelly.Hahs@	ventura.or	9		E-mail:			Gro	atio (S)	9 5	真品	ow Gro				
Project Name:	NPDES Stor	rmwater Mo	nitoring Pro	gram - 201	7/18-1 (Wet)			활	돌띝	P W	tion	Minn nd (1 1		
P.O.#/Ref:	Contract No	. AE18-015						를 를	2 8	astri h, E	dapt duc	ad N				
	ample ID	Sample	aaaaaaaaaaa	Sample	Grab/		Container	PS S	발발	owt owt	proc	the				1 1
		Date	Time	Matrix*	Comp	Number	Type	ല് യ	또 있	လွ ထွ	2 %	E S				\perp
	-OXN	1/8/18	_	FW	Grab	2	2.5-gal jerrican					Х				
	HUE		1955	FW	Grab	2	2.5-gal jerrican				Х					
MO	-THO		2010	FW	Grab	2	2.5-gal jerrican				Х					
MO-	MPK		1740	FW	Grab	2	2.5-gal jerrican			Х			0.0			
МО	-SIM	4 - 4	1910	FW	Grab	2	2.5-gal jerrican				Х					
MC	-FIL		1645	FW	Grab	2					Х					
MO	-SPA	V	1600	FW	Grab	2	2.5-gal jerrican					Х				
															+	+
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MO UUE. K	H-16-5 A					Date: 1/		Time	151	6	Date:	15.		T	ime: 15	12
MO-HUE: If sa	linity >2ppt, p	erform addi	ional topsm	elt test for d	comparison	RELINQUI					RECE		-1	7.9		
						Signature:					Signa	ture:	June	MC C	en	
						Print:					Print:	San	ranth	a coi	م لهاله	
						Organizati	ion:				Orgar	izatio	n: PER			
						Date:		Time:			Date:	1/10	118	T	ime: O	745

^{*}Example Matrix Codes: (EFF - Effluent) (FW = Freshwater); (SW = Saltwater); (WW = Wastewater); (STRMW = Stormwater); (SED = Sediment); or other



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date:	3/2/18		_				017/18-	2 (Wet)
Sampling Team	: Lava Mc	eleer, Jaime	M	cal	ain			
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Nottes Nottes
	ME-CC		X	X	X	x		1
	MF-SCR		x	х	X	X	. 5.	1
	ME-VR2		X	x	x	x		1
	MO-CAM		X	X	X	X		1
	мо-ојл		X	X	X	X		1
-	MO-MEI		x	х	X	X		
	MO-VEN		X	X	X	x	300	1
1	FB-1	3/2/18/0930	x	x	x	X	1 9	THO
	ED 1		X	X	X	X	-	
Relinquished	Printed Name Signature Affiliation	Lara Mee Tare W WPP	n	1	Time	3-	2-18	W:26
Received	Printed Name Signature Affiliation	Al can	ve	Date/	l'ime	C	50	14 6 1030
Other Notes:	Perform bacteriologic	cal analyses within 6 hours of	of sam	ple co	llection	n time		ar a
	1:10 1:100, and 1:100	0 dilutions for E. coli					0	



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 2 of 2)

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX		Number of Bottles	NOTES
J.,,,,,	MO SPA		X	Х	X	x	-	1	
	MO-FIL		x	х	x	X-	-	1	
	MO-SIM	3/2/18/0535	X	х	X	х		1	
	MO-MPK	3/2/18/0435	X	X	x	х		1	
	MO-THO	3/2/18/0940	X	х	X	X		1	
	MO-OXN		X	X	X	X	-	1	
	MO-HUE		X	X	X	X		T	
elinquished	Printed Name Signature Affiliation	Lara Meek Jan Mr WPD		Date/	Time	3-	2-1	8	10:26
eceived	Printed Name	-							
	Signature Affiliation			Date/	Time				
her Notes:									



Chain of Custody Record Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date				Proje	ct Nur	nber: 20	017/18-2	(Wet)
Sampling Tean	n: J Mc(v)	ory T. Schmidt						
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)	Number of Bottles	NOTES
, i.e.	ME-CC	3/2/18 12:06	X	X	x	Х	1	
	ME-SCR	3/2/18 10:00	X	X	x	x	1	
	ME-VR2	3/2/18 8:35	x	х	х	x	1	
	MO-CAM		X	X	X	x	1	
,	мо-оја		x	X	х	X	1	
	MO-MEI		x	x	Х	X	1	
	MO-VEN		x	x	х	X	1	
	FB-1		x	X	x	х	1	
	FD-1		х	X	х	х	1	
Relinquished	Printed Name Signature Affiliation	JIM MCC		2 Y	l'ime	3.	2.18	: 12:40
Received	Printed Name	Salva Jor	Y.	0	CRA	-		
	Signature Affiliation	P.H. LAY	1	Date/	rime	3	12/18	12:142
ther Notes:	Perform bacteriologica	al analyses within 6 hours o	f sam	ple col	lection	time		
	1:10 1:100, and 1:1000	dilutions for E. coli						



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX		Number of Bottles	NOTES
	ME-CC		X	x	x	X	-	1	
	ME-SCR		X	X	X	X	-	1	
	ME-VR2		X	y	x	y	+	1	
	MO-CAM	3/2/18 04:30	х	х	х	X		1	
	MO -OJA		X	X	X	X	-	1	
	MO-MEI		X	X	X	x.		1	
	MO-VEN	3/2/18-0540	х	х	x	x		1	J
	FB-1		X	X	X	X		1	_
	FD-1	3/2/18 04:30	х	х	x	х		1	MO-CAM
Relinquished	Printed Name Signature Affiliation Printed Name Signature	David Lag				, ,			07:50
	Affiliation	- PH COD		Date/3	ime	G^2	0	1	8 CASC
ther Notes:	Perform bacteriologic	al analyses within 6 hours o	f sam	ple col	lection	n time			



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 2 of 2)

	3/2/18		-	Projec	t Nun	ber: 20	17/18-	2 (Wet)	
Sampling Team	: Dave Laak	+ Peter boran	2						
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	NOTES
	MO-SPA		X	X	X	X		1	
	MO-FIL		Y	X	X	X		1	
_	MO-SIM		X	X	X	X	+	1	_
_	MO-MPK		X	X	X	X		1	_
_	MO-THO		Y	X	X	х	1	1	
	MO-OXN	3/2/18 06:15	X	X	Х	X		1	
	MO-HUE	3/2/18 06:15	х	х	X	х		1	
Relinquished	Printed Name Signature Affiliation	See Other	1	Q Date/	Time				
Received	Printed Name Signature	See			7.0				
Other Notes:	Affiliation Perform bacteriologic	al analyses within 6 hours o		Date/		n time			
	1:10 1:100, and 1:100	0 dilutions for E. coli							



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES
	ME-CC		X		1	2 DNA Filters
-	ME SCR		X		1	2 DNA Filters
•	ME-VR2		X		1	2 DNA Filters
	MO-CAM		X		1-	2 DNA Filters
	мо-оја		X		1	2 DNA Filters
	MO-MEI		X		1	2 DNA Filters
	MO-VEN		X		1	2 DNA Filters
	- FB-1		Х		-1	2 DNA Filters
elinquished	Printed Name Signature Affiliation	Lara Mee	Date	:/Time 3-2	2-18	10:26



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season

DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter			Number of Bottles	NOTES
	MO-SPA		х			1	2 DNA Filters
	MO-EIL		Y	-		1	2 DNA Filters
	MO-SIM	3/2/18/0535	X			1	2 DNA Filters
	МО-МРК	3/2/18/0435	X			1	2 DNA Filters
	мо-тно	3/2/18/0940	X			1	2 DNA Filters
	MO-OXN		X			1	2 DNA Filters
	MO-HUE		X			_1	2 DNA Filters
	, and the second						
elinquished	Printed Name						
	Signature Affiliation		D	ate/Time			
eceived	Printed Name Signature	40	10				
ther Notes:	Affiliation	cal analyses within 6 hours o		ate/Time	n time		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

Sampling Team:	3/2/2018 Steven 6	a, Andys	Projec				
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter			Number of Bottles	NOTES
	ME-CC		x			1	2 DNA Filters
	ME-SCR		X			1	2 DNA Filters
	ME-VR2		x	417		1	2 DNA Filters
+	MO-CAM		x			1	2 DNA Filters
	MO-OJA	3/2/18 01:20	x			1	2 DNA Filters
	MO-MEI	3/2/18 02:20	x			1	2 DNA Filters
	MO-VEN		x			1	2 DNA Filters
	FB-1		X			1	2 DNA Filters
elinquished eceived	Printed Name Signature Affiliation Printed Name Signature Affiliation	Steven S. G Steven S. G VOWPD: WRS: VOWPD: WRS:	Date/		3/2/18		e e co



