

Table F-1. 2016-2017 Dry Weather Receiving Water Monitoring Results – Riverside County Copermittees

Analyte	Units	Water Quality Objective (WQO)	WQO Reference	902LMC778	902LMC778	902LTC777	902LTC777	902USM828	902ADB848	902SND100
				D1	D2	D1	D2	D1	D1	D1
				5/17/2017	9/07/2017	5/17/2017	9/14/17	5/25/2017	5/31/2017	5/31/2017
<b>Physical Chemistry</b>										
Dissolved Oxygen (Field)	mg/L	5	Basin Plan	6.51	5.51	7.81	6.82	8.15	6.94	7.81
pH (Field)	pH units	6.5-8.5	Basin Plan	6.83	6.9	6.98	6.69	6.27	6.97	7.65
Salinity (Field)	ppt			0.52	0.5	1.13	1.1	0.17	0.25	1.12
Specific Conductance (Field)	µs/cm			1,059	1,022	2,220	216	357	517	2,200
Specific Conductance (Lab)	µmhos/cm			1,000	1,000	2,200	2,100	320	520	2,200
Water Temperature (Field)	Celsius			17.41	25.03	15.03	18.16	19.6	15.86	17.21
Turbidity (Field)	NTU	20	Basin Plan	3.4	1.3	3.1	1	0.4	0.2	0.4
Turbidity (Lab)	NTU	20	Basin Plan	1.1	3.1	1.4	1.5	1.2	1.4	0.34
<b>Fecal Indicator Bacteria</b>										
<i>E. coli</i>	MPN/100 mL	126	Basin Plan	50	<200#	170	300	50	2	4
<i>Enterococcus</i>	MPN/100 mL	33	Basin Plan	50	200	110	1,700	2	30	27
Fecal Coliform	MPN/100 mL	200	Basin Plan	50	<200	170	300	50	2	13
Total Coliform	MPN/100 mL			1,600	3,000	1,600	1,700	80	140	900
<b>Nutrients</b>										
Ammonia as N	mg/L			<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048
Ammonia as N (Unionized)	mg/L	0.025	Basin Plan	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Nitrate as N	mg/L	10 (a)	Basin Plan	0.076J	<0.055	0.49	0.63	0.26	0.39	10
Nitrite as N	mg/L	1 (a)	Basin Plan	<0.0042	<0.0042	0.01	0.0072J	<0.0042	<0.0042	0.022
Total Kjeldahl Nitrogen	mg/L			0.65	0.33J	0.84	0.71	0.29J	0.19J	<0.13
Total Nitrogen	mg/L	N:P 10:1	Basin Plan	0.7	0.3	1.4	1.3	0.6	0.6	10
Dissolved Phosphorus	mg/L			<0.043	0.16	0.22	0.19	0.2	<0.043	<0.043
Total Phosphorus	mg/L	0.1	Basin Plan	0.06	0.24	0.26	0.24	0.14	<0.04	<0.04
<b>General Chemistry</b>										
Biochemical Oxygen Demand	mg/L			6J	<5	<2	<2.5	<2	5J	<4
Chemical Oxygen Demand	mg/L			18	20	34	23	16	36	73
Dissolved Organic Carbon	mg/L			5.6H	4.6H	8.1H	5.7H	3.5H	1.6H	2.8H
Total Organic Carbon	mg/L			6.6	5.3	8.9	5.9	3.9	1.7	3
Oil & Grease	mg/L			1.8B	2.0B	3.1B	<0.9BS	<0.9	0.9J	0.9J
Surfactants (MBAS)	mg/L	0.5	Basin Plan	0.07J	0.06J	0.07J	0.08J	0.05J	0.05J	0.05J
Sulfate	mg/L	250-300 (b)	Basin Plan	70	97	250	270	37	38	420
Total Dissolved Solids	mg/L	500-750 (b)	Basin Plan	630	550H	1,500	1,500	180	290	1,500
Total Suspended Solids	mg/L			2	5	4	11	30	3	3
Total Hardness	mg/L			260	240	660	730	83	210	800
<b>Total Metals</b>										
Arsenic	µg/L	10 (a)	Basin Plan	3	3.7	1.7	1.6	2	4.8	1.8
Cadmium	µg/L	5 (a)	Basin Plan	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Chromium	µg/L	50 (a)	Basin Plan	0.6	<0.4	0.6	0.5	<0.4	0.7	0.7
Chromium VI	µg/L	10 (a)	Basin Plan	0.15J	<0.024	<0.024	<0.024	0.034J	<0.024	<0.024
Copper	µg/L	1000 (a)	Basin Plan	1.8	2.1	2.8	1.6	20	0.8	2.7
Iron	µg/L	300 (b)	Basin Plan	89	120	210	190	130	210	32
Lead	µg/L	2.5	40 CFR 131.38	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Manganese	µg/L	50 (b)	Basin Plan	70	270	450	230	19	27	11





