



A joint regional project of the City of Santa Fe and Santa Fe County to build a reliable and sustainable water supply.

Memorandum

Date: July 7, 2016
To: Buckman Direct Diversion Board
From: Matthew Sandoval, Interim Operations Superintendent *MS*
Subject: Update on BDD Operations for the Month of June 2016

ITEM:

1. This memorandum is to update the Buckman Direct Diversion (BDD) Board on BDD operations during the month of June 2016. The BDD diversions and deliveries have averaged, in Million Gallons Daily (MGD) as follows:
 - a. Raw water diversions: 3.02 MGD Average
 - b. Finished Drinking water deliveries through Booster Station 4A: 1.15 MGD Average
 - c. Finished Drinking water deliveries through Booster Station 5A: 0.868 MGD Average
 - d. Raw water delivery to Las Campanas at BS2A: 27.01 MG Total.
2. The BDD is providing approximately 27 percent of the water supply to the City and County for the month.
3. Please see the following pages from the Monthly report to the Office of the State Engineer (OSE) for accurate information up to June 15, 2016.
4. Please note all prior years are also included for reference.
5. The current Drought Update Summary is attached and reservoir storage status.



BACKGROUND AND SUMMARY:

Buckman Direct Diversion Monthly SJC and Native Diversions

Jun-16

In Acre-Feet

Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03638 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	378.873	50.648	0.066	328.159	328.159	0.000	3.029
FEB	326.352	66.609	10.811	248.933	248.933	0.000	2.303
MAR	587.746	123.812	4.622	459.312	459.312	0.000	4.304
APR	708.538	130.463	0.000	578.076	578.076	0.000	5.329
MAY	587.344	179.527	0.000	407.817	407.817	0.000	3.625
JUN	162.171	19.353	0.000	142.818	92.600	50.218	1.337
JUL	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AUG	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SEP	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OCT	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOV	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DEC	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	2,751.025	570.412	15.498	2,165.114	2,114.897	50.218	19.926

In Acre-Feet

Month	Native COUNTY	Native Las Campanas	SJC CITY	SJC Las Campanas	All Partners Diversions BDD
JAN	50.648	0.066	325.131	0.000	375.844
FEB	66.609	10.811	246.630	0.000	324.049
MAR	123.812	4.622	455.008	0.000	583.442
APR	130.463	0.000	572.747	0.000	703.210
MAY	179.527	0.000	404.192	0.000	583.719
JUN	19.353	0.000	91.733	49.748	160.834
JUL	0.000	0.000	0.000	0.000	0.000
AUG	0.000	0.000	0.000	0.000	0.000
SEP	0.000	0.000	0.000	0.000	0.000
OCT	0.000	0.000	0.000	0.000	0.000
NOV	0.000	0.000	0.000	0.000	0.000
DEC	0.000	0.000	0.000	0.000	0.000
TOTAL	570.412	15.498	2,095.441	49.748	2,731.099

Dec-15**In Acre-Feet**

Month	Total SJC + Native Rights	SP-4842 RG Native COUNTY	SD-03638 RG Native LAS CAMPANAS	SJC Call Total	SP-2847-E SJC Call CITY	SP-2847-N-A SJC Call LAS CAMPANAS	All Partners Conveyance Losses
JAN	312.687	66.122	0.000	246.565	246.565	0.000	2.400
FEB	328.880	49.882	6.848	272.150	272.150	0.000	2.358
MAR	358.212	169.870	8.149	180.193	180.193	0.000	1.602
APR	40.134	40.134	0.000	0.000	0.000	0.000	0.000
MAY	465.403	238.729	0.000	226.674	226.674	0.000	2.145
JUN	692.311	128.544	0.000	563.767	452.444	111.323	5.043
JUL	448.317	148.671	0.000	299.646	237.065	62.581	2.701
AUG	493.158	213.727	0.000	279.430	279.430	0.000	2.538
SEP	683.013	130.850	0.000	552.163	552.163	0.000	4.983
OCT	677.884	80.409	0.000	597.475	597.475	0.000	5.300
NOV	494.573	66.158	0.000	428.415	428.415	0.000	3.893
DEC	308.669	111.017	0.000	197.652	197.652	0.000	1.764
TOTAL	5,303.242	1,444.113	14.997	3,844.131	3,670.227	173.904	34.726

