



United States Department of the Interior

BUREAU OF RECLAMATION
Central Valley Operations Office
3310 El Camino Avenue, Suite 300
Sacramento, California 95821

JAN 09 2014

IN REPLY
REFER TO:

CVO-100
WTR-4.10

VIA ELECTRONIC MAIL AND U.S. MAIL

Thomas Howard
Executive Director
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Subject: Request for Modification, Water Rights Decision 1641 (D-1641) San Joaquin River at Vernalis Water Quality Objective

Dear Mr. Howard:

The U.S. Bureau of Reclamation (Reclamation) is requesting a modification to D-1641, Table 2, Water Quality Objective for Agricultural Beneficial Uses, for the San Joaquin River at Vernalis for a period in January 2015. This request is made in connection with Reclamation and the California Department of Water Resources' January 29, 2014, urgency change petition, as modified, in response to severe drought conditions, which remains in effect through January 27, 2015. The Central Valley Project (CVP) and State Water Project (SWP) Drought Operations Plan and Operational Forecast of April 8, 2014 (DOP), did not specifically address Table 2, D-1641, South Delta Water Quality Objective at Vernalis in January, which calls for a maximum 30-day running average electrical conductivity (EC) of 1.0.

The San Joaquin River at Vernalis EC increased rapidly beginning December 19, 2014, following precipitation events in the San Joaquin Valley. It is very unusual to see high salinity at Vernalis in December and January, and Reclamation believes that it was caused by highly saline runoff from lands due to prolonged drought conditions in the basin. Vernalis EC has been decreasing since the end of December but is still above 1.0 millimhos/centimeter (mmhos/cm) (see Attachment 1). The daily average on January 6, 2015, was 1.07 mmhos/cm, and the 30-day running average on the same date was 0.96 mmhos/cm. We estimate that it will require approximately 12,000 to 15,000 acre-feet of additional release from New Melones Reservoir to meet the objective. New Melones storage is currently (January 6, 2014) 552,000 acre-feet and is 23% of capacity and 40% of average for this date. December forecast projections for both the 90% and 50% exceedences indicate that New Melones storage would drop below the minimum power pool of approximately 300,000 acre-feet (in June and September, respectively) under current regulatory requirements.

This salinity spike was most likely a temporary event, and in light of the current storage condition and projections for New Melones Reservoir, Reclamation proposes to not make any storage releases to prevent the 30-day running average from exceeding 1.0 mmhos/cm through the end of January. Instead, until the 30-day period following the rapid rise around December 19 has passed, we propose to operate to a daily EC of 1.0 mS/cm or below. A release increase on the Stanislaus River from 200 cubic feet per second (cfs) to 300 cfs was made on January 7, 2015, to achieve this. This operation would likely result in the 30-day average EC values at Vernalis in the 1.0 to 1.1 range from January 12 through January 27 and a modification of the Vernalis water quality objective would be necessary.

Specifically, Reclamation requests that the implementation of Table 2 in D-1641, Southern Delta Electrical Conductivity (EC) at the San Joaquin River at Airport Way Bridge, Vernalis be modified as follows:

- Maximum 30-day running average of mean daily EC (mmhos/cm) for January 11 through January 27, 2015, shall be 1.1.

Reclamation has notified State Water Resources Control Board staff, the Department of Water Resources, the fisheries agencies on the Water Operations Management Team, and South Delta Water Agency of this occurrence.

If you have any questions or would like more information regarding this notification, please contact Mr. Paul Fujitani of Reclamation at 916-979-2197.

Sincerely,



for Ronald Milligan
Operations Manager

cc: Please see next page.

cc: Continued from previous page.

<p>Mr. Les Grober State Water Resources Control Board 1001 I Street Sacramento, CA 95814</p>	<p>Mr. David Murillo Regional Director Mid-Pacific Region Bureau of Reclamation 2800 Cottage Way Sacramento, CA 95825</p>
<p>Mr. Chuck Bonham Director California Department of Fish and Wildlife 1416 Ninth Street Sacramento, CA 95814</p>	<p>Mr. Ren Lohofener Regional Director Pacific Southwest Region U.S. Fish and Wildlife Service 2800 Cottage Way Sacramento, CA 95825</p>
<p>Mr. Mark Cowin Director California Department of Water Resources 1416 Ninth Street Sacramento, CA 95814</p>	<p>Mr. John Leahigh Operations Control Office California Department of Water Resources 3310 El Camino Avenue, Suite 300 Sacramento, CA 95821</p>
<p>Ms. Maria Rea Assistant Regional Administrator California Central Valley Area Office National Marine Fisheries Service 650 Capitol Mall, Suite 5-100 Sacramento, CA 95814</p>	<p>Mr. John Herrick South Delta Water Authority 4255 Pacific Avenue, Suite 2 Stockton, CA 95207</p>

Attachment 1

Mean Daily and 30-Day Average EC at Vernalis (reported in micromhos per centimeter – $\mu\text{mhos/cm}$)

Date	Vernalis	
	Daily (EC)	30- day running average (EC)
12/1/2014	0.63	0.50
12/2/2014	0.61	0.51
12/3/2014	0.58	0.52
12/4/2014	0.51	0.53
12/5/2014	0.56	0.54
12/6/2014	0.61	0.55
12/7/2014	0.64	0.56
12/8/2014	0.72	0.57
12/9/2014	0.88	0.59
12/10/2014	0.91	0.60
12/11/2014	0.81	0.61
12/12/2014	0.64	0.62
12/13/2014	0.45	0.61
12/14/2014	0.47	0.61
12/15/2014	0.59	0.61
12/16/2014	0.70	0.62
12/17/2014	0.82	0.63
12/18/2014	0.85	0.64
12/19/2014	0.91	0.65
12/20/2014	1.00	0.67
12/21/2014	1.01	0.69
12/22/2014	1.09	0.70
12/23/2014	1.17	0.72
12/24/2014	1.18	0.74
12/25/2014	1.17	0.76
12/26/2014	1.17	0.78
12/27/2014	1.18	0.80
12/28/2014	1.18	0.81
12/29/2014	1.18	0.83
12/30/2014	1.17	0.85
12/31/2014	1.15	0.86
1/1/2015	1.13	0.88
1/2/2015	1.12	0.90
1/3/2015	1.07	0.92
1/4/2015	1.06	0.93
1/5/2015	1.08	0.95
1/6/2015	1.07	0.96