

Water Report

March 7, 2017

- Weather Forecast
- Status of Watershed
- CCSF Reservoir Storage and Operations
- Don Pedro Reservoir Storage and Operations



WEEKLY WATERSHED STATUS REPORT

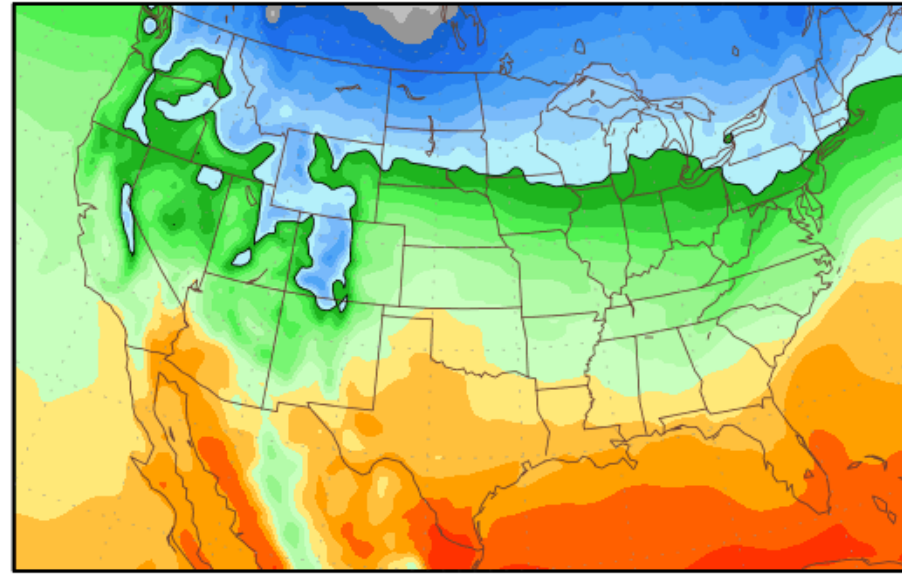
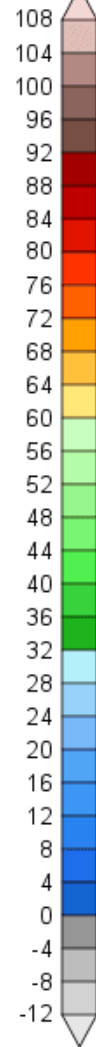
3/5/2017

	This Week	Week Ago	Last Year
	-	-	-
Don Pedro Reservoir Elevation:	824.4	828.8	724.1
Don Pedro Reservoir Storage:	1,958,457	2,014,531	970,972
Storage in Acre Feet:			
Don Pedro (TID Net)	1,157,803	1,194,822	490,804
Don Pedro (MID Net)	491,654	510,709	171,168
Turlock Lake	21,635	23,960	6,605
Hetch Hetchy Reservoir	303,106	314,318	253,831
Cherry Valley Reservoir	232,573	240,252	129,668
Lake Eleanor Reservoir	19,961	22,890	3,972

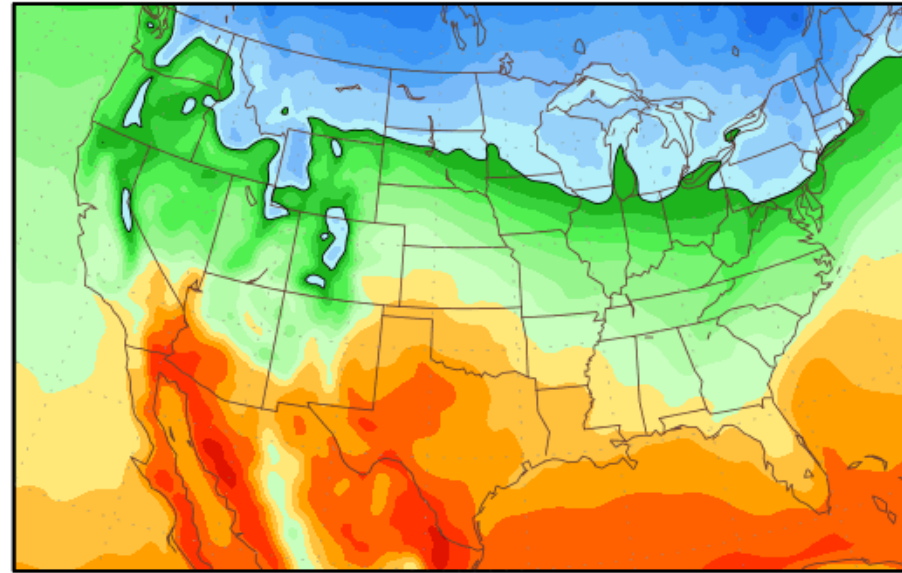
Temperature Forecasts

Mean Surface Temperature (°F)
during the period:

Mon, 06 MAR 2017 at 00Z
-to-
Tue, 14 MAR 2017 at 00Z

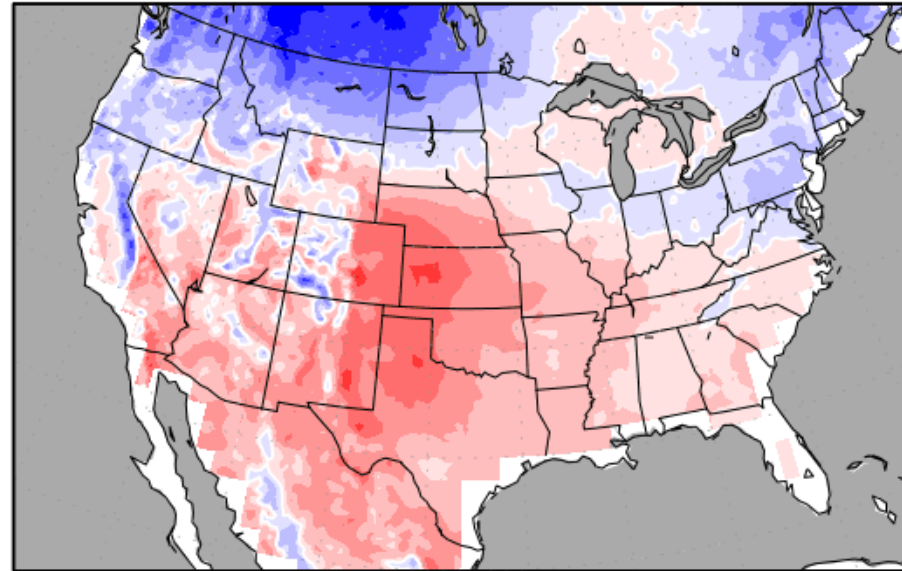
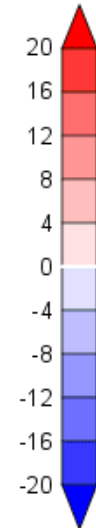


Tue, 14 MAR 2017 at 00Z
-to-
Wed, 22 MAR 2017 at 00Z



Temperature Anomaly
during the first period:

