

DEPARTMENT OF PUBLIC WORKS OPERATIONS

October 26, 2009 File # 0780-85-KY181

California Regional Water Quality Control Board San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340 Attention: Ms. Cynthia Gorham-Test

SUBJECT: COMMENTS ON THE PROPOSED 2008 FEDERAL CLEAN WATER ACT SECTION 303(D) LIST OF WATER QUALITY LIMITED SEGMENTS

Thank you for the opportunity to provide comments on the proposed 2008 Clean Water Act Section 303(d) list. The City of Chula Vista has carefully reviewed the proposed 303(d) list, Lines of Evidence (LOE), and monitoring data that have been used to list Poggi Canyon Creek and the Sweetwater River. The following are our comments that we trust will meet your consideration before the 303(d) list is finalized. Our comments are organized under each Water Body/Pollutant combination heading.

Poggi Canyon Creek/Selenium

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on Section 303(d) list under Section 3.1 of the Water Quality Control Policy (Listing Policy). One LOE (7427) is presented to support the listing of Poggi Canyon Creek for selenium. The Fact Sheet further states that according to results in California's Surface Water Ambient Monitoring Program (SWAMP) Report, 2007, three water samples were collected at Poggi Creek Station (910OTPOG3) in January, April, and May 2003, and that all three samples exceed the Water Quality Objective for selenium. The Fact Sheet further states that data used satisfies the data quality requirements of Section 6.1.4 of the Listing Policy.

Comment:

In reviewing the SWAMP data, it is evident that test results from samples taken on 04/21/2003 and 05/15/2003 are both "Estimated, non-compliant with associated Quality Assurance Project Plan (QAPP)". Of the three test results on the same sample from 01/21/2003, two of the results are from "Matrix Spike/Matrix Spike duplicate" samples, indicating that they were blanks. Only one test result from a normal grab sample is compliant with the associated OAPP (please see Attachment 1).



Conclusion:

Based on the presented data, only one test result on a sample out of the three samples taken is valid and, therefore, the data does not meet the requirements of Table 3.1 of the Listing Policy.

Recommendation:

Since there are insufficient valid sample results from Poggi Canyon Creek, the referenced LOE does not meet the requirements of Table 3.1 of the Listing Policy and, therefore, Poggi Canyon Creek should not be 303(d) listed for selenium.

Poggi Canyon Creek/DDT

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on the Section 303(d) list under Section 3.1 of the Listing Policy. One LOE (3359) is presented to support the listing of Poggi Canyon Creek for DDT. The Fact Sheet further states that according to results in the SWAMP Report, 2004, two of three samples collected from March through September 2002, exceeded the California Toxics Rule (CTR). The Fact Sheet also states that data used satisfies the data quality requirements of Section 6.1.4 of the Listing Policy.

Comment:

In reviewing the SWAMP data, three samples were taken in 2003 on 01/21/2003 (two test results), 04/21/2003 (one test result), and 05/15/2003 (six test results). Please see Attachment 2 for SWAMP test results. Based on the available data in the SWAMP database:

- The two entries from 01/21/2003 both had no result listed.
- The one entry from 04/21/2003 had no result listed and was "Estimated; non-compliant with associated QAPP."
- Out of the six entries from 05/15/2003, four of them were "Matrix Spike/Matrix Spike Duplicate," indicating that they are blank samples. Two of these entries did not have results.

Conclusion:

Based on the presented data, only one sample (taken on 05/15/2003) out of the three samples taken is valid and, therefore, the data does not meet the requirements of Table 3.1 of the Listing Policy.

Recommendation:

Since there are insufficient valid sample results from Poggi Canyon Creek, the referenced LOE does not meet the requirements of Table 3.1 of the Listing Policy and, therefore, Poggi Canyon Creek should not be 303(d) listed for DDT.

