Enclosure 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

November 3, 2016

Joseph Simi
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Re: Proposed Revisions to the 303(d) List of Impaired Water Bodies and Integrated Assessment Report for the Central Valley Region

Dear Mr. Simi:

EPA reviewed the Clean Water Act Sections 305(b) and 303(d) 2014 Integrated Report for the Central Valley Region Draft Staff Report, dated September 2016 and have a few comments. We request the State consider further analysis of several waterbodies and additional listings where data show impairment.

Temperature Assessments Discard Many Impaired Waters

The Staff Report indicates that of 189 new waterbody evaluations for temperature, elevated temperatures were found in 39 yet only one was recommended for listing. The State states in the Staff Report that most of these were waterbodies that had surface grab samples only in summer months at the edges of swimming holes and would be unrepresentative of temperature conditions. However, in reviewing the lines of evidence, there are many waterbodies that are well mixed lotic systems where a surface grab sample showing exceedances of temperature thresholds would still be representative of most of the water column and suggest a temperature impairment for the waterbody as a whole. There are several waterbodies, such as segments of the Sacramento River that have substantial data collected under the Irrigated Lands Regulatory Program indicating impairment. Additionally, for many of these waterbodies continuous monitoring stations with existing data published by a sister State Agency, Department of Water Resources in publically available databases (e.g. California Data Exchange Center (CDEC) found at www.cdec.water.ca.gov and the California Water Data Library http://www.water.ca.gov/waterdatalibrary/) are available to confirm impairments initially identified by the already analyzed grab sample data.

EPA also notes that the thresholds selected in the Staff Report for this listing cycle, 21°C and 24°C for rainbow trout and steelhead respectively, are much warmer than the temperatures recommended in EPA's *2003 Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards.*

Existing Numeric Temperature Criteria Do Not Appear to be Utilized as Thresholds

EPA notes that in the Lines of Evidence for river segments that have more protective numeric standards than the thresholds utilized for comparison to the narrative objective, the more

protective numeric standard was not used. Table III-4 and III-4A in the Sacramento and San Joaquin River Basin Plan identifies specific objectives for Deer Creek and the Sacramento River. As an example, 56°F (13.3°C) is a numeric objective for Sacramento River between Keswick Dam and Hamilton City but the line of evidence for this segment appears to have been compared to a 21°C threshold.

Continuous Monitoring Data in the Delta is "Readily Available Information"

In implementing section 303(d) of the Clean Water Act the State is required to assess all "readily available data and information"[1] when putting together a list of impaired waters. Federal policy[2] does not define this as narrowly as California has chosen to interpret it. EPA does not believe all readily available information were included in the development of the proposed list of impaired waters. California appears to have discarded all the continuous data reported in CDEC and the California Water Data Library. However, EPA notes this data is used by the State Board to implement water management decisions and is used by the Central Valley Regional Board in developing TMDLs.

The omission of continuous monitoring information is particularly notable in the Delta where 24 continuous monitoring stations are identified in Table 7 of the 2006 Bay-Delta Plan as stations to assess compliance with water quality objectives[3] and are not assessed for this Integrated Report. It has resulted in illogical listing decisions such as the listing of the Stockton Deep Water Ship Channel for temperatures unsuitable to support migration of cold water species, but none of the surrounding waters are listed as impaired. The Draft Staff Report also has inconsistent assessments for dissolved oxygen and salinity in the 2006 Bay-Delta Plan when there is an abundance of publically available data identifying broader impairments. These data should be assessed and incorporated into the final Staff Report.

The broader issue of incorporating readily available continuous monitoring data, not just from the Delta but across the State, should be addressed in the next listing cycle. These data are not readily incorporated into the California Environmental Data Exchange Network (CEDEN) but are collected at a great cost and effort by the State and other agencies and should be assessed against water quality objectives to accurately report the condition of California's waters to the public.

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[1] In developing Section 303(d) lists, states are required to assemble and evaluate all existing and readily available water quality-related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the state's most recent CWA Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate nonattainment of applicable standards; (3) waters for which water quality problems have been reported by governmental agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any CWA Section 319 nonpoint assessment submitted to EPA. See 40 CFR § 130.7(b)(5).

