

Planned & Actual Water Production By Source (Acre-Feet)
Water Year: 2016

Report Month:

September

	Cachuma Project			Gibraltar Reservoir		Devil's Canyon	Mission Tunnel		Groundwater Production					State Water		Net Overlap Water	Groundwater Recharge		Blend Water		Potable Total		Recycled Water		El Estero Process Usage		Water System Total	
	Plan	Act.	Balance	Plan	Act.	Actual	Plan	Act.	Plan	SU #1	Foot-hill Basin	Total Actual	SU#3 Actual	Plan	Act.	Act.	Injec.	Total Actual	Plan	Act.	Plan	Act.	Plan	Act.	Plan	Act.	Plan	Act.
2015 Oct	751	639	3,732	0	0	0	52	45	202	214	48	262	15	0	0	-16	0	0	82	49	922	881	67	53	15	13	1,005	947
Nov	537	494	3,245	0	0	0	63	41	202	175	47	222	1	0	20	-15	0	0	30	3	771	759	43	72	15	15	830	846
Dec	458	485	2,798	0	0	0	64	42	202	168	47	215	0	0	0	-18	0	0	0	2	724	722	37	43	15	16	776	781
2016 Jan	0	55	2,764	0	0	0	65	44	202	114	46	160	0	367	367	-11	0	0	0	7	634	609	19	25	15	13	667	647
Feb	14	61	2,679	0	0	0	60	50	202	146	21	167	0	367	366	-14	0	0	0	2	643	628	20	31	15	15	678	675
Mar	103	142	2,531	0	0	0	52	58	268	101	10	111	0	367	367	-13	0	0	0	1	790	664	19	23	15	17	824	704
Apr	174	0	2,548	0	0	0	50	55	268	179	38	217	4	367	504	-34	0	0	0	0	859	742	48	45	15	11	922	797
May	289	0	2,548	0	0	0	45	50	268	192	91	283	0	367	492	5	0	0	0	0	969	829	76	66	15	14	1,060	910
Jun	278	45	2,532	0	0	0	44	48	268	204	88	293	0	367	463	-14	0	0	0	0	957	835	98	74	15	16	1,070	925
Jul	336	3	2,486	0	0	0	41	50	268	236	86	322	0	367	534	-22	0	0	0	0	1,011	888	119	104	15	16	1,145	1,008
Aug	389	571	1,915	0	0	0	39	48	268	196	84	279	0	367	0	-8	0	0	0	0	1,063	890	113	108	15	17	1,191	1,014
Sep	316	498	1,417	0	0	0	41	43	268	237	77	314	2	367	0	-10	0	0	0	0	991	845	114	96	15	17	1,120	958
Year to Date	3,646	2,993	1,417	0	0	0	615	574	2,882	2,162	684	2,845	22	3,303	3,113	-169	0	0	112	64	10,334	9,293	772	741	15	178	11,286	10,212
Annual Total	3,646			0			615		2,882					3,303							10,334		772		180		11,286	
Notes			*4										*7					*2	*6	*2	*3			*5				

A B C D E F G H I J K L N M O P Q R -S T -U V W X Y Z AA AB AC

- *1 Included in Gibraltar measurement
- *2 Groundwater recharge & Blend Water not part of potable production
- *3 Based on 2013 total system production of 14,765 AF with 25% conservation target due to drought.
- *4 Cachuma Balance: Net of entitlement, carryover, spills, & transfers, per COMB
- *5 Effective 2011 WY, Net Production to Distribution System (Meter Distr. Flow - EEWTP process water). Effective Jan. 2015 recycled water production also includes Valle Verde Well production.
- *6 Planned blend water based on expected filter production
- *7 Groundwater from Storage Unit #3 is non-potable water serving recycled water demands.

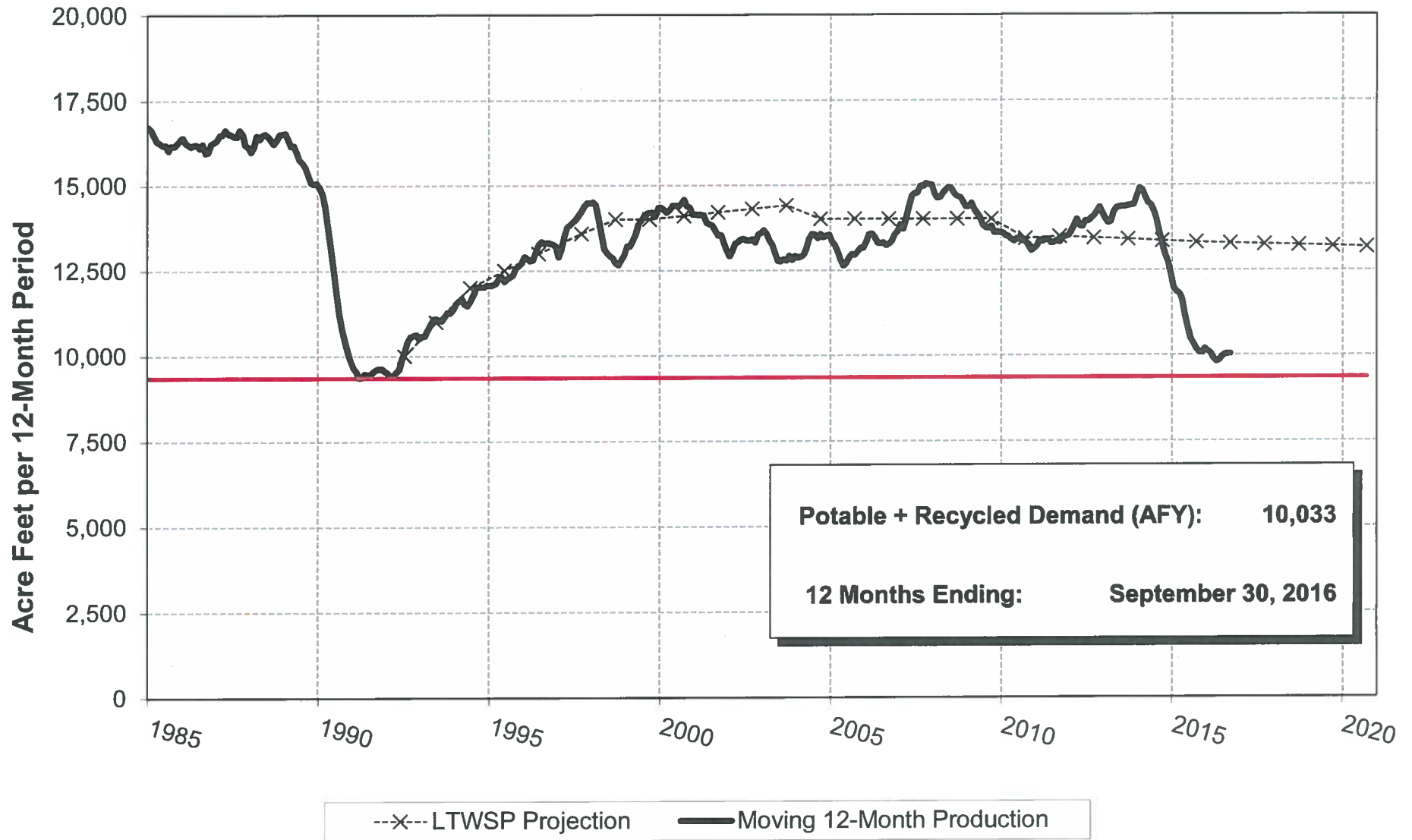
YTD Percent of Target:	89.9%	95.9%			90.5%
	Potable	Recycled			System

