



Central Valley Regional Water Quality Control Board

23 June 2023

Lower San Joaquin River Real Time Management Program Stakeholders and Other Interested Parties

[See Attached List – sent by email only]

STATUS OF WATER QUALITY OBJECTIVES FOR SALINITY IN THE LOWER SAN JOAQUIN RIVER

The water quality objectives for salinity in the lower San Joaquin River (R5-2017-0062) include provisions for a relaxation of salinity standards during an Extended Dry Period. Due to hydrologic conditions during the water years 2020- 2022, the Lower San Joaquin River, from the mouth of the Merced River to Vernalis, entered an Extended Dry Period on 1 October 2021. Based upon measured and forecasted conditions during water year 2023, it is expected that the Extended Dry Period for the lower San Joaquin River will end on 30 September 2023. The standard water quality objective of 1550 $\mu\text{S}/\text{cm}$, expressed as a 30-day running average, would apply for the Lower San Joaquin River between the mouth of the Merced River and Vernalis beginning on 1 October 2023. Per the calculations described in the Basin Plan, the expected Wet year classification for water year 2023 would make it impossible to enter into an Extended Dry period again until 1 October 2026 at the earliest.

Additional information about the objective and the method for establishing an Extended Dry Period can be found in the attached memorandum.

If you have any questions or comments regarding the memorandum, please contact Angela Llaban at angela.llaban@waterboards.ca.gov.

Sincerely,

Patrick Pulupa
Executive Officer

Brum, Leonard
leonard.brum@water.ca.gov

Carmo, Shawn
scarmo@gwdwater.org

Enas, Gordon
gordon.enas@mid.org

Huff, David
dhuff@turlock.ca.us

Johnson, Kenneth
kenneth.johnson@water.ca.gov

Johnson, Mike
mjohnson@mljenvironmental.com

Kabir, Jobaid N.
jkabir@usbr.gov

Klassen, Parry
klassenparry@gmail.com

Koehler, Ben
bkoehler@modestogov.com

Linneman, Chris
linneman@summerseng.com

Lu, James N.
jlu@usbr.gov

Mackey, Debbie
eofficer@cvcwa.org

Mauterer, John
john.mauterer@mid.org

McGahan, Joe
jmcgahan@summerseng.com

Montalbano, Debbie C.
dcmontalbano@tid.org

Naventhan, Kandasamy
kandasamy.naventhan@water.ca.gov

Ortega, Ric
rortega@gwdwater.org

Quinn, Nigel
nwquinn@lbl.gov

Wang, Jun
junwang@usbr.gov

Central Valley Regional Water Quality Control Board

TO: Angela Llaban
Senior Environmental Scientist
Salinity and Basin Planning Unit

FROM: Jay Simi
Water Resources Control Engineer
Non-Point Source Planning and Assessment Unit

DATE: 23 June 2023

SUBJECT: STATUS OF WATER QUALITY OBJECTIVES FOR SALINITY IN THE
LOWER SAN JOAQUIN RIVER

In June 2017 the Central Valley Water Board adopted an amendment to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins to establish water quality objectives for salinity in the Lower San Joaquin River between the mouth of the Merced River and Vernalis, CA (R5-2017-0062). This amendment was later approved by the United States Environmental Protection Agency in December 2018. This Basin Plan amendment established numeric water quality objectives for electrical conductivity (at 25°C) of 1550 $\mu\text{S}/\text{cm}$, expressed as a 30-day running average, except during Extended Dry Periods. During Extended Dry Periods, electrical conductivity (at 25°C) levels shall not exceed 2470 $\mu\text{S}/\text{cm}$ (as a 30-day running average) and 2200 $\mu\text{S}/\text{cm}$ (as an annual average calculated using samples collected during the previous four quarters at minimum). Beginning on 1 October 2021, the San Joaquin River Basin entered an Extended Dry Period as defined in the Basin Plan Amendment. The Extended Dry Period in the lower San Joaquin River is expected to end on 30 September 2023. The expected end of the Extended Dry Period would mean that the standard water quality objective of 1550 $\mu\text{S}/\text{cm}$, expressed as a 30-day running average, would apply on 1 October 2023.

The Basin Plan definition of an Extended Dry Period is based, in part, upon the San Joaquin Valley Water Year Hydrologic Classification published by the California Department of Water Resources in Bulletin 120. The Basin Plan assigns the following indicator values to the published water year classifications:

- Wet – 5
- Above Normal – 4
- Below Normal – 3

- Dry – 2
- Critically Dry – 1

An Extended Dry Period shall begin when the sum of the current year's indicator value and the previous two year's indicator values total six (6) or less. An Extended Dry Period shall be deemed to exist for one water year (12 months) following a period with an indicator value total of six (6) or less.

The San Joaquin Valley Hydrologic Water Year Classifications for water years 2021 and 2022 are Critically Dry, each with an indicator value of one (1). Forecasts indicate that water year 2023 will be classified as a Wet year, with an indicator value of five (5). A Wet year classification for water year 2023 would bring the three-year sum of indicator values to seven (7) and end the Extended Dry Period. The standard water quality objective of 1550 $\mu\text{S}/\text{cm}$, expressed as a 30-day running average, would apply for the Lower San Joaquin River between the mouth of the Merced River and Vernalis beginning on 1 October 2023. Per the calculations described in the Basin Plan, a Wet year classification for water year 2023 would make it impossible to enter into an Extended Dry period again until 1 October 2026 at the earliest.

Further updates regarding the water year classification in the San Joaquin Basin and applicability of water quality objectives for salinity will be distributed as new information becomes available.