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Fax # 916 341 5550	Fax #

August 29, 2002

To: Renee DeShazo

From: Elizabeth Erickson

Subj: Response to Comments for 2000 303(d)listing for Nitrate/Nitrite and Organic Enrichment/DO for Reach 6 (EPA Reach 8) of the Santa Clara River

The County Sanitation Districts of Los Angeles (CSDLA) submitted a comment letter dated June 14, 2002 which included new data and requested that Reach 6 (EPA Reach 8) be delisted. I have completed additional analysis of the new data, the previous data, and the components of the best professional judgement of the recommendation to retain the listing for nitrate/nitrite and I summarize these results in detail below. A summary of comments for the nutrient listing questions on this reach is also provided.

Summary

The new data set was collected over only two years of the sample period. Some submitted data was incorrectly attributed to this reach, while it was collected in the adjacent downstream reach, which has more dilution.

The downstream reach has a lower objective (5 mg/L) than the reach for which delisting is requested. Of eleven samples taken in the downstream reach immediately over the reach boundary (station RC), 4 or 36% of the nitrate-nitrite as nitrogen exceeded the 5 mg/L objective, demonstrating that the nutrient levels in the upstream reach are high enough to prevent attainment of the objective at every location in the downstream reach.

A nutrient TMDL is currently underway in this reach proposed for delisting and ongoing sampling efforts and visual observations show the presence of algae and nitrate-nitrite and nitrogen exceedances in this reach.

Although the discharger claims that the ammonia specific objective in the Basin Plan will require compliance with the ammonia objective by 2003, this requirement will not address nitrate, DO or organic chrichment objectives. Further, the discharger has not submitted any data or reports confirming progress to attain the ammonia objective at their plant.

Based on the insufficient data set and the uncertainty in achieving the ammonia objectives, Regional Board staff recommends retaining the listings for nitrate-nitrite, organic enrichment/DO in the reach.

Location and Objectives

Reach 6 (EPA Reach 8) lies between the Bouquest Canyon Bridge and the west pier of the Highway 99 bridge (see figure). It receives flow from CSDLA's Saugus Water Reclamation Plant, Santa Clara River (dry), South Fork of the Santa Clara River (dry), Bouquet Creek and

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rising groundwater. The Santa Clara River and the South Fork of that river are both dry at this location, but maintain underflow in alluvium with unusually high transmisivity. The Santa Clara River becomes a gaining river at the downstream end of the reach which lies within the Holser and San Gabriel Fault zones. The faults act as a water barrier which force up the underflow and other groundwater from the majority of the upper Santa Clara Watershed.

The nitrate plus nitrite objective in Reach 6 (EPA Reach 8) is 10mg/L. The nitrite and nitrate objectives come from the beneficial use for groundwater reacharge and are 1 mg/L and 10 mg/L respectively. The reaches immediately downstream and upstream have a lower nitrate plus nitrite objective of 5 mg/L. These also represent historical conditions in the river.

Impairment

AUG-29-2000 15:05 FROM:

Kene4c Deshazo

The nitrate plus nitrite levels represented in the 2000 303(d) data in Reach 6 (EPA Reach 8) are high enough to prevent attainment of the objective in the downstream reach which is listed for nitrate/nitrite, even if the newly submitted data show that Reach 6 does not exceed the objectives for this nutrient measurement alone. In fact, the data submitted for the 303(d) analysis of that downstream reach comes from within a half mile of the downstream end of the Reach 6 (EPA Reach 8). At that Receiving Water Station RC, 36% of the samples exceed the objective for Reach 5 (EPA Reach 7) of 5 mg/L.