Mon, 06 MAR 2017 at 00Z
-to-
Tue, 14 MAR 2017 at 00Z

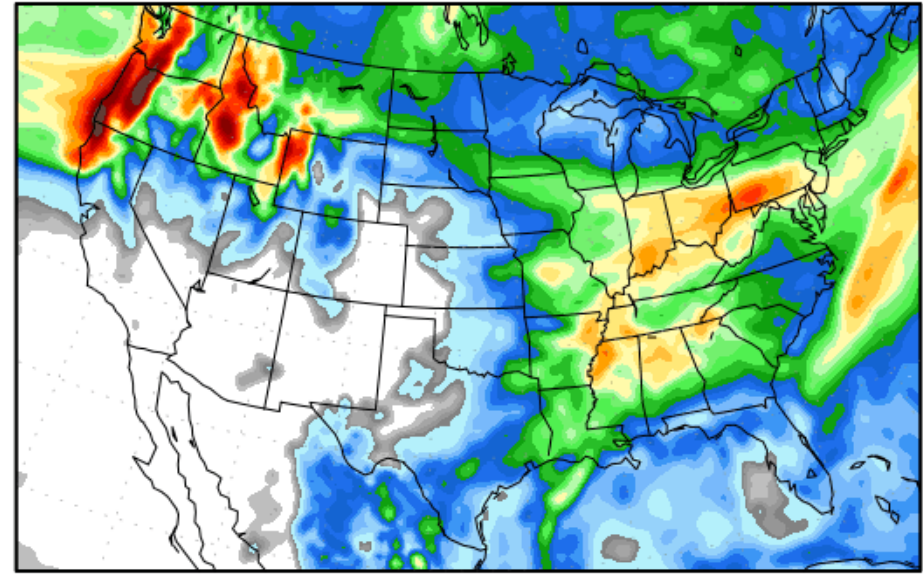
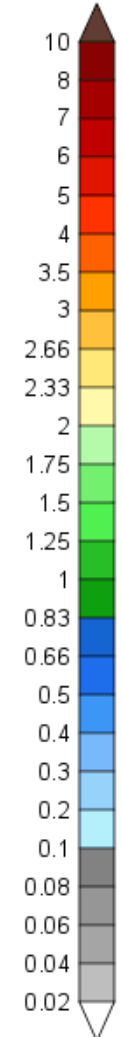


Temperature forecasts from the National Centers for Environmental Prediction.
Normal Temperature derived from CRU monthly climatology for 1901-2000
Forecast Initialization Time: 00Z06MAR2017

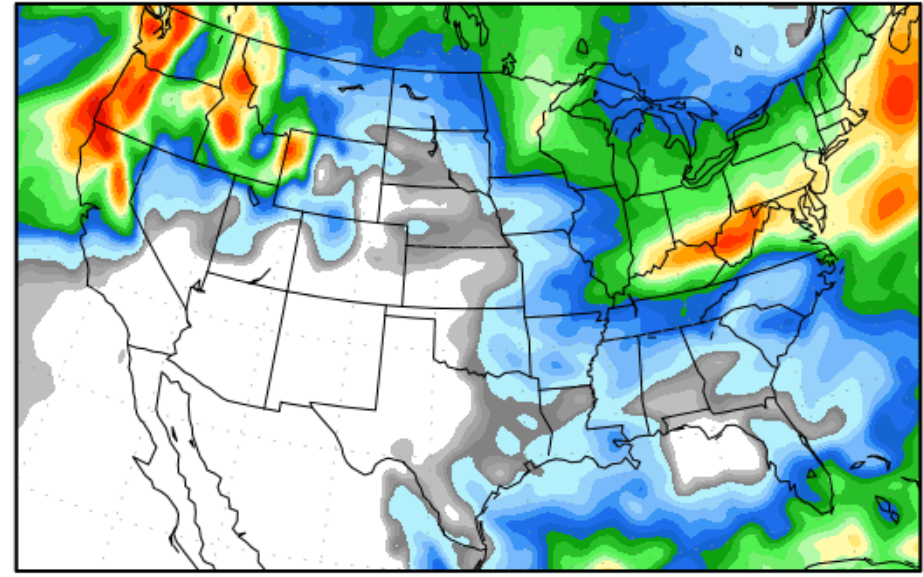
Precipitation Forecasts

Precipitation (in)
during the period:

Mon, 06 MAR 2017 at 00Z
-to-
Tue, 14 MAR 2017 at 00Z

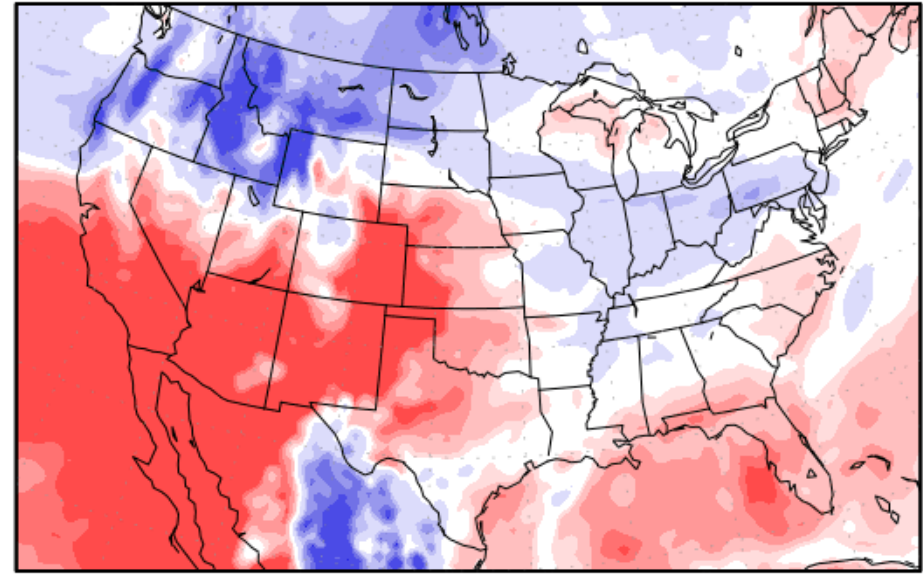
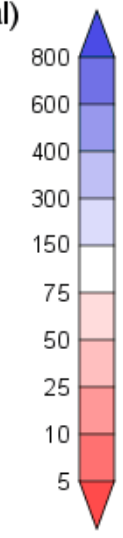


