

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

**VIA EMAIL**

March 4, 2020

Mr. Jeff Sutton
Tehama-Colusa Canal Authority
Post Office Box 1025
Willows, California 95988
jsutton@tccanal.com

Governor's Office of Planning & Research

MAR 05 2020

STATE CLEARINGHOUSE

SCH# 2020029001 2020 Tehama-Colusa Canal Authority in Basin Water Transfers Mitigated Negative Declaration and Initial Study, and Environmental Assessment (MND)

Dear Mr. Sutton:

The Department of Water Resources (DWR) has reviewed the MND for 2020 Tehama-Colusa Canal Authority (TCCA) In Basin Water Transfers. DWR has the following comments.

Proposed Project

The proposed project includes water transfers of up to 36,685 acre-feet (AF) of water from willing sellers on northern California waterways who have contracts with the United States (Sellers) to Member Units of the TCCA (Buyers). These water transfers would reduce potential effects of water supply shortages in 2020 through a combination of groundwater substitution transfers and cropland idling transfers.

Comments

As stated in the California Water Action Plan, 2018 Update, California promotes safe and effective water transfers. To that end, DWR requests the environmental analysis in the MND and the IS/EA address our concerns on the following: (1) data and information in Chapter 2; (2) groundwater model; and (3) proposed monitoring and mitigation measures. To that end, we request the following specific comments be addressed.

Alternatives Analysis

2.3.6.3 Environmental Setting – Groundwater

The MND does not have an accurate environmental setting description for groundwater: it relies on data that has been supplemented or superseded. The MND needs to provide a more accurate and comprehensive groundwater evaluation based on current and best available information.

The groundwater environmental setting section uses DWR's 2002 Sacramento River Basin-wide Water Management Plan and DWR's 2003 Bulletin 118 from to qualitatively describe the groundwater quality of Sacramento Valley as generally good but with some localized issues. For an accurate alternatives analysis, DWR requests the alternatives be analyzed based on current water quality data from the State Water Resources Control Board Groundwater Ambient Monitoring and Assessment (https://www.waterboards.ca.gov/water_issues/programs/gama/online_tools.html) and

DWR's Water Data Library (<http://wdl.water.ca.gov/waterdatalibrary/>) which provide additional details on the localized issues.

According to the MND, groundwater levels in the northern Sacramento Valley Groundwater Basin have declined over the last 15 years mostly due to the persistent dry weather conditions since 2006. Those levels have also declined due to land use changes between 2004 and 2019, especially in areas without surface water on the west side of the Sacramento Valley in Colusa, Glenn, and Tehama Counties. Such Land use changes include: (1) dry farming/grazing acreage converted to orchards of permanent crops, and (2) annual/truck crop acreage converted to orchards of permanent crops.

Between 2004 and 2019, shallow wells (generally comprised of domestic wells) on the west side of the Sacramento Valley reflect record low groundwater levels. Shallow wells in this area appear to be the most sensitive to dry and drought year conditions and the increase in groundwater pumping from aquifer zone at greater depths. Although the multiple aquifer zones (shallow, intermediate, deep) located west of the Sacramento River are assumed to be separated by aquitards, it cannot be assumed that the aquitards provide full, laterally continuous barriers; therefore, pumping from deep wells may impact groundwater levels in wells completed in aquifer zones above the pumping zone. DWR recommends to include this information in the groundwater environmental settings analysis.

While groundwater levels in the northern Sacramento Valley Groundwater Basin may show an increase between spring 2018 and spring 2019, groundwater levels on the west side and other areas of the northern Sacramento Valley still show a cumulative decrease since 2004. The MND states that past groundwater trends are indicative of groundwater levels declining moderately during extended droughts and recovering to predrought levels after subsequent wet periods. There are no data to substantiate such a statement. DWR requests you provide the data to substantiate the conclusion that the Sacramento Valley Groundwater Basin has moderate levels of groundwater decline and recover groundwater and your modelling analysis of the date, if necessary.

According to the MND, Yolo, Colusa, Glenn, and Sutter Counties have experienced subsidence generally related to groundwater pumping and subsequent consolidation of loose aquifer sediments. DWR recommends that the MND specify if the land subsidence is temporary (elastic) or permanent (inelastic). If the MND does not specify the land subsidence is temporary, DWR requests the MND includes supporting information as to why the land subsidence is not temporary.

Groundwater Model

The MND used SACFEM2013, a numerical groundwater model calibrated to historical conditions from water years 1970 through 2009 to estimate groundwater level impacts of the Proposed Action. SACFEM2013 does not represent the existing groundwater and land use conditions because the period of analysis only considers historical hydrology of water years 1970 through 2003, which does not include the recent historic drought and crop conversions. DWR recommends extending the calibration and simulation period through 2019 to provide the most recent hydrology and agricultural water use conditions.

Mr. Jeff Sutton
March 4, 2020
Page 3

Groundwater Monitoring Program and Mitigation Plan: Mitigation Measure GW-1

Mitigation measure GW-1 needs to include land surface elevation survey to monitor land subsidence. At this time, mitigation measure GW-1 provides a monitoring program that relies solely on groundwater level triggers from different Groundwater Management Plans (GMP) as a proxy to monitor the occurrence of land subsidence. Since evidence suggests the GMPs for the Northern Sacramento Valley have very little to no quantitative criteria, reliance solely on those GMPs as the basis for this mitigation measure is inadequate. DWR recommends land surface elevation surveys be conducted prior to, during, and after the groundwater substitution transfer is needed in order to directly monitor land subsidence in the vicinity of Seller's region.

Due to highly technical nature of groundwater substitution transfers, DWR offers its assistance in the review of the completeness and quality of the transfer proposal on a case-by-case basis, including but not limited to: (1) the groundwater level monitoring well network, (2) groundwater level triggers, and (3) mitigation plans, to ensure less than significant impacts from the Proposed Action and protect California natural resources. DWR requests copies of any subsequent environmental documentation related to the Project, including, but not limited to any CEQA and NEPA documents and all legal notices prepared by your district and other partners. Please send future correspondence and questions to:

Anna Fock, Supervising Engineer
Department of Water Resources
State Water Project Analysis Office
1416 Ninth Street, Room 1620
Sacramento, California 94236-0001
(916) 653-0190

If you have any questions or need additional information, please contact me by phone at (916) 653-6840, fax (916) 653-0952, or email Nancy.Finch@water.ca.gov.

Sincerely,

Casey Parecero c/o Nancy Finch
Casey Parecero
Staff Attorney

Nancy Finch
Senior Attorney