The entire data set submitted for analysis does not represent an even distribution in time or space, but provides data in a biased manner. As an example, the new data submitted for Reach 6 (EPA Reach 8) was collected at two locations, a receiving water station below the Saugus outfall, at the extreme upper end of the reach, and at the Highway 99 bridge, the extreme downstream end of the reach. While CSDLA is correct in that the two data sets together show attainment of the 10 mg/L standard for nitrate plus nitrite in Reach 6 (EPA Reach 8), the data collected at the lower end of the reach included half of the samples, but only 1 ½ years of data. In this small data set alone, 26% of the nitrate plus nitrite data exceeded the 5 mg/L objective of the downstream reach (which lies within a half mile) but meets the 10 mg/L for the reach in question. In the upper end of the reach, a full 4 years of data were reported. Finally, in the comment letter by CSDLA, as much as half of the data presented graphically to demonstrate attainment of the objectives comes from the receiving water station RC, which lies in the downstream reach. These data biases are further demonstrated by comparison with data collected by Regional Board staff, but not used in the 303(d) analysis. Among the 23 samples collected throughout the reach, 14% of the nitrate plus nitrate values in Reach 6 (EPA Reach 8) lay between the downstream objective of 5 mg/L and the objective of 10 mg/L and 12% of the nitrate samples exceeded the objective of 10 mg/L.

Reach 6 (EPA Reach 8) should be listed for nitrite. CSDLA did not include all of the water quality data submitted for their NPDES permit No. CA005431 for the 303(d) analysis and in fact not all of this data was used in the assessment. Receiving water levels in Reach 6 (EPA Reach 8) were evaluated for this memo as reported between 1997 and 2001. Of 20 nitrite samples taken,

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August 29, 2002

15 exceeded the criteria of 1 m/gL, for 75% exceedance. Because this analysis postdates the submission of listing recommendations for 303(d) a new listing has not been recommended, but our permitting group has been asked to prepare a Notice of Violation.

Reach 6 (EPA Reach 8) should be listed for algae. Algae problems have been documented in both Reach 5 and 6. Figures are attached which demonstrate that in October 2001 for Reach 5 and in June 2002 for Reach 6, the algae problem probably exceed the RWQCB-LA Basin Plan Criteria (pg3-8) which states that "waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses." Some of these algae problems, including chorophyll-A mass measurements were documented in October 2001 and should be publically available this year. Access problems, as described below, have prevented further documentation of these observations and the lack of confirmation is the reason Reach 6 (EPA Reach 8) was not recommended for algae listing in the 2000 303(d) listing cycle.

Reach 6 (EPA Reach 8) might also be listed for coliform. RWQCB samples for coliform were collected on May 4, 1999, but were not evaluated for this 303(d), partially due to the difficulties with duplicating the sample due to access problems. On that date, 9000 MPN total coliform was recorded at Bouquet Canyon bridge and 700 was recorded at Highway 99. Additional sampling of these high levels is expected to demonstrate a coliform impairment.

Public Verification of Data Used for Listing

The RWQCB-LA has not be able to access the site sufficiently to verify the water quality information used in this request for delisting. As two examples of these continuous problems, a RWQCB funded study by UCLA, which was designed to document nutrient impairments, requested access of the land owner, Newhall Land and Farming, on Aug 13, 2001 for an October study after the Newhall had signed an MOU agreeing to participate in monitoring. The samplers were ultimately asked to leave the property before completing their assessment of Reach 6 (EPA Reach 8) when they accompanied CSDLA during their sampling of the receiving water stations (see emails attached). Citizen monitoring groups were also denied access to this property in June 2002. When the attached photos were finally taken on City of Santa Clarita property in that month, Newhall responded by saying that access to the sampling point would not be allowed. This problem has been experienced by other agencies, and resulted in an incomplete assessment of the water quality problems in the area. For example, approval of Newhall's development plans by the Los Angeles County Supervisors was delayed this summer after a Fish and Game search warrant revealed that they had illegally graded endangered spine flowers.

Attachments:

Figure: location map

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Picture 1: algae at Receiving Water Station RD below Valencia WRP Outfall, October 2001.