Tue, 14 MAR 2017 at 00Z
-to-
Wed, 22 MAR 2017 at 00Z

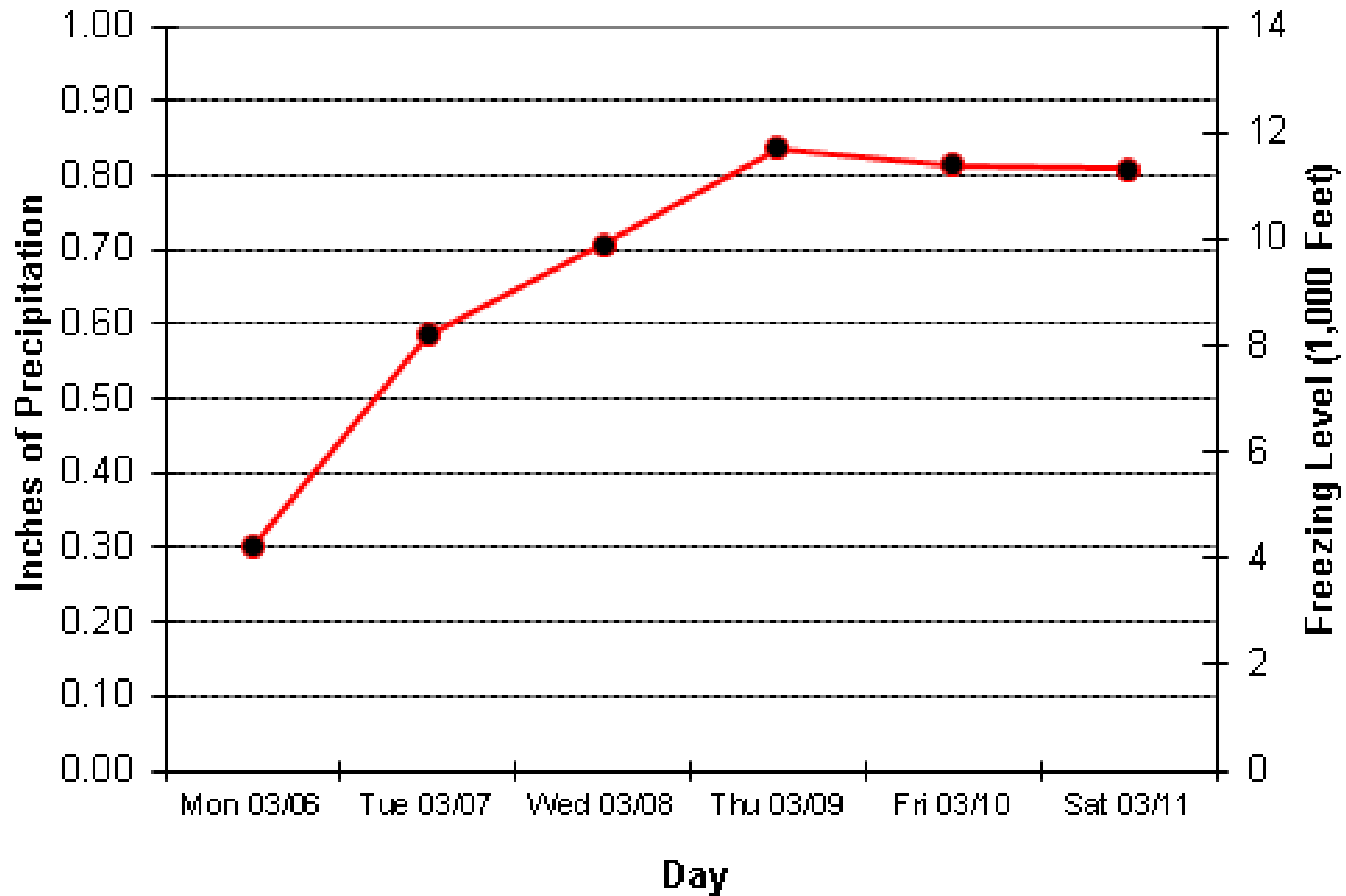


Precipitation (% of normal)
during the first period:

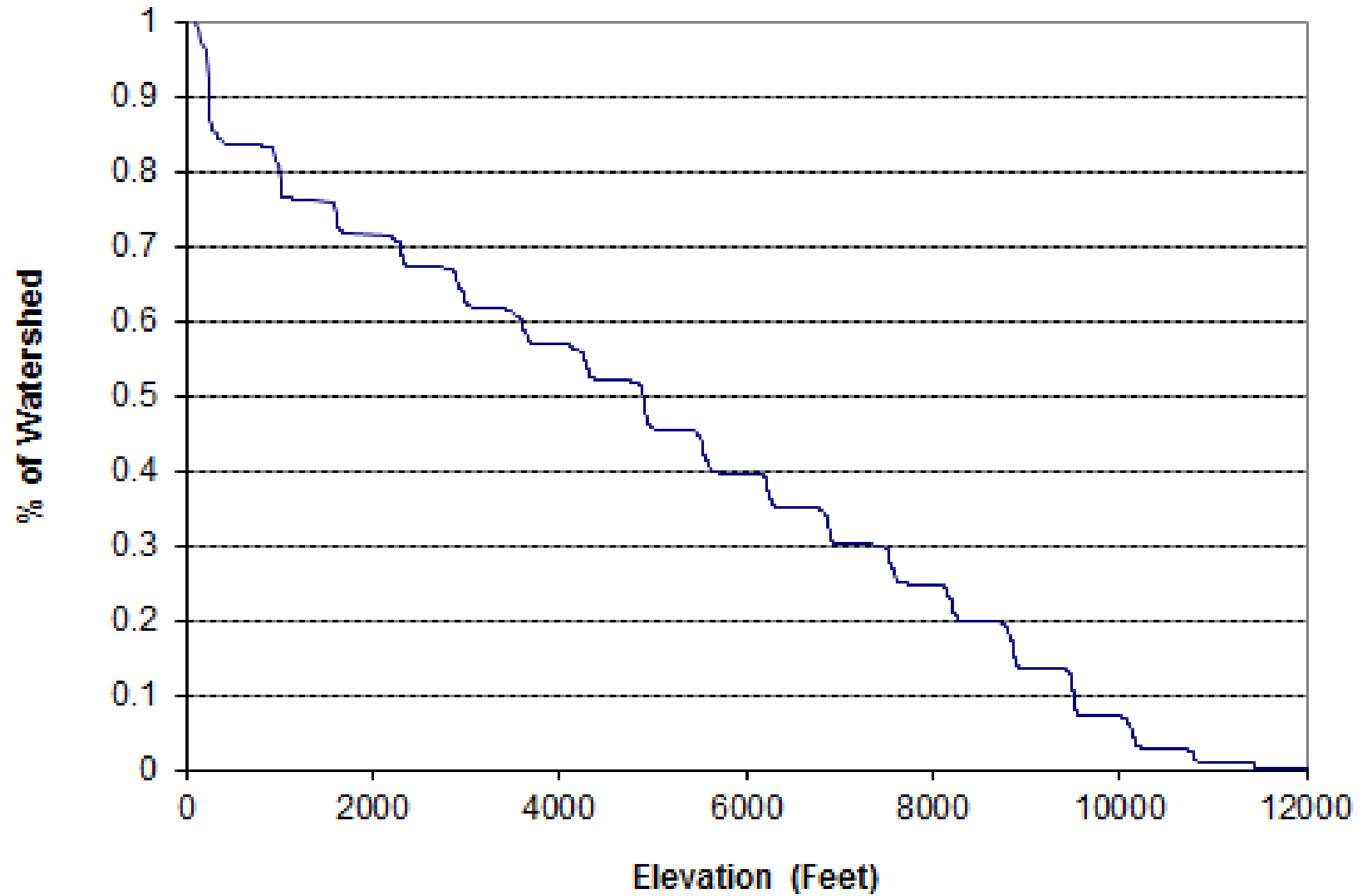
Mon, 06 MAR 2017 at 00Z
-to-
Tue, 14 MAR 2017 at 00Z