Potable System V = C+F+G+I+N+P+Q-S-U

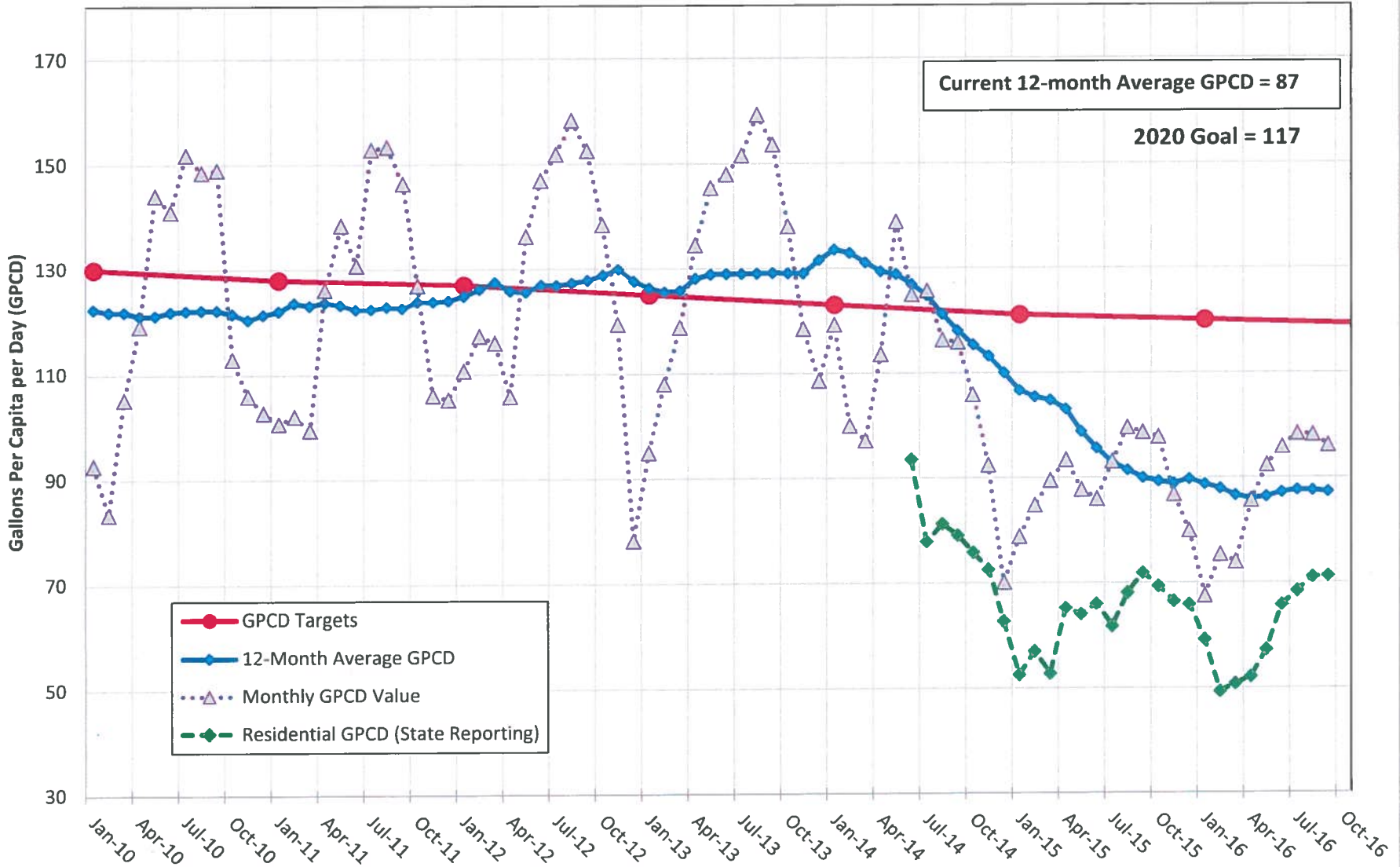
 = Preliminary Data or Not Yet Available

City of Santa Barbara Water Demand

Moving 12-Month Production to Serve Potable + Recycled Systems



City of Santa Barbara Water Use in Gallons Per Capita per Day (GPCD) September 30, 2016