Picture 2: Algae looking upstream from historic Railroad Bridge site between MCBean Parkway

and San Fransisquito Creek on Santa Clara River, June 30, 2002-08-29

Picture 3: Algae beneath historic Railroad Bridge site between MCBcan Parkway and San

Fransisquito Creek on Santa Clara River, June 30, 2002-08-29

Tabel New data submitted
Table LACSD data from RC
Table NPDES report data
Table Regional Board Data not submitted for 303(d) listing

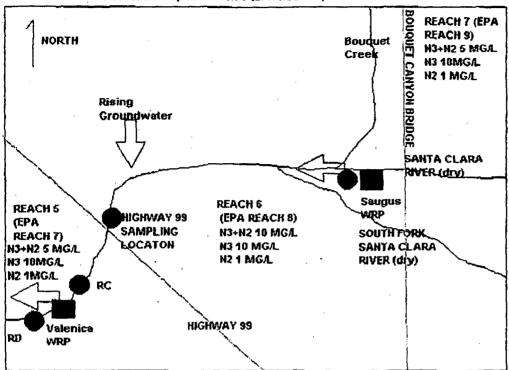
Emails from Mark Subbotin (Newhall Land) Aug 14, September 10, 18, and 19, 2001. Emials for Heather Merenda, City of Santa Clarita, July 30, 2002.

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Not to scale, locations are approximate