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	312118		_ Pr	oject Number:	2017/18-2	(Wet)	
Sampling Team:	SG	AS					
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES	
ONLI	MO-SPA	3/2/18 0435	X		1	2 DNA Filters	
	MO-FIL	3/2/18 0350	х		1	2 DNA Filters	
	MO-SIM		X		1	2 DNA Filters	
	MO-MPK	1 -	X	1 1 2	1	2 DNA Filters	
	мо-тно		х		1	2 DNA Filters	
	MO-OXN		x		1	2 DNA Filters	
	MO-HUE		х		1	2 DNA Filters	
Relinquished	Printed Name Signature Affiliation			ate/Time	1		
Received	Printed Name Signature	139		ate/Time			
Other Notes:	Affiliation Perform bacteriologi	cal analyses within 6 hours		- 1 C	ne		



Ventura County Watershed Protection District
NPDES Stormwater Monitoring Program
Project: NPDES Stormwater Wet Season
DNA FILTERS - VCHCA Lab (SIDE 1 of \$\frac{1}{4})

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES
	ME-CC		x		1	2 DNA Filters
	ME-SCR	3-2.18 10:00	X		1	2 DNA Filters
	ME-VR2	3.2.18 8:35	X		1	2 DNA Filters
	MO-CAM		X		1	2 DNA Filters
	MO-OJA		x		1	2 DNA Filters
	MO-MEI		x		1	2 DNA Filters
	MO-VEN		x		1	2 DNA Filters
	FB-1		Х		1	2 DNA Filters
elinquished	Printed Name Signature	Jim Mcc	ROAY			
	Affiliation	GCE	Date	/Time 3 ·	2.18	12:40
eceived	Printed Name	SALVANOR Y	BOR	RAGAN		
	Signature	I That	Dan	open		
-	Affiliation	P. H. 1 1 1		Time 3	2.18	12:42



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

Sampling Date: Sampling Team		+ Peter Doran		roject Num	ber: <u>2017</u> ,	/18-2	(Wet)
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter			Number of Bottles	NOTES
	ME-CC		X	1 1 2		1	2 DNA Filters
	ME-SCR		x			1	2 DNA Filters
	ME -VR2		X		\dashv	1	2 DNA Filters
	MO-CAM	3/2/18 04:30	х	18/11		1	2 DNA Filters
	MO-OJA	7.4	X		-	1	2 DNA Filters
	MO-MEI		X			1	2 DNA Filters
	MO-VEN	3/4/8 05:40	х			1	2 DNA Filters
	FB-1		x	+	-	- 1	2 DNA Filters
elinquished	Printed Name Signature	David Laa	M	lar.	2/2/	100	07:50
eceived	Affiliation Printed Name	NKAIG I	_ D	ate/Time _	3/2/	18	07:50
cerveu		Torcia L					
	Signature Affiliation	DH COD	D	ate/Time	030	218.	00770
		- WILL COLOR					



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	3/2/18		_ P	roject Number: 2	2017/18-2	(Wet)
Sampling Team	Dave Land	t + Peter Pora	1			
					Number of Bottles	
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Numbe	NOTES
	MO-SPA		X		1	2 DNA Filters
	MO- FIL		X	+	1	2 DNA Filters
	MO-SIM		X		1	2 DNA Filters
	MO-MPK		X.	+	1	2 DNA, Filters
	M O-THO		X		1	2 DNA Filters
	MO-OXN	3/2/18 06:15	X		1	2 DNA Filters
	MO-HUE	3/2/18 06:15	x		1	2 DNA Filters
						* /
Relinquished	Printed Name Signature			7		V
Received	Affiliation Printed Name	See Othe	t 2.p	ate/Time		
	Signature	N 700				
Other Notes:	Affiliation Perform bacteriologic	cal analyses within 6 hours of		ate/Timele collection time	2	



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 2)

		Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	(EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits						Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
SAMPLE ID	DATE/TIME COLLECTED	Oil &	Cyan	GRO	MTB	Trave						Num	NOTES
ME-CC	,	2	1	-2-	3	1		-	-	-		9	
ME-SCR	3/2/18 10:00	2	1	2	3	1				T	λ	9	JM/TS
ME-VR2	3/2/18 8:35	2	1	2	3	1						9	JM/TS
MO-CAM	3/2/18 0430 3	-8	1	2	3	1				1		10	DL/PO 2 OHS COURSE
MO-OJA	3/2/18 01:20	2	1	2	3	1						9	56, AS
MO-MEI	3/2/18 02:20	2	1	2	3	1						9	SG, AS
MO-VEN	3/2/18 05:40	2	1	2	3	1						9	DL/PD
MO-OXN	3/4/8 06:15	2	1	2	3	1				1		9	DL/PD
FD-1	3/2/18 04:30	2	1	2	3	1						9	nio cam - DL/PD
Relinquished	Printed Name WILL Signature WE Affiliation	eli Li	an			REZ	Da	e/Ti	me _	3	-2-(8/	1355
Received	Printed Name Signature Affiliation	2	KI	~ 	5	S	Da	re/Ti	me _	3	- 2	\	9/13:55
Other Notes:	Travel blanks are only to EPA 624 has replaced El								MT.	BE c	or 2-C	LEVE	E)



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 2 of 2)

	DATE/TIME	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits				Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
SAMPLE ID MO-SPA	COLLECTED	ö	S	2	3 3	I 1	+	-		Ž	NOTES
MO-FIL	3/2/18 04:35	2						-			SG/AS
	3/2/18 03:50		1	2	3	1		-		9	\$6/AS
MO-SIM	3/2/18 0535	2	1	2	3	1		-		9	LM / JM
MO-HUE	3/2/18 07:15	2	1	2	3	1				9	04/10
MO-THO	3/2/18 0940	2	1	2	3	1				9	LM/JM / vial for
MO-MPK	3/2/10 0435	2	1	2	3	1				9	LM /JM
FB-1	3/2/18 0930	2	1	2	3	1				9	LM /JM THO
Relinquished	Printed Name WICE Signature Will Affiliation V	lis	1-1	C	CAL	REY	Date/	Γime	3-	2-18/	(355
Received	Printed Name	ec	1	-1	5	Su.	wh				
(4)	Signature	ラ									,
8	Affiliation WELLIA35 Date/Time 3-2-18/13:55										
Other Notes: Travel blanks are only to be analyzed if samples have hits of MTBE or 2-CLEVE) EPA 624 has replaced EPA 524.2 for MTBE and 2-Cleve								E)			



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 1)

Sampling Date: Sampling Team:	3/3/18 P. DORAN, B	. C	AR	Y		=	Project Nur	mber: <u>20</u>	17/18	2(Wet) Grabs
SAMPLE ID	DATE/TIME COLLECTED	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits				Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
ME-CC	3/3/18/0915	2	1	2	3	1		\vdash		_	PD, BC
TE SCR	0/3/10/01/3	2	1	2	3	1				9	. 0,50
ME-VR2		2	1	2	3	1				0	
MO CAM		3	1	2	3_	1				10-	
MO OJA		2	1	2.	3	1				9	
MO-MEI		2	1	2	3	1				0	
VOVEN			1	2	-2	4					
MO OVV		2	1		- 2						
*D :			1	2	0	-					
		-	*	- 2	3						
Relinquished	Printed Name W.	ru	I	·m	(CAR	EY				
	Signature	Nil	li	m		Ca	ey				
	Affiliation	cn	PC	1	_	_	Date/Time	3-3	8-18	/	1200
eceived	Printed Name Dai	me	3	*	05	a	las				A
	Signature /	m.	2	X	1	>	94.				GAMV.
	Affiliation	W	e	EK			Date/Time	3-	3-18	1	1200 3/3/18 14:70
Other Notes:	Travel blanks are only to	bea	nalv	zed i	fsan	nnlee					77
	EPA 624 has replaced E							IDE OF	2-CLE	v.E.	



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Sampling Date:	3-2-18					1	Proj	ect N	Vum	ber:	201	7/18	3-1-(per Kelly Wet) Composites
Sampling Team:	JM, TS				140									
	DATE/TIME	Dissolved Inorganic Carbon and Dissolved Organic Carbon	NO3-N, Total Chlorine Residual	Metals, total & dissolved (+ Hardness), & Danum (total only) Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	ber of F	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
SAMPLE ID ME-CC	COLLECTED	X		X X		X	X	X	X	X	X	$\overline{}$	-	NOTES
ME-SCR		X	-	X X	-	X	X	X	Х	X	X	X	1	
ME-VR2		X	-	x x	-	X	X	X	Х	X	X	X	1	
-MO-GAM		X	-	X X	X	X	X	X	X	X	X	X	1	
MO-OJA	3-2-18/0720	Х		x x	X	Х	X	Х	Х	Х	X	Х	1	JM/TS
MO-MEI	3-2-18/0755	х	-	x x	X	Х	Х	X	Х	X	Х	X	1	JM/TS
MO-VEN	V = -070	X		x x	X	X	X	X	Х	X	X	X	-1-	
											11		11	
Relinquished Received	Signature W	ent	w/	CA	RE U	4	Dat	te/T	ime	25	3-2	(<u>{</u>	3/	1355
	Signature	(9	_											
	Affiliation (CO.C. X	LA	B			Dat	te/T	ime	7	_	2-	18	13:55
	A AAAAAAAAA AAAA													

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3/2/10 18/7

3k / 10 / 191) Attachment D Appendix E

1.78



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 2 of 2)