Sweetwater River/Sulfate

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on the Section 303(d) list under Section 3.2 of the Listing Policy. Three LOE (25667, 7185, 6519) are presented to support the listing of the Sweetwater River for sulfate. Data used to assess water quality are presented as follows:

- 1. SWAMP Report, 2007, indicates that four of the eight samples collected at Station 909SSWR03 show excessive sulfate concentrations (Attachment 3).
- San Diego County Municipal Copermittees' Annual Progress Report, 2007, indicates
 that eleven of fifteen samples collected exceed the Water Quality Objective for Total
 Dissolved Solids.
- 3. SWAMP Report, 2007, indicates that four of the eight samples collected at Station 909SSWR08 show excessive sulfate concentrations (Attachment 4).

Comment:

Station 909SSWR03 is upstream and east of the Sweetwater Reservoir in hydrological sub-area (HSA) 909.31, while Station 909SSWR08 is downstream and west of the Reservoir in HSA 909.12. Section 6.1.5.4 of the Policy states "data shall be aggregated by the water body segments as defined in the Basin Plan." Therefore, LOE 25667 cannot be aggregated with LOE 6519.

According to Table 2-2 of the Basin Plan, HSA 909.12 is exempt from Municipal and Domestic Supply Beneficial Uses. According to Table 3-2 of the Basin Plan, the Water Quality Objective for sulfate in the Lower Sweetwater River is 500 mg/L and not 250 mg/L, as indicated. As can be seen from SWAMP data, none of the test results for sulfate at Station 909SSWR03 exceed 250 mg/L, and test results for sulfate at Station 909SSWR08 do not exceed 500mg/L.

TDS exceedance data from the San Diego County Municipal Copermittees' Annual Progress Report, 2007 was used as a LOE for listing the Sweetwater River as impaired for sulfate. TDS exceedances cannot be attributed to sulfates alone and should not be used as a LOE for listing a water segment for sulfates since TDS exceedances may be due to the presence of different types of salts in water.

Conclusion:

Two of the LOEs referenced do not show exceedances of the Basin Plan Water Quality Objectives. The third line of evidence indicates an exceedance of TDS and not sulfate. The Sweetwater River has been 303(d) listed for TDS elsewhere.

Recommendation:

Since there are no LOEs supporting listing of the Sweetwater River for sulfate, it is recommended to remove this water body/pollutant combination from the proposed 2008 303(d) list.

Sweetwater River/TDS/Salinity/Chloride

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on the Section 303(d) list under Section 3.2 of the Listing Policy. Two LOEs (7185, 6519) are presented to support the listing of the Sweetwater River for TDS/Salinity/Chloride. Data used to assess water quality are presented as follows:

- San Diego County Municipal Copermittees' Annual Progress Report, 2007, indicates that eleven of fifteen samples collected exceed the Water Quality Objective for Total Dissolved Solids.
- 2. SWAMP Report, 2007, indicates that four of the eight samples collected at the Sweetwater River show excessive sulfate concentrations.

Comment:

As noted under "Sweetwater River/Sulfate" above, the Water Quality Objective for the Lower Sweetwater River is 500 mg/L and not 250 mg/L as indicated. This fact makes LOE 6519 invalid.

Further, the only one remaining LOE is for TDS exceedance, which does not support listing the Sweetwater River for salinity or chloride.

Conclusion:

The only valid LOE presented in the Fact Sheet supports listing of the Lower Sweetwater River for TDS and not salinity or chloride.

Recommendation:

Since there are no LOE supporting listing of the Sweetwater River for salinity or chloride, it is recommended to remove these water body/pollutant combinations from the proposed 2008 303(d) list.

Sweetwater River/Enterococcus

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on the Section 303(d) list under Section 3.2 of the Listing Policy. One LOE (7184) is presented to support the listing of the Sweetwater River for Enterococcus. The Fact Sheet further states that according to test results from the San Diego County Municipal Copermittees' Annual Progress Report, 2007, all fifteen samples exceed the WQO for Enterococcus. The Fact Sheet also states that data used satisfies the data quality requirements of Section 6.1.4 and 6.1.5 of the Listing Policy.

