Basin Monitoring Task Force Meeting

September 23, 2021
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Revised Language for Salinity Effluent Limits

Effluent limits that are imposed for the purpose of implementing the approved wasteload allocation for TDS shall generally require dischargers to demonstrate compliance based on a 60-month running average. The Regional Board may consider imposing effluent limitations for TDS identified in Table 5-5 (below) using shorter or longer averaging periods (not to exceed an averaging period of 120-months as a volume-weighted running average) based on case-by-case evaluation that considers the dischargers ongoing actions and activities that are being implemented to address and/or avoid long-term salinity impacts.

Revised Summary of TIN Model Results for Scenarios A - F

Reach	Underlying Management Zone	TIN Objective (mg/L)	Ambient NO_3-N (mg/L)	Assimilative Capacity (mg/L)	Averaging Period	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F
						2020 Maximum Expected Discharge	2020 Most Likely Discharge	2020 Minimum Expected Discharge	2040 Maximum Expected Discharge	2040 Most Likely Discharge	2040 Minimum Expected Discharge
Groundwater					Maximum Value for the Volume-Weighted Recharge for the Planning Period Hydrology (mg/L)						
Noble Creek; unnamed tributary to Marshall Creek below Beaumont DP 007; Cooper's Creek; San Timoteo Creek - Reach 4	Beaumont	5.0[1]/1.5[2]	2.7[3]	2.3[4]	1-year	2.29	2.32	2.36	1.86	1.87	1.88
					5-year	1.88	1.90	1.92	1.60	1.61	1.61
					10-year	1.77	1.79	1.81	1.54	1.54	1.54
					20-year	1.74	1.75	1.77	1.52	1.52	1.53
Cooper's Creek; San Timoteo Creek - Reach 2, 3 and 4	San Timoteo	5.0[1]/2.7[2]	1.5[3]	3.5[4]	1-year	***3.75***	***3.73***	***3.72***	***3.41***	***3.36***	***3.11***
					5-year	***3.58***	***3.55***	***3.52***	***2.94***	***2.89***	***2.70***
					10-year	***3.39***	***3.35***	***3.32***	***2.68***	***2.65***	***2.49***
					20-year	***3.38***	***3.33***	***3.28***	***2.68***	***2.64***	***2.47***
San Timoteo Creek - Reach 1 and Santa Ana River - Reach 5	Bunker Hill-B	7.3	5.8[3]	1.5	1-year	3.32	3.09	2.83	3.10	3.02	2.76
					5-year	2.84	2.56	2.34	2.57	2.49	2.24
					10-year	2.76	2.48	2.24	2.52	2.43	2.16
					20-year	2.67	2.39	2.17	2.44	2.35	2.10
Santa Ana River - Reach 4	Colton	2.7	3.3[3]	none	1-year	***3.45***	2.34	2.31	***3.11***	***3.06***	2.23
					5-year	***2.83***	1.90	1.82	2.62	2.47	1.82
					10-year	2.70	1.86	1.65	2.53	2.37	1.78
					20-year	2.63	1.76	1.57	2.50	2.36	1.69
Santa Ana River - Reach 4[5]	Riverside-A	6.2	5.7[3]	0.5	1-year	***6.95***	***6.68***	***6.64***	***6.80***	***6.59***	***6.39***
					5-year	***6.60***	***6.16***	***6.10***	***6.42***	***6.09***	***5.79***
					10-year	***6.45***	***5.97***	***5.91***	***6.27***	***5.91***	5.58
					20-year	***6.35***	***5.83***	***5.77***	***6.16***	***5.78***	5.43
Santa Ana River - Reach 3	Chino-South	5.0[6]	27.6[3]	none	1-year	4.47	4.45	4.42	4.35	4.27	4.25
					5-year	3.48	3.47	3.45	3.29	3.12	3.11
					10-year	3.20	3.18	3.16	2.96	2.84	2.82
					20-year	3.20	3.17	3.15	2.95	2.83	2.81
Temescal Creek - Reach 2,3, 4, 5 and 6	Upper Temescal Valley[7]	7.9[8]	4.7[9]	3.2	1-year	***7.20***	***6.38***	***5.47***	***7.05***	***6.09***	***5.38***
					5-year	***7.14***	***5.77***	***4.71***	***6.93***	***5.31***	4.46
					10-year	***7.08***	***5.57***	4.41	***6.82***	***5.05***	4.16
					20-year	***7.02***	***5.49***	4.32	***6.73***	***4.95***	4.03
Santa Ana River - Reach 2	Orange County	3.4	3.0[3]	0.4	1-year	***3.60***	***3.10***	2.66	***3.58***	***3.25***	2.68
					5-year	***3.41***	2.97	2.49	***3.34***	***3.06***	2.52
					10-year	***3.20***	2.81	2.32	***3.13***	2.84	2.30
					20-year	***3.19***	2.78	2.29	***3.11***	2.83	2.27
Wetlands					Maximum Value for the Volume-Weighted Recharge for the Planning Period Hydrology (mg/L)						
Santa Ana River - Reach 3 above River Rd	Prado Basin[10]	na	na[11]	na	1-year	6.46	6.34	6.26	6.53	6.29	6.21
					5-year	6.30	6.18	6.09	6.38	6.13	6.05
					10-year	6.24	6.10	6.00	6.31	6.05	5.97
					20-year	6.16	6.02	5.92	6.24	5.97	5.88
Surface Water					Maximum Value for the Volume-Weighted Stream Concentration for the Planning Period Hydrology (mg/L)						
Santa Ana River Reach 3 Below Prado Dam	na	10.0	na	na[12]	Baseflow Average[13]	7.05	5.95	5.34	6.99	6.25	5.28
Santa Ana River Reach 2 Below Prado Dam	na	na	na	na[12]	5-year moving average of the 1-year volume-weighted average	5.90	4.28	3.17	5.89	4.25	3.03
Santa Ana River Reach 2 at Santa Ana	na	na	na	na[12]	5-year moving average of the 1-year volume-weighted average	2.80	1.29	0.94	3.33	1.33	1.14