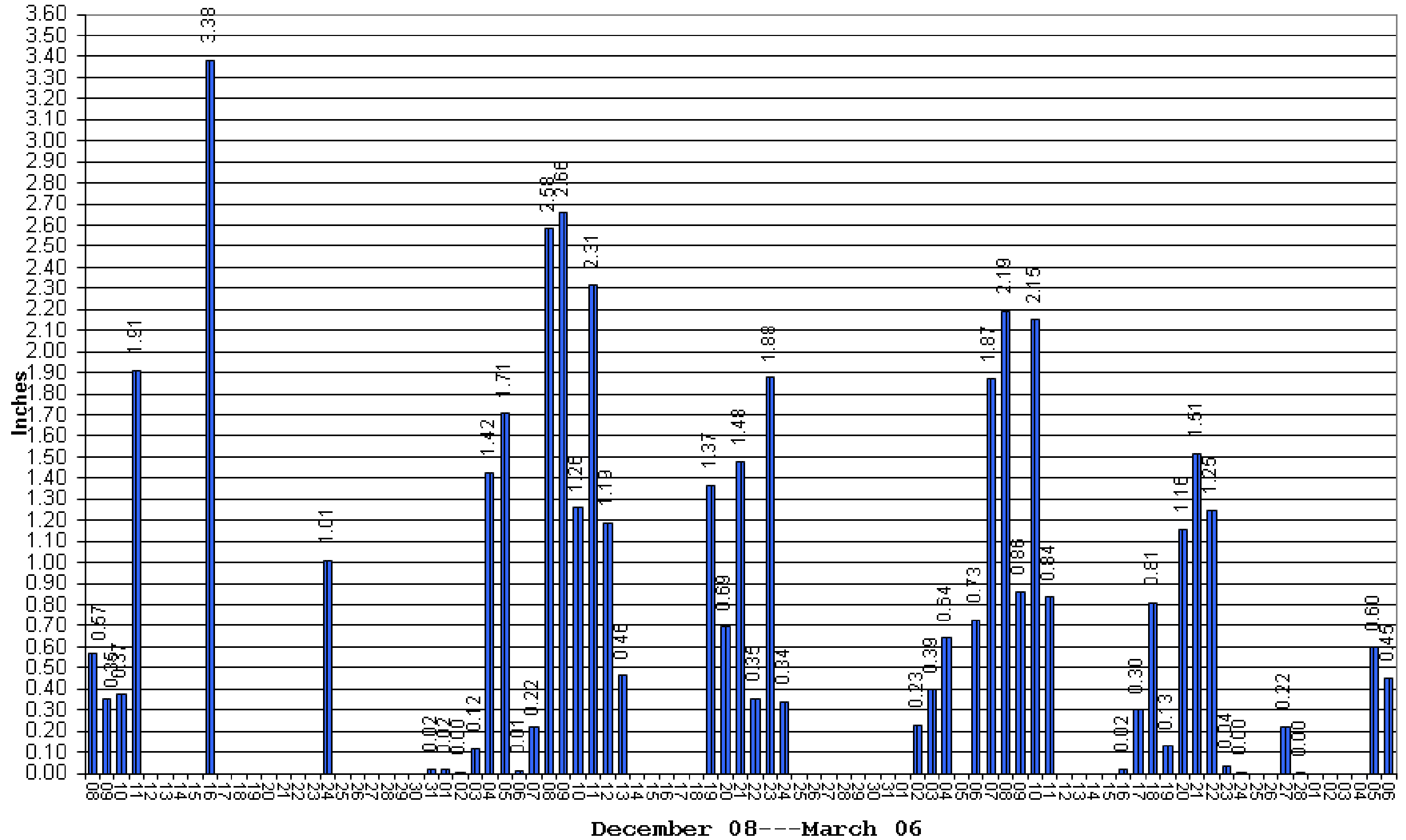
Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 00Z06MAR2017



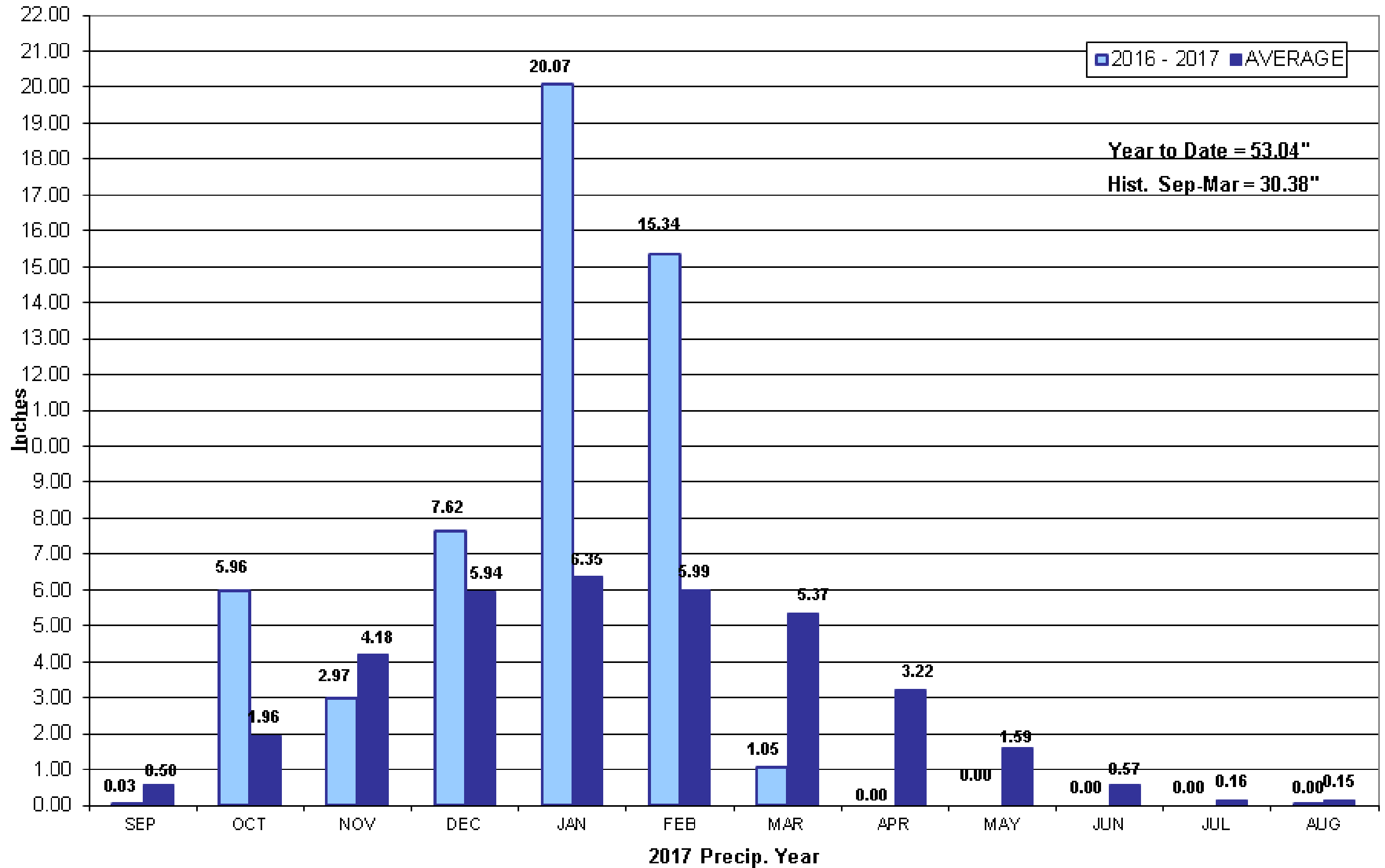
Percentage of Tuolumne River Watershed Area At Elevation or Higher