Analyte	Units	Water Quality Objective (WQO)	WQO Reference	902LMC778	902LMC778	902LTC777	902LTC777	902USM828	902ADB848	902SND100
				D1	D2	D1	D2	D1	D1	D1
				5/17/2017	9/07/2017	5/17/2017	9/14/17	5/25/2017	5/31/2017	5/31/2017
Propoxur	µg/L			<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75
<b>Toxicity</b>										
Chronic <i>Ceriodaphnia dubia</i> – Survival	Toxic Units*	≤1		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chronic <i>Ceriodaphnia dubia</i> – Reproduction	Toxic Units*	≤1		1.0	1.0	>1.0	1.0	1.0	1.0	>1.0
Chronic <i>Hyaella azteca</i> - Survival	Toxic Units*	≤1		I	1.0	I	1.0	1.0	1.0	1.0
Chronic <i>Hyaella azteca</i> – Growth	Toxic Units*	≤1		I	1.0	I	1.0	1.0	1.0	1.0
Chronic <i>Pimephales promelas</i> - Survival	Toxic Units*	≤1		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chronic <i>Pimephales promelas</i> – Growth	Toxic Units*	≤1		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chronic <i>Pseudokirchneriella subcapitata</i> - Growth	Toxic Units*	≤1		1.0	1.0	1.0	>1.0	1.0	1.0	1.0
Acute <i>Ceriodaphnia dubia</i> – Survival	Toxic Units*	<1		0.0	0.0	0.41	<1.0	0.0	0.0	0.0
Acute <i>Hyaella azteca</i> – Survival	Toxic Units*	<1		I	0.23	I	<1.0	0.41	0.23	0.51
Acute <i>Pimephales promelas</i> – Survival	Toxic Units*	<1		0.23	0.0	0.23	<1.0	0.23	0.41	0.23
Chronic <i>Strongylocentrotus purpuratus</i> - Development	Toxic Units*	≤1		NS	NS	<1.0	1.0	NS	NS	1.0

< - Results are less than the method detection limit.

\* Toxicity is expressed in toxicity units (TU) for both acute and chronic toxicity where  $TU_a = 100/EC_{50}$  and  $TU_c = 100/NOEC$ . The  $EC_{50}$  is the concentration of sample estimated to cause an adverse effect on 50% of the test organisms and the NOEC is the highest concentration tested at which no toxicity is statistically discernible. A  $TU_a$  value > 1.0 indicate >50% mortality in the undiluted sample. A  $TU_c$  of ≤1 indicates a lack of toxicity, and values much greater than 1 indicate higher toxicity.

NS - Not sampled.

(a) WQOs are based on the MUN beneficial use as described in the San Diego Regional Water Quality Control Plan by watershed for the San Diego Region (Basin Plan), 1994 (with amendments effective on or before April 4, 2011).

(b) WQOs are based on the Basin Plan, 1994 (with amendments effective on or before April 4, 2011) and may vary by hydrologic area.

(c) WQOs for dissolved metal fractions are based on total hardness and is calculated as described by 40 CFR Part 131.38 (May 18, 2000). The Criterion Continuous Concentration (CCC) was used.

A - Analyte is not required.

B - Analyte was detected in the associated method blank.

H - Sample received and or/analyzed past the recommended holding time.

I – Test was invalid. Lab control did not meet acceptability criterion for survival. Results were deemed invalid for reporting.

J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.

Shaded results did not meet WQOs.

