

October 20, 2016

Mr. Jay Simi
Water Resource Control Engineer
California Water Quality Control Board
Central Valley Division
11020 Sun Center Drive, #200
Rancho Cordova, CA 95870-6114

Delivered via email only to: Jay.Simi@waterboards.ca.gov

**SUBJECT: SACRAMENTO VALLEY WATER QUALITY COALITION COMMENTS
ON PROPOSED 303(D) LIST REVISIONS**

Dear Mr. Simi:

The Sacramento Valley Water Quality Coalition (Coalition) appreciates the opportunity to provide comments on the proposed California Water Code Section 303(d) impairment list (303(d) List) revisions. We recognize that this was a significant effort for the Central Valley Regional Water Quality Control Board (Regional Water Board) staff to compile a large amount of data and prepare the detailed assessment according to the State Water Resources Control Board (State Water Board) process to comply with the impairment listing requirements of the federal Clean Water Act (Listing Policy).¹

The Coalition represents more than 8,600 farmers and wetlands managers in the Sacramento River Basin and is supported by local farm bureaus, resource conservation districts, County Agricultural Commissioners, and crop specialists with the University of California Cooperative Extension. The Coalition is organized into thirteen (13) subwatershed covering more than 1.1 million irrigated acres regulated under the Regional Water Board's Irrigated Lands Regulatory Program. The Coalition has a recommendation on the proposed pH 303(d) listing for Anderson Creek (Shasta County).

Anderson Creek pH

The Coalition recommends not listing Anderson Creek (Shasta County) as impaired due to pH (Decision ID 54265) based on (1) lack of data presented, (2) potential double counting of the data reported as used to determine the need for the impairment, and (3) contradictory evidence using the Coalition's own monitoring data (specified by the Regional Water Board as used to make the impairment determination) that shows only one exceedance of the water quality objective for pH as compared to the three exceedances reported in the listing decision.

¹State Water Resources Control Board. *Water Quality Control Policy for Developing California's Clean Water Action Section 303(d) List*. Adopted September 30, 2004 Amended February 3, 2015.

http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/020315_8_amentment_clean_version.pdf

The basis for the proposed impairment listing is stated as developed from two lines of evidence representing 6 exceedances of the Water Quality Control Plan, Central Valley Region Sacramento River Basin and San Joaquin River Basin (Basin Plan) water quality objective for pH ($6.5 \leq \text{pH} \leq 8.5$) out of 34 total samples.

Lack of Data Presented

The Fact Sheet² presented for the proposed listing of Anderson Creek as impaired for pH includes two lines of evidence (LOE ID 79045 and LOE ID 78453) for the listing. The Data Reference for each of these lines of evidence does not provide a web link to the data used to make the impairment determination. The Data Reference for LOE ID 79045 is the Quality Assurance Project Plan (QAPP) Guidelines for Order No. R5-2009-0875, Sacramento Valley Water Quality Coalition Monitoring and Reporting Program. The Data Reference for LOE ID 78453 is a spreadsheet (Ref No. 3816) that does not include any water quality monitoring data collected for Anderson Creek at Ash Creek Road (StationCode 508XACACR). Neither of these Data References provides a link to pH data for Anderson Creek at Ash Creek Road. To this end, the data reportedly used in the impairment determination are not available for review.

Double Counting of Data

Anderson Creek at Ash Creek Road (StationCode 508XACACR) has been a routine Coalition monitoring site since March 2006. Both lines of evidence listed in the Fact Sheet present similar information. Each line of evidence states that the number of sample reviewed equals 17, the number of exceedances observed equals 3, and the period of record for these data is 02/08/2007 to 09/23/2009. LOE ID 78453 states, “Two sets of samples wre [sic] collected on the same date; the sample results were averaged they were assessed.” Apart from field duplicate samples collected by the Coalition as specified in its QAPP, the Coalition is unaware of “two sets of samples collected on the same date”. Based on the information presented in the Fact Sheet, it appears that the Coalition data set for pH covering the period 02/08/2007 to 09/23/2009 was counted twice by the Regional Water Board staff. **Table 1** lists the 17 pH measurements collected for Anderson Creek at Ash Creek Road by the Coalition during the specified time period. **Table 2** lists two (2) pH measurements collected as field duplicate samples for Anderson Creek at Ash Road. Without additional information that is not available in the Fact Sheet, it is not possible to confirm the existence of 34 pH results for Anderson Creek at Ash Creek Road as reported by the Regional Water Board.