In Acre-Feet

Month	Native COUNTY	Native Las Campanas	SJC CITY	SJC Las Campanas	All Partners Diversions BDD
JAN	66.122	0.000	244.165	0.000	310.287
FEB	49.882	6.848	269.792	0.000	326.521
MAR	169.870	8.149	178.592	0.000	356.610
APR	40.134	0.000	0.000	0.000	40.134
MAY	238.729	0.000	224.529	0.000	463.258
JUN	128.544	0.000	448.397	110.327	687.268
JUL	148.671	0.000	234.928	62.017	445.616
AUG	213.727	0.000	276.893	0.000	490.620
SEP	130.850	0.000	547.180	0.000	678.030
OCT	80.409	0.000	592.175	0.000	672.585
NOV	66.158	0.000	424.522	0.000	490.681
DEC	111.017	0.000	195.888	0.000	306.905
TOTAL	1,444.113	14.997	3,637.061	172.344	5,268.515

Buckman Direct Diversion Monthly SJC and Native Diversions

Dec-14

Month	Total SJC Release (AF)	SJC Conveyance Losses (AF)	Total SJC Available at BDD (AF)	SJC Diversion, SP-2847-E (AF)	SJC Diversion, SP-2847-N-A (AF)	Total Native Rio Grande Diversion SP-4842 (AF)	Release of SJC in Elephant Butte (AF)	Total BDD Surface Diversion (all permits)	SJC from SP-2847-E used to offset Buckman Wells RG-20516 (AF)	SJC from SP-2847-N used to offset Buckman Wells RG-20516 (AF)
JAN	383.35	3.74	390.34	390.34	0.00	12.68	0	403.01	0	0
FEB	349.51	3.28	341.55	341.55	0.00	11.38	0	352.93	0	0
MAR	373.88	3.66	381.69	357.07	34.09	148.83	0	530.52	0	0
APR	178.75	1.70	176.78	92.46	84.47	227.22	0	404.00	0	0
MAY	491.46	4.61	480.35	389.13	91.22	374.86	0	855.21	0	0
JUN	427.50	3.96	412.65	295.07	117.58	292.84	0	705.49	0	0
JUL	425.22	4.14	431.96	399.51	32.46	72.32	0	504.28	0	0
AUG	496.68	4.60	479.66	479.66	0.00	96.07	0	575.74	0	0
SEP	552.71	5.40	562.83	562.83	0.00	84.85	0	647.68	0	0
OCT	381.93	3.63	378.30	378.30	0.00	142.46	0	520.76	0	0
NOV	441.14	4.09	426.17	426.17	0.00	11.59	0	437.76	0	0
DEC	423.99	4.13	430.74	430.74	0.00	19.56	0	450.30	0	0
TOTAL	4,926.12	46.93	4,893.03	4,542.84	359.82	1,494.66	0.00	6,387.69	0.00	0.00

Source of SJC releases in reporting month. Includes conveyance losses.

