From: Uecker, lan@DWR

Sent: Friday, August 27, 2021 10:07 AM

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Cc: White, Molly@DWR; Hinojosa, Tracy@DWR; Halston, Armin A; White, Kristin N.; Leahigh,

John@DWR; Pettit, Tracy@DWR; Kiteck, E

Subject: Electronic Transmittal: Conserved Water Accounting for July 2021 under TUCP Order

Attachments: Drought Accounting July 21.pdf

EXTERNAL:

In its June 1, 2021 Order Conditionally Approving a Petition for Temporary Urgency Changes in License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions, the State Water Resources Control Board (Board) required 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 through the changes authorized by this Order, as well as a record of where that water was conserved, submit such records on a monthly basis to the State Water Board within 20 working 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 month of July.

Under D-1641, the minimum Delta Outflow requirement for July is 4,000 cfs on a monthly average. The June 1 Order changed the minimum Delta outflow requirement (as measured by the Net Delta Outflow Index - NDOI) to 3,000 cfs on a monthly average during July, but no less than 2,000 cfs on a 7-day running average. The Order also extended through August 15 the change to the Western Delta agricultural objective compliance point from Emmaton to Three Mile Slough. Water Quality modeling indicates that even after increasing NDOI to meet the 4,000 cfs requirement, a significant amount of water would still have been necessary to meet the Emmaton 14-day EC objective.

The Projects operated under the Order for the entire month. The amount of water that would have been required to meet the unmodified D-1641 standards for all of July was determined to be approximately 119 TAF. This amount was conserved upstream by the Projects in July and it has been determined that the water conserved would have come from Shasta 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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July			TUCP in effect?						
Date	Historical Daily Outflow (cfs)	Historical 7-Day Outflow (cfs)	NDOI	EC	Daily Combined Exports	Historical Emmaton (14 day EC)	Modeled Emmaton (14 Day EC)	Additional Outflow Needed (cfs)	Water Shortage (TAF)
7/1/2021	2748	3328	Х	х	1098	5421	2747	4000	7.93
7/2/2021	3329	3291	Х	х	893	5465	2747	4000	7.93
7/3/2021	3043	3221	Х	х	1292	5478	2776	4000	7.93
7/4/2021	2711	3062	X	x	907	5492	2782	2500	4.96
7/5/2021	2838	2970	x	x	908	5488	2753	2500	4.96
7/6/2021	3461	2993	X	X	900	5464	2676	2500	4.96
7/7/2021	3493	3089	X	X	877	5420	2662	2500	4.96
7/8/2021	3873	3250	X	X	906	5343	2593	2500	4.96
7/9/2021	4139	3365	X	X	898	5225	2516	2500	4.96
7/10/2021	3798	3473	X	X	903	5105	2463	2500	4.96
7/11/2021	3651	3608	X	X	898	5023	2430	2500	4.96
7/12/2021	3462	3697	X	X	907	4942	2372	2500	4.96
7/13/2021	3740	3737	X	X	894	4899	2371	2500	4.96
7/14/2021	3298	3709	X	X	891	4915	2470	2500	4.96
7/15/2021	3366	3636	X	x	885	4922	2527	1500	2.97
7/16/2021	3007	3474	X	X	1147	4904	2594	1500	2.97
7/17/2021	3158	3383	X	X	1142	4850	2590	1500	2.97
7/18/2021	3155	3312	X	x	1142	4760	2596	1500	2.97
7/19/2021	3389	3302	x	x	1148	4663	2598	1500	2.97
7/20/2021	3476	3264	Х	х	1148	4588	2621	1500	2.97
7/21/2021	3496	3292	X	X	1146	4531	2603	1500	2.97
7/22/2021	3599	3326	х	x	1148	4414	2525	1000	1.98
7/23/2021	3767	3434	х	х	1148	4397	2551	1000	1.98
7/24/2021	3689	3510	Х	х	1148	4384	2571	1000	1.98
7/25/2021	3378	3542	Х	х	1151	4357	2597	1000	1.98
7/26/2021	3407	3545	x	х	1151	4320	2609	1000	1.98
7/27/2021	3416	3536	Х	х	1165	4225	2579	1000	1.98
7/28/2021	3696	3565	х	X	1209	4149	2548	1000	1.98
7/29/2021	2776	3447	х	х	1182	4136	2627	1000	1.98
7/30/2021	3056	3345	x	х	1150	4157	2644	1000	1.98
7/31/2021	3026	3251	Х	х	1147	4196	2723	1000	1.98
Monthly Average	3369							Total (TAF)	118.98

D1641 Standards NDOI 4000 cfs Emmaton 2.78 umhos/cm

Draft: Subject to revision