



Linda S. Adams
Secretary for
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California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair

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FILE

20 April 2009

Orvil D. McKinnis
Westlands Water District
3130 N. Fresno Street
Fresno, California 93703

REQUEST TO WAIVE REQUIREMENT TO SUBMIT A MANAGEMENT PLAN FOR ELECTRAL CONDUCTIVITY, PANOCHÉ-SILVER CREEK AT INTERSTATE HIGHWAY 5, FRESNO COUNTY

On 14 July 2008, Westlands Stormwater Coalition requested the requirement for a Management Plan to address exceedances of electrical conductivity (EC) at your upgradient monitoring site on Panoche-Silver Creek at Interstate Highway 5 (I-5) be waived. Your request proposed that the elevated EC has a natural cause and cited EC data contained in United States Geological Survey (USGS) Water Resources Investigation Report No. 02-4286, *Selenium and Sediment Loads in Storm Runoff in Panoche Creek California February 1998* (Report 02-4286).

California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) staff reviewed Report 02-4286, additional EC data collected by the USGS at Panoche-Silver Creek and I-5, aerial photographs of the region, and conducted a field reconnaissance of the monitoring site and surrounding area. Central Valley Water Board staff have determined that the preponderance of EC data collected from reviewed sources confirm the occurrence of naturally elevated EC at the monitoring site.

The requirement for a Management Plan based on the detection of elevated EC at the Panoche-Silver Creek and I-5 monitoring site is hereby waived.

If you have any questions regarding this matter, please contact Brent Vanderburgh at (559) 488-4382 or bvanderburgh@waterboards.ca.gov.

Pamela Creedon
Executive Officer

Enclosure: Staff Memorandum



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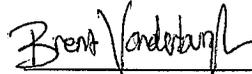


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TO: David Sholes
Senior Engineering Geologist
C.E.G 1687

FROM: Brent Vanderburgh
Engineering Geologist
Irrigated Lands Regulatory
Program

DATE: 20 April 2009

SIGNATURE: 

SUBJECT: **REVIEW OF USGS REPORT NO. 02-4286 REGARDING MANAGEMENT PLAN FOR ELECTRICAL CONDUCTIVITY, PANOCHES-SILVER CREEK, FRESNO COUNTY**

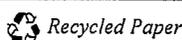
On 14 July 2008, Westlands Stormwater Coalition (Coalition) requested that the Executive Officer (EO) of the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) waive the requirement for a Management Plan (MP) for electrical conductivity (EC) at the Coalition's Interstate Highway 5 (I-5) and Panoche-Silver Creek (upgradient) monitoring site. Order No. R5-2006-0053, Coalition Group Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Waiver) requires a MP whenever two or more exceedances of a water quality objective are detected at a monitoring site within a three-year period unless the Central Valley Executive Officer determines otherwise. Elevated EC was detected in each of the four samples collected from the monitoring site within the past three years; however, flows in Panoche-Silver Creek are infrequent, short in duration (1-2 days), and are not now used for agricultural supply. The Coalition maintains that the elevated EC is naturally occurring and is not an indication of irrigated agriculture's affect on water quality in Panoche-Silver Creek. They cite EC data for the same sampling site, Panoche-Silver Creek at I-5 (USGS monitoring station no. 11255575) contained in United States Geological Survey (USGS), Water-Resources Investigations Report No. 02-4286 (Report 02-4286) to support their position.

In response to the Coalition's request, I reviewed the data contained in Report 02-4286 to evaluate whether it supports the Coalition's position that natural environmental conditions are the likely cause for the EC exceedances. I also reviewed additional sampling data collected by the USGS at Panoche-Silver Creek at I-5.

The 32 samples taken by the USGS during four storm events in February 1998 and reported in Report 02-4286 have EC values ranging from 1,390 to 3,680 microsiemens per centimeter ($\mu\text{S}/\text{cm}$) with an average of 2,395 $\mu\text{S}/\text{cm}$. Report 02-4286 also indicates high variability of EC over short periods of time, varying as much as 830 $\mu\text{S}/\text{cm}$ per hour.

An additional 16 samples from USGS monitoring station no. 11255575 (Panoche-Silver Creek at I-5) collected from April 1998 through February 2008 show high EC values similar to the

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32 samples described in Report 02-4286. EC values ranged from 448 to 5,640 $\mu\text{S}/\text{cm}$, with an average of 2,410 $\mu\text{S}/\text{cm}$.

Westlands EC data from the Panoche-Silver Creek upgradient monitoring site collected between 5 April 2006 and 25 February 2008, ranged from 911 to 4,873 $\mu\text{S}/\text{cm}$, with an average of 2,556 $\mu\text{S}/\text{cm}$. One of the four samples fell within the range for EC presented in Report 02-4286; however, all fell within the range of EC reported for the additional samples collected by the USGS at monitoring station no. 11255575 (Panoche-Silver Creek and I-5).

Data reported in Report 02-4286 and additional data collected from USGS monitoring station no. 11255575 appear to support the Coalition's position that the EC of stormwater flows in Panoche-Silver Creek are naturally elevated and highly variable.