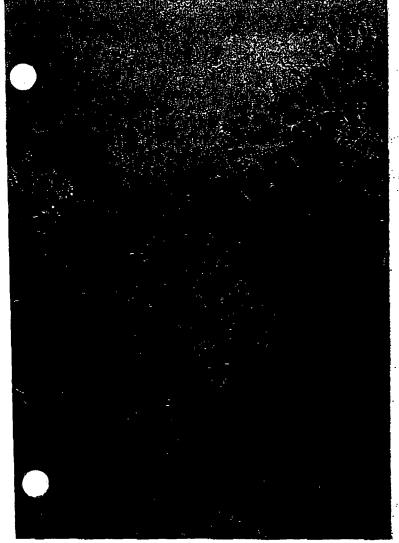
MONITORING POINT

Source of Flow

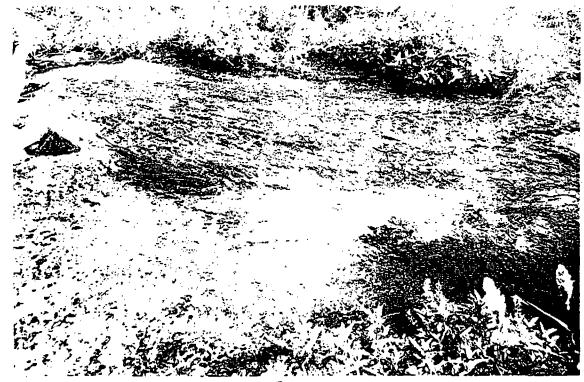
HIGHWAYS AND REACH BOUNDARIES

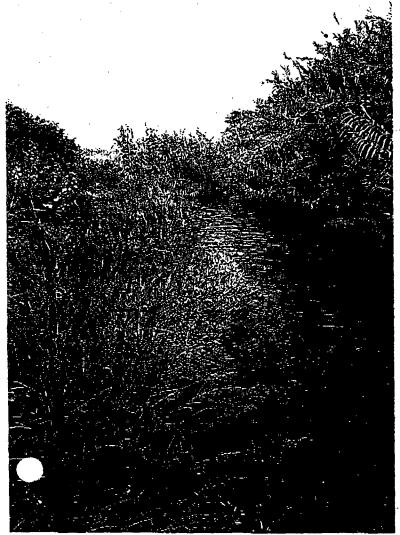
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New Data Submitted			ļ						ļ	 	 	 	
Parameter Test Materia		Result	Units	MOL	Sample MetiS				Latitude	Longitude		ream Reach	
NTRATE+nitrito (AS NITR		1.19			-l	2/23/99		SCR-Rb		 	SANTA CLA	SC-6	403.5
NTRATE+nitrite (AS NITR		1.15	MGL			5/26/99		SCR-Rb		<u> </u>	SANTA CLA		403.5
ITRATE+nitrile (AS NITR		1,69	MGL			8/3/99		SCR-Rb	<u> </u>		SANTA CLA		403.5
HTRATE-mitrze (AS NITR		4,35	MGL			11/11/99		SCR-Rb	<u> </u>	1	SANTA CLAI		403.5
VITRATE+nibite (AS NITR		2.33	MGL			2/3/90		SCR-Rb	<u> </u>		SANTA CLA		403.5
NITRATE+nibite (AS NITR		4.26	MGL	·		B/17/00		SCR-Rb	<u> </u>	<u> </u>	SANTA CLA		403.5
VITRATE+nitrite (AS NITR		3.54	MGL			8/23/00		SCR-Rb		1	SANTA CLA		403.5
ITRATE+nltrite (AS NITR		2.55	MGL			11/21/00		SCR-Rb	<u> </u>	<u>:</u>	SANTA CLA		403.5
HTRATE+nitrite (AS NITR		3.44	MGL		_ _	2/16/01		SCR-Rb	.		SANTA CLA	SC-6	403.5
ITRATE-mitrite (AS NITR		3.4	MGL			5/21/01		SCR-Rb	· •	 	: 		
NTRATE+nitrite (AS NITR		3,18	MGIL			8/21/01		SCR-Ro	<u> </u>			<u> </u>	
VITRATE+nitrite (AS NITR		1.5	MG.L			10/31/01		SCR-Rb	 	<u> </u>	: *	<u> </u>	
NTRATE+nitrite (AS NITR		2.17	MGAL		<u> </u>	11/7/01		SCR-Rb		Ļ	:	<u></u>	
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VITRATE+nitrite (AS I		4.58			_!	8/28/00		old road br		<u> </u>	impair	0	
VITRATE+nitrite (AS I		5.68			!	9/29/00		old road br			Hwy 99		
NITRATE+nitrite (AS I	VITROGEN	6.06				11/2/00		old road br			count	19	
NTRATE+nitrite (AS!	VITROGEN	4.96			i	11/27/00		old road br			exceed	5	
VITRATE+nibibe (AS I	VITROGEN		MGL			12/21/00		old road br			impair	0.263158	
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VITRATE+nitrite (AS !	VITROGEN	2.24	MG/L			2/20/01		old road br					
VITRATE+nitrite (AS I			MGL			3/15/01		old road br					
NITRATE+nitrite (AS I			MGL			5/2/01		old road br					-
VITRATE+nivite (AS			MGL			5/29/01		old road br					
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No. of samples above	5 mg/L(dov	vnsiream)	5		 					 			
% of samples above 5			0.151515				 -		 	 -	 		

CSDLA data sent as part of NPDES reports but not submitted for 303(d)

CODES GOIL	•	o reports but not submitted for oboldy
Parameter	Date Value	
_	vater station RB	Groundwater station T4N-16W-16R1
Nitrate	Feb-97 4.960	nitrate 2/20/97 5.43
Nitrate	May-97 1.490	nitrite 2/20/97 <.01
Nitrate	Aug-97 2.990	nitrate 8/7/97 7.85
Nitrate	Nov-97 2.960	nitrite 8/7/97 NA
Nitrate	Feb-99 0.200	nitrate Feb-01 5.21
Nitrate	Feb-99 0.410	nitrite Feb-01 <.01
Nitrate	May-99 0.240	nitrate Aug-01 5.86
Nitrate ,	May-99 0.300	nitrite Aug-01 <.01
Nitrate	Aug-99 0.470	
Nitrate	Aug-99 2.880	
Nitrate	Nov-99 0.810	nitrate
Nitrate .	Nov-99 1.240	number 19
Nitrate	Feb-00 < 0.05	exceed 0
Nitrate	May-00 1.870	impair% none
Nitrate	Aug-00 1.410	
Nitrate	Nov-00 0.790	
Nitrate	Feb-01 1.610	·
Nitrate	May-01 1.370	
Nitrate	Aug-01 1.060	
Nitrate	Nov-01 0.510	
		nitrite
Nitrite	* Feb-97 1.580	number 20
Nitrite	May-97 1.020	exceed 15
Nitrite	Aug-97 1.110	impair% 0.75
Nitrite	Nov-97 0.963	0.70
Nitrite	Feb-99 0.988	
Nitrite	Feb-99 0.712	•
Nitrite	May-99 0.912	
Nitrite	May-99 0.690	•
Nitrite	Aug-99 1.220	
Nitrite	Aug-99 2.980	
Nitrite	Nov-99 3.540	
Nitrite	Nov-99 3.090	
Nitrite	Feb-00 2.280	•
Nitrite	May-00 2.390	·
Nitrite	Aug-00 2.130	
Nitrite	Nov-00 1.760	
Nitrite	Feb-01 1.830	
Nitrite	May-01 2.030	
Nitrite	Aug-01 2.120	
Nitrite	Nov-01 1.660	
	1404-01 11000	

