

Recomputation of Ambient Water Quality in the Santa Ana River Watershed

BMPTF: April 22, 2020



Ambient Water Quality Phases

1: Data Gathering

- ✓ Data Compilation
- ✓ QA/QC, Process, and Upload recent data

2: Point Statistics

- ✓ Calculate Water Quality Point Statistics
- ✓ Shapiro-Wilk Test for Normality

3: Computations

- ✓ Groundwater Elevation Contours
- ✓ Nitrate, TDS Concentrations
- ✓ Compute ambient water quality for GMZs

4: Interpretive Tools

✓ Innovative Interpretive Tools

AWQ DRAFT TM

- Draft Technical Memorandum
- Released for comment on April 16, 2020
- Please respond with comments on the Draft TM by Monday, May 18, 2020



Attachment B Subwatershed Packets

Attachment Contents:

B12-1 Groundwater Storage and Elevation Contours Fall 2018

B12-2 NO₃-N Concentration and Contour Map

B12-3 TDS Concentration and Contour Map

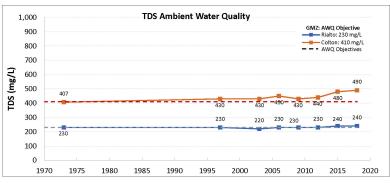
B12-4 NO₃-N Concentration Change (1996-2015 to 1999-2018)

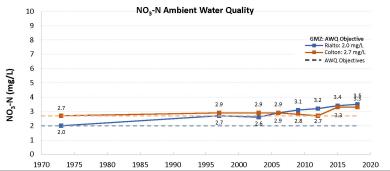
B12-5 TDS Concentration Change (1996-2015 to 1999-2018)



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

Management Zone	Water Quality Objective	Historical Ambient (1954-1973) ¹	1997 Ambient (1978-1997)	2003 Ambient (1984-2003)	2006 Ambient (1987-2006)	2009 Ambient (1990-2009)	2012 Ambient (1993-2012)	2015 Ambient (1996-2015)	2018 Ambient (1999-2018)	Difference from 2015 to 2018	Assimilative Capacity
				Т	otal Dissolved Solids	(mg/L)					
Colton	410	407	430	430	450	430	440	480	490	10	None (-80)
Rialto	230	230	230	220	230	230	230	240	240	0	None (-10)
					Nitrate as Nitrogen	(mg/L)					
Colton	2.7	2.7	2.9	2.9	2.9	2.8	2.7	3.3	3.3	0.0	None (-0.6)
Rialto	2.0	2.0	2.7	2.6	2.9	3.1	3.2	3.4	3.5	0.1	None (-1.5)











Near-Term Schedule