Contradictory Data

The Coalition’s pH data collected for Anderson Creek at Ash Creek Road (see **Table 1**) only includes a single exceedance of the Basin Plan water quality objective for pH. This exceedance was measure on August 21, 2007. The Fact Sheet states that the pollutant is being considered for placement on the Clean Water Act Section 303(d) List under section 3.2 of the Listing Policy. According to the binomial test used in determining the minimum number of measured exceedances needed to place a water segment on the Section 303(d) List for conventional or other pollutants under section 3.2 of the Listing Policy, one exceedance out of 17 total samples does not meet the minimum effect size of 15%. One exceedance out of 17 total samples

²http://www.swrcb.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/2014_303d_305b/appendix_g/02012.shtml

represents an effect size of 6%. However, the 6% exceedance rate does meet the null hypothesis under section 3.2 of the Listing Policy: actual exceedance proportion \leq 10%. The single pH exceedance measured for Anderson Creek at Ash Creek Road is insufficient to list the water segment on the Section 303(d) List under section 3.2 of the Listing Policy.

Table 1. pH Data Collected by the Sacramento Valley Water Quality Coalition for Anderson Creek at Ash Creek Road: Feb. 8, 2007 – Sep. 23, 2009.

Station Code	Station Name	Sample Date	Sample Time	Result (std units)
508XACACR	Anderson Creek at Ash Creek Road	02/08/2007	09:00	6.89
		04/17/2007	08:00	6.81
		05/15/2007	08:35	7.09
		06/19/2007	08:00	6.9
		06/19/2007	19:50 ⁽¹⁾	7.0
		07/17/2007	08:00	7.23
		08/21/2007	08:30	6.02
		09/18/2007	08:00	7.44
		12/19/2007	08:25	7.79
		01/28/2009	14:00	8.08
		02/19/2009	12:25	6.64
		03/16/2009	17:00	7.88
		04/22/2009	15:00	7.45
		05/20/2009	09:40	7.53
		06/17/2009	09:25	7.0
		08/19/2009	10:45	6.62
09/23/2009	09:50	6.82		

1. This sample does not represent a field duplicate sample. A second sample was collected at the site on the same day to capture diurnal variation in field measured parameters.

2. Exceedance of Basin Plan water quality objective for pH.

Table 2. pH Field Duplicate Data Collected by the Sacramento Valley Water Quality Coalition for Anderson Creek at Ash Creek Road: Jun. 19, 2007.

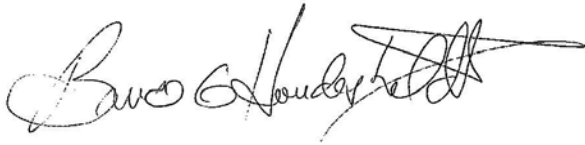
Station Code	Station Name	Sample Date	Sample Time	Result (std units)
508XACACR	Anderson Creek at Ash Creek Road	06/19/2007	19:55	6.94
		06/19/2007	20:00	6.93

In summary, the data reported as used for the assessment by the Regional Water Board are not available for public inspection, the data appear to have been double counted, and the Coalition's own monitoring data for Anderson Creek at Ash Creek Road only shows a single exceedance of

the Basin Plan water quality objective for pH, and this single exceedance does not meet the minimum exceedance requirements of the Listing Policy.

Please let me know if you have questions regarding our recommendation to not include pH for Anderson Creek at Ash Creek Road in the revised 2014 303(d) List.

Yours truly,

A handwritten signature in black ink, appearing to read "Bruce W. Houdyshell". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Cc: Michelle Wood
Larry Forero

Rob Rianda

Vicky Dawley

Brin Greer