

From: "Hinojosa, Tracy@DWR" <Tracy.Hinojosa@water.ca.gov>

Date: 08/21/2015 4:03 PM (GMT-08:00)

To: "Grober, Les@Waterboards" <Les.Grober@waterboards.ca.gov>

Cc: "Stein, Russell@DWR" <Russell.Stein@water.ca.gov>, "Rea, Maria@NOAA" <Maria.Rea@noaa.gov>, pfujitani@usbr.gov, "Wilcox, Carl@Wildlife" <Carl.Wilcox@wildlife.ca.gov>, "Rico, Christine@Waterboards" <Christine.Rico@waterboards.ca.gov>, "Castleberry, Dan@fws" <Dan.Castleberry@fws.gov>, Garwin.Yip@noaa.gov, "Riddle, Diane@Waterboards" <Diane.Riddle@waterboards.ca.gov>, RMILLIGAN@usbr.gov, "Pettit, Tracy@DWR" <Tracy.Pettit@water.ca.gov>, "Mizell, James@DWR" <James.Mizell@water.ca.gov>, "Leahigh, John@DWR" <John.Leahigh@water.ca.gov>, ekiteck@usbr.gov, PManza@usbr.gov, "Hinojosa, Tracy@DWR" <Tracy.Hinojosa@water.ca.gov>, "Rabin, Larry@fws.gov" <Larry.Rabin@fws.gov>, JSandberg@usbr.gov, "Miller, Aaron@DWR" <Aaron.Miller@water.ca.gov>, "Giorgi, Bryant@DWR" <Bryant.Giorgi@water.ca.gov>, "Chu, Andy@DWR" <Andy.Chu@water.ca.gov>, "Masier, Guy@DWR" <Guy.Masier@water.ca.gov>

Subject: Conserved Water Accounting for July 2015 under TUCP Order

Les--

In its July 3, 2015 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) continued to require 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 is 4,000 cfs on a monthly average. The April 6 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. DSM2 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 152 TAF. This amount was conserved upstream by the Projects in July. The cumulative total water conserved under the TUCP in 2015 to date is approximately 736 TAF.

If you have any questions or would like more information, please contact Dan Yamanaka at (916) 574-0456 or Mr. Paul Fujitani at (916) 979-2197.

Tracy Hinojosa

Regulatory Compliance & Reporting Branch Chief

SWP Operations Control Office

☎ 916-574-2333 (office)

☎ 916-764-7024 (mobile)

July Date	Historical Daily Outflow (cfs)	Historical 3- Day Outflow (cfs)	Historical Vernalis (cfs)	TUCP in effect?			Daily Combined Exports (cfs)	Historical Emmaton (14 day EC)	Modeled Emmaton (14 Day EC)	Additional Outflow Needed (cfs)	Additional Water for Emmaton (cfs)	Total Additional Water Needed (cfs)	Water Shortage (TAF)
				NDOI	EC	Vernalis							
7/1/2015	3512	3370	177	x	x		493	4008	2214	488	4500	4988	9.89
7/2/2015	3153	3383	137	x	x		593	4062	2240	847	4500	5347	10.61
7/3/2015	2809	3158	118	x	x		587	4166	2307	1191	5000	6191	12.28
7/4/2015	2928	2963	105	x	x		587	4304	2396	1072	5000	6072	12.04
7/5/2015	2899	2879	113	x	x		587	4460	2494	1101	5000	6101	12.10
7/6/2015	2701	2843	145	x	x		591	4615	2584	1299	5000	6299	12.49
7/7/2015	3312	2971	140	x	x		721	4744	2644	688	5000	5688	11.28
7/8/2015	3072	3028	130	x	x		741	4887	2715	928	5000	5928	11.76
7/9/2015	2859	3081	125	x	x		586	5028	2778	1141	5000	6141	12.18
7/10/2015	3498	3143	157	x	x		586	5097	2769	502	5000	5502	10.91
7/11/2015	3851	3403	149	x	x		588	5146	2742	149	4500	4649	9.22
7/12/2015	3722	3690	151	x	x		589	5209	2732	278	4500	4778	9.48
7/13/2015	4018	3863	162		x		589	5232	2685	0		0	0.00
7/14/2015	4169	3969	134		x		588	5273	2665	0		0	0.00
7/15/2015	3907	4031	111	x	x		587	5275	2616	93		93	0.18
7/16/2015	3881	3986	113	x	x		587	5274	2581	119		119	0.24
7/17/2015	3681	3823	100	x	x		590	5244	2538	319		319	0.63
7/18/2015	4138	3900	114		x		586	5198	2499	0		0	0.00
7/19/2015	4201	4007	123		x		497	5029	2354	0		0	0.00
7/20/2015	4388	4242	137		x		635	4884	2248	0		0	0.00
7/21/2015	3360	3983	149	x	x		539	4787	2198	640		640	1.27
7/22/2015	3358	3702	116	x	x		305	4670	2138	642		642	1.27
7/23/2015	3148	3288	125	x	x		447	4535	2071	852		852	1.69
7/24/2015	3079	3195	148	x	x		622	4393	2002	921		921	1.83
7/25/2015	3025	3084	169	x	x		671	4264	1949	975		975	1.93
7/26/2015	3183	3095	139	x	x		595	4161	1924	817		817	1.62
7/27/2015	2775	2994	133	x	x		586	4094	1932	1225		1225	2.43
7/28/2015	3509	3156	163	x	x		588	4029	1938	491		491	0.97
7/29/2015	3364	3216	124	x	x		592	4018	1988	636		636	1.26
7/30/2015	3357	3410	111	x	x		589	4031	2054	643		643	1.28
7/31/2015	3521	3414	97	x	x		588	4048	2115	479		479	0.95

Monthly Average 3431

Total (TAF) 151.81
Running Total (TAF) 735.84

D1641 Standards	
Chippis X2	0 Day(s)
Carry-Over	0 Day(s)
NDOI	4000 cfs
Emmaton	2.78 umhos/cm