Table F-2. 2016-2017 Wet Weather Receiving Water Monitoring Results – Riverside County Copermittees

Analyte	Units	Water Quality Objective (WQO)	WQO Reference	902LMC778	902LMC778	902LMC778	902LTC777	902LTC777	902LTC777	902ADB848	902ADB848
				W1	W2	W3	W1	W2	W3	W1	W2
				11/21/2016	12/16/2016	2/18/2017-2/19/2017	11/21/2016	12/16/2016	2/18/2017-2/19/2017	12/16/2016	1/19/2017
<b>Physical Chemistry</b>											
Dissolved Oxygen (Field)	mg/L	5	Basin Plan	8.88	7.39	10.08	7.73	8.04	9.66	8.24	9.85
pH (Field)	pH units	6.5-8.5	Basin Plan	8.25	7.53	8.09	8.2	7.46	8.71	7.9	8.61
Salinity (Field)	ppt			NS	0.27	0.14	NS	0.8	0.12	NS	0.1
Specific Conductance (Field)	µs/cm			733	547	302	1,705	1,578	278	493	217
Specific Conductance (Lab)	µmhos/cm			790	520	400	2,300	1,500	380	480	230
Water Temperature (Field)	Celsius			13.82	13.79	11.82	13.96	13.43	12.32	11.15	11
Turbidity (Field)	NTU	20	Basin Plan	10	27	242.7	0	4.3	95.7	0	37.6
Turbidity (Lab)	NTU	20	Basin Plan	9.3	180	190	0.88	29	140	2.4	28
<b>Fecal Indicator Bacteria</b>											
<i>E. coli</i>	MPN/100 mL	126	Basin Plan	3,000	1,400	24,000	280	400	17,000	<200#	1,100
<i>Enterococcus</i>	MPN/100 mL	33	Basin Plan	2,200	500	17,000	500	1,300	17,000	400	800
Fecal Coliform	MPN/100 mL	200	Basin Plan	9,000	2,200	24,000	280	800	17,000	<200	1,100
Total Coliform	MPN/100 mL			>16,000	14,000	30,000	1,600	7,000	160,000	5,000	3,800
<b>Nutrients</b>											
Ammonia as N	mg/L			<0.048	0.072J	<0.048	<0.048	<0.048	0.085J	0.12	<0.048
Ammonia as N (Unionized)	mg/L	0.025	Basin Plan	<0.1#	<0.1#	<0.048#	<0.1#	<0.1#	<0.1#	<0.1#	<0.1#
Nitrate as N	mg/L	10 (a)	Basin Plan	0.44	0.5	0.44	<0.1	0.4	0.48	0.4	0.7
Nitrite as N	mg/L	1 (a)	Basin Plan	0.016	0.013	0.016	<0.0042	0.01	0.021	0.0060J	<0.0042
Total Kjeldahl Nitrogen	mg/L			0.61	1	1.4	0.63	0.84	1.6	0.6	1.1
Total Nitrogen	mg/L	N:P 10:1	Basin Plan	1.1	1.5	1.8	0.6	1.2	2.1	1	1.8
Dissolved Phosphorus	mg/L			0.055	0.24	0.37	0.13	0.25	0.42	0.12	0.65
Total Phosphorus	mg/L	0.1	Basin Plan	0.71	0.57	0.65	1.2	0.37	0.64	0.21	0.58
<b>General Chemistry</b>											
Biochemical Oxygen Demand	mg/L			5J	<4	<4	7J	14J	<4	4J	<4
Chemical Oxygen Demand	mg/L			5.8J	54	63	10	31	63	22	75
Dissolved Organic Carbon	mg/L			5.0H	4.7H	5.5H	6.2H	7.7H	6.2H	9.4H	13H
Total Organic Carbon	mg/L			6.7	7.1	6.8	7.4	11	7.4	12	13
Oil & Grease	mg/L			1.3J	2	1.2J	1.3J	1.4J	2.7	2	1.0J
Surfactants (MBAS)	mg/L	0.5	Basin Plan	0.12	<0.05	<0.05	0.05J	0.05J	<0.05	0.05J	<0.05
Sulfate	mg/L	250-300 (b)	Basin Plan	65	41	44	260	170	37	65	27
Total Dissolved Solids	mg/L	500-750 (b)	Basin Plan	430	290	280	1,400	890	270	300	180
Total Suspended Solids	mg/L			14	170	240	<5	48	220	<5	10
Total Hardness	mg/L			180	130	150	730	450	120	160	61
<b>Total Metals</b>											
Arsenic	µg/L	10 (a)	Basin Plan	1.5	2.5	3.3	0.9J	1.1	2.2	3.6	1.6
Cadmium	µg/L	5 (a)	Basin Plan	<0.12	0.15J	0.16J	<0.12	<0.12	0.17J	<0.12	<0.12
Chromium	µg/L	50 (a)	Basin Plan	1.5	12	14	0.4J	1.9	11	0.6	2.4
Chromium VI	µg/L	10 (a)	Basin Plan	<0.024	NS	NS	0.43	NS	NS	<0.024	NS
Copper	µg/L	1000 (a)	Basin Plan	6.5	12	15	3.4	6.2	13	2.2	5.7
Iron	µg/L	300 (b)	Basin Plan	440	12,000	16,000	87	1,600	11,000	130	1,300
Lead	µg/L	65	40 CFR 131.38	1	3.7	4.5	<0.2	1	3	<0.2	0.5
Manganese	µg/L	50 (b)	Basin Plan	80	270	340	77	430	330	16	15







