Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

Management Zone	Water Quality Objective[1] (mg/L)	1997[2] Ambient (mg/L)	2003[3] Ambient (mg/L)	2006[4] Ambient (mg/L)	2009[5] Ambient (mg/L)	2012[6] Ambient mg/L	Assimilative Capacity (mg/L)
UPPER SANTA ANA RIVER BASIN							
Beaumont – "max benefit" [7]	330	290	260	260	280	290	40
Beaumont – "antideg"	230	290	260	260	280	290	-60**
Bunker Hill A	310	350	320	330	340	340	-30**
Bunker Hill B	330	260	280	280	270	280	50
Lytle	260	240	230	230	240	240	20
San Timoteo – "max benefit" [7]	400	300	?	?	420[8]	410	-10**
San Timoteo – "anti-deg"	300	300	?	?	420[8]	410	-110**
Yucaipa – "max benefit" [7]	370	330	310	310	320	320	50
Yucaipa – "antideg"	320	330	310	310	320	320	0
SAN JACINTO RIVER BASINS							
Canyon	230	220	420	370	420	340	-110**
Hemet South	730	1030	850	920	910	940	-210**
Lakeview – Hemet North	520	830	840	880	870	860	-340**
Menifee	1020	3360	2220	2140	2050	2030	-1010**
Perris North	570	750	780	730	770	760	-190**
Perris South	1260	3190	2200	2600	2470	2400	-1140**
San Jacinto Lower	520	730	950	810	800	800	-280**
San Jacinto Upper – "max benefit"[7]	500	370	370	350	350	350	150
San Jacinto Upper –"anti-deg"	320	370	370	350	350	350	-30**
CHINO, RIALTO/ COLTON, & RIVERSIDE BASINS							
Chino North – "max benefit"[7]	420	300	320	340	340	350	70

Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

Management Zone	Water Quality Objective[1] (mg/L)	1997[2] Ambient (mg/L)	2003[3] Ambient (mg/L)	2006[4] Ambient (mg/L)	2009[5] Ambient (mg/L)	2012[6] Ambient mg/L	Assimilative Capacity (mg/L)
Chino 1 – "antideg"	280	310	330	340	340	350	-70**
Chino 2 – "antideg"	250	300	340	360	360	380	-130**
Chino 3 – "antideg"	260	280	280	310	320	320	-60**
Chino East	730	760	620	650	770	770	-40**
Chino-South	680	720	790	940	980	990	-310**
Colton	410	430	430	450	430	440	-30**
Cucamonga – "max benefit" [7]	380	260	250	250	250	260	120
Cucamonga – "anti-deg"	210	260	250	250	250	260	-50**
Rialto	230	230	220	230	230	230	0
Riverside A	560	440	440	440	430	420	140
Riverside B	290	320	310	340	340	340	-50**
Riverside C	680	760	750	740	740	730	-50**
Riverside D	810	--	?	?	?	?	--**
Riverside E	720	720	700	710	700	740	-20**
Riverside F	660	580	570	570	570	560	100
Prado Basin	Surface water objective applies	819					
ELSINORE/ TEMESCAL VALLEYS							
Arlington	980	?	1020	960	1020	1030	-50**
Bedford	?	?	740	?	?	?	--**
Coldwater	380	380	400	420	440	440	-60**
Elsinore	480	480	460	470	470	490	-10**
Lee Lake	?	?	?	?	?	?	--**

Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for TDS

Management Zone	Water Quality Objective[1] (mg/L)	1997[2] Ambient (mg/L)	2003[3] Ambient (mg/L)	2006[4] Ambient (mg/L)	2009[5] Ambient (mg/L)	2012[6] Ambient mg/L	Assimilative Capacity (mg/L)
Temescal	770	780	700	780	790	790	-20**
Warm Springs	?	?	?	?	?	?	--**
ORANGE COUNTY BASINS							
Irvine	910	910	880	920	910	940	-30**
La Habra	?	?	?	?	?	?	--**
Orange County	580	560	560	590	600	610	-30**
Santiago	?	?	?	?	?	?	--**

Source: Wildermuth Environmental, Inc., 2014

** → Indicates Management Zone has no assimilative capacity

? → Not enough data to estimate TDS concentrations; management zone is presumed to have no assimilative capacity. If assimilative capacity is demonstrated by an existing or proposed discharger, that discharge would be regulated accordingly.

[1] Data sampling period was 20 years (1954-1973) for historical ambient water quality computations.

[2] Data sampling period was 20 years (1978-1997) for current ambient water quality computations

[3] Data sampling period was 20 years (1984-2003) for current ambient water quality computations.

[4] Data sampling period was 20 years (1987-2006) for current ambient water quality computations.

[5] Data sampling period was 20 years (1990-2009) for current ambient water quality computations.

[6] Data sampling period was 20 years (1993-2012) for current ambient water quality computations.

[7] Assimilative capacity created by “maximum benefit” objectives is allocated solely to agency(ies) responsible for “maximum benefit” implementation.

[8] For the San Timoteo management zone, the 2009 ambient water quality was estimated using the data from January 1, 1991 to December 31, 2010 to allow for inclusion of data from monitoring wells installed in 2010. This methodology is a deviation from the methodology approved by the BMPTF that has been used to compute the ambient quality for other groundwater management zones. The deviated methodology was discussed with the stakeholders in the San Timoteo area and the Regional Board staff and is considered adequate given there have been insufficient data to conduct computation for the 1987-2006 period.