Comment:

Test samples were taken at the Mass Loading Station in the Sweetwater River, which is located in Hydrologic Sub Area (HSA) 909.12. According to Table 2-2 of the Basin Plan, this HSA has a <u>Potential</u> Beneficial Use of REC-1. The Water Quality Objective used to assess pollutant exceedance is the most stringent of the US EPA bacteriological criteria for Enterococcus of 61 colonies per 100 mL, which is a standard for water contact recreation (REC-1).

According to Section 6.1.5.4 of the Listing Policy, "data shall be aggregated by the water body segments as defined in the Basin Plan". The reach of the Sweetwater River within which samples were taken, has a <u>Potential</u> Beneficial Use of REC-1.

Conclusion:

The Water Quality Objective applied to the Lower Sweetwater River is for contact recreation (REC-1), which is a Potential Beneficial Use for that segment of the river. The correct Water

Quality Objective to be applied is for REC-2 since <u>Potential</u> Beneficial Uses should not be used as a basis for 303(d) listing water bodies or developing TMDLs.

Recommendation:

It is recommended to use the correct Water Quality Objective (REC-2) for comparison of test results and determination of exceedances.

Sweetwater River/Fecal Coliform

Fact Sheet:

The Fact Sheet states that this pollutant is being considered for placement on the Section 303(d) list under Section 3.2 of the Listing Policy. One LOE (7376) is presented to support the listing of the Sweetwater River for Fecal Coliform. The Fact Sheet further states that according to test results from the San Diego County Municipal Copermittees' Annual Progress Report, 2007, thirteen of fifteen samples exceed the WQO for Fecal Coliform. The Fact Sheet also states that data used satisfies the data quality requirements of Section 6.1.4 of the Listing Policy.

Comment:

Test samples were taken at the Mass Loading Station in the Sweetwater River, which is located in Hydrologic Sub Area (HSA) 909.12. According to Table 2-2 of the Basin Plan, this HSA has a <u>Potential</u> Beneficial Use of REC-1. The Water Quality Objective used to assess pollutant exceedance is the Basin Plan Water Quality Objective for contact recreation (REC-1).

According to Section 6.1.5.4 of the Listing Policy, "data shall be aggregated by the water body segments as defined in the Basin Plan". The reach of the Sweetwater River within which samples were taken, has a <u>Potential</u> Beneficial Use of REC-1.

Conclusion:

The Water Quality Objective applied to the Lower Sweetwater River is for contact recreation (REC-1), which is a <u>Potential</u> Beneficial Use for that segment of the river. The correct Water Quality Objective to be applied is for REC-2 since <u>Potential</u> Beneficial Uses are not to be used as a basis for 303(d) listing water bodies or developing TMDLs.

Recommendation:

It is recommended to use the correct Water Quality Objective (REC-2) for comparison of test results and determination of exceedances.

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Attachments

C: Richard Hopkins, Director of Public Works Matt Little, Assistant Director of Public Works Silvester Evetovich, Principal Civil Engineer

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ATTACHMENT 1

Poggi - Selenium

Project	Station Code	Station Name	Sample Date	Sample Time	Sample Type	Analyte	Fraction	Result	Units	Lab Comments	QaQc Description
Surface Water Ambient				•						Sample preparation date was	Estimated; non-compliant with
Monitoring Program	910OTPOG3	Poggi Creek 3	04/21/2003	11:15	Normal Grab Sample	Selenium	Dissolved	12.8	μg/L	04/22/2003.	associated QAPP
										90 %Rec; Expected Result 24.6.	
Surface Water Ambient										Sample preparation date was	Compliant with associated
Monitoring Program	910OTPOG3	Poggi Creek 3	01/21/2003	11:15	Matrix Spike/Matrix spike duplicate	Selenium	Dissolved	23.6	μg/L	01/23/2003.	QAPP
Surface Water Ambient										Sample preparation date was	Estimated; non-compliant with
Monitoring Program	910OTPOG3	Poggi Creek 3	05/15/2003	9:30	Normal Grab Sample	Selenium	Dissolved	19.2	μg/L	05/16/2003.	associated QAPP
Surface Water Ambient										Sample preparation date was	Compliant with associated
Monitoring Program	910OTPOG3	Poggi Creek 3	01/21/2003	11:15	Normal Grab Sample	Selenium	Dissolved	14.6	μg/L	01/23/2003.	QAPP
Surface Water Ambient										89 %Rec, 0.257 RPD; Expected Result 24.6. Sample preparation	Compliant with associated
	910OTPOG3	Poggi Creek 3	01/21/2003	11:15	Matrix Spike/Matrix spike duplicate	Selenium	Dissolved	23.5			QAPP