[2] See pp. 30-32 of the Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act (IRG). https://www.epa.gov/sites/production/files/2015-10/documents/2006irg-report.pdf

[3] "This Plan requires, and the permits and license of the DWR and the USBR include conditions for, a monitoring program to provide baseline information and determine compliance with water quality objectives." pp 41 of the 2006 Bay-Delta Plan

Monitoring Data Collected by CDFW for San Joaquin River Restoration Has been Overlooked

A multi-agency effort has been underway to restore the San Joaquin River since 2008. The upper restoration reaches have had temperature data collected since well before the data cutoff of 2010 and continue to be intensely scrutinized for suitability for salmonid reintroduction. These data are collected by the California Department of Fish and Wildlife (CDFW) and are an attachment to this letter.

The Salmon Protection Objective Should be Assessed

EPA notes that despite readily available data and information the Staff Report does not assess the Salmon Protection Objective found in Table 3 of the *Water Quality Control Plan for the San Francisco Bay/Sacramento- San Joaquin Delta Estuary* (2006 Bay-Delta Plan)

> Water quality conditions shall be maintained, together with other measures in the watershed, sufficient to achieve a doubling of natural production of chinook salmon from the average production of 1967-1991, consistent with the provisions of State and federal law.

This objective was adopted in the Water Quality Control Plan due to its inclusion in the Central Valley Project Improvement Act (CVPIA). Pursuant to CVPIA, US Fish and Wildlife Service has developed numeric targets to achieve this goal that are included in Table 1 and Appendix B-1 of the Restoration Plan for the Anadromous Fish Recovery Program. These can be accessed at the following website and are also included as an Appendix to this letter:
https://www.fws.gov/cno/fisheries/CAMP/Documents/Final_Restoration_Plan_for_the_AFRP.pdf

California collects the data used to assess progress towards these targets for many of these tributaries. CDFW publishes this information at this website:
https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=84381&inline=1

And existing program summary describing how all of the data are collected can be found here:
https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=3491&inline

The listing for Salmon Protection would be consistent with the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List. Section 3.9 states that a water segment should be listed "if the water segment exhibits significant degradation of biological populations as compared to reference site(s) and is associated with water or sediment concentration of pollutants including but not limited to chemical concentrations, temperature, dissolved oxygen or trash". There are readily available data collected by a sister State agency (CDFW) to assess the Salmon Protection objective.

If you have any questions, please contact Valentina Cabrera at 415-972-3434 or cabrera-stagno.valentina@epa.gov or Terry Fleming at 415-972-3462 or fleming.terrence@epa.gov.

Sincerely,

Janet Hashimoto

Janet Hashimoto
Chief, Water Quality Assessment Section

Appendix: Table 1 and Appendix B-1 from the Restoration Plan for the Anadromous Fish Recovery Program

Table 1. Target production levels for anadromous fish in Central Valley rivers and streams.

Species	Target
Chinook salmon, all races[a]	990,000
Fall run	750,000
Late-fall run	68,000
Winter run	110,000
Spring run	68,000
Steelhead[b]	13,000
Striped bass[c]	2,500,000
American shad[d]	4,300
White sturgeon	11,000
Green sturgeon	2,000

Preliminary estimated production targets for chinook salmon. Data for rivers without a race designatio are for fall-run chinook salmon.

Race and river	Production targets
All races combined[a]	990,000
Fall run	750,000
Late-fall run	68,000
Winter run	110,000
Spring run	68,000
Sacramento River	
Fall run	230,000
Late-fall run	44,000
Winter run	110,000
Spring run	59,000
Clear Creek	7,100
Cow Creek	4,600
Cottonwood Creek	5,900
Battle Creek	
Fall run	10,000
Late-fall run	550
Paynes Creek	330
Antelope Creek	720
Mill Creek	
Fall run	4,200
Spring run	4,400
Deer Creek	
Fall run	1,500
Spring run	6,500
Miscellaneous creeks	1,100
Butte Creek	
Fall run	1,500
Spring run	2,000
Big Chico Creek	800
Feather River	170,000
Yuba River	66,000
Bear River	450
American River	160,000
Mokelumne River	9,300
Cosumnes River	3,300
Calaveras River	2,200*
Winter run	
Stanislaus River	22,000
Tuolumne River	38,000
Merced River	18,000