Table 2. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for Nitrate-nitrogen

Management Zone	Water Quality Objective [1] (mg/L)	1997[2] Ambient (mg/L)	2003[3] Ambient (mg/L)	2006[4] Ambient (mg/L)	2009[5] Ambient (mg/L)	2012[6] Ambient mg/L	Assimilative Capacity (mg/L)
UPPER SANTA ANA RIVER BASIN							
Beaumont – "max benefit" [7]	5	2.6	2	1.6	2.5	2.9	2.1
Beaumont – "antideg"	1.5	2.6	2	1.6	2.5	2.9	-1.4**
Bunker Hill A	2.7	4.5	4.3	4	4	4	-1.3**
Bunker Hill B	7.3	5.5	5.8	5.4	5.4	5.6	1.7
Lytle	1.5	2.8	2.7	2.7	2.6	2.5	-1**
San Timoteo – "max benefit" [7]	5	2.9	?	?	0.8[8]	2.3	2.7
San Timoteo – "anti-deg"	2.7	2.9	?	?	0.8[8]	2.3	0.4
Yucaipa – "max benefit" [7]	5	5.2	5.4	5.3	6.2	6.3	-1.3**
Yucaipa – "antideg"	4.2	5.2	5.8	5.3	6.2	6.3	-2.1**
SAN JACINTO RIVER BASINS							
Canyon	2.5	1.6	2.1	1.9	2.7	2	0.5
Hemet South	4.1	5.2	5.4	5.5	5.2	5.7	-1.6**
Lakeview – Hemet North	1.8	2.7	3.4	2.7	2.6	2.5	-0.7**
Menifee	2.8	5.4	6	4.7	4.4	4.6	-1.8**
Perris North	5.2	4.7	6.7	6.5	7.4	7.3	-2.1**
Perris South	2.5	4.9	5.9	5.5	5.8	5.8	-3.3**
San Jacinto Lower	1	1.9	1.8	1.2	1.1	1.1	-0.1**
San Jacinto Upper – "max benefit" [7]	5	1.9	1.7	1.6	1.5	1.4	3.6
San Jacinto Upper –"anti-deg"	1.4	1.9	1.7	1.6	1.5	1.4	0
Chino, Rialto/ Colton, & Riverside Basins							

Table 2. Water Quality Objectives, Ambient Water Quality, and Assimilative Capacity for Nitrate-nitrogen

Management Zone	Water Quality Objective [1] (mg/L)	1997[2] Ambient (mg/L)	2003[3] Ambient (mg/L)	2006[4] Ambient (mg/L)	2009[5] Ambient (mg/L)	2012[6] Ambient mg/L	Assimilative Capacity (mg/L)
Chino North – "max benefit"[7]	5	7.4	8.7	9.7	9.5	10	-5**
Chino 1 – "antideg"	5	8.4	8.9	9.3	9.1	10	-5**
Chino 2 – "antideg"	2.9	7.2	9.5	10.7	10.3	10.7	-7.8**
Chino 3 – "antideg"	3.5	6.3	6.8	8.2	8.4	8.5	-5**
Chino East	10	29.1	9.6	12.7	15.7	21	-11**
Chino-South	4.2	8.8	15.3	25.7	26.8	28	-23.8**
Colton	2.7	2.9	2.9	2.9	2.8	2.7	0
Cucamonga – "max benefit" [7]	5	4.4	4.3	4	4.1	4.1	0.9
Cucamonga – "anti-deg"	2.4	4.4	4.3	4	4.1	4.1	-1.7**
Rialto	2	2.7	2.6	2.9	3.1	3.2	-1.2**
Riverside A	6.2	4.4	4.9	4.9	5.2	5.4	0.8
Riverside B	7.6	8	7.8	8.3	8.4	6.7	0.9
Riverside C	8.3	15.5	15.5	15.3	14.8	14.5	-6.2**
Riverside D	10	?	?	?	?	?	--**
Riverside E	10	14.8	15.4	15.3	15.2	10.2	-0.2**
Riverside F	9.5	9.5	10.6	10.3	10.6	10.1	-0.6**
Prado Basin	Surface water objective applies	22	-	-	-	-	-
ELSINORE/ TEMESCAL VALLEYS							
Arlington	10	--	26	20.4	18.1	18.3	-8.3**
Bedford	--	--	2.8	?	?	?	--**
Coldwater	1.5	2.6	2.4	2.6	2.8	2.8	-1.3**
Elsinore	1	2.6	2.4	2.4	2.2	2.1	-1.1**

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Lee Lake	?	?	?	?	?	?	--**
Temescal	10	13.2	12.8	12.6	12	10.9	-0.9**
Warm Springs	?	?	?	?	?	?	--**
ORANGE COUNTY BASINS							
Irvine	5.9	7.4	6.5	6.5	6.7	6.7	-0.8**
La Habra	?	?	?	?	?	?	--**
Orange County[8]	3.4	3.4	3.1	3	3	2.9	0.5
Santiago	?	?	?	?	?	?	--**

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