Watershed Daily Precipitation

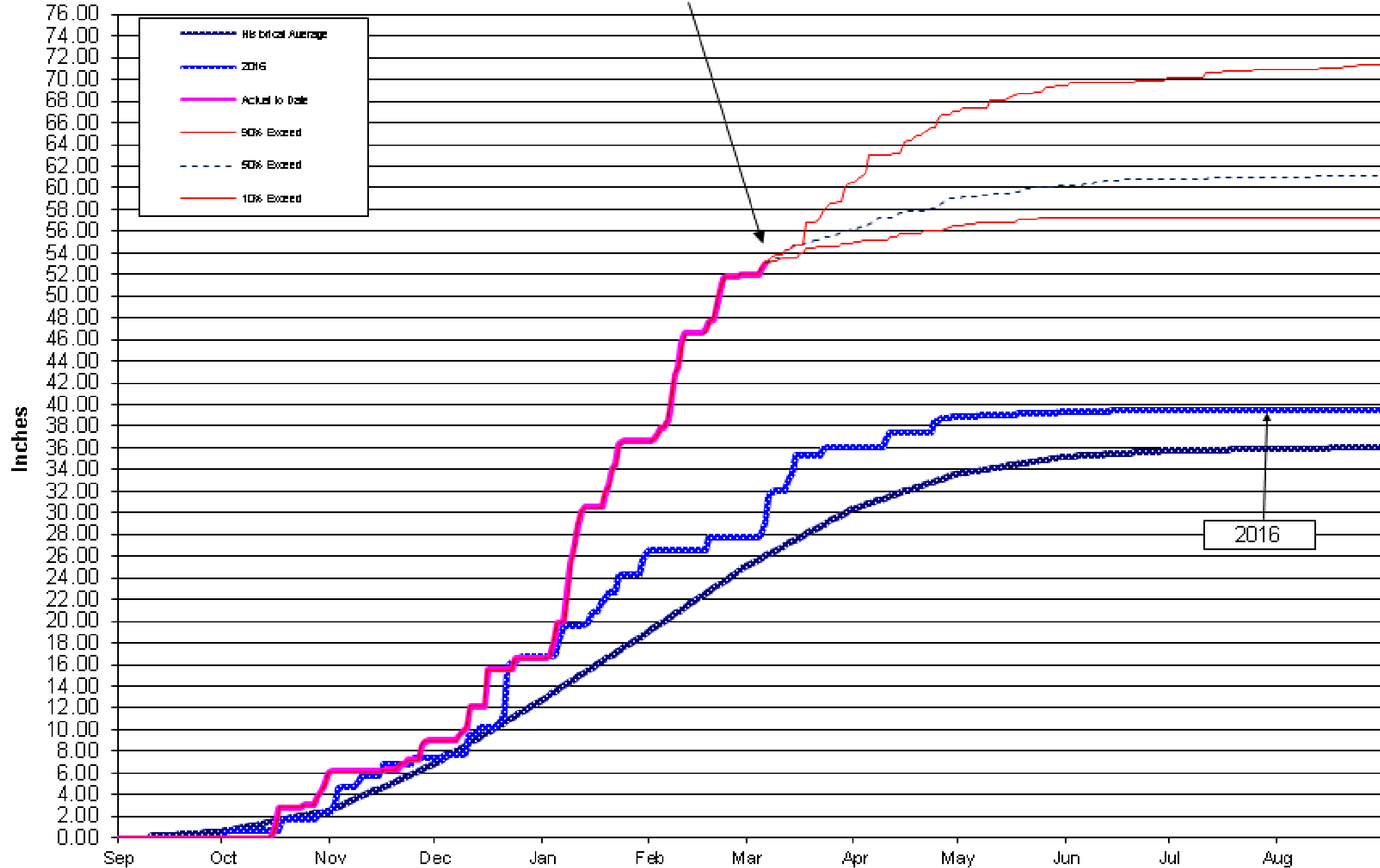


Tuolumne River Watershed Monthly Accumulation of Precipitation

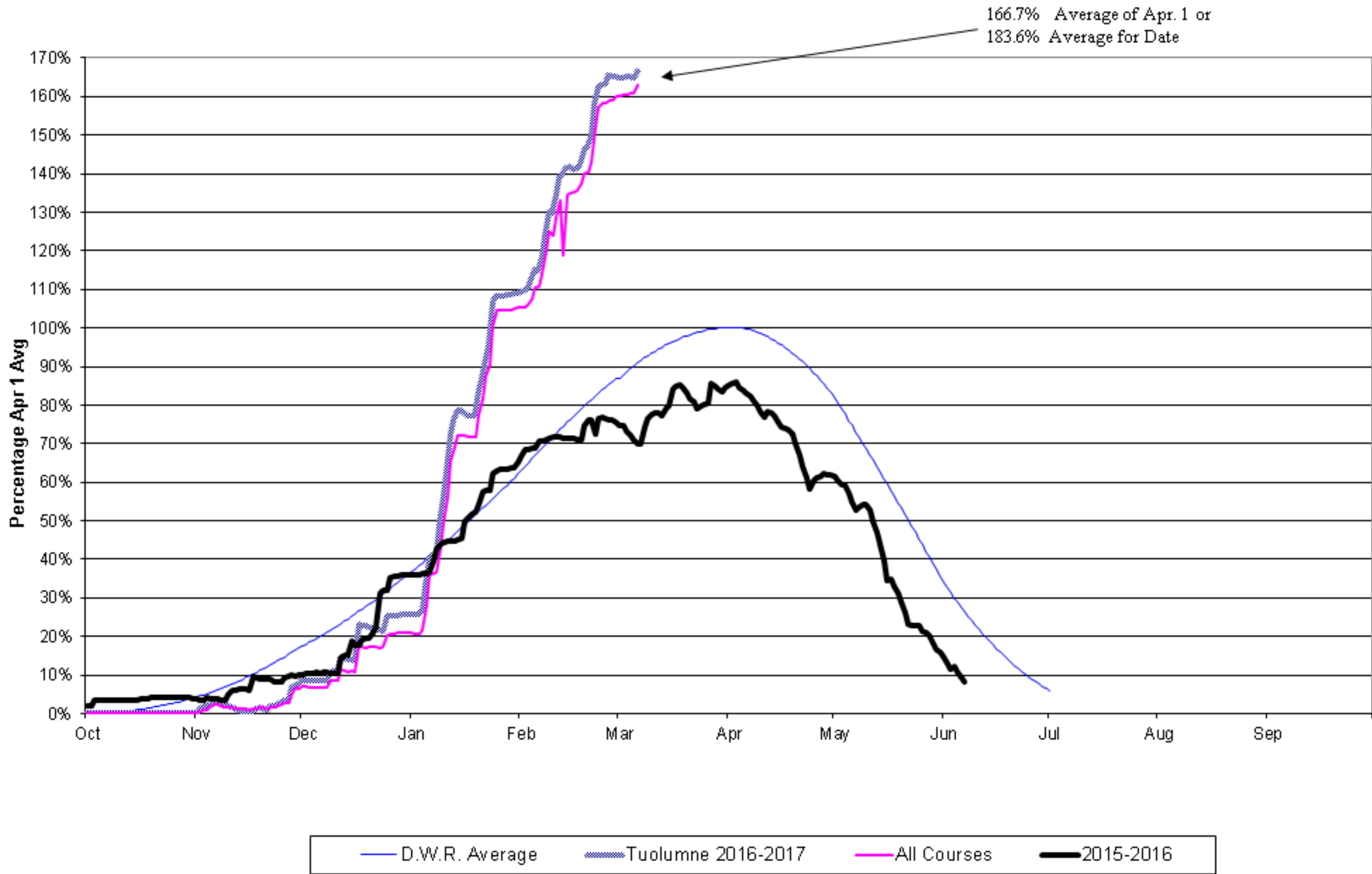


Tuolumne River Watershed Accumulated Precipitation

53.04 Inches or 203.6% for this date



Snow Sensors Used in Tuolumne River Forecast

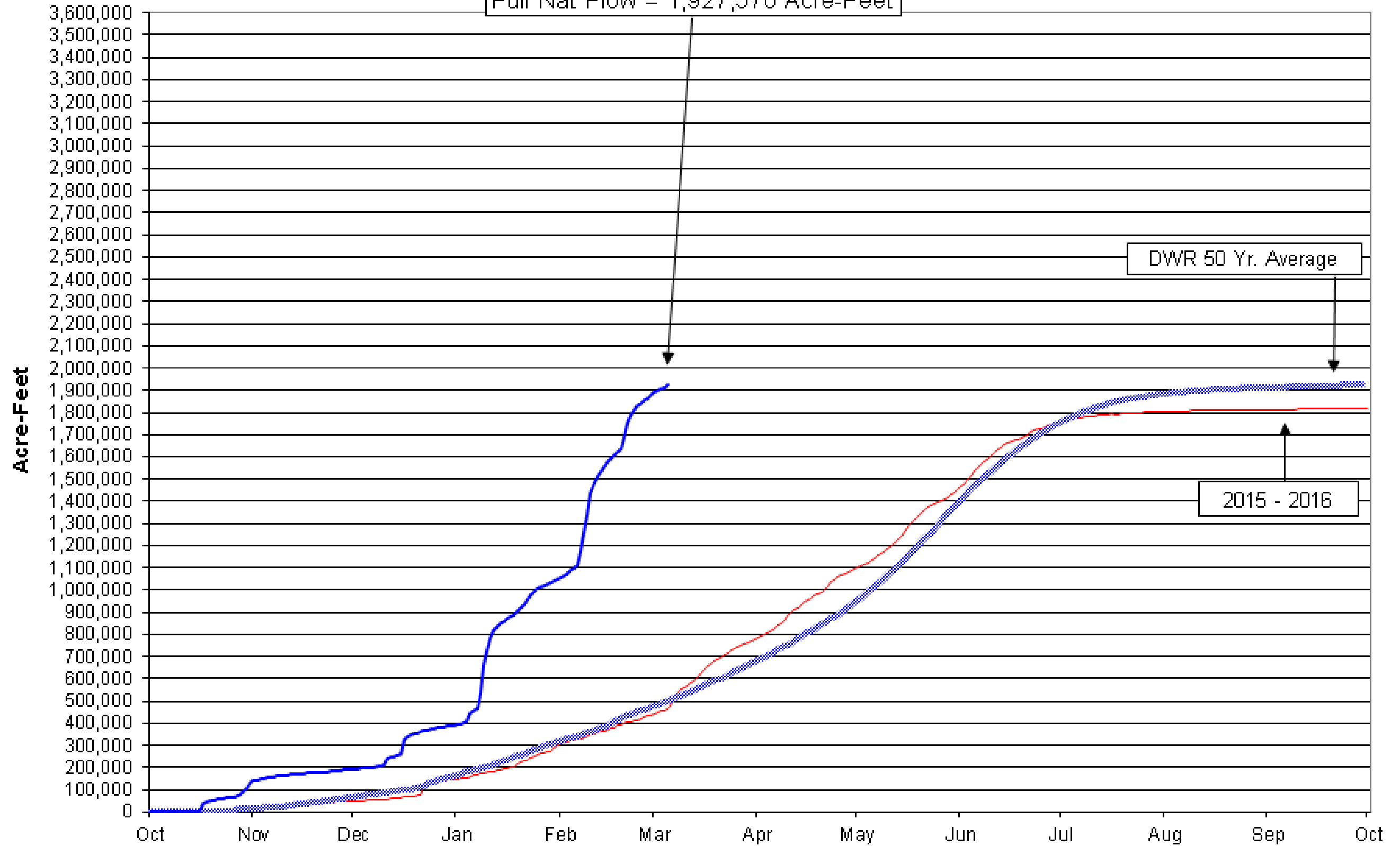


WY2017 Computed Natural Flow

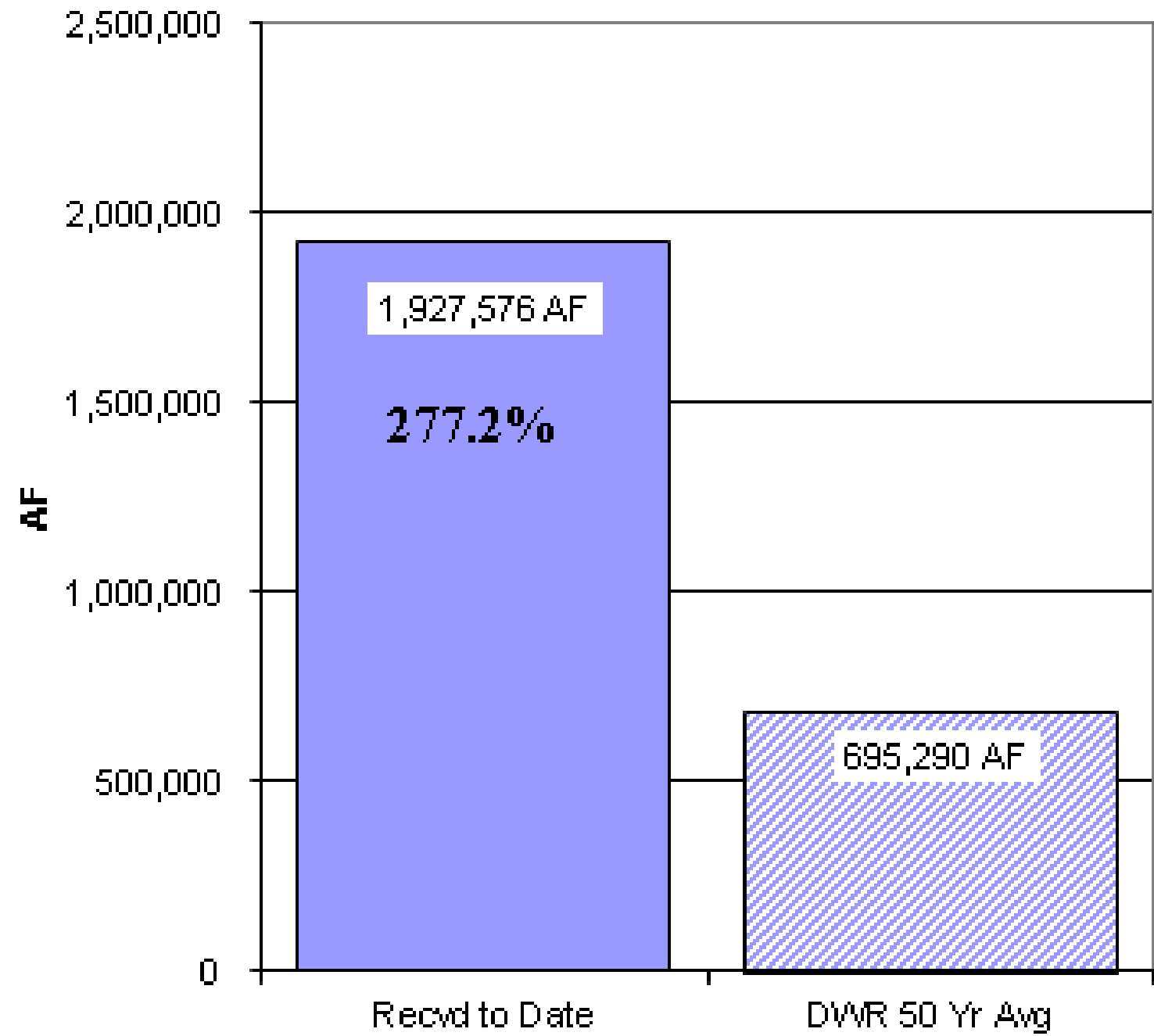
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEPT
DAY	CFS	CFS	CFS	CFS	CFS	CFS	CFS	CFS	CFS	CFS	CFS	CFS
1	218	5,420	867	1,647	2,668	5,513						
2	(255)	2,982	38	1,317	3,383	4,697						
3	(211)	1,714	954	1,946	6,853	4,734						
4	183	1,955	662	5,473	7,750	4,497						