Analyte	Units	Water Quality Objective (WQO)	WQO Reference	902LMC778	902LMC778	902LMC778	902LTC777	902LTC777	902LTC777	902ADB848	902ADB848
				W1	W2	W3	W1	W2	W3	W1	W2
				11/21/2016	12/16/2016	2/18/2017-2/19/2017	11/21/2016	12/16/2016	2/18/2017-2/19/2017	12/16/2016	1/19/2017
Methomyl	µg/L			<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	NS
Oxamyl	µg/L			<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	NS
Propoxur	µg/L			<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	<0.75	NS
<b>Toxicity</b>											
Chronic <i>Ceriodaphnia dubia</i> – Survival	Toxic Units*	≤1		1.0	1.0	1.0	1.0	>1.0	1.0	1.0	1.0
Chronic <i>Ceriodaphnia dubia</i> – Reproduction	Toxic Units*	≤1		1.0	1.0	1.0	1.0	>1.0	1.0	1.0	1.0
Chronic <i>Pimephales promelas</i> - Survival	Toxic Units*	≤1		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chronic <i>Pimephales promelas</i> – Growth	Toxic Units*	≤1		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Chronic <i>Pseudokirchneriella subcapitata</i> - Growth	Toxic Units*	≤1		>1.0	>1.0	1.0	1.0	>1.0	1.0	1.0	1.0
Acute <i>Ceriodaphnia dubia</i> – Survival	Toxic Units*	<1		<1	<1	<1	<1	<1	<1	<1	<1
Acute <i>Hyalella azteca</i> – Survival	Toxic Units*	<1		<1	<1	I	<1	>1	I	<1	<1
Acute <i>Pimephales promelas</i> – Survival	Toxic Units*	<1		<1	<1	<1	<1	<1	<1	<1	<1

< - Results are less than the method detection limit.

\* Toxicity is expressed in toxicity units (TU) for both acute and chronic toxicity where TU<sub>a</sub> = 100/EC<sub>50</sub> and TU<sub>c</sub> = 100/NOEC. The EC<sub>50</sub> is the concentration of sample estimated to cause an adverse effect on 50% of the test organisms and the NOEC is the highest concentration tested at which no toxicity is statistically discernible. A TU<sub>a</sub> value > 1.0 indicate >50% mortality in the undiluted sample. A TU<sub>c</sub> of ≤1 indicates a lack of toxicity, and values much greater than 1 indicate higher toxicity.

NS - Not sampled.

(a) WQOs are based on the MUN beneficial use as described in the San Diego Regional Water Quality Control Plan by watershed for the San Diego Region (Basin Plan), 1994 (with amendments effective on or before April 4, 2011).

(b) WQOs are based on the Basin Plan, 1994 (with amendments effective on or before April 4, 2011) and may vary by hydrologic area.

(c) WQOs for dissolved metal fractions are based on total hardness and is calculated as described by 40 CFR Part 131.38 (May 18, 2000). The Criterion Continuous Concentration (CCC) was used.

H - Sample received and or/analyzed past the recommended holding time.

I – Test was invalid. Lab control did not meet acceptability criterion for survival. Results were deemed invalid for reporting.

J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.