Sampling Date:	3-2-18							Proj	ect l	Num	ber:	201	7/1	8-1 (Wet) Composites
Sampling Team:	SG, AS 2	WBC													
SAMPLE ID	DATE/TIME COLLECTED		Dissolved Inorganic Carbon and Dissolved Organic Carbon	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL		ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
MO-SPA	3/2/18 05:20	le li la	X	Х	Х		X	X	Х	X	X	X	X	1	S6/AS
MO-FIL	3/2/18 11:10		X	X	X	X	X	Х	X	X	X	X	X	1	WBC
MO-SIM			X	X	X	X	X	X	X	X	X	X	X	-1-	
MO-MPK			X	X	X	X	X	X	X	X	X	X	X	1	
MO-THO			X	X	X	X	X	X	X	X	X	X	X	1	
MO-OXN			X	X	X	X	X	X	X	X	X	X	X	-1-	
MO-HUE			X	X	X	X	X	Х	X	X	X	X	X	1	
														T	
Relinquished Received	Signature Affiliation Printed Name Signature	Ven Ven	ney	-	Ca	S	1	ı	hi	ime		3-2	2	8/	1355
Other Notes:	1) Filter for dissolved	metals as	nd pe	erfor	m co	ondu	ctivi	ity a	nalys	ses in	nme	diat	ely.		140
	ute limited volume samp		_		_						-		_	_	

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Ventura Countwide Stormwater Quality Ch Management Program 2017/18 Annual Report 3-2-18 6 17 PM



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date:	3-2-18			Project Nu	mber: 2017/18-2 (Wet) Cleaning
Sampling Team:	WBC				
	EQUIPMENT	Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	NOTES
18.5 L wide necl		1			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Blue cube cooler				ц	
Black bags		- 1		4	
20 L narrow necl	s carboy, 2 lids, attachment assembly	3			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Relinquished	Printed Name WILLI Signature Willia				
20.0-6	Affiliation Vcw1	00		Date/Time	e 3-2-18/1355
Received	Printed Name Signature Affiliation	SA FLA		∟~ Date/Time	e_3-2-18/13:55
Other Notes:	* Please clean with detergent, nitr	ric, and i	methanol	and do no t	t rinse after methanol step (allow to air dry after
	methanol cleaning to avoid organ	ics cont	amination). Record t	he bottles cleaned with methanol.

Hacks Sanch





Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 1 of 2)

Sampling Date:		3/3/18									Num	ber:	201	7/1	82	(Wet) Composites
Sampling Team:	K. He	ahs D. Look	P. C	OR	AN	, 3	B.	CA	RE)	,						
SAMPLE ID	1	ATE/TIME	Dissolved Inorganic Carbon and Dissolved Organic Carbon	NO3-N, Total Chlorine Residual	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL		ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
ME-CC	3/3/	18 0915	X	X	X	X	X	X	X	X	X	X	X	X	1	PD,BC
ME-SCR	1	0758	X		X	X	X	X	X	X	X	X	X	X	1	PD, BC
ME-VR2	3	0907	X		X	X	X	X	X	X	X	X	X	X	1	KH, DL
MO-CAM		0839	X		X	X	X	X	X	X	X	X	X	X	1	PD, 3C
MO-VEN		/ 0830	X		X	X	X	X	X	Х	X	Х	X	X	1	KH, DL
							1							Ē		
Relinquished	Signat Affilia	ation	VC	-0-	00	ca	AR	2		e/Ti	ime	3	5-3	-18	3/	1200
Received	Printe Signat Affilia	ure du	me and	TO K	y o	50	ad			e/Ti	ime	3	-3	-18	/1	200
Other Notes: 2) Please do not dil		er for dissolved m		_				ctivi	ty as	nalys	es in	nme	diate	ely.		



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 2 of 2)

Sampling Date:	3/3/18										ber:	201	7/18	3-2	Wet) Composites
Sampling Team:	K.HAHS D.L	MAK	L		ree	Ke	٢,	J.,	M						m _i
SAMPLE ID	DATE/TIME COLLECTED		Dissolved Inorganic Carbon and Dissolved Organic Carbon	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
MO-SIM	3/3/18 0850		X	X	X	X	X	X	_	X	X	X	X	1	LM, JM
MO-MPK	0805	3 (5)	X	Х	Х	Х	Х	X	Х	X	X	Х	X	1	LM, JM
MO-THO	0940		X	X	X	Х	Х	X	X	X	Х	X	Х	1	LMJM
MO-OXN	V 0800		Х	X	X	X	X	X	Х	X	Х	Х	Х	1	KH,OL
MO-HUE															Cleaning only
	v								3						
Relinquished Received	Signature W. Affiliation Printed Name	illi Ven	m (P)	2	AR	rey			re/T:	ime		3 - 3	3-1	8/	1200
á.	Digitature //	Nec	-0	1				Dat	e/T	ime	3	-3	-1	81	1200 /3/3/18 14
															1 1



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date: Sampling Team:	3/3/18		_	Project Nu	amber: 2017/18-2 (Wet) Cleaning
Sampling Team:	NBC				
	EQUIPMENT	Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	NOTES
18.5 L wide neck		4			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Blue cube cooler				10	is some was reason was measured.
Black bags				10	
20 L narrow neck	carboy, 2 lids, attachment assembly	6			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Relinquished	Printed Name WILLIA Signature William	m ca	CAREX		
	Affiliation VCWP	4		Date/Tim	e 3-3-18/1200
Received	Printed Name Signature Affiliation We CK	2	osa	Jus Date/Tim	e 3-3-18/1200 3/3/18 14:30
Other Notes:	* Please clean with detergent, nitri	c, and 1	methanol	and do no	t rinse after methanol step (allow to air dry after
	methanol cleaning to avoid organi	cs cont	amination). Record t	the bottles cleaned with methanol.



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date:		1 2.		Projec	ct Nun	nber: 2	2017/1	8-3 (Wet)
Sampling Team	: Steven S. 6	areer, Peter I)						
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	NOTES
	ME-CC		X	x	X	X		1	
	ME-SCR	3/10/18 1805 PST	x	X	X	x		1	F
	ME-VR2		X	X	X	X		1	
	MO-CAM		X	x	X	x		1	
	MO-OJA	3/10/18 14:10 PST	x	x	X	х		1	
	MO-MEI	3/10/18, 14: FO PST	X	x	x	x		1	
	MO-VEN		X	x	X	х	, Jul	1	
	FB-1	3/00/18 18:05 PST	X	х	X	x		1	(ME-SCR)
7	FD-1		x	x	X	X	jlij	1	(ME-CC)
Relinquished	Printed Name Signature Affiliation	Steven S. G. Steve S. VCWPD	G	9—	Time ,	3/1	0/18		
Received	Printed Name Signature	Lauren Stead	Q)					
	Affiliation	VCPHL		Date/	Time .	3/	10/18	3 6	6:SIPM
Other Notes:		cal analyses within 6 hours of 0 dilutions for E. coli	sam	ple co	ollection	n time	Ш		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 2 of 2)

Sampling Date:				Pro	ject N	un	nber:	2017/	18-3	(Wet)
Sampling Team	: 55 AM	(P.D		100	Ŷ.					0
LAB USE		DATE/TIME	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)		E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Number of Bottles	
ONLY	MO-SPA	3/19/18 16:35 PST	X	X		X	X	+	1	NOTES
1	MO-FIL	3/10/08 16:00 PST	X	X		x	X	+	1	
	MO-SIM	91.710 10.00131	x	X	HC. 1	X	X		1	
	MO-MPK		X	x	-	X	X		1	
	мо-тно		x	X		X	x	1	1	
	MO-OXN		х	х		X	x		. 1	
	MO-HUE		х	X		X	х		1	
				/					,	
Relinquished	Printed Name	/				_		/		
remiquisirea	Signature			0	1		/	/		
	Affiliation		6	Y	e/Tim	ne/				
Received	Printed Name	/ 20	1	×.						
	Signature			/						~
	Affiliation	/	/	Date	e/Tim	ie_				
Other Notes:		cal analyses within 6 hours of	fsam	ple	collec	tion	n time	e		
	1:10 1:100, and 1:100	0 dilutions for E. coli								



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX			Number of Bottles	NOTES
	ME-CC	3/10/18 2045	X	х	X	X			1	
	ME-SCR	1	X	X	X	X			1	
	ME-VR2		X	X	X	X		-	1	
	MO-CAM		X	x	х	Х	_		1	
	мо-ојд		X	X	X	X	-		1	
	мо-меі		X	-X-	X	-X-	-1)		1	
	MO-VEN		Х	X	X	X			1	
	FB-1 —		x	х	x	X	-		1	(ME-SCR)
	FD-1	3/10/18 2045	x	х	х	х			1	(ME-SCR)
elinquished	Printed Name Signature Affiliation Printed Name Signature	Lava Moeke Lava Moeke Lava WPD Lavan stead Leven Stead	h	Date/	Time .	3/	10/	18		Z136
	Affiliation	VC PHL	_	Date/	Time	3,	101	18		9:42pm
L XI		cal analyses within 6 hours o								
her Notes:	1:10 1:100, and 1:1000		sam	pie co	песцо	ii uin	C		_	