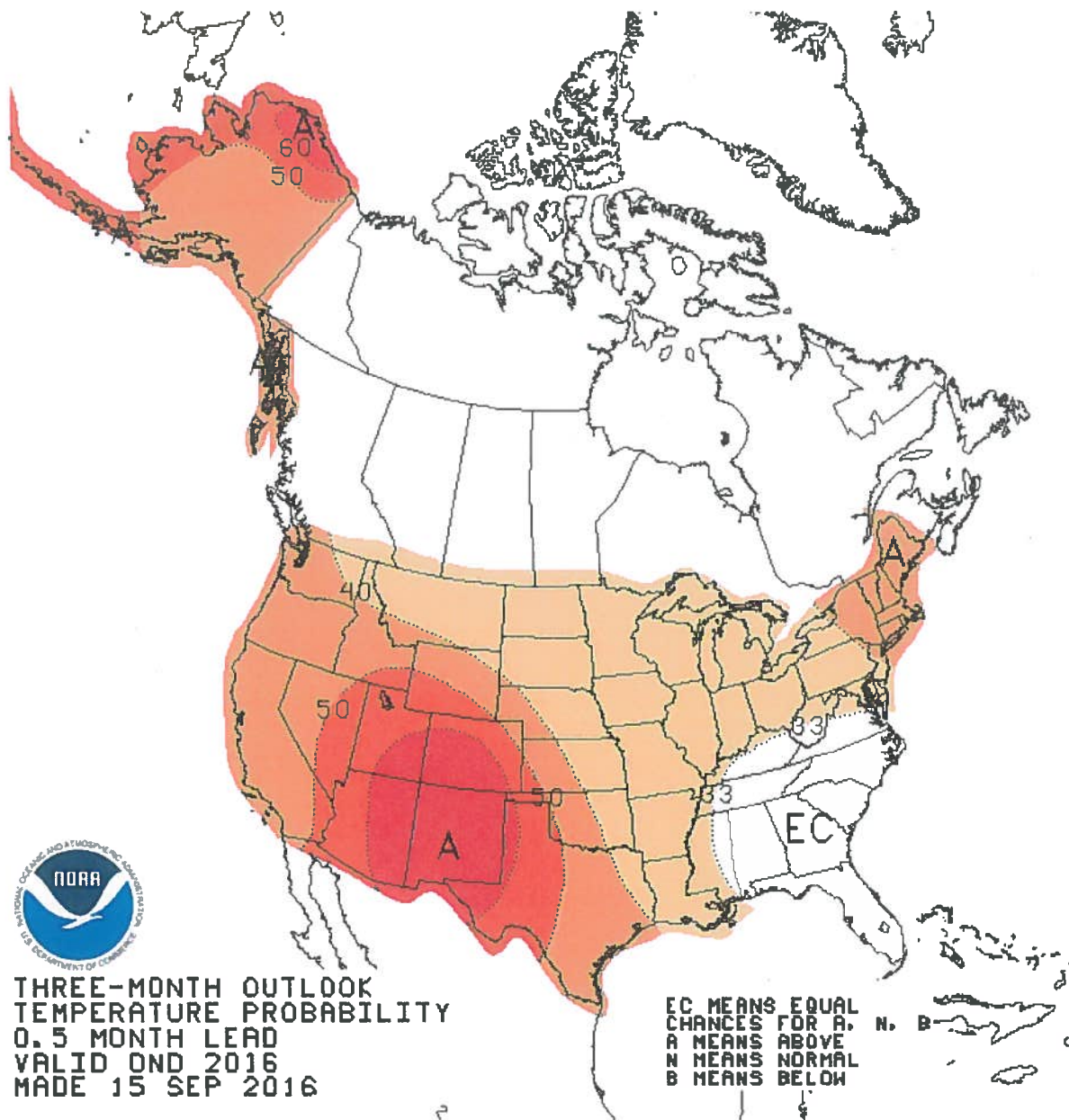


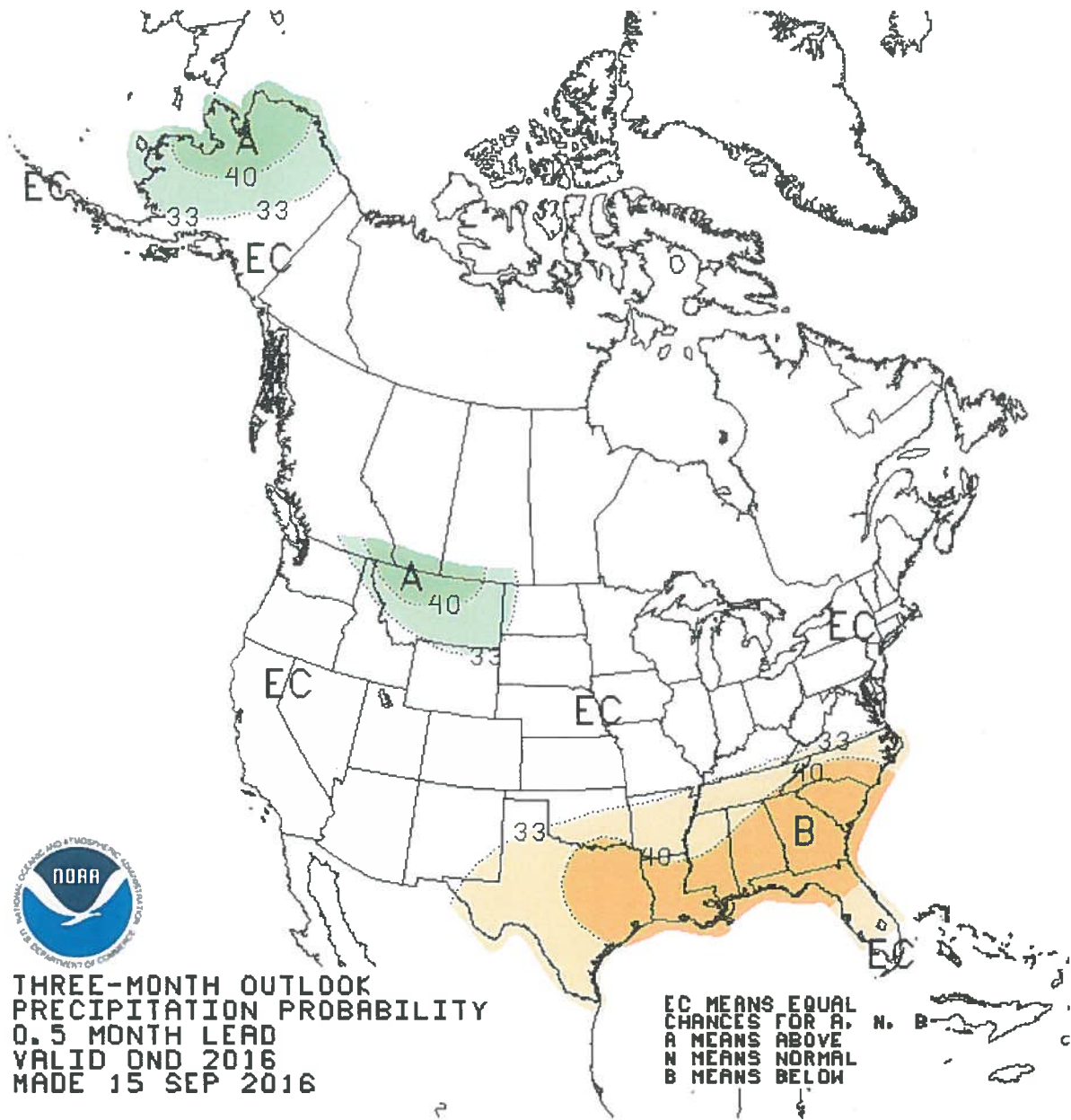
NOTE: The GPCD values above exclude blend water for recycled water production.