# - Reporting limit greater than WQO.

Shaded results did not meet WQOs.



Table F-3. 2016-2017 Dry Weather Receiving Water Monitoring Results – County of San Diego

Permit Requirement	Analyte	Units	Water Quality Objective (WQO)	WQO Reference	SMR-MLS-2		SMR WMA % of Samples Above WQO
					D1	D2	
					9/26/2016- 9/27/2016	5/30/2017- 5/31/2017	
<b>Physical Chemistry</b>							
2013	Dissolved Oxygen	mg/L	<6.0	1. Basin Plan	9.42	10.97	0%
2007, 2013	pH	pH Units	6.5-9.0	1. Basin Plan	7.73	8.14	0%
2007, 2013	Specific Conductivity	µS/cm	NA		1,306	1,265	-
2007, 2013	Water Temperature	Celsius	NA		19.82	21.42	-
2007, 2013	Turbidity	NTU	20	1. Basin Plan	0.2	2.5	0%
<b>Bacteriological</b>							
2007, 2013	<i>Enterococcus</i>	MPN/100 mL	61	1. Basin Plan	40	20	0%
2007, 2013	Fecal Coliform	MPN/100 mL	400	1. Basin Plan	<20	<20	0%
2007, 2013	Total Coliform	MPN/100 mL	NA		300	400	-
<b>Nutrients</b>							
2007, 2013	Ammonia as N	mg/L	(a)	6. USEPA Water Quality Criteria (Freshwater)	<0.048	<0.048	0%
2007, 2013	Nitrate as N	mg/L	10 (b)	1. Basin Plan	<0.041	1.7	0%
2007, 2013	Nitrite as N	mg/L	1 (b)	1. Basin Plan	0.016J	0.027J	0%
2007, 2013	Total Kjeldahl Nitrogen	mg/L	NA		0.2	0.34	-
2007, 2013	Total Nitrogen (calc)	mg/L	1	1. Basin Plan	0.216	2.067	50%
2007	Dissolved Phosphorus	mg/L	NA		0.014	0.019	-
2007, 2013	Total Phosphorus	mg/L	0.1	1. Basin Plan	0.024	0.024	0%
<b>General Chemistry</b>							
2007	Biochemical Oxygen Demand	mg/L	NA		<2.0	<2.0	-
2007	Chemical Oxygen Demand	mg/L	NA		17	16	-
2007, 2013	Dissolved Organic Carbon	mg/L	NA		3	4.3	-
2007, 2013	Total Organic Carbon	mg/L	NA		2.9	4.1	-
2007	Oil & Grease	mg/L	NA		<1.3	<1.3	-
2007, 2013	Surfactants (MBAS)	mg/L	0.5	1. Basin Plan	0.024J	0.026J	0%
2007, 2013	Total Dissolved Solids	mg/L	750 (c)	1. Basin Plan	870	860	100%
2007, 2013	Total Suspended Solids	mg/L	NA		1	6	-
2007, 2013	Total Hardness	mg CaCO <sub>3</sub> /L	NA		422	441	-
<b>Total Metals</b>							
2007	Antimony	mg/L	6 (b)	1. Basin Plan	0.11J	0.11J	0%
2007, 2013	Arsenic	mg/L	10 (b)	1. Basin Plan	1.2	1.4	0%
2007, 2013	Cadmium	mg/L	5 (b)	1. Basin Plan	<0.041	<0.041	0%
2007, 2013	Chromium	mg/L	50 (b)	1. Basin Plan	0.073J	0.21	0%
2007, 2013	Copper	mg/L	1000 (b)	1. Basin Plan	0.44J	2.2	0%
2007, 2013	Lead	mg/L	NA		0.088J	0.067J	-
2007, 2013	Nickel	mg/L	100 (b)	1. Basin Plan	0.57J	0.84	0%
2007, 2013	Selenium	mg/L	5	16. 40 CFR 131.38	0.34J	0.88	0%
2007, 2013	Zinc	mg/L	5000 (b)	1. Basin Plan	1.0J	1.5J	0%
<b>Dissolved Metals</b>							
2007	Antimony	mg/L	NA		0.087J	0.11J	-
2007, 2013	Arsenic	mg/L	150	16. 40 CFR 131.38	1.1	1.3	0%
2007, 2013	Cadmium	mg/L	(d)	16. 40 CFR 131.38	<0.041	<0.041	0%