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	3/10/18 Losa/Meek	. 10	_	Projec	et Nun	nber:	2017	/18-3	(Wet)
Sampling Team	Losa Meel	e-, 1+5	_		_		y #5	_	
LAB USE		DATE/TIME	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ.IDEXX)	Total Coliform (Tray Method - WQ IDEXX)		Nimber of Bottles	
ONLY	SAMPLE ID MO-SPA	COLLECTED	X		X	X		1	
	MO-FIL		-	X	X	X	1	- 1	
	MO-SIM	3/10/18 1835	X	X	X	X		1	
	MO-MPK	3/10/18 17:30	X	x	x	X		1	
	MO-THO	3/10/18 1940	X	X	x	X		1	
	MO-OXN	3/0//8 1110	X	х	x	X		1	
	MO-HUE		X	X	Х	X		1	
Relinquished	Printed Name Signature	Law Meek		_					
	Affiliation	WPD		Date/	Time	37	10/1	8	2136
Received	Printed Name	Lauren Stead							
	Signature	Lover 2		/					
	Affiliation	VCPHL		Date/	Time .	3	110/	18	9:42pm
Other Notes:	Perform bacteriologi	cal analyses within 6 hours o	of san	ple co	llectio	n tin	ne		
	1:10 1:100, and 1:100	00 dilutions for E. coli					- 4		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 2)

Sampling Date: Sampling Team	3/10/18 : OL, JM		7	Projec	ct Nun	nber: <u>20</u>	17/18-3 (Wet)
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)	Number of Bottles	NOTES
	ME-CC		X	X	X		1	
	ME-SCR		X	X	X	X	T	
	ME-VR2	3-10-18 20:50	х	Х	х	х	1	DUJJM
	MO-CAM	3-10-18 17:10	X	Х	x	x	1	
	MQ-OJA		X	X	X	X	1	-
	MO-MEI		X	-X-	X	X	1	
	MO-VEN	3-10-18 18:45	X	х	Х	X	1	
	FB-1		x	x	X	х	1	(ME-SUR)
	FD-1		X	х	х	х	1	(me-cc)
Relinquished	Printed Name Signature Affiliation	SEE OFHE	2	Dates/	(Kiir)	E		
Received	Printed Name	OTH!	10					
	Signature	560						
	Affiliation			Date/				
Other Notes:	Perform bacteriologic	al analyses within 6 hours o	f san	ple co	llection	n time		
	1:10 1:100, and 1:1000	dilutions for E. coli						

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Bacteriological - VCHCA Lab (SIDE 2 of 2)

3-10-18

Laak & Jim McCroy Sampling Date: Project Number: 2017/18-3 (Wet) Sampling Team: (Tray Method - WQ IDEXX Total Coliform (25 Tube Method - MPNX ecal Coliform (25 Tube Method - MPNX coli (Tray Method - WQ IDEXX Number of Bottles 'otal Coliform LAB USE DATE/TIME ONLY SAMPLE ID COLLECTED NOTES MO SPA MQ-FIL MQ-SIM MO-MPK 1 MO-THO X X X X 1 1 MO-OXN X X X X 3-10-15 18:00 MO-HUE X X X X 3-10-18 1945 Relinquished Printed Name -Signature 3-10-18 @2145 Date/Time Affiliation Printed Name Received Signature Date/Time 3/10/18 1. Uspm Affiliation 1C PHL Other Notes: Perform bacteriological analyses within 6 hours of sample collection time

1:10 1:100, and 1:1000 dilutions for E. coli



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

Sampling Team	D.L,					
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Borrles	NOTES
	ME-CC		X		1	2 DNA Filters
	ME-SCR		X	20 13 3	1	2 DNA Filters
:	ME-VR2	3-10-18 20:50	x		1	2 DNA Filters
	MO-CAM	3-10-18 17:10	x		1	2 DNA Filters
	MO-OJA		X		1	2 DNA Filters
	MO-MEI		X		1	2 DNA Filters
	MO-VEN	3-10-18 18:45	х		1	2 DNA Filters
	FB-1		Х		1	2 DNA Filters
linquished	Printed Name Signature Affiliation			SL 51	DE	
ceived	Printed Name Signature	9KR	1000			
	Affiliation		Da	ite/Time		



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	3-10-18	F. 1. 100 1-	Proj	ect Number: 20	17/18-3	(Wet)
ampling Team	: Nave Laar	K + Jim McErory				
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter		Number of Bottles	NOTES
	MO-SPA		X		1	2 DNA Filters
	MO-FIL		X		1	2 DNA Filters
	MO-SIM		X		1	2 DNA Filters
	M O-MPK		X		T	2 DNA Filters
	MO-THO		X		1	2 DNA Filters
	MO-OXN	3-10-18 18:00	x		1	2 DNA Filters
	MO-HUE	3-10-18 1945	X		1	2 DNA Filters
elinquished	Printed Name Signature	David Loak	1			2
eceived	Affiliation Printed Name	Lauren Stead	1	e/Time	-10-18	2145
	Signature	LouranSte	al			
	7.50.000	VC PHL		e/Time 3/	5-52002	9:4591



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 1 of 2)

										;
LAB USE	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter				ì		Named of Bollics	NOTES
	ME-CC	3/10/18 2045	X						2 D	NA Filters
	ME-SCR		X	Y					2 D	NA Filters
	ME-VR2		х						2 D	NA Filters
	мо-сам		X						2 Di	NA Filters
	MO-OJA		X			-		1	2 DI	NA Filters
	мо-ме		X				=		2 DI	A Filters
	MO-VEN		X				\dashv		2 DI	NA Filters
	FB-1 ——		x		1		7	1	2 DI	NA Filters
elinquished ceived	Printed Name Signature Affiliation Printed Name Signature Affiliation	Lara Me Jam WPD Lauren Ster Lauren Ster VC PHL	De De			1	3/,	10/1		5014 BBMZ



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season DNA FILTERS - VCHCA Lab (SIDE 2 of 2)

Sampling Date:	3/10/18		Pre	oject Nu	mber:	2017/	18-3	(Wet)	
Sampling Team	Lara Me	eker, A.S.					_		
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	DNA Filter				Number of Bottles	NOTES	
ONLI	MO-SPA	COLLECTED	X				1	2 DNA Filters	
	MO-FIL		X			1 1	-1	2 DNA Filters	
	MO-SIM	3/10/18 1835	X	pije			1	2 DNA Filters	
	MO-MPK	3/10/18 1730	х		4		1	2 DNA Filters	
	мо-тно	3/10/18 1940	х				1	2 DNA Filters	
	MO-OXN	9,10,110	x				1	2 DNA Filters	
	мо-ниЕ		Х				1	2 DNA Filters	
				H					
Relinquished	Printed Name Signature Affiliation	Jan Y WPD	n	te/Time	-3	101	1/8	2136	
Received	Printed Name	Lauren Stea Levere Stea	d .						
	Signature Affiliation	VC PHL	Da	te/Time	3	10/	18	9:42pm	
Other Notes:	Perform bacteriologi	cal analyses within 6 hours of	f sampl	e collecti	ion tir	ne			_



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 2)

Sampling Date: Sampling Team:	V	_	Project	Num	ber: 2	2017/1	.8-3 (Wet) Grabs				
	DATE/TIME	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	(EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits					Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
SAMPLE ID	COLLECTED			GRO						+		NOTES
ME-CC	3/10/18 2045 PST		1	2	3	1		-			9	LM, AS
ME-SCR	3/10/18 18:05 PST	2	1	2	3	1					9	SG, PD
ME-VR2	3/10/18 20:50 PSt	2	1	2	3	1					9	DL, VM
MO-CAM	3/10/18 17:10 851	3	1	2	3	1					10	DIJM
MO-OJA	3/10/18 14:10 PST	2	1	2	3	1					9	56, PD
MO-MEI	3/10/18 14:50 PST	2	1	2	3	1		Te			9	56,PD
MO-VEN	3/10/18 18:45PST	2	1	2	3	1					9	DLJM
MO-OXN	3/10/18 18:00 PST	2	1	2	3	1	1111			1	9	DEJM
FD-1	3/10/18 204585	- 2	1	2	3	1			41		9	(ME-CC)LM, AS
Relinquished	Printed Name KE Signature follo	1			15		Date/T	ime	3	11/18	3/	1400 PDT
Received	Printed Name 11	K	P.	1	<u> </u>	w	Date/T	ime	3	h	1/18	@ 2:00 PM
Other Notes:	Travel blanks are only to EPA 624 has replaced EI	be a	naly	zed i				f MT	BE o	or 2-CI	EYE	4
											(1545



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 2 of 2)