GIBRALTAR RAINFALL DATA

Gauge Location: Gibraltar Dam

Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
1965-66	0.00	17.00	9.36	2.24	0.86	0.24	0.00	0.00	0.00	0.00	0.00	0.00	29.70
1966-67	0.04	7.48	9.38	8.22	0.00	6.86	7.15	0.06	0.00	0.00	0.00	0.12	39.31
1967-68	0.00	5.11	1.51	1.84	1.30	3.50	1.67	0.00	0.00	0.00	0.00	0.00	14.93
1968-69	1.19	1.07	2.22	31.18	18.23	1.67	2.81	0.00	0.00	0.00	0.00	0.00	58.37
1969-70	0.00	2.59	0.31	4.34	3.57	6.58	0.00	0.00	0.00	0.00	0.00	0.00	17.39
1970-71	0.08	9.38	8.87	1.10	1.64	0.00	0.94	0.47	0.00	0.00	0.00	0.00	22.48
1971-72	0.47	1.09	13.20	0.19	0.32	0.00	0.24	0.11	0.00	0.00	0.00	0.00	15.62
1972-73	0.55	9.10	1.06	8.38	14.89	4.27	0.00	0.00	0.00	0.00	0.00	0.00	38.25
1973-74	0.70	3.19	2.83	12.26	0.05	5.35	0.85	0.02	0.00	0.00	0.00	0.00	25.25
1974-75	0.89	0.06	9.53	0.35	5.62	8.96	2.13	0.08	0.00	0.00	0.01	0.00	27.63
1975-76	0.40	0.44	0.22	0.00	10.93	2.02	1.08	0.00	0.00	0.00	0.05	4.28	19.42
1976-77	0.25	0.44	0.83	5.42	0.26	2.89	0.00	5.19	0.00	0.00	0.38	0.00	15.66
1977-78	0.00	0.14	9.23	1.91	14.42	18.28	4.27	0.00	0.00	0.00	0.00	1.63	49.88
1978-79	0.00	2.76	2.51	8.49	6.08	7.26	0.00	0.00	0.00	0.00	0.00	1.01	28.11
1979-80	0.58	0.96	2.02	8.13	17.69	4.39	1.10	0.24	0.00	0.00	0.00	0.00	35.11
1980-81	0.00	0.00	1.74	6.17	2.99	9.98	1.05	0.00	0.00	0.00	0.00	0.00	21.93
1981-82	0.38	2.57	0.47	6.14	0.65	7.55	5.30	0.05	0.00	0.00	0.00	1.70	24.81
1982-83	1.30	7.87	5.61	15.07	8.47	15.11	8.86	0.00	0.00	0.00	0.79	0.59	63.67
1983-84	5.57	4.18	6.75	0.25	0.08	0.95	0.24	0.00	0.00	0.00	0.07	0.28	18.37
1984-85	0.49	3.52	7.94	0.96	1.24	1.92	0.13	0.00	0.00	0.00	0.00	0.05	16.25
1985-86	0.42	7.14	1.11	3.24	10.61	6.77	1.51	0.00	0.00	0.00	0.00	0.84	31.64
1986-87	0.00	0.96	0.42	2.71	2.04	4.58	0.00	0.00	0.00	0.00	0.00	0.00	10.71
1987-88	1.60	1.52	4.67	5.19	4.12	2.60	5.14	0.06	0.05	0.00	0.00	0.00	24.95
1988-89	0.00	1.04	5.73	0.29	5.38	1.43	0.13	0.46	0.00	0.00	0.00	0.25	14.71
1989-90	0.79	0.58	0.00	5.61	3.33	0.27	0.24	0.78	0.00	0.00	0.00	0.20	11.80
1990-91	0.00	0.26	0.18	1.71	4.88	23.12	0.03	0.00	0.06	0.38	0.00	0.00	30.62
1991-92	0.33	0.13	7.54	4.72	18.82	7.28	0.04	0.16	0.00	0.07	0.00	0.00	39.09
1992-93	1.78	0.00	8.17	14.30	16.43	8.12	0.00	0.34	0.47	0.00	0.00	0.00	49.61
1993-94	0.19	1.51	2.42	1.74	9.76	2.72	0.65	0.51	0.00	0.00	0.00	0.09	19.59
1994-95	2.19	1.29	1.54	33.26	3.39	15.30	0.33	1.64	0.02	0.00	0.00	0.00	58.96
1995-96	0.00	0.18	2.85	2.93	10.30	2.21	1.00	0.39	0.00	0.00	0.00	0.00	19.86
1996-97	7.05	1.89	7.81	7.45	0.13	0.00	0.00	0.00	0.00	0.04	0.00	0.09	24.46
1997-98	0.00	5.48	10.17	6.64	34.63	4.47	4.43	6.62	0.03	0.00	0.00	0.55	73.02
1998-99	0.13	1.30	0.79	4.25	2.24	4.55	2.97	0.00	0.13	0.24	0.00	0.03	16.63
1999-00	0.00	1.65	0.00	2.25	16.70	3.73	5.36	0.03	0.19	0.00	0.00	0.00	29.91
2000-01	4.04	0.00	0.15	11.24	8.85	13.59	2.96	0.01	0.00	0.01	0.00	0.00	40.85
2001-02	0.65	4.48	2.89	1.03	0.33	0.84	0.08	0.09	0.00	0.00	0.00	0.06	10.45
2002-03	0.00	4.61	6.45	0.12	5.26	4.43	4.97	2.82	0.00	0.06	0.00	0.00	28.72
2003-04	0.00	2.29	3.10	0.42	8.50	0.43	0.00	0.00	0.00	0.00	0.00	0.00	14.74
2004-05	8.39	0.46	17.37	21.54	15.65	3.58	1.14	1.46	0.00	0.00	0.00	0.14	69.73
2005-06	0.60	1.43	0.68	9.67	5.41	5.22	8.15	1.29	0.00	0.00	0.10	0.00	32.55
2006-07	0.37	0.23	1.63	2.62	3.40	0.16	0.81	0.00	0.00	0.00	0.02	0.85	10.09
2007-08	0.38	0.10	4.09	23.84	3.11	0.00	0.15	0.27	0.00	0.00	0.10	0.00	32.04
2008-09	0.06	2.22	4.07	1.00	7.95	0.90	0.35	0.01	0.09	0.00	0.00	0.00	16.65
2009-10	5.81	0.00	5.19	11.89	6.90	0.69	4.44	0.08	0.00	0.00	0.00	0.00	35.00
2010-11	2.03	2.04	14.04	2.06	5.12	14.95	0.00	1.18	0.51	0.00	0.00	0.00	41.93
2011-12	0.74	3.00	0.36	1.22	0.47	5.89	3.08	0.00	0.00	0.00	0.00	0.04	14.80
2012-13	0.34	2.60	2.68	1.39	0.24	1.02	0.00	0.61	0.00	0.00	0.00	0.00	8.88
2013-14	0.08	1.21	0.29	0.00	5.07	5.16	0.66	0.57	0.00	0.00	0.00	0.00	13.04
2014-15	0.00	1.21	7.88	0.87	0.73	0.60	0.36	0.62	0.98	0.00	0.00	0.16	13.41
2015-16	0.23	0.36	0.71	4.66	2.66	4.22	0.27	0.13	0.00	0.00	0.00	0.00	13.24
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Total
50 yr avg	1.02	2.26	4.22	6.21	6.62	5.13	1.74	0.53	0.05	0.02	0.03	0.26	28.41
50 yr median	0.38	1.37	2.76	3.75	4.98	4.25	0.74	0.06	0.00	0.00	0.00	0.00	24.88
Average YTD:	1.02	3.28	7.51	13.71	20.33	25.46	27.20	27.73	27.78	27.79	27.82	28.08	
Actual YTD:	0.23	0.59	1.30	5.96	8.62	12.84	13.11	13.24	13.24	13.24	13.24	13.24	