Permit Requirement	Analyte	Units	Water Quality Objective (WQO)	WQO Reference	SMR-MLS-2		SMR WMA % of Samples Above WQO
					D1	D2	
					9/26/2016- 9/27/2016	5/30/2017- 5/31/2017	
2007, 2013	Chromium	mg/L	(d)	16. 40 CFR 131.38	0.05J	0.062J	0%
2007, 2013	Copper	mg/L	(d)	16. 40 CFR 131.38	0.41J	1.9	0%
2007, 2013	Lead	mg/L	(d)	16. 40 CFR 131.38	0.033J	<0.031	0%
2007, 2013	Nickel	mg/L	(d)	16. 40 CFR 131.38	0.57J	0.73J	0%
2007, 2013	Selenium	mg/L	NA		0.29J	0.93	-
2007, 2013	Zinc	mg/L	(d)	16. 40 CFR 131.38	1.4J	1.4J	0%
<b>Organophosphorus Pesticides</b>							
2007, 2013	Chlorpyrifos	µg/L	0.014	12. CA Dept. of Fish & Game, 2000	<0.0069	<0.0069	0%
2007, 2013	Diazinon	µg/L	0.05	12. CA Dept. of Fish & Game, 2000	<0.0052	<0.0052	0%
2007, 2013	Malathion	µg/L	0.1	13. CA Dept. of Fish & Game, 1998, 5. Goldbook	<0.0076	<0.0076	0%
<b>Toxicity</b>							
2007, 2013	<i>Ceriodaphnia</i> 96-hr survival	LC <sub>50</sub> (%)	>100		>100	>100	0%
2007, 2013	<i>Ceriodaphnia</i> 7-day survival	NOEC (%)	100		100	100	0%
2007, 2013	<i>Ceriodaphnia</i> 7-day reproduction	NOEC (%)	100		100	<100	50%
2007	<i>Hyalella</i> 96-hr survival	LC <sub>50</sub> (%)	>100		>100	>100	0%
2007, 2013	<i>Selenastrum</i> 96-hr growth	NOEC (%)	100		100	100	0%

< - Results are less than the method detection limit.

NA - No criterion or published value was available or applicable to the matrix or program.

NR -Sampling of this analyte not required for transitional monitoring (Regional Board Order No. R9-2007-0001) and/or for long-term monitoring (Regional Board Order No. R9-2013-0001).

(a) WQO is the criterion maximum concentration (CMC) and criterion continuous concentration (CCC) based on pH and water temperature when applicable as described in the U.S. EPA, 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater, EPA-822-R-13-001, April 2013.

(b) WQO is based on the MUN beneficial use as described in the Basin Plan, 1994 (with amendments effective on or before April 4, 2011).

(c) WQOs are based on the San Diego Regional Water Quality Control Plan by watershed for the San Diego Region (Basin Plan), 1994 (with amendments effective on or before April 4, 2011) and may vary by hydrologic area.

(d) WQOs for dissolved metal fractions is based on total hardness and is calculated as described by 40 CFR Part 131.38 (May 18, 2000). The Criterion Criteria Concentration (CCC) was used.

(-) Unable to calculate because there is no criterion or published value available for the analyte.

BS-L - Blank Spike recovery of this analyte was below the control limits. Results may be biased low.

J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.

Shaded results did not meet WQOs.

Sources - Please refer to Attachment B of the Transitional Receiving Water Monitoring Workplan for WQO source citations.

Table F-4. 2016-2017 Wet Weather Receiving Water Monitoring Results – County of San Diego