Sampling Date: Sampling Team:	3/10/88 LM, AS, SG.P.	O	D'	Lo	rw.	_	Project N	umber: <u>20</u>	017/18-3	(Wet) Grabs
SAMPLE ID	DATE/TIME COLLECTED	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits			Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
MO-SPA	3/10/18 16:35 PST	2	1	2	3	1			9	SG,PD
MO-FIL	3/10/18 16:00 PST	2	1	2	3	1			9	SG, PD
MO-SIM	3/10/18 1835 PST	2	1	2	3	1			9	LM, AS
MO-HUE	3/10/18 1945/51	2	1	2	3	1			9	DLIM
MO-THO	3/10/18 1940 PST	2	1	2	3	1			9	LM, AS
MO-MPK	3/10/18 1730 195	2	1	2	3	1			9	LM, AS
Relinquished Received	Affiliation Printed Name	IK.	36. TA	5		B	Date/Tir	ne <u>3/</u>	11/318	1400 PDT
Other Notes:	Affiliation Travel blanks are only to EPA 624 has replaced EI	be a	_	zed	if saı				/u/18	13/11/18 15:45



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 1 of 2)

Sampling Date:	3/10/18 + 3/	11/19	8						Proj	ect l	Num	ber:	201	7/18	3-3 (Wet) Composites
Sampling Team:	LM, AS DL, J	W.	5	G	Pr)	Kr	+		_						
SAMPLE ID	DATE/TIME COLLECTED		Dissolved Inorganic Carbon and Dissolved Organic Carbon	NO3-N, Total Chlorine Residual	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by 200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
ME-CC	3/11/18 10:258	0	X	X		X	X	X	X	X	X	X	X	X	1	KHLM
ME-SCR	3/11/18 1125 PD	T	X		X	X	X	X	X	X	X	X	X	X	1	KHILM
ME-VR2	3/11/18 10:00 PA	1	X		X	X	X	X	X	X	X	X	X	X	1	DL, PD
MO-CAM	3/10/18 17:10/81	î	X		X	X	X	X	X	X	X	X	X	X	1	DEJM
MO-VEN	3/10/18 18:45/5)	X		X	X	X	X	X	X	X	X	X	X	1	DENM
MO-FIL	3/11/18 0850 80	n .	×		×	×	×	×	X	×	×	×	X	×	1	KH, LM
Relinquished Received	Printed Name Signature Affiliation Printed Name	16	So So	16	2	tan	000		Dat	e/Ti	ime	3/	n/	18	1	1400 707
Other Notes:	Signature Affiliation 1) Filter for dissolved									e/Ti			3	-	1	18 @ 2:01 PN
	1) Wilken For diagolared	moto	ie or	nd ne	ertor	mc	ondi	ctiv	ity of	nalwe	OC 10	mme	dente			N N N



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 2 of 2)

Sampling Date:	3/10/18 + 3/11/		7	2	~		Proje	ect N	Jum	ber:	201	7/18	3-3 (Wet) Composites
Sampling Team:	DATE/TIME COLLECTED	Dissolved Inorganic Carbon and Dissolved Organic Carbon	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
MO-SIM	3/10/18 1835BT	X	X	X	X	X	X	X	X	X		X	1	LM, 45
MO-MPK	3/10/18 1730851	X	х	X	Х	X	X	Х	X	X	Х	X	1	LMAS
MO-THO	3/11/18 094580	X	Х	X	Х	X	X	X	X	X	X	X	1	KH, L-M
MO-OXN	3/10/18 1800 PST	X	Х	X	Х	X	X	х	X	X	X	X	1	DLNM
MO-HUE	3/11/18 10:55 PDT.	X	×	X	X	×	×	×	×	×	×	×	1	Gleaning only DL PD
10-SPA	3/00/18 17:25951	X	义	X		K	X	X	X	X	X	X	1	SG, PD
mo-MEI	3/11/18 0925 PDT	X	X	X	X	X	X	X	X	X	X	X	1	OL, PD
MO-OJA	3/11/18 0905 PDT	X	X	X	X	X	X	X	X	X	X	X	1	DL, PD
Relinquished Received	Printed Name Signature Affiliation Printed Name Signature	At.	HA VCU	SPI				re/T	ime		3	hil	8	0 2:00 PM
	Affiliation	L-0110	-		-		Dal	C/ 1	mile	_	1	+	1	2 /1/12 151

Brandon Gee

From:

Hahs, Kelly <Kelly.Hahs@ventura.org>

Sent:

Wednesday, March 14, 2018 1:44 PM

To:

Brandon Gee

Subject:

Composite sample time corrections to COC/WeckConnect

Hi Brandon,

I found a few issues with our composite (8C11001) sample times for event 3. Some are wrong on the COC (Sorry! Teams were tired) and one is wrong on WeckConnect. Can you fix them please?

ME-CC should be 10:25 AM

MO-CAM should be 5:25 PM

MO-VEN should be 7:07 PM

MO-SIM should be 6:50 PM

MO-MPK should be 5:25 PM

MO-OXN should be 6:15 PM

Sorry for the inconvenience!

Kelly

Kelly Hahs
Water Resources Specialist IV
Ventura County Watershed Protection District
800 South Victoria Avenue
Ventura, CA 93009-1610
(805) 658-4375
www.vcstormwater.org



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater-Wet Season (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date:	3/11/18			Project l	Number	: 2017/18-3 (Wet) Cleaning
Sampling Team:	K. HAHS					
	EQUIPMENT	Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required		NOTES
18.5 L wide necl	k carboy and lid	5				Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Blue cube cooler				14		
Black bags				14		
20 L narrow necl	k carboy, 2 lids, attachment assembly	9				Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
	p.					19.
Relinquished Received	Printed Name Signature	JPD OW	aver	Date/T	ime	3/11/18 / 1400 PDT
Other Notes:		ic, and r	nethanol	and do 1	not rinse	e after methanol step (allow to air dry after



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season Bacteriological - VCHCA Lab (SIDE 1 of 1)

Sampling Date Sampling Team		er, David Laa	K	Projec	t Nun	nber: <u>20</u>	17/18-4	(Wet)
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (25 Tube Method - MPNX)	Fecal Coliform (25 Tube Method - MPNX)	E. coli (Tray Method - WQ IDEXX)	Total Coliform (Tray Method - WQ IDEXX)	Number of Bottles	NOTES
	MO-HUE	3/21/18 1125	X	X	X	X	1	PDT
	FD-1	3/21/18 1125	Х	Х	Х	х	1	PDT
			JŲ.					
				1	\Box			
elinquished	Printed Name Signature	Hara Meeker	~	- //		2/2/	La	1220 PD+
eceived	Affiliation Printed Name	Nadia lutst		Date/1	ime _	3/21/	18	1220 PDT
	Signature Affiliation	PHLAS	1	Date/T	ime _	3/2	1/18	9 1220
her Notes:	Perform bacteriologica	al analyses within 6 hours o	of sam	ple col	ection	time		
	1:10 1:100, and 1:1000	dilutions for E. coli					-	



Ventura County Watershed Protection District

BC22033

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 1)

i														
Sampling Date:	3/21/18						F	roje	ct Nu	nber:	201	17/1	8-4 (Wet) Grabs
Sampling Team:	3/21/18 Lara Meel	er, p	(V	id	<u>la</u>	aΚ								
,	DATE/TIME	Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	WTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits							Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
SAMPLE ID	COLLECTE			$\overline{}$			_	_	_	_		_	 ' ' ' 	NOTES
MO-HUE	3/21/18 1125	2	1	2	. 3	1	_				Ц	<u> </u>	9	PDT
FD-1	3/21/18 1129	2	1	2	3	1							9	PDT
							.							
				<u> </u>							İ			
:								\dashv			H			
				<u> </u>			_	\dashv	_	+	\vdash	\vdash		
	1		<u> </u>					\dashv	+			╀		
			<u> </u>	_		_			_	\bot		<u> </u>		
Relinquished	Printed Name	KE	LL	У	÷Α	H <								
1	Signature		all		بلاً	-R								W W -
	Affiliation	Vζ	_	7	KC .	<u> </u>	. 7		/Time		- 2	/2:	- h	8 /
	Amizuon	1	(<u> </u>				Jale	/ 111116		Ť	1 2	<u>~ /1</u>	/
Received	Printed Name	Jeec	ہلار	(_	EI.	w	سم	<u></u>		-			·
	Signature	0												
	Affiliation 1	ECK	مساسا	1.B	7		ו	Date	/Time	<u> </u>	3 †	= 22	2	18 0905
Other Notes:	Travel blanks are or	ıly to be	analy	zed	if sa	mple	s hav	e hit	s of M	TBE	Or :	2-CI.	EVE	Z)
	EPA 624 has replac													
	, ,	Selv	6	la		_		$\sqrt{\chi}$	amer	MVZ/		3	11	8 120 2.40
	3-22-1	3						<u> </u>	•	•				

Ventura Countywide Stormwater Quality Management Program 2017/18 Annual Report

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Attachment D Appendix E



8C22030

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Composites - Weck Laboratories (SIDE 1 of 1)