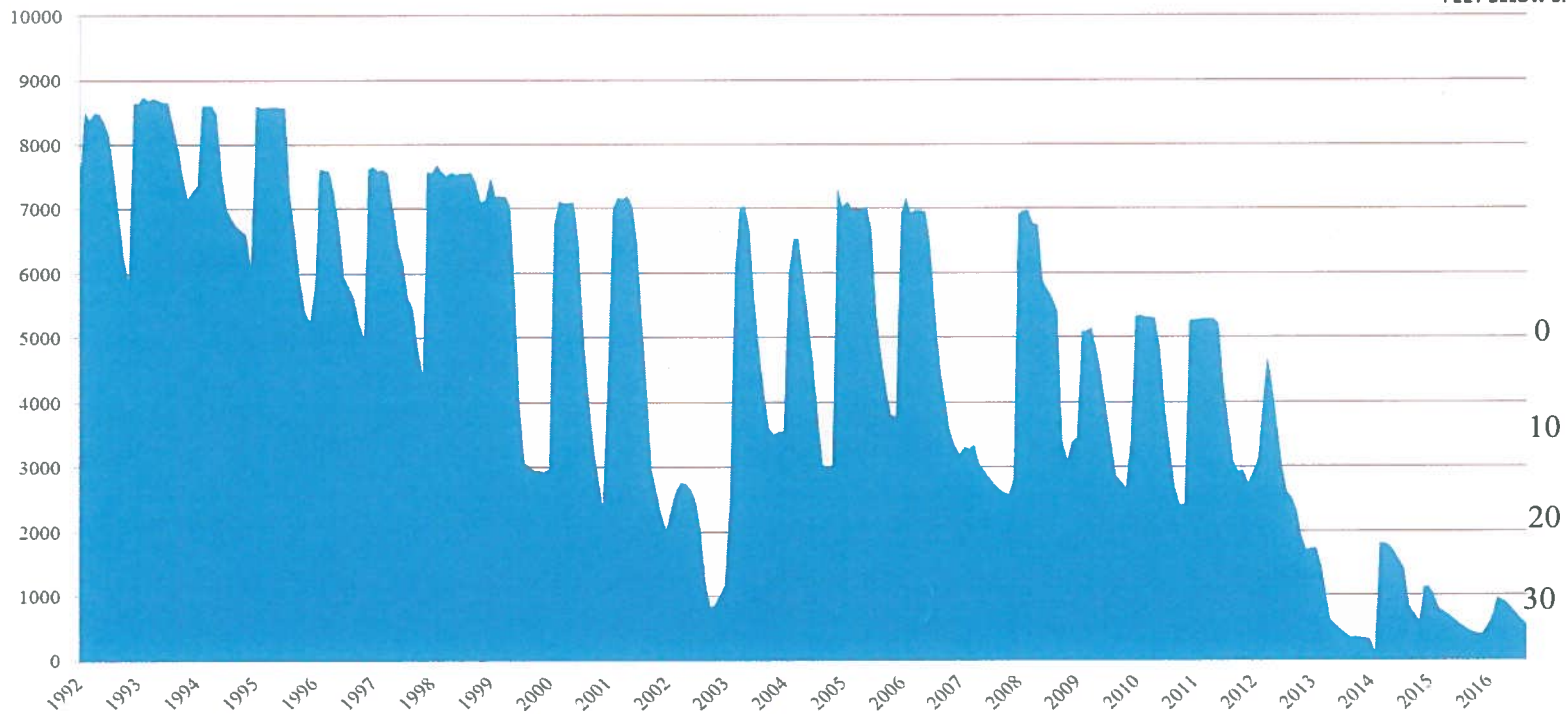




GIBRALTAR RESERVOIR HYDROGRAPH WATER IN STORAGE and FEET BELOW SPILL

STORAGE

FEET BELOW SPILL



<u>ELEV.</u>	<u>STATUS</u>	<u>CAPACITY (AF)</u>
1,400.00	Reservoir is Full	5,246
1,376.48	First 16" Intake Valve	1,156
1,361.82	Second 16" Intake Valve	0
1,300.00	Reservoir is Empty	0

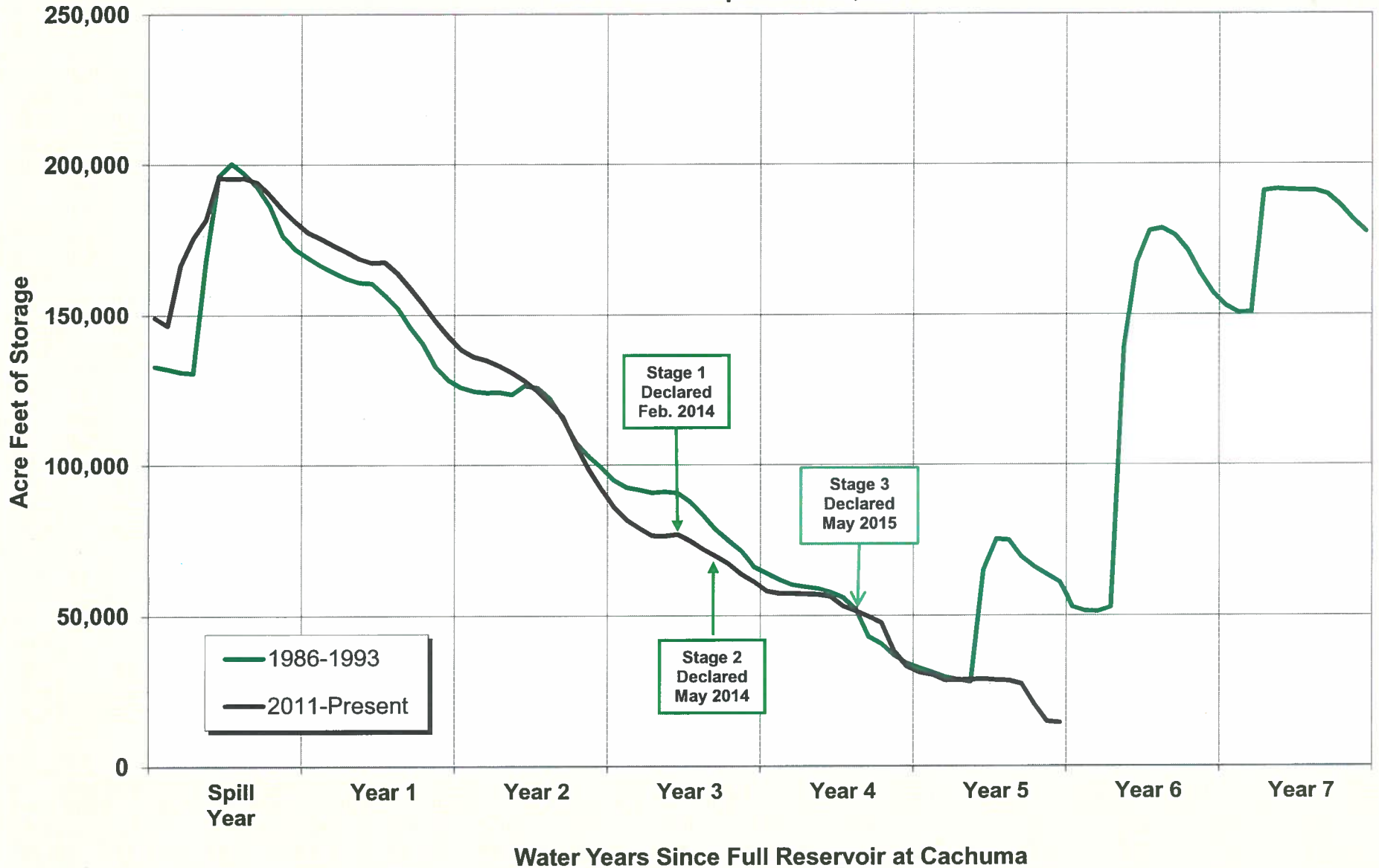
January 1993 - February 1996... Reflects use of M,N&S 1992 Gib. Area/Capacity Survey @ 8,618 AF
 February 1996 - October 1998... Reflects use of M,N&S 1996 Gib. Area/Capacity Survey @ 7,631 AF
 October 1998 - December 2001... Reflects use of M,N&S 1998 Gib. Area/Capacity Survey @ 7,261 AF
 January 2002 - December 2004... Reflects use of M,N&S 2001 Gib. Area/Capacity Survey @ 7,096 AF
 January 2005 - November 2007... Reflects use of M,N&S 2004 Gib. Area/Capacity Survey @ 7,085 AF
 December 2007 - July 2008... Reflects use of M,N&S 2007 Gib. Area/Capacity Survey @ 6,784 AF
 August 2008 - May 2010... Reflects use of MN&S 2008 Gib. Area/Capacity Survey @ 5,303 AF
 June 2010 - September 2013... Reflects use of MN&S 2010 Gib. Area/Capacity Survey @ 5,251 AF
 October 2013 - Present... Reflects use of MN&S 2013 Gib. Area/Capacity Survey @ 5,246 AF