5	398	1,231	725	14,538	5,327	6,001						
6	118	1,083	521	7,479	7,933							
7	(8)	1,150	687	4,892	29,308							
8	(147)	1,066	877	35,352	42,774							
9	272	921	2,129	64,576	40,573							
10	(234)	1,312	3,728	31,652	48,732							
11	(41)	366	11,356	28,725	24,626							
12	314	1,207	4,143	15,647	14,574							
13	(619)	352	2,574	10,021	11,900							
14	863	698	1,919	6,977	9,869							
15	236	581	4,211	6,447	8,393							
16	1,883	537	32,121	5,510	7,828							
17	14,942	697	6,447	4,006	8,855							
18	6,170	906	3,356	4,183	9,851							
19	2,078	(126)	2,634	7,418	8,156							
20	1,605	508	2,350	9,289	22,394							
21	1,484	462	1,813	8,934	31,516							
22	637	795	1,966	8,526	17,478							
23	997	582	1,539	11,590	11,773							
24	1,603	857	2,661	6,533	12,238							
25	767	579	1,842	5,469	7,149							
26	1,442	599	1,099	4,561	4,680							
27	897	1,285	1,544	3,303	6,217							
28	3,110	1,174	1,514	4,163	5,367							
29	9,835	1,088	1,554	2,912								
30	4,829	545	1,102	3,646								
31	11,737		1,103	3,817								
Average C.F.S.	2,100	1,084	3,227	10,663	14,934	5,088						
Total Monthly A.F.	129,134	64,511	198,416	655,633	829,418	50,464						
DWR 50 YR Average A.F.	20,000	50,000	88,000	153,000	154,000	209,000	270,000	455,000	359,000	137,000	33,000	16,000
Total October-September Computed Natural Flow=				1,927,576	A.F.				APR-JLY =	0	A.F.	
			Remaining =	16,424				Remaining =	1,221,000			