Sampling Date:	3/22/18						_	Proj	ect l	Nшп	ıber:	201	7/1	8-4 (Wet) Composites
Sampling Team:	K.HAHS, L	<u> NB</u>	- C	AR	E>										
SAMPLE ID MO-HUE	DATE/TIME COLLECTED 3/22/18 OS20				\times Interacts, total & dissorted (+ 1.1 argness), & Darium (total only) \times Cr+6		NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	⋈ Phosphorus-P Total & Dissolved	⋈ 625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	× 515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+	⋈ DRO/ORO (EPA 8015B)	⋈ ALK, CLO4, Turb, TDS, TSS, VSS, Cond	1 Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
Relinquished	Printed Name Signature	Cila	KE		Y 1	HA	HS								
Received	Affiliation Printed Name Signature Affiliation	() () () () () () () () () ()	U. Y.	1 413	SQI SQI J	مدأ		Dat	e/Ti	ime		3, -	22	-11	18 0905 ALZ
Other Notes: 2) Please do not dilu	1) Filter for dissolved rate limited volume samp													mpo	rtant).
								(<u>r</u>		8			<u>p </u>	20219.
Ventura Count SManagement	gwide Stormwater Quali Program 2017/18 Annual	ty I Rep	oort	Jww	d pro	Page	DE -	3 17		18	1	70		4.	Attachment D Appendix E



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date:	3/22/18		<u> </u>	Project :	Number	r: 2017/18-4 (Wet) Cleaning
Sampling Team:	K. HAHIS					
		Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	4	
	EQUIPMENT		Cle	ž		NOTES
18.5 L wide neck o	carboy and lid	M				Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Blue cube cooler	<u> </u>					
Black bags			_		5	
20 L narrow neck o	carboy, 2 lids, attachment assembly	×				Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Grey tub/composi	te bottle bucket	-		×		·
				-		
Relinquished	Printed Name KEL	レンド	natis		<u> </u>	
1		Hes			•	
	Affiliation VIWPS	7		Date/T	ime	3/12/18/
Received	Printed Name + CC + C		- unch) 		34-5713/
	Signature (•			
	Affiliation Well	JAF	27	Date/T	ime	7-22-13 0905
Other Notes:	* Please clean with detergent, nitr	ic, and n	nethanol a	and do i	not rinse	e after methanol step (allow to air dry after
	methanol cleaning to avoid organi	ics conta	mination). Recor	d the bo	ottles cleaned with methanol.
Ventura Co	No black both with the program 2017/18 Annual Report	9 6			mah	3/U/Attachment D Appendix E





Chain of Custody Record Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Sampling Date	5/30/18			Pro	ect N	umber: 2	017/18	2100	ian) 5 (Dy)
Sampling Tean	L. MEEKE	ER, K. HAHS							(96)
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Lotal Coffice (Of Trians in the Hall)	recar comorm (23 Tribit)	E. coli (Tray Method - WO IDEXY)	talC	Number of Desci	samor of potties	NOTES
	ME-CC	5/30/18 1055	ĸ	K	X		1		NOTES
	MESOR MO-CAM		ζ	ĸ	x	x	1		
	MO-THO	0950	1	Z	x	x	1	+	
	MIC CHIMINO SIM	0840	k	K	x	X	1	+	
	THO THE MAKE	3 3 10		ζ.	X	x	1	+)RY
	MO-the	5/30/18 1255	X	Z Z	x	х	1	1	
	MOVEN	5/20/10 1255	X		x	X	1	H	
	Por		X		х	x	1	-	
			k		x	x	1		
inquished	Printed Name	KELLY HAHS		-					
	Signature	collettes						-	
	Affiliation _	Carro	D	to /	Cima.	C/20	lic	1	12111
	rinted Name	Nadia lies	3	iie/	Time _	5/30	118		1344
S	ignature /								
A	ffiliation	PHILL	Da	te/T	ime	00	3018	1	1344
er Notes: P		analyses within 6 hours of sa			_		1010		011



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season

Bacteriological - VCHCA Lab (SIDE 1 of 2)

pling Date:	Andy S	,2018 yr Ka &	3	11	121	ey/	awet)
LAB USE	SAMPLE ID	DATE/TIME COLLECTED			E. cott (Tray Method - WQ IDEXX) Total Coliform (Tray Method - WQ IDEXX	Number of Bottles	NOTES
ONLI	MIL SC MC NO	COLLECTED	13	j.	XX		NOTES
	A PER COD				1 11		
r .	יויסרוים				7. 37		
	MO CHIMIME-SUR	6-6-18/01/5		3	x x	1	
	MO-FIL	6-6-18 0745	111	3	x x	1	
	MO MEL MO ON	0442	11		XX	1,	
	MO WEN MO SPA		11	- 2	x x	1-	
	mo-vay	6-6-18,920	1	2	x x	1	
	ED 1 TVIO TICE	0.700	##		7 37		
nquished	Printed Name	W.B. CAREY					- 9 -
ilquisticu	Signature	W.B. Carey					
	Affiliation	UCWPD	Dat	/Time	e 6-6	-18/	140
eived	Printed Name	Nadia Was	+	,			· ·
	Signature	V-					*
	Affiliation	PHLON	Date	/Time	060	6180	2140
er Notes:	Perform bacteriological	analyses within 6 hours o	f sample	collect	ion time		
	1:10 1:100, and 1:1000 d	ilutions for E. coli		1			



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program Project: NPDES Stormwater Wet Season

Pacteriological - VCHCA Lab (SIDE 1 of 1)

Bacteriological

Project Number: 2017/18 & Allen

6/21/18 Sampling Date: Project Number: 2017/18-12/200 W.B. CAREY Sampling Team: Total Coliform (Tray Method - WQ IDEXX (Tray Method - WQ IDEXX Number of Bottles coli DATE/TIME LAB USE ONLY SAMPLE ID COLLECTED NOTES 1 X ME-YRZ 8 1115 DAZY 6/21/18 0925 HAHS KELLY Relinquished Printed Name Signature Affiliation Date/Time Received Printed Name Signature Affiliation Date/Time Other Notes: Perform bacteriological analyses within 6 hours of sample collection time 1:10 1:100, and 1:1000 dilutions for E. coli



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program



Project: NPDES Stormwater Dry Weather (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 1)

Sampling Date: Sampling Team:	5/30/18 L. MEEKER,	K.HAHS		Project Num	lber: <u>2017/1</u>	8-5 (D1	ry) Grabs
SAMPLE ID ME-CC MO-CAM	DATE/TIME	Oil & Grease (EPA 1664A) Cyanide (ASTM D7511) GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624) Travel Blanks (EPA 624)-only analyze if hits				Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
	5/30/18 1055		3 1	1.		9	NOTES
MO-CAM	1145	2 1 2	3 1			9	
MO-MPK	West Tree Bridge Control of the Cont	-2-1-2-	3 1	SECTION CONTRACTOR VALUE	ومهيميونيد يميرورونيد. ومبعدوليودول		DRY
MO-SIM	5/30/18 0840	2 1 2	3 1			9	
мо-тно	0960	2 1 2	3 1			9	
MO-HUE	1255	2 1 2	3 1			9	
Relinquished	Signature	word		Date/Time	5/30/	8 /	1500
Received	Printed Name Signature Affiliation	DAVID MS	Lev	Date/Time	2:	152	8pm
Other Notes:	Travel blanks are only (EPA 624 has replaced I			l 2-Cleve	TBE or 2-CI		5/30/18 1841 2.10



8FOG0SS

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Dry Weather (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 1)

Sampling Date:	JUNE 6th, 201	8					_	Pro	ject]	Num	ber:	201	7/1	8-5 (.	Dry) Grabs
Sampling Team:	W.B. CAREY	\$, <i>p</i> a		Y42	RE	A	÷							
		(A)			A 624))-only analyze if hits									Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
	DATE/TIME	& Grease (EPA 1664A)	Cyanide (ASTM D7511)	(O (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only								Number of Bottles	
SAMPLE ID	COLLECTED	Ö	<u>ڻ</u>	GRO	Z	Tre	ļ	_	_					Z	NOTES
MP VP2		2	1	2	3	1						é		-9-	
NO ARI		7		-0-	-2-	. 1	-				-		سجا		•
HO-OJA			1	-2	-2-	_1_								-	
ME-SCR	6-6-18/1045	3	1	2	3	1								10	, 100
MO-FIL	6-6-18/0745	2	1	2	3	1								9	
MOEONNE		2	1	2	3.	_1_							Quincy	<u>_</u>	
MOSPA		_2	-1-2	-2-	- 100		101212					State of the last		-0.03.2	
MO-VEN	6-6-18/0920	2	1	2	3	1	<u> </u>							9	. 20
MO THIE		-20	-1-	2	-9-			-	_					-93	
Relinquished			<i>•</i> (Dat	e/T	ime	6	-6	- 18	/1	530
Received	Printed Name	I OCTO													~
٠	Signature		,	A DECEMBER OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PERSON NAM		_	_	•					•		
	Affiliation //C	u	1/2		~ <	T-Se	ب د	Dat	e/T	ime	Е	-6	12	3/1	§30
Other Notes:	Travel blanks are only to EPA 624 has replaced E.				if sa	mple	es ha	ıve h	its o						
										X	im(m	ne7		celle118 17:45 1.8°C



Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program Project: NPDES Stormwater Dry Weather (Contract AE17-001)

Grabs - Weck Laboratories (SIDE 1 of 1)