Permit Requirement	Analyte	Units	Water Quality Objective (WQO)	WQO Reference	SMR-MLS-2		SMR WMA % of Samples Above WQO
					W1	W2	
					10/25/2016	2/18/2017-2/19/2017	
<b>Physical Chemistry</b>							
2013	Dissolved Oxygen	mg/L	<6.0	1. Basin Plan	8.97	9.91	0%
2007, 2013	pH	pH Units	6.5-9.0	1. Basin Plan	7.38	8.35	0%
2007, 2013	Specific Conductivity	µS/cm	NA		1430	3	-
2007, 2013	Water Temperature	Celsius	NA		16.92	13.53	-
2007, 2013	Turbidity	NTU	20	1. Basin Plan	1.5	218.8	50%
<b>Bacteriological</b>							
2007, 2013	<i>Enterococcus</i>	MPN/100 mL	61	1. Basin Plan	300	50,000	100%
2007, 2013	Fecal Coliform	MPN/100 mL	400	1. Basin Plan	110	24,000	50%
2007, 2013	Total Coliform	MPN/100 mL	NA		1,700	160,000	-
<b>Nutrients</b>							
2007, 2013	Ammonia as N	mg/L	(a)	6. USEPA Water Quality Criteria (Freshwater)	<0.048	<0.048	0%
2007, 2013	Nitrate as N	mg/L	10 (b)	1. Basin Plan	0.14	2.5	0%
2007, 2013	Nitrite as N	mg/L	1 (b)	1. Basin Plan	0.010J	0.014J	0%
2007, 2013	Total Kjeldahl Nitrogen	mg/L	NA		0.2	1.4	-
2007, 2013	Total Nitrogen (calc)	mg/L	1	1. Basin Plan	0.35	3.914	50%
2007	Dissolved Phosphorus	mg/L	NA		0.022	0.16	-
2007, 2013	Total Phosphorus	mg/L	0.1	1. Basin Plan	0.039	0.48	50%
<b>General Chemistry</b>							
2007	Biochemical Oxygen Demand	mg/L	NA		<2.0	5	-
2007	Chemical Oxygen Demand	mg/L	NA		19	30	-
2007, 2013	Dissolved Organic Carbon	mg/L	NA		3.6	6	-
2007, 2013	Total Organic Carbon	mg/L	NA		3.3	6.9	-
2007	Oil & Grease	mg/L	NA		<1.3	<1.3	-
2007, 2013	Surfactants (MBAS)	mg/L	0.5	1. Basin Plan	<0.019	<0.019	0%
2007, 2013	Total Dissolved Solids	mg/L	750 (c)	1. Basin Plan	900	430	50%
2007, 2013	Total Suspended Solids	mg/L	NA		7	110	50%
2007, 2013	Total Hardness	mg CaCO <sub>3</sub> /L	NA		442	229	-
<b>Total Metals</b>							
2007	Antimony	mg/L	6 (b)	1. Basin Plan	0.12J	0.39J	0%
2007, 2013	Arsenic	mg/L	10 (b)	1. Basin Plan	1.0	4.1	0%
2007, 2013	Cadmium	mg/L	5 (b)	1. Basin Plan	<0.041	0.12	0%
2007, 2013	Chromium	mg/L	50 (b)	1. Basin Plan	0.081J	17	0%
2007, 2013	Copper	mg/L	1000 (b)	1. Basin Plan	0.53	15	0%
2007, 2013	Lead	mg/L	NA		0.053J	4.3	-
2007, 2013	Nickel	mg/L	100 (b)	1. Basin Plan	0.55J	7.3	0%
2007, 2013	Selenium	mg/L	5	16. 40 CFR 131.38	0.4	0.92	0%
2007, 2013	Zinc	mg/L	5000 (b)	1. Basin Plan	<0.94	47	0%
<b>Dissolved Metals</b>							
2007	Antimony	mg/L	NA		0.11J	0.36J	-
2007, 2013	Arsenic	mg/L	340	16. 40 CFR 131.38	1.0	1.6	0%
2007, 2013	Cadmium	mg/L	(d)	16. 40 CFR 131.38	<0.041	<0.041	0%
2007, 2013	Chromium	mg/L	(d)	16. 40 CFR 131.38	0.041J	0.32	0%
2007, 2013	Copper	mg/L	(d)	16. 40 CFR 131.38	0.48J	2.2	0%