TIME & DATE OF SPILL SINCE 1989

4:30 Am	March 19, 1991
9:09 Am	February 7, 1992
10:30 Am	January 7, 1993
6:45 Am	February 18, 1994
1:37 Pm	January 9, 1995
2:10 Pm	February 20, 1996
6:00 Am	December 22, 1996
3:00 Am	January 2, 1997
1:30 Pm	January 15, 1997
9:40 Am	December 6, 1997
4:30 Pm	February 6, 1999
8:00 Am	February 24, 2000
1:00 Am	February 15, 2001
1:30 Pm	April 14, 2003
5:00 Pm	December 29, 2004
8:30 Pm	January 2, 2006
1:00 Am	January 5, 2008
7:00 Pm	February 16, 2009
12:00 Noon	January 20, 2010
07:00 Am	December 20, 2010

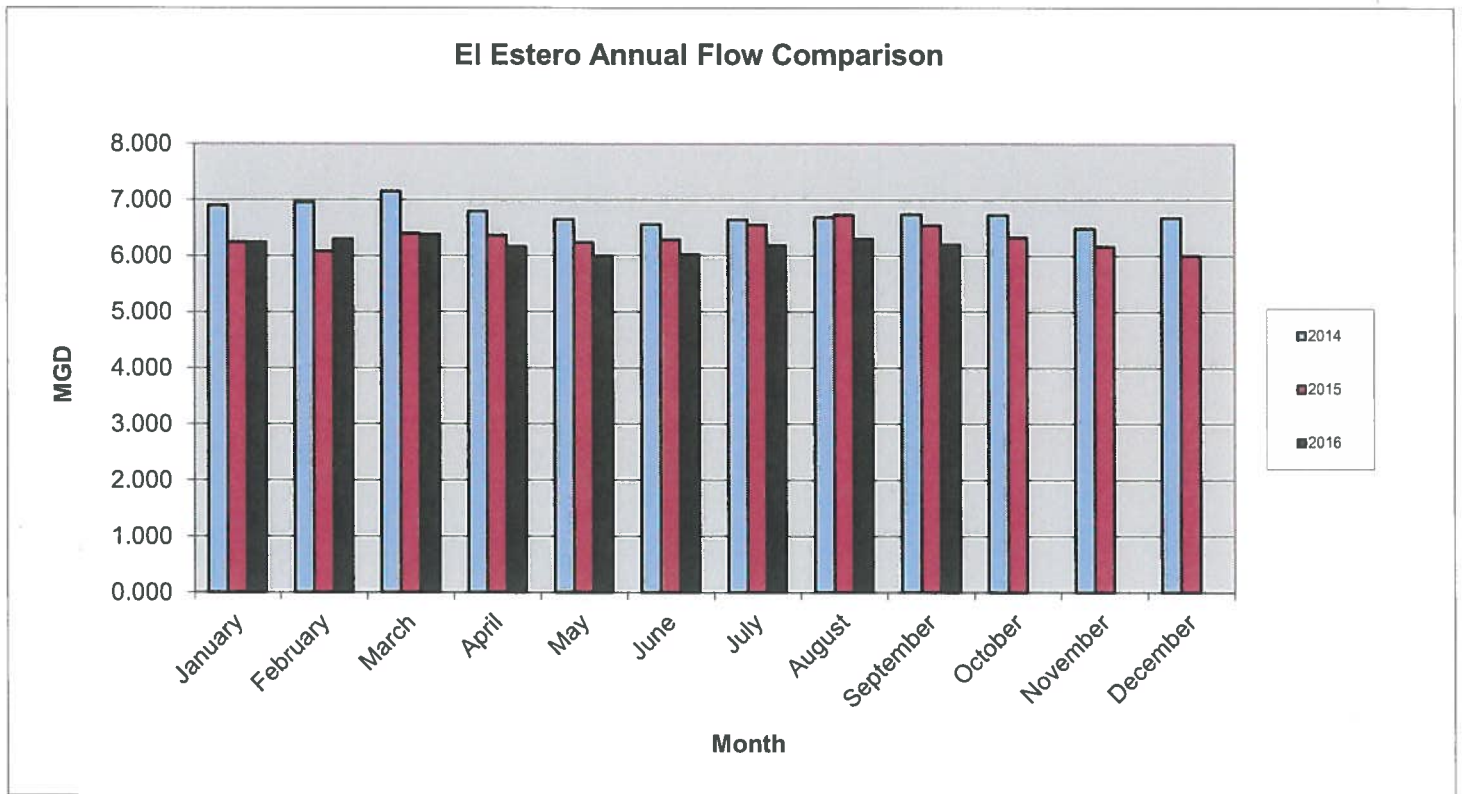
Cachuma Storage: Current Drought & 1986-93 Period