Notes

This table represents a revised version of Table 25 from the 2017 WLAM Summary Report (Geoscience, 2020) and includes the results from the Supplemental WLAM Scenarios for San Timoteo, Bunker Hill-B, and Colton Groundwater Management Zones.

Bold black values represent concentrations above ambient groundwater quality, but below objective. Bold red values represent concentrations above basin objective

[1] "Maximum benefit" objectives apply unless the Regional Board determines that lowering of water quality is not of maximum benefit to the people of the state

[2] "Antidegradation" objectives apply when the Regional Board determines that the lowering of water quality is not of maximum benefit to the people of the state

[3] 2018 estimate of ambient water quality (WSC, 2020)

[4] Based on maximum benefit objectives

[5] Due to rising water conditions, no streambed recharge occurs in SAR Reach 3 overlying Riverside-A GMZ.

[6] On August 4, 2017, the California Regional Water Quality Control Board, Santa Ana Region, adopted Resolution No. R8-2017-0036 revising the water quality objective for nitrate as nitrogen from 4.2 mg/L to 5.0 mg/L in the Chino South Groundwater Management Zone. The State Water Resource Control Board approved the amendment under Resolution No. 2018-0004 on February 6, 2018. The new objective became effective when the Office of Administrative Law approved the Basin Plan amendment on July 2, 2018

[7] Proposed Upper Temescal Valley GMZ includes Bedford GMZ, Lee Lake GMZ, Warm Springs Valley GMZ

[8] Proposed TIN objective from June 2018 CEQA Scoping Meeting

[9] Based on Salt and Nutrient Management Plan for the Upper Temescal Valley, Table 6-B (WEI, 2017)

[10] Streambed recharge in Prado Basin Management Zone only occurs above River Rd. This recharge is assumed to be temporary and become rising water farther downstream. Prado Basin Management Zone does not have its own set of water quality objectives, although the objectives of the streams that flow into the Prado Basin Management Zone (presented in the Prado Basin Surface Water Management Zone Section of the 2016 Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin, pg. 4-29) continue to apply. For the purposes of this investigation, no objectives were evaluated for Prado Basin Management Zone. Note: SAR Reach 3 TDS/TIN objectives are identified in the Basin Plan as "baseflow" objectives. According to the 1983 Basin Plan, compliance with these objectives should be assessed without the influence of stormflow events. Model-calculated maximum volume-weighted recharge concentrations for Prado Basin do not represent baseflow conditions. Baseflow Average concentrations for Reach 3, without the influence of storm events, are presented for surface water flow at the Santa Ana River Below Prado Dam.

[11] No Prado Basin ambient Nitrate as Nitrogen was computed after 1997

[12] Currently, the Regional Board does not recognize the existence of assimilative capacity for nitrogen in surface water

[13] SAR Reach 3 TDS/TIN objectives are identified in the Basin Plan as "baseflow" objectives. Model-calculated maximum volume-weighted stream concentrations for Reach 3 in August and September, without the influence of storm events, are used to represent the baseflow conditions.