LACSD data from receivir	g water station RC	as submitte	ed for 97-00				N3+n2=				F				
NITRATE (A LIQUID	2.15		G	8/19/97	11:30	SCR-RC	2.16	SANTA CLAS	SC-6			SANTA CLAIL			
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NITRATE (ALLIQUID	3.54	MGAL	G	11/5/97	11:30	SCR-RC	3.55	SANTA CLAS	SC-6	403.51	SANTA CLA	SANTA CLAFLO)\$ ANGEL	Valencia WW	RP, NPOES
NITRITE (AS LIQUID	1 0.01	MGAL	G	11/5/97	11:30	SCR-RC		SANTA CLAS	SC-6	403.51	SANTA CLA	SANTA CLAIL	OS ANGEL	Valencia WM	RP, NPOES
NITRATE (A LIQUID	3.03	MG/L	G	2/11/56	11:35	SCR-RC	3.06	SANTA CLAS	SC-6	403.51	SANTA CLA	SANTA CLAFLO	IS ANGEL	Valencia WW	RP, NPDES
NITRITE (AS LIQUID	0.05	MG/L	G	2/11/98		SCR-RC	I J	SANTA CLAS				SANTA CLAFLO			
NITRATE (A LIQUID	232		G	5/21/96	11:30	SCR-RC	2.43	SANTA CLAS	SC-6	403.51	SANTA CLA	SANTA CLAILO	S ANGEL	Valencia WW	RP, KPOES
NITRITE (AS LIQUID	0.11	MG/L	lG ·	5/21/98	11:30	SCR-RC		SANTA CLAS	\$C-6			SANTA CLAFLO			
NITRATE (ALIQUID	3.54	MG/L	G	679.58	10:50	SCR-RC	3.57	SANTA CLAS				SANTA CLAFLO			
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NITRATE (A LIQUID	5.02	MG/L	G	11/5/26		SCR-RC	5.09	SANTA CLAS				SANTA CLAIL			
NITRITE (AS LIQUID	0.07	MG·L	G	11,5,56		SCR-RC		SANTA CLÁS				SANTA CLAPLO			
NITRATE (A LIQUID	3.77	MG/L	G	2/23/59		SCR-RC	3.95	SANTA CLAS				SANTA CLAFLO			
NITRITE (AS LIQUID !	0.19	MGL	G	223.99		SCR-RC	l	SANTA CLAS				SANTA CLAFLO			
NITRATE (ASLIQUID	4.39	MGA	G	5/26/39		SCR-RC	4.57	SANTA CLAI				SANTA CLATLO			
NITRITE (AS LIQUID	0.18	MGA	G	\$/26/98		SCR-RC		SANTA CLAF				SANTA CLAILO			
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NITRITE (AS UCCUID	0.18	MGR	G	6.3.36		SCR-RC	<u> </u>	SANTA CLAI				SANTA CLAIL(
NITRATE (ASLIQUID	5,68	YG1L	G	11/1/1/95		SCR-RC	5.76:	SANTA CLAI				SANTA CLAILO			
NITRITE (AS LIQUID	0.08	MGA	G	11/11/39		SCR-RC	1	Santa Clai				SANTA CLAIL			
NITRATE (ALEQUID	5.69	MGA	G	25.00		SCR-RC	6.14	SANTA CLAI				SANTA CLAIL			
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