ATTACHMENT 2 Poggi Creek - DDT

Project	Agency	Station Code	Station Name	Sample Date	Sample Time	Sample Type	Analyte	Fraction	Result	Units	Lab Comments	QaQc Description
											Sample preparation date was	
											01/01/1950.Digest extraction method was	
	State Water Resources									_	EPA 3510C. Extraction date was	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	05/15/2003	9:30	Normal Grab Sample	p,p'-DDT	None		μg/L	05/19/2003.	Compliant with associated QAPP
											Expected Result 0.02. Sample preparation	
Surface Water Ambient	Ctata Matar Bassurasa										date was 01/01/1950.Digest extraction method was EPA 3510C. Extraction date	
	Control Board	0100TD002	Poggi Creek 3	05/15/2003	0.30	Matrix Spike/Matrix spike duplicate	o,p'-DDT	None	0.0204	/I	was 05/19/2003.	Compliant with associated QAPP
Worldoning Program	Control Board	910017003	Foggi Creek 3	03/13/2003	9.30	Matrix Spike/Matrix spike duplicate	0,p-001	None	0.0204	μg/L	Expected Result 0.02. Sample preparation	Compliant with associated QAFF
											date was 01/01/1950.Digest extraction	
Surface Water Ambient	State Water Resources										method was EPA 3510C. Extraction date	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	05/15/2003	9:30	Matrix Spike/Matrix spike duplicate	p,p'-DDT	None	0.0248	ua/L	was 05/19/2003.	Compliant with associated QAPP
<u> </u>			33				1 7			1 5	Expected Result 0.02. Sample preparation	
											date was 01/01/1950.Digest extraction	
Surface Water Ambient	State Water Resources										method was EPA 3510C. Extraction date	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	05/15/2003	9:30	Matrix Spike/Matrix spike duplicate	p,p'-DDT	None	0.0244	μg/L	was 05/19/2003.	Compliant with associated QAPP
											Sample preparation date was	
											01/01/1950.Digest extraction method was	
	State Water Resources									_	EPA 3510C. Extraction date was	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	01/21/2003	11:15	Normal Grab Sample	p,p'-DDT	None		μg/L	01/25/2003.	Compliant with associated QAPP
											Sample preparation date was	
Surface Water Ambient	Ctata Matar Bassurasa										01/01/1950.Digest extraction method was EPA 3510C. Extraction date was	Estimated; non-compliant with
	Control Board	0100TPOG3	Poggi Creek 3	04/21/2003	11:15	Normal Grab Sample	p,p'-DDT	None		µg/L	04/25/2003.	associated QAPP
Worldoning Frogram	Control Board	910017003	Foggi Creek 3	04/21/2003	11.13	Normal Grab Sample	p,p-001	None		μg/L	Sample preparation date was	associated QAFF
											01/01/1950.Digest extraction method was	
Surface Water Ambient	State Water Resources										EPA 3510C. Extraction date was	Estimated; non-compliant with
	Control Board	910OTPOG3	Poggi Creek 3	04/21/2003	11:15	Normal Grab Sample	o,p'-DDT	None		μg/L	04/25/2003.	associated QAPP
0			00			,					Sample preparation date was	
											01/01/1950.Digest extraction method was	
Surface Water Ambient	State Water Resources										EPA 3510C. Extraction date was	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	01/21/2003	11:15	Normal Grab Sample	o,p'-DDT	None		μg/L	01/25/2003.	Compliant with associated QAPP
											Sample preparation date was	
											01/01/1950.Digest extraction method was	
	State Water Resources										EPA 3510C. Extraction date was	
Monitoring Program	Control Board	910OTPOG3	Poggi Creek 3	05/15/2003	9:30	Normal Grab Sample	o,p'-DDT	None		μg/L	05/19/2003.	Compliant with associated QAPP
											Expected Result 0.02. Sample preparation	
Surface Water Ambient	Ctata Matar Bassuras										date was 01/01/1950.Digest extraction	
	Control Board	0100TP002	Poggi Crook 2	05/15/2003	0.30	Matrix Spika/Matrix spika dualisata	o n' DDT	None	0.0204	ua/l	method was EPA 3510C. Extraction date was 05/19/2003.	Compliant with associated CARR
Monitoring Program	Control Board	1910017063	Poggi Creek 3	05/15/2003	9:30	Matrix Spike/Matrix spike duplicate	o,p'-DDT	ivone	0.0204	µg/L	Was U3/ 19/20U3.	Compliant with associated QAPP

