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**Subject:** Electronic Transmittal: Conserved Water Accounting for Condition 4 of the April 2022 under TUCP Order

Condition 4 of the April 4, 2022 Order Conditionally Approving a Petition for Temporary Urgency Changes in License and Permit Terms and Conditions requires the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation) to “calculate and maintain a record of the amount of water conserved in storage and identify the reservoir(s) where storage is conserved. These records shall be submitted on a monthly basis to the State Water Board and fisheries agencies within 10 business days after the first day of the following month.” In compliance with this requirement, DWR and Reclamation are presenting the attached table showing daily accounting for conserved water under the Order for the period of April 4 through April 30, 2022.

Under D-1641, the Net Delta Outflow requirement for April was 7,100 cfs on a three-day average (or the equivalent salinity measured as 2.64 EC at Collinsville) all month long, plus a requirement to meet higher outflow of 11,400 cfs (or equivalent salinity at Chipps) for 10 days. The April 4 Order modified this requirement to 4,000 cfs on a 14-day average. The Order also modified the location of the Western Delta agricultural standard compliance point from Emmaton to Threemile Slough, when the projects are not diverting or storing water, and the minimum San Joaquin River base flow requirement at Vernalis from 853 cfs to 710 cfs, outside of the pulse period.

The estimated amount of water that would have been required to meet the unmodified D-1641 standards for the period of April 4 through April 30 was determined to be 102.9 TAF. The modified Western Delta agricultural standard did not apply in the month of April, and therefore no water was conserved as a result of this modification. The entirety of the 102.9 TAF would have been needed to meet the Outflow requirement and 3.6 TAF of the water conserved for Outflow would have come from the San Joaquin River and would therefore be used to meet both the unmodified Vernalis standard as well as the unmodified Outflow requirement. Of the total 102.9 TAF, 3.6 TAF was conserved in New Melones Storage. Prior to the issuance of the Order, only Oroville had been making releases above minimums to meet Delta requirements, therefore most of the remaining 99.3 TAF conserved would’ve likely come from Oroville storage.

If you have any questions or would like more information, please contact me at (916) 574-2991.

**Ian Uecker, PE**

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April Date	Water Conserved from TUCP?			Daily Combined Exports	Historical 3- day Outflow (cfs)	Modeled 3- day Outflow (cfs)	Estimated Additional Outflow to meet X2	Historical Vernalis (cfs)	Modeled Vernalis (cfs)	Estimated Additional Flow to meet Vernalis (cfs)	Estimated Total Additional Outflow Needed (cfs)	Estimated Water Shortage (TAF)
	NDOI	Vernalis	EC									
4/1/2022	x			1492	10590	11423	2500	973	973	0	2500	5.0
4/2/2022	x			1493	11162	12828	2500	955	955	0	2500	5.0
4/3/2022	x			1498	10091	12591	2500	966	966	0	2500	5.0
4/4/2022	x			1497	8972	11739	3300	925	925	0	3300	6.5
4/5/2022	x			1492	8150	11416	4000	857	857	0	4000	7.9
4/6/2022	x			1496	7853	11620	4000	804	804	0	4000	7.9
4/7/2022	x			1492	7419	11419	4000	744	744	0	4000	7.9
4/8/2022	x			1495	6869	10369	2500	677	677	0	2500	5.0
4/9/2022	x			1490	6210	9044	2000	685	685	0	2000	4.0
4/10/2022	x			1493	5834	8001	2000	747	747	0	2000	4.0
4/11/2022	x			1498	5391	7391	2000	767	767	0	2000	4.0
4/12/2022	x	x		1489	5154	7154	2000	679	979	300	2000	4.0
4/13/2022	x	x		1500	5334	7334	2000	646	946	300	2000	4.0
4/14/2022	x	x		1473	5474	7474	2000	592	892	300	2000	4.0
4/15/2022	x	x		1489	5450	7484	2100	538	838	300	2100	4.2
4/16/2022	x	x		1497	5198	7264	2100	563	863	300	2100	4.2
4/17/2022	x	x		1494	5597	7697	2100	677	977	300	2100	4.2
4/18/2022	x			1507	6597	8697	2100	1278	1278	0	2100	4.2
4/19/2022	x			1492	7594	9694	2100	1372	1372	0	2100	4.2
4/20/2022	x			1494	8548	10648	2100	1324	1324	0	2100	4.2
4/21/2022	x			1487	8887	10987	2100	1243	1243	0	2100	4.2
4/22/2022	x			1493	9202	11169	1700	1315	1315	0	1700	3.4
4/23/2022	x			1488	9926	11459	800	1448	1448	0	800	1.6
4/24/2022				1497	10906	11740	0	1559	1559	0	0	0.0
4/25/2022				1495	11737	12004	0	1409	1409	0	0	0.0
4/26/2022				1496	11560	11560	0	1125	1125	0	0	0.0
4/27/2022	x			1508	10077	10244	500	880	880	0	500	1.0
4/28/2022	x			1498	8336	8903	1200	793	793	0	1200	2.4
4/29/2022	x			1496	6541	7507	1200	802	802	0	1200	2.4
4/30/2022	x			1494	5962	7429	2000	866	866	0	2000	4.0

Total (TAF)\* 102.9

**D-1641 Standards**  
10 days: NDOI 11,400 cfs 3-day or CHP daily/14-day EC below 2.64 mmos/cm  
20 days: NDOI 7,100 cfs 3-day or CLL daily/14-day EC below 2.64 mmos/cm  
Vernalis Monthly Avg (outside pulse period) 853 cfs ( 7-Day Avg 682 cfs)  
**DRAFT Subject to Revision**

\* TUCP in place April 4-30, total water conserved accounts for this period only