Data Shown September 30, 2016



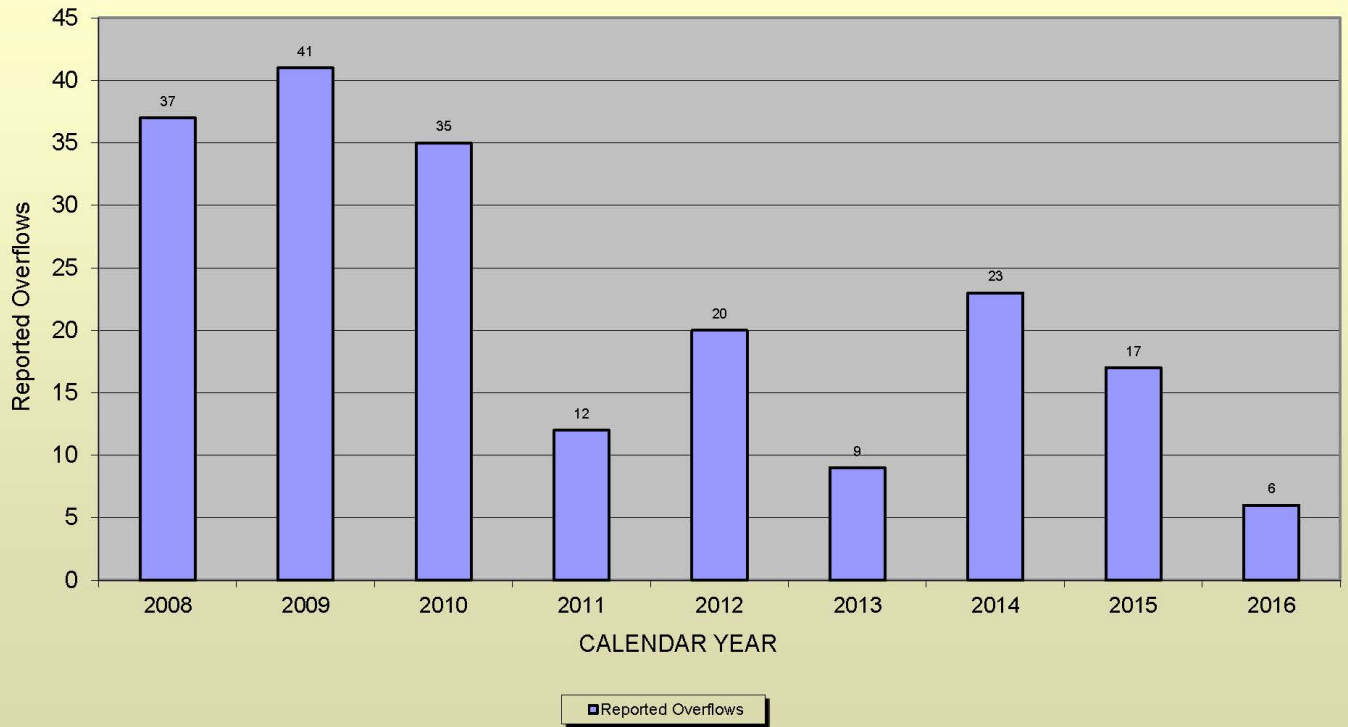
EL ESTERO INFLUENT FLOW COMPARISON

	2014	2015	2016
January	6.898	6.244	6.245
February	6.956	6.081	6.298
March	7.145	6.401	6.380
April	6.795	6.367	6.164
May	6.650	6.237	5.999
June	6.558	6.282	6.020
July	6.644	6.556	6.189
August	6.683	6.731	6.301
September	6.739	6.541	6.205
October	6.727	6.322	
November	6.483	6.162	
December	6.681	5.999	

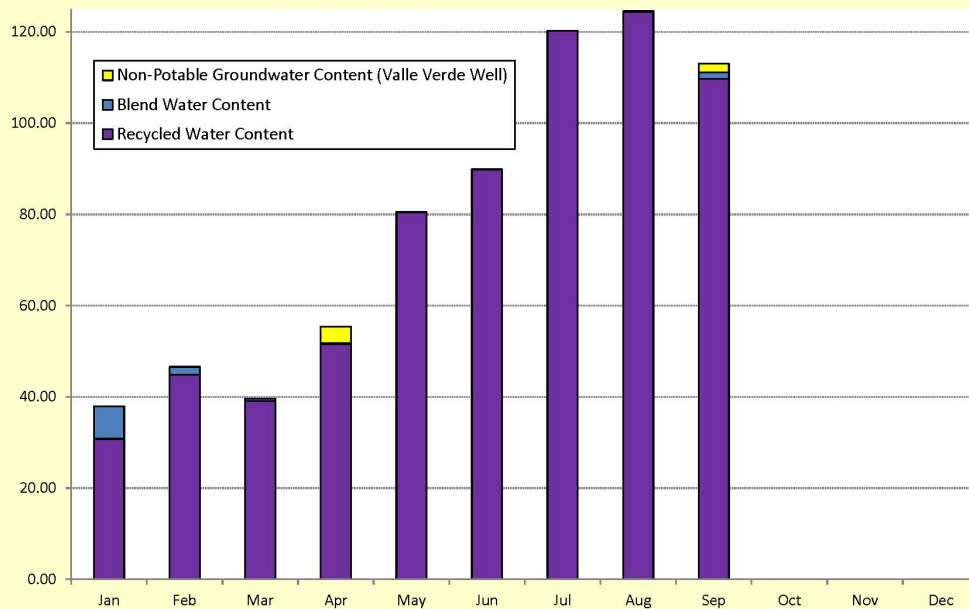


Annual Flow is Calculated Adjusted Influent Flow

CITY OF SANTA BARBARA
Graph of Annual SSO's (Category 1, 2, and 3) - Public Spills only
(as of 10/17/2016)




Recycled Production by Source of Supply for 2016 (Acre-Feet)





City of Santa Barbara
Public Works Department

Interoffice Memorandum

DATE: October 3, 2016
TO: Joshua Haggmark, Water Resources Manager
FROM: Bill Ferguson, Project Manager 
SUBJECT: Warren Act Contract for USRYOA Pass Through Operations - Status

Following is the status of implementation of Pass Through Operations under the 1989 Upper Santa Ynez River Operations Agreement ("Pass Through Agreement"):

Reclamation's Environmental Assessment and Finding of No Significant Impact

Staff has submitted comments on the proposed Final EA, as requested by Reclamation.

Warren Act Contract

Staff has received and is reviewing Reclamation's calculation of proposed charges for storage and conveyance of the City's Pass Through water.

cc: Kelley Dyer, Water Resources Supervisor
Dakota Corey, Water Resources Specialist

BF/