ATTACHMENT 3

Sweetwater 3 - Sulfate

Project	Station Code	Station Name	Sample Date	Sample Time	Sample Type	Analyte	Fraction	Result	Units	Lab Comments	QaQc Description
Surface Water										4/400 dila. Campla proporation data was	
Ambient Monitoring Program	909SSWR03	Sweetwater River 3	09/07/2005	7:00	Normal Grab Sample	Sulfate	None	83.1		1/100 diln; Sample preparation date was 09/08/2005.	Compliant with associated QAPP
Surface Water Ambient Monitoring					·					1/10 diln; Sample preparation date was	
Program	909SSWR03	Sweetwater River 3	06/01/2005	7:10	Normal Grab Sample	Sulfate	None	64			Compliant with associated QAPP
Surface Water Ambient Monitoring										1/10 diln; Sample preparation date was	
•	909SSWR03	Sweetwater River 3	01/31/2006	7:00	Normal Grab Sample	Sulfate	None	82			Compliant with associated QAPP
Surface Water											
Ambient Monitoring Program	909SSWR03	Sweetwater River 3	04/11/2006	7:00	Normal Grab Sample	Sulfate	None	52.4		1/10 diln; Sample preparation date was 04/12/2006.	Compliant with associated QAPP

ATTACHMENT 4

Sweetwater 8 - Sulfate

Project	Station Code	Station Name	Sample Date	Sample Time	Sample Type	Analyte	Fraction	Result	Units	Lab Comments	QaQc Description
Surface Water Ambient										RPD 8.75, 1/200 diln; Sample preparation	Estimated; non-compliant with
Monitoring Program	909SSWR08	Sweetwater River 8	09/06/2005	16:00	Normal Grab Sample	Sulfate	None	448	mg/L	date was 09/08/2005.	associated QAPP
Surface Water Ambient										1/100 diln; Sample preparation date was	Compliant with associated
Monitoring Program	909SSWR08	Sweetwater River 8	01/30/2006	17:30	Normal Grab Sample	Sulfate	None	443	mg/L	02/01/2006.	QAPP
Surface Water Ambient										1/200 diln; Sample preparation date was	Compliant with associated
Monitoring Program	909SSWR08	Sweetwater River 8	05/31/2005	17:30	Normal Grab Sample	Sulfate	None	483	mg/L	06/02/2005.	QAPP
Surface Water Ambient										1/200 diln; Sample preparation date was	Estimated; non-compliant with
Monitoring Program	909SSWR08	Sweetwater River 8	09/06/2005	16:00	Normal Grab Sample	Sulfate	None	489	mg/L	09/08/2005.	associated QAPP
Surface Water Ambient										1/100 diln; Sample preparation date was	Compliant with associated
Monitoring Program	909SSWR08	Sweetwater River 8	04/10/2006	18:00	Normal Grab Sample	Sulfate	None	328	mg/L	04/12/2006.	QAPP