Month	Total Release (AF)	ABIQUIU		
		City of Santa Fe (AF)	Santa Fe County (AF)	Club at Las Campanas (AF)
JAN	383.35	383.35	0.00	0.00
FEB	349.51	349.51	0.00	0.00
MAR	373.88	346.37	0.00	27.37
APR	178.75	93.42	0.00	85.41
MAY	491.46	399.41	0.00	92.41
JUN	427.50	307.54	0.00	120.28
JUL	425.22	397.13	0.00	28.09
AUG	496.68	496.68	0.00	0.00
SEP	552.71	552.71	0.00	0.00
OCT	381.93	381.93	0.00	0.00
NOV	441.14	441.14	0.00	0.00
DEC	423.99	423.99	0.00	0.00
TOTAL	4,926.12	4,573.19	0.00	353.55

Buckman Direct Diversion Monthly SJC and Native Diversions

December 2013

Month	Total SJC Release (AF)	SJC Conveyance Losses (AF)	Total SJC Available at BDD (AF)	SJC Diversion, SP-2847-E (AF)	SJC Diversion, SP-2847-N-A (AF)	Total Native Rio Grande Diversion SP-4842 (AF)	Release of SJC in Elephant Butte (AF)	Total BDD Surface Diversion (all permits)	SJC from SP-2847-E used to offset Buckman Wells RG-20516 (AF)	SJC from SP-2847-N used to offset Buckman Wells RG-20516 (AF)
JAN	439.04	4.24	441.79	441.79	0	44.09	0	485.88	0	0
FEB	261.03	2.47	257.94	257.94	0	10.49	0	268.42	0	0
MAR	353.69	3.30	343.57	343.57	0	75.66	0	419.23	0	0
APR	680.73	6.34	661.33	661.33	0	89.47	0	750.80	0	0
MAY	1045.27	9.88	1030.46	1030.46	0	22.86	0	1053.32	0	0
JUN	817.91	7.85	818.00	734.56	83.44	260.03	0	1078.03	0	0
JUL	606.85	5.90	614.73	397.47	78.83	0.00	0	476.30	83.70	54.73
AUG	108.68	0.91	95.34	41.68	36.91	0.00	0	78.59	5.58	11.18
SEP	136.77	1.43	149.29	63.86	53.76	0.00	0	117.61	25.36	6.32
OCT	255.24	2.46	256.53	213.87	42.66	72.92	0	329.45	0	0
NOV	196.45	1.88	195.50	187.02	8.48	117.33	0	312.83	0	0
DEC	293.76	2.63	274.19	274.19	0.00	12.25	0	286.44	0	0
TOTAL	5195.42	49.29	5138.67	4647.73	304.07	705.09	0.00	5656.89	114.64	72.23

Source of SJC releases in reporting month. Includes conveyance losses.

Month	Total Release (AF)	ABIQUIU		
		City of Santa Fe (AF)	Santa Fe County (AF)	Club at Las Campanas (AF)
JAN	439.04	439.04	0	0
FEB	261.03	261.03	0	0
MAR	353.69	353.69	0	0
APR	680.73	680.73	0	0
MAY	1045.27	1045.27	0	0
JUN	817.91	729.30	0	88.60
JUL	606.85	473.27	0	133.58
AUG	108.68	65.21	0	43.47
SEP	136.77	83.87	0	52.90
OCT	255.24	211.15	0	44.09
NOV	196.45	186.31	0	10.15
DEC	293.76	293.76	0	0.00
TOTAL	5195.42	4822.62	0.00	372.79

Buckman Direct Diversion Monthly SJC and Native Diversions

December 2012

Month	Total SJC Release SP-2847-E (AF)	Conveyance Losses (AF)	Total SJC Available at BDD Diversion (AF)	Total SJC Diversion SP-2847-E (AF)	Total Native Rio Grande Diversion SP-4842 (AF)	Release of SJC in Elephant Butte (AF)	Total BDD Surface Diversion SP-2847-E plus SP-4842 (AF)	SJC used to offset Buckman Wells RG-20516 (AF)
JAN	448.09	4.06	447.00	411.56	5.02	0	416.59	35.44
FEB	210.29	1.97	216.94	208.13	32.21	0	240.34	8.81
MAR	335.75	2.94	323.61	312.85	59.21	0	372.06	10.76
APR	528.63	4.72	519.90	519.90	108.61	0	628.51	0.00
MAY	660.18	6.24	651.05	651.05	145.51	0	796.55	0.00
JUN	722.36	6.79	692.21	692.21	120.92	0	813.12	0.00
JUL	152.03	2.23	191.75	157.16	0.00	0	157.16	34.60
AUG	86.08	0.58	60.90	60.90	239.96	0	300.87	0.00
SEP	637.17	6.05	630.92	630.92	110.07	0	740.99	0.00
OCT	747.21	7.14	744.87	744.87	50.82	0	795.69	0.00
NOV	479.19	4.63	482.65	482.65	120.91	0	603.56	0.00
DEC	442.67	4.17	434.71	434.71	119.44	0	554.15	0.00
TOTALS	5449.67	51.53	5396.51	5306.90	1112.67	0.00	6419.57	89.61

