



DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance
3310 El Camino Avenue, Suite 300
Sacramento, California 95821



— BUREAU OF —
RECLAMATION

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

Erik Ekdahl
State Water Resources Control Board
1001 I Street
Sacramento, California 95814

Re: Condition 2 of the February 15, 2022 Temporary Urgency Change Order

Dear Mr. Ekdahl:

Consistent with the February 15, 2022 Temporary Urgent Change Order by the State Water Resources Control Board (SWRCB) issued to the U.S. Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR), and in compliance with Condition 2 of that Order, DWR and Reclamation hereby submit this report on minimum Delta export thresholds by the State Water Project (SWP) and the Central Valley Project (CVP), also collectively referred to as Projects.

Human health and safety (HH&S) demands for water are based on minimum unmet water demands to meet domestic supply, fire protection, and sanitation needs during the year. The minimum Delta export threshold that would be needed to support annual HH&S demands and wildlife refuge needs will vary from year to year and as well as by season. The CVP has several demands for HH&S supply south of the Delta primarily through CVP water service contracts. The largest HH&S demands typically fall within the metropolitan areas of the Bay Area and include the largest M&I water service provider, Santa Clara Valley Water District with a service population of nearly 1.9 million people. These demands rely on either direct diversion in the summer from Jones Pumping Plant or previously stored water in San Luis Reservoir, or a combination of the two.

Reclamation currently uses its Municipal and Industrial (M&I) Water Shortage Policy to determine the amount of water to be provided to its M&I contractors in those years where human health and safety needs govern CVP allocations to these contractors. M&I contractors are required to update population estimates and non-CVP water source information to determine how much water will be needed from the CVP to meet their overall human health and safety demand for that year. The vast majority of CVP contractors throughout the entire service area that receive M&I water from the CVP have other available supplies to help meet their demand.

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Water exported at the CVP's Jones Pumping Plant is primarily diverted for meeting municipal and industrial (M&I) public health and safety demands, wildlife refuge demands as required under CVPIA, and senior water right holders.

The SWP provides all or a portion of water supply to 27 million Californians and about 750,000 acres of farmland. The SWP's HH&S demands are based on minimum unmet water supply and are to be no more than 55 gallons per capita per day (gpcd), consistent with the description contained within the SWRCB's emergency curtailment regulations¹. South of Delta SWP Public Water Agencies (PWAs) primarily rely on water exported through Clifton Court Forebay or previously stored water in San Luis Reservoir to meet HH&S demands. In addition, the PWAs located in the South Bay Area (Alameda County Flood Control and Water Conservation District-Zone 7, Alameda County Water District, and Santa Clara Valley Water District) rely on direct diversions from the Delta to meet their municipal and industrial demands that are reliant on SWP water, as they are not directly connected San Luis Reservoir.

The CVP meets HH&S south of the Delta through pumping at Jones Pumping Plant. Minimum pumping for this facility is one of the smaller pumps, or roughly 800 cfs. These pumps do not have a variable speed function and therefore a lower pumping rate would require the single pump to be cycled on and off within a 24-hour period. A portion of this minimum pumping rate either goes directly to meeting HH&S or to storage in San Luis Reservoir for meeting later HH&S demands. The remainder of the volume is delivered to wildlife refuge demands as required under CVPIA, and senior water right holders.

Under the 2021 TUCO, from June 1 through August 15, 2021, combined Project exports were below the maximum export limit of 1,500 cfs included in the TUCO. The SWP minimum exports averaged about 300 cfs. This minimum export supplied water to the SWP South Bay PWAs who are not directly connected to San Luis Reservoir and who therefore rely on direct diversions from the south Delta through the South Bay Aqueduct to meet their municipal and industrial demands. This export rate also supplied on average about 75 cfs per day to Byron Bethany Irrigation District (a non-SWP Contractor), who diverts directly from Clifton Court Forebay, plus water to manage SWP system losses (e.g. evaporation and gate leakage) in the California Aqueduct. The total deliveries to the South Bay PWAs during the 2021 TUCO period are as follows:

June 2021	10,089 acre-feet (or 10.1 TAF)
July 2021	9,618 acre-feet (or 9.6 TAF)
August 2021*	10,581 acre-feet (or 10.6 TAF)

TAF – thousand acre-feet

**Deliveries reported are monthly values; however, the 2021 TUCO was in effect through August 15.*

¹ Cal. Code Regs., tit. 23, §§ 877.1(g), 878.; see also

https://www.waterboards.ca.gov/drought/delta/docs/deltareg_oal_approval.pdf

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From June 1 through August 15, 2021, the CVP minimum exports were in the range of 600 to 900 cfs. This export rate supplied water to senior water rights holders, refuges, and municipal and industrial demands.

As stated in a prior submittal in response to Condition 10 of the June 1, 2021 TUCO, repeatedly starting and stopping Reclamation pumping units may cause excessive wear and tear and can ultimately shorten the lifespan of the pumping units.

To further limit exports without causing excessive wear and tear on the units, the SWP and CVP implemented a one-facility operation in parts of June and July 2021. This was a new operation not previously used by the projects. The one-facility export operation utilized the Delta-Mendota Canal-California Aqueduct Intertie (DCI) to help distribute the limited export of about 800 cfs to 1,000 cfs to both the California Aqueduct and the Delta-Mendota Canal (DMC). This rate of export was sufficient to meet DWR's South Bay Aqueduct needs and provide water through the DCI to the upper reach of the DMC canal, which is normally fed directly by Jones Pumping Plant.

If you have any questions, please contact Molly White of DWR at (916) 574-2722 or Kristin White of Reclamation at (916) 979-2199.

Sincerely,

Molly White

Molly White, Manager
Water Operations Office
Division of Operations and Maintenance
Department of Water Resources

Levi Johnson

Kristin White, Operations Manager
Central Valley Operations Office
Bureau of Reclamation

Levi Johnson
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