Sampling Date:	6/2	1/18						-	Pro	ject l	Nun	ber:	201	7/1	8-5 (Dry) Grabs
Sampling Team:	<u> </u>	CARE	7	K	. 1	\ A'	45		-							
SAMPLE ID	DATE/7		Oil & Grease (EPA 1664A)	Cyanide (ASTM D7511)	GRO (EPA 8015B)	MTBE & 2CLEVE (EPA 624)	Travel Blanks (EPA 624)-only analyze if hits								Number of Bottles	Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel blanks.
ME-VR2	6/21/18	1115	2	1	2	3	1		-		-				9	110120
MO MEI	110		-2_	1	2	3_	_1_	- SABOLINA	ed toward	aranten.			Assessing to		9	DRY
мо-оја	6/21/18	0925	2	1	2	3	1								9	
ME-SCR	The species of the second seco		3	1	2	3	-						·		10	
MOTI			2	1	2	3	1								<u>.</u>	
MO CXY			2	_1_	2		4								-	
MO JPA						-8-	4		يسنا ا						-	. *1
MOLINA				-1-		-6-							··		-	
MO FUL			2	1	2	3	1			_		_			-	
Relinquished	Printed Name Signature Affiliation		EL 6/10 eu	4	19	H/	4 11	<u>S</u>	Dat	e/Ti	me		ble		8	\330
Received	Printed Name Signature Affiliation	Q	ec.			مستهمسم	<u>)</u>		Dat				6/	21	18	1330
Other Notes:	Travel blanks a	re only to	be a	naly	zed	f sar			ave h 2-Cle	its of	f M'I		or 2	-CL	EVE	()
	ountywide Storm ent Program 2017			ort	`	4	Pa	age	DE-1		p	6/	21	l	&	1627 16 Altachment D. Appendox E



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

8E30080

Project: NPDES Stormwater Dry Weather (*Contract AE17-001*)
Composites - Weck Laboratories (SIDE 1 of 1)

Sampling Date:		5/30/18	Project Number: 2017/18-5 (Dry) Composites													Dry) Composites	
Sampling Team:		L. MEEKER	K.	. H/	44	<u> </u>											
SAMPLE ID	D	OATE/TIME OLLECTED		Dissolved Inorganic Carbon and Dissolved Organic Carbon	NO3-N, Total Chlorine Residual	Metals, total & dissolved (+ Hardness), & Barium (total only)	Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525,2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
ME-CC	_	30/18 1045		X	X	X	x	X	X	X	X	X	X	X	X	1	110 120
MO-CAM		1135		Х		X	X	X	Х	X	X	х	X	Х	Х	1	
MO-MPK		0800		X		X	X	Х	X	X	X	Х	X	X	X	1	
MO-SIM		0900		X	,	X	X	Х	Х	X	X	Х	X	X	X	1	
мо-тно		0950		X		X	X	X	X	X	X	X	X	X	X	1	
MO-HUE		1245		X		X	X	X	X	X	X	X	X	X	X	1	· · · · · · · · · · · · · · · · · · ·
				Х		X	X	X	X	X	X	X	X	X	X	1	
		•	<u> </u>														
Relinquished Received	Signa Affili	ature 6	D.	THE WAY	14 TO 00 11 11 11 11 11 11 11 11 11 11 11 11	1445	-0	· · · · · · · · · · · · · · · · · · ·	-		e/T:		5	130		11	500
Othor Notes		- ő		.1				1	•							<u> </u>	
Other Notes: 2) Please do not dilu	ite lim	ter for dissolved r	neta les v	us an when	u pe	ction	m co g pri	orito	List	(low	rep	ortir	nme 12 lir	oiate nits	are i	mpo	ortant).



8E30080 Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date:	2/30/18			Project	Number:	: 2017/18-2 (XXXX) Cleaning
Sampling Team:	L. MEEKER K.HA	HS				·
		Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	Heve dispose of.	
18.5 L wide neck o	EQUIPMENT	$\frac{1}{2}$	OB	Z	ac	NOTES Please place tape or plastic bag over top and note on wrap
Blue cube cooler	arooy and iid	12			<u> </u>	if bottle was cleaned with methanol.
Black bags	<u> </u>	+		6		
·	1 011 1	1		6	<u> </u>	Please place tape or plastic bag over top and note on wrap
	earboy, 2 lids, attachment assembly	- 1				if bottle was cleaned with methanol.
Bh bottle	5 w/ sodrum aziden	1			3	
			ļ			
			-			
Relinquished	Printed Name KELLY	HAH	5			
1	Signature Iduth			_		
	Affiliation KWPD	<u> </u>		Date/T	ime 4	5/30/18/1500
Received	Printed Name		>	,		
Keceived	1,00	1 0				
	Signature 1) 1-1	<u> </u>	lev	1		
	Affiliation RMS	***		Date/T	ime	2:55PM
Other Notes:	* Please clean with detergent, ni	tric, and 1	nethanol	and do :	not rinse	after methanol step (allow to air dry after
	methanol cleaning to avoid orga	nics cont	amination). Recor	d the bo	ttles cleaned with methanol.



Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program Project: NPDES Stormwater Dry Weather (Contract AE17-001)

8F06049

Composites - Weck Laboratories (SIDE 1 of 1)

Sampling Date:	-	>1 <u>E</u>						-	Proj	ect I	Nuit.	ber:	201	//12	5-5 (Dry) Composites
Sampling Team:	W.B.CAREY	\$	A.	- S	pyf	kK.	Æ									
SAMPLE ID	DATE/TIME COLLECTED			Dissolved Inorganic Carbon and Dissolved Organic Carbon	Metals, total & dissolved (+ Hardness), & Barium (total only)	< Cr+6	BOD, COD, MBAS, TKN, Ammonia, TOC	3 NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	Phosphorus-P Total & Dissolved	625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	515.3-Herb 547-Glyphosate, 608-CTR	525.2 Reg+507, 525-OPP-LL	DRO/ORO (EPA 8015B)	ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
MOMEL				v	·V	Ÿ	v	v	Ÿ	37	37	37	77	77	4	
MO-Ojh					-37	v	v	v	v	v	v	v	37	37-		
ME-SCR	6-6-18/1040			X	X	Х	X	X	X	X	X	X	x	X	1	
MO-FIL	6-6-18/0745			X	X	X	X	X	X	X	X	X	X	X	1	
				37	4.5	7.7			2				77			
															1	
MO-VEN	6-6-18/0915			X	Х	X	X	x	X	X	X	X	Х	X	1	
Relinquished	Printed Name W	.B.	- (W	EY				Dat	e/Ti	ime		-t		3/	1530
Received	Printed Name	B	Y	0	7	<u>-6</u>		_	:					_		
	Signature /	1	e	, a second												
	Affiliation LE	eTe	arb	Q	/~c	ر ج	501	Ly Ø	Dat	e/Ti	ime		5-6	5-1	8 /	1530
Other Notes:	1) Filter for dissolved a															
2) Please do not dib	ute limited volume samp	les v	vher.	ena	ctint	g pri	ority	list	(low	rep	ortir	ıg lir	nits	are i	mpo	rtant).

VENTURA COUNT

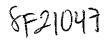
Chain of Custody Record

8F06049

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Wet Season (<u>Contract AE17-001</u>)
Equipment - Weck Laboratories

Sampling Date:	6-6-18			1		Project	Numbe:	5 (Q.y) r: 2017/18-2 (***) Cleaning
Sampling Team:	W-B-CAR	E¥ &	Α	SPYRI				
		•						
				03	and			
				NH pue	HNO3,			
				Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	uired		
				with de	with de	No action required		
	EQUIPMENT			Clean	Clean with methanol*	No ac		NOTES
18.5 L wide neck o	arboy and lid			ı				Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
Blue cube cooler	·			4		3		
Black bags						3		
20 L narrow neck o	arboy, 2 lids, attac	ament ass	embly	2		_		Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.
	<u> </u>		-			·		
			,					
·								
Relinquished	Printed Name	W.8	<i>د</i>	arey				
	Signature	W.	8-	Carl				· · · · · · · · · · · · · · · · · · ·
	Affiliation	J	CWP	D 6	,	Date/T	ime	6-6-18/1530
Received	Printed Name	Dal	01 ()-	2 J	·			·
	Signature	1		<u></u>	•			
	Affiliation	Re	via	been	regar	Date/T	ime	6-6-18/1530
Other Notes:	* Please clean wi	th deterge	ent, nitr	ic, and n	nethanol :	and do	not rins	e after methanol step (allow to air dry after
	methanol cleanir	ig to avoid	d organ	ics conta	mination). Recor	d the bo	ottles cleaned with methanol.