Source of SJC Releases in reporting month. Includes conveyance losses.

Month	Total Release (AF)	HERON		EL VADO		ABIQUIU	
		CITY	COUNTY	CITY	COUNTY	CITY	COUNTY
JAN	448.09	0.00	0.00	0.00	0.00	448.09	0.00
FEB	210.29	0.00	0.00	0.00	0.00	210.29	0.00
MAR	335.75	0.00	0.00	0.00	0.00	335.75	0.00
APR	528.63	0.00	0.00	0.00	0.00	528.63	0.00
MAY	660.18	0.00	0.00	0.00	0.00	660.18	0.00
JUN	722.36	0.00	27.21	0.00	0.00	695.15	0.00
JUL	152.03	0.00	21.42	0.00	0.00	130.61	0.00
AUG	86.08	0.00	0.00	0.00	0.00	86.08	0.00
SEP	637.17	0.00	0.00	0.00	0.00	637.17	0.00
OCT	747.21	0.00	0.00	0.00	0.00	747.21	0.00
NOV	479.19	0.00	0.00	0.00	0.00	479.19	0.00
DEC	442.67	0.00	0.00	0.00	0.00	442.67	0.00
TOTALS	5449.67	0.00	48.63	0.00	0.00	5401.04	0.00

Note: Grey fields indicate revisions to previous monthly report

Drought, Monsoon/El Nino, and ESA Update

Drought conditions have eased this past year due to the reappearance of a strong El Nino, although February – June has been relatively dry. NOAA has recently issued an **“Alert System Status” (June 20, 2016) which indicates that ENSO (El Nino) neutral conditions are now present with increasing likelihood for La Nina conditions (hot/dry) to develop by the summer, with about a 75% chance of La Nina during fall and winter 2016/17.** The dynamic model average indicates La Nina by June-July-August, while the statistical models predict a transition to La Nina around September-October-November. Dry conditions in 2016/17 could present significant challenges to all water purveyors, water utilities, and irrigators if there is not significant filling and carry-over storage in regional reservoirs from the current run-off season and/or monsoon rains. Regional reservoir levels on the upper Santa Fe, Rio Grande, and Chama Rivers are still low but rising due to warmer temperatures and resultant snowmelt runoff. Preliminary estimates are for an approximate 90% delivery of full firm-yield of San Juan-Chama Project water. There are no water-related Endangered Species Act (ESA) updates. Updates on ESA issues will be made as needed. Rio Grande Compact Article VII storage restrictions went back into effect 4/22/16, which means the City will not be allowed to impound “native” runoff into Nichols and McClure Reservoirs above the pre-Compact pool of 1,061 AF (unless an exchange for water is made with the NMISC). Updates to this condition will be made as needed.

Current City of Santa Fe 2015/2016 SJCP Reservoir Storage:

Heron:

6,392 AF (2015 SJCP water must be vacated by September 31, 2016 pursuant to a BoR waiver).

El Vado:

0 AF

Abiquiu:

9,047 AF SJCP carry-over from previous years, no time limit to vacate due to storage agreement with ABCWUA

TOTAL:

15,439 AF