Permit Requirement	Analyte	Units	Water Quality Objective (WQO)	WQO Reference	SMR-MLS-2		SMR WMA % of Samples Above WQO
					W1	W2	
					10/25/2016	2/18/2017-2/19/2017	
2007, 2013	Lead	mg/L	(d)	16. 40 CFR 131.38	<0.031	<0.031	0%
2007, 2013	Nickel	mg/L	(d)	16. 40 CFR 131.38	0.54J	0.98	0%
2007, 2013	Selenium	mg/L	NA		0.43	0.49	-
2007, 2013	Zinc	mg/L	(d)	16. 40 CFR 131.38	<0.94	3.1J	0%
<b>Organophosphorus Pesticides</b>							
2007, 2013	Chlorpyrifos	µg/L	0.002	12. CA Dept. of Fish & Game, 2000	<0.0069	<0.0069	0%
2007, 2013	Diazinon	µg/L	0.08	12. CA Dept. of Fish & Game, 2000	<0.0052	<0.0052	0%
2007, 2013	Malathion	µg/L	0.43	13. CA Dept. of Fish & Game, 1998, 5. Goldbook	<0.0076	<0.0076	0%
<b>Pyrethroids</b>							
2007, 2013	Allethrin	µg/L	NA		<0.0005	<0.0005	-
2007, 2013	Bifenthrin	µg/L	0.0093	15. Anderson et al., 2006	<0.0005	0.0176	50%
2007, 2013	Cyfluthrin	µg/L	0.344	17. Wheelock et al., 2004	<0.0005	0.0026	0%
2007, 2013	Cyhalothrin, Total Lambda	µg/L	0.2	17. Wheelock et al., 2004	<0.0005	<0.0005	0%
2007, 2013	Cypermethrin	µg/L	0.683	17. Wheelock et al., 2004	<0.0005	<0.0005	0%
2007, 2013	Danitol (Fenpropathrin)	µg/L	NA		<0.0005	0.0023	-
2007, 2013	Deltamethrin/Tralomethrin	µg/L	NA		<0.0005	<0.0005	-
2007, 2013	Esfenvalerate	µg/L	0.25	17. Wheelock et al., 2004	<0.0005	<0.0005	0%
2007, 2013	Fenvalerate	µg/L	NA		<0.0005	<0.0005	-
2007, 2013	Fluvalinate	µg/L	NA		<0.0005	0.0017J	-
2007, 2013	Permethrin	µg/L	0.021	15. Anderson et al., 2006	<0.002	<0.002	0%
2007, 2013	Prallethrin	µg/L	NA		<0.0005	<0.0005	-
2007, 2013	Resmethrin	µg/L	NA		<0.005	<0.005	-
<b>Toxicity</b>							
2007, 2013	<i>Ceriodaphnia</i> 96-hr survival	LC <sub>50</sub> (%)	>100		>100	>100	0%
2007, 2013	<i>Ceriodaphnia</i> 7-day survival	NOEC (%)	100		100	100	0%
2007, 2013	<i>Ceriodaphnia</i> 7-day reproduction	NOEC (%)	100		100	100	0%
2007	<i>Hyalella</i> 96-hr survival	LC <sub>50</sub> (%)	>100		>100	>100	0%
2007, 2013	<i>Selenastrum</i> 96-hr growth	NOEC (%)	100		100	100	0%

< - Results are less than the method detection limit.

NA - No criterion or published value was available or applicable to the matrix or program.

NR - Sampling of this analyte not required for transitional monitoring (RWQCB Order No. R9-2007-0001) and/or for long-term monitoring (RWQCB Order No. R9-2013-0001).

NS - Not sampled.

(a) WQO is the criterion maximum concentration (CMC) and criterion continuous concentration (CCC) based on pH and water temperature when applicable as described in the U.S. EPA, 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia - Freshwater, EPA-822-R-13-001, April 2013.

(b) WQO is based on the MUN beneficial use as described in the Basin Plan, 1994 (with amendments effective on or before April 4, 2011).

(c) WQOs are based on the San Diego Regional Water Quality Control Plan by watershed for the San Diego Region (Basin Plan), 1994 (with amendments effective on or before April 4, 2011) and may vary by hydrologic area.

(d) WQOs for dissolved metal fractions are based on total hardness and is calculated as described by 40 CFR Part 131.38 (May 18, 2000). The Criterion Maximum Concentration (CMC) was used.

(-) Unable to calculate because there is no criterion or published value available for the analyte.

BS - L-Blank Spike recovery of this analyte was below the control limits. Results may be biased low.

J - Analyte was detected at a concentration below the reporting limit and above the method detection limit. Reported value is estimated.

Shaded results did not meet Water Quality Benchmarks.

Sources - Please refer to Attachment B of the Transitional Receiving Water Monitoring Workplan for WQO source citations.