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Chain of Custody Record

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Project: NPDES Stormwater Dry Weather (*Contract AE17-001*)
Composites - Weck Laboratories (SIDE 1 of 1)

Sampling Date:	6/21/18						_	Pro	ject .	Nun	nber	<u>2</u> 01	17/1	8-5	(Dry) Composites
Sampling Team:	_ ME W.B.	(ARE	<u>ک</u>	K.	41	145	<u>`</u>								
SAMPLE ID ME-VR2 MO-MEI	DATE/TIME COLLECTED		⋈ Dissolved Inorganic Carbon and Dissolved Organic Carbon	<u>~</u>			NO3+NO2 (353.2), Cl, F, SO4 (300.0), Phenolics	M N Phosphorus-P Total & Dissolved	★ × 625-CTR, 8270SIM-PAH, 8270SIM-Phenols *	x 515.3-Herb 547-Glyphosate, 608-CTR	※ × 525.2 Reg+507, 525-OPP-LL	K × DRO/ORO (EPA 8015B)	A ALK, CLO4, Turb, TDS, TSS, VSS, Cond	Number of Bottles	Metals by200.8, Total & Dissolved: Sb, Ag, Al, As, Be, Cd, Cr, Cu, Fe, Ni, Pb, Se, Tl, Zn, Hg Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.), AND Na, K 608 include alpha- & gamma-chlordane * Same extraction with low-level spike for 3 methods: 625CTR, 8270SIM-PAH, & 8270SIM-PHENOLS Lab to select samples for MS/MSD where extra volume permits (all test
МО-ОЈА	6/21/18 0925		Х	X	X	Х	X	Х	Х	X	Х	X	X	1	
ME CO			- 37	V	37	ΧŻ	77	77	V.	H	77	H	77		
MO PII			11	77	XI.	ĬĮ.	Ĭ	- 1	11	24-	71	A	Λ	Ţ.	
MC OXEV			V	V	v	v	37	21	H	II.	77	11	71	7	
N			-12			21	H	-M	¥	Y	Ÿ	Y	Y	1	
MOVEN			Y	Y.	v	v	V.	V	V	V	y	Y	X	1	
Relinquished	Printed Name Signature Affiliation	KEL	1	B	4A1	_		Date	·/Ti	me .		6	121	/18	/ 1330
Received	Printed Name Signature	Aı	<u>u</u>	AN) ;	<u>601</u>	<u>~D</u>	6E	RO	<u></u>		_	-		
		ECK!	_A	<u>`</u>				Date	·/Tir	me _		(d	2)	18	1330
Other Notes:	1) Filter for dissolved n	netals an	d pe	for	n co	nduc	tivi	ty an	alyse	s in	mec	liate	l y .		
Please do not dilu	ate limited volume sample	les when	enac	ting	рдс	rity	list (low	repo	rtinį	g lim	uts a	re ir		
- Urcung	7 Ull	-		1	ч —	<u>U</u>				61	21	10	8	ĺ	625
	Countywide Stormwater C ment Program 2017/18 An			~qh	MVP	Pa	ge D	E - 7	5	æl	ટા	118)	lu l	Attacliment D Appendix E



Management Program 2017/18 Annual Report

Chain of Custody Record

Ventura County Watershed Protection District

NPDES Stormwater Monitoring Program Project: NPDES Stormwater Dry Weather (Contract AE17-001)

Equipment - Weck Laboratories

Sampling Date: Sampling Team:	6/21/ K. HA	***			Project N	umber: 2017/18-5 (Dry) Cleaning			
	EQUIPMENT		Clean with detergent and HNO3	Clean with detergent, HNO3, and methanol*	No action required	NOTES			
18.5 L wide neck	carboy and lid	<u>.</u>	\$1			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.			
20 L narrow neck silicone stopper	carboy and lid (+a	sembly) or	4			Please place tape or plastic bag over top and note on wrap if bottle was cleaned with methanol.			
Silicone stoppers		<u> </u>	4	-					
Blue cube cooler					2				
Grey bucket					3				
Black bottle bag	-				2				
Bottle harness					4				
Relinquished	Printed Name Signature Affiliation	KELL	1 H/	145	Date/Time	e 6/21/18/1330			
Received	Printed Name	<u>A TUAL</u>							
	Signature	ul	<u> </u>						
	Affiliation WECK Date/Time 6/21/18 1330								
Other Notes:	* Allow to air dry (don't rinse) after methanol step to avoid organics contamination).								
	Record the bottl				_				
	(French		blaily 1628			
Ventura C	ountywide Stormwate	r Quality	F	age DÉ -	76	Attachment D Appendix E			

Ventura County Watershed Protection District NPDES Stormwater Monitoring Program

Major Outfall Dry Weather Monitoring Bacteriological - VCHCA Lab

Sampling Date:			_	Samı	ple Event:	DRY 201	18	
Sampling Team		CAREY						
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (Tray Method - WQ IDEXX)	E. coli (Tray Method - WQ IDEXX)		4	Number of Bottles	NOTES
	Gamarillo 1			95		4-15-9		MO CAM.
1	Fillmore-1	8/20/18 1120	×	×	i E		1	MO-FIL
A	Moorpark-1		F				- 4	MO MPK
2	Ojai-6	8/20/18 1225	×	x			(MO-OJA DRY-OJA6
3	Oxnard-2	8/20/18 0840	×	×			1	MO-OH DRY-OTAG MO-OHN DRY-OXN
	Port Hueneme-3	8/20/18 1430						DRY-HUE3 rec'd 1517
Ч	Santa Paula-	8/20/18 1040	×	×	1111-1	1		DRY-SPA 24.
	Si mi Valley- 1							MO-SIM
	Thousand Oaks 1				Marie 1			MO-THO
	Unincorporated 4-							DRY-UNI4
5	Ventura 5 -5	8/20/18 1320	>	*			١	DRY-VENS
elinquished	Printed Name Signature Affiliation	who KELI	10	Date/		8/20/1	Q'	/1405
eceived	Printed Name Signature	SAL Y BARK			, ,	11/4 -	1	
	Affiliation	P.H. LAb	7	Bate/	Time	10/1	8	14:075 *
ther Notes:	1:10, 1:100, and 1:1000) dilutions Part Heneme -	3	رزاء ر	quished	8 20	18	1512 66345



Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Major Outfall Dry Weather Monitoring

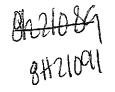
Bacteriological - VCHCA Lab

Sampling Date:	8/21/18		-	Sample Ever	nt: DRY	2018	
Sampling Team:	W.B. 0	AREY					
LAB USE ONLY	SAMPLE ID	DATE/TIME COLLECTED	Total Coliform (Tray Method - WQ IDEXX)	E. coli (Tray Method - WQ IDEXX)		Number of Bottles	NOTES
	Camarillo-1	8/21/18 0740				1	MO-CAM
	Fillmore-1				U in I		MO-FIL
	Moorpark-1	8/21/18 0840	×	×		1	MO-MPK
	Ojai-1-						M O OJA
	Ownerd 1				7010		MO-OM-
	Port Hucneme 3	-	iii				DRY HUE3.
	Santa Paula-2						DRY-SPA2
	Simi Valley-1	8/21/18 0925	×	7		1	MO-SIM
	Thousand Oaks-1	1100	×	×		1	мо-тно
	Unincorporated-4	1010	×	7		1	DRY-UNI4
	Ventura 1 •						MO VEN.
linquished	Printed Name	KELLY HAI	15				
	Signature	white				-	
	Affiliation	Vanso		Date/Time	8/21	118	5/1147
reived	Printed Name	. 1.	25				1
	Signature						11
		PHLab]		082	1/1	0 1140



SAMPLE ID

Chain of Custody Record Ventura County Watershed Protection District NPDES Stormwater Monitoring Program Major Outfall Dry Weather Monitoring Grabs - Weck Laboratories



Invoice Contract No. AE17-001

Sampling Date:

8/20/18 + 8/21/18 W.B. (AREY

Sample Event: DRY 2018

Dissolved Metals by 200.8 (Lead, Zinc, Copper)

Х

Х

X

X

Х

X

X

Х

Х

Sampling Team:

Camarillo-1

Fillmore-1

Moorpark-1

Ojai-**6**

Oxnard 2

Port Hueneme-3

SantaPaula-🛂

Simi Valley-1

Other Notes:

Thousand Oaks-1

Lab to select samples for MS/MSD where extra volume permits (all test methods) excluding travel Metals by 200.7, Total (only): Ca, Mg (for Hardness calc.) Number of Bottles NOTES MO-CAM

MO-FIL

DRY-SPA4

MO-SIM

OHT- OM

Unincorporated-	4		1010	X	X	x	4	DRY-UN14
Ventura- 5	-	8/20/18	1320	X	х	X	4	DRY-VENS
Relinquished	Printed Name		KELLY 1	4 <i>A</i> t	5			
	Signature	t	alletter	\triangleright				
	Affiliation	70-	<u> </u>		Date/T	ime _	8/21/18	/ 1558
Received	Printed Name	BRU	(E MA	RKD.	VYCH		•	<u> </u>
	Signature		la	Y1	<i>y</i>	٠.,	_	
	Affiliation	Weder	705 1		Date/T	ime _	8/21/18/	1558

Total Hardness

X

X

X

 \mathbf{X}

Х

 \mathbf{X}

X

X

 \mathbf{X}

Х

Х

 \mathbf{x}

 \mathbf{x}

 \mathbf{X}

 \mathbf{X}

 \mathbf{X}

 \mathbf{X}

 \mathbf{X}

DATE/TIME

COLLECTED

1120

9840

1225

0840

1430

1100

8/21/18 0925

Ventura Countywide Stormwater Quality Management Program 2017/18 Annual Report Page DE -