Full Natural Flow

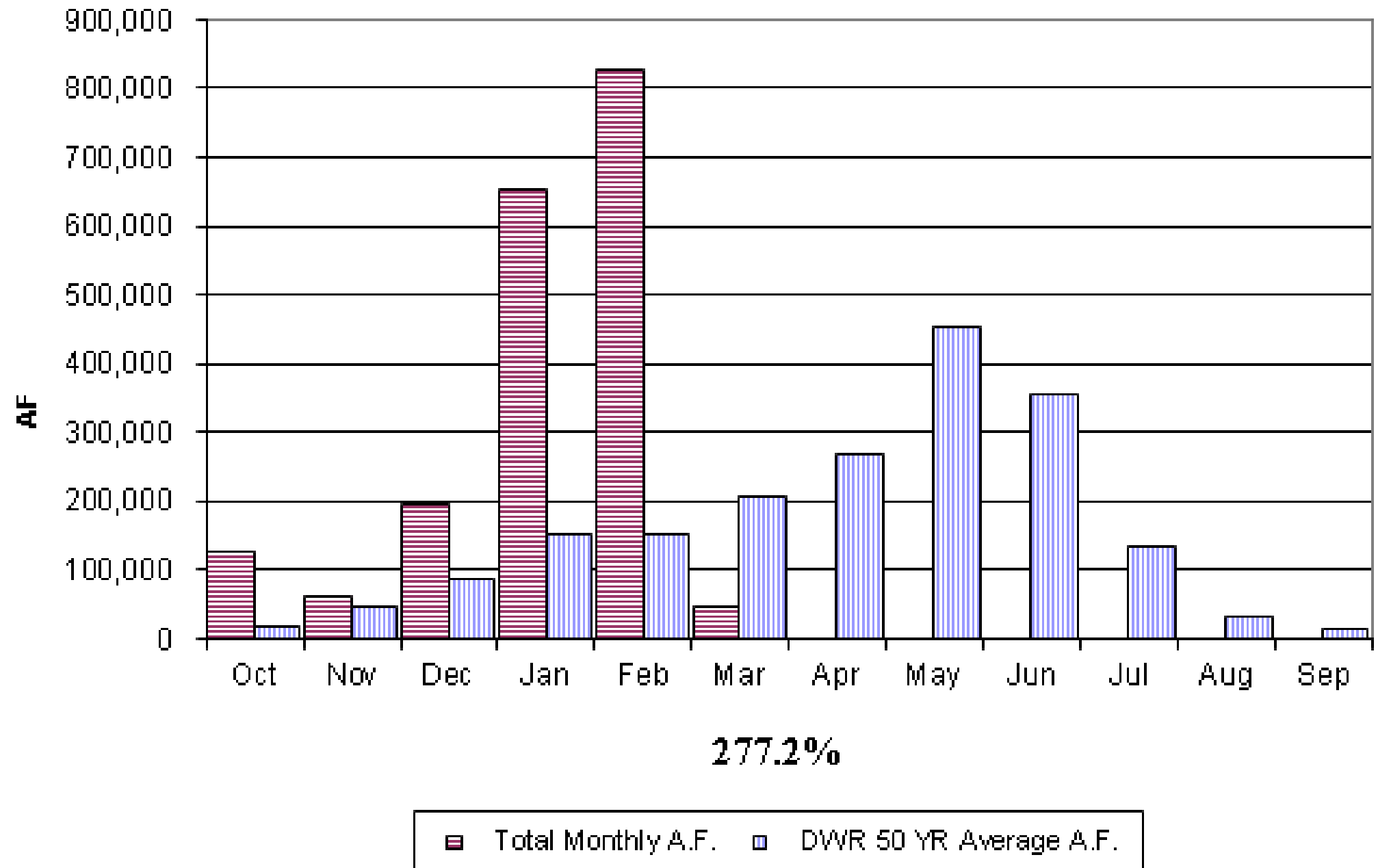
Full Nat Flow = 1,927,576 Acre-Feet



WY2017 Computed Natural Flow to Date

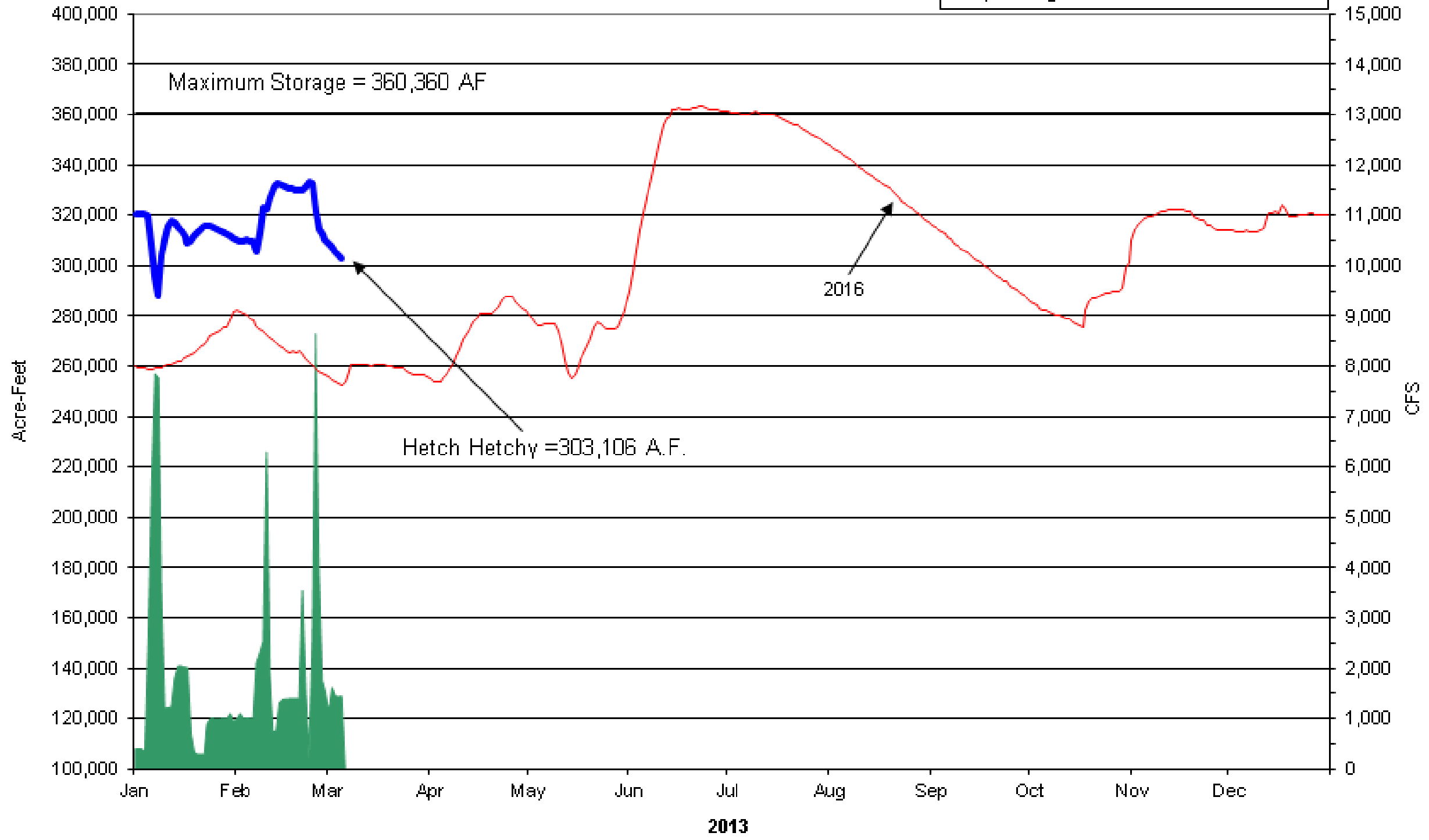


WY 2017 Monthly Full Natural Flow Distribution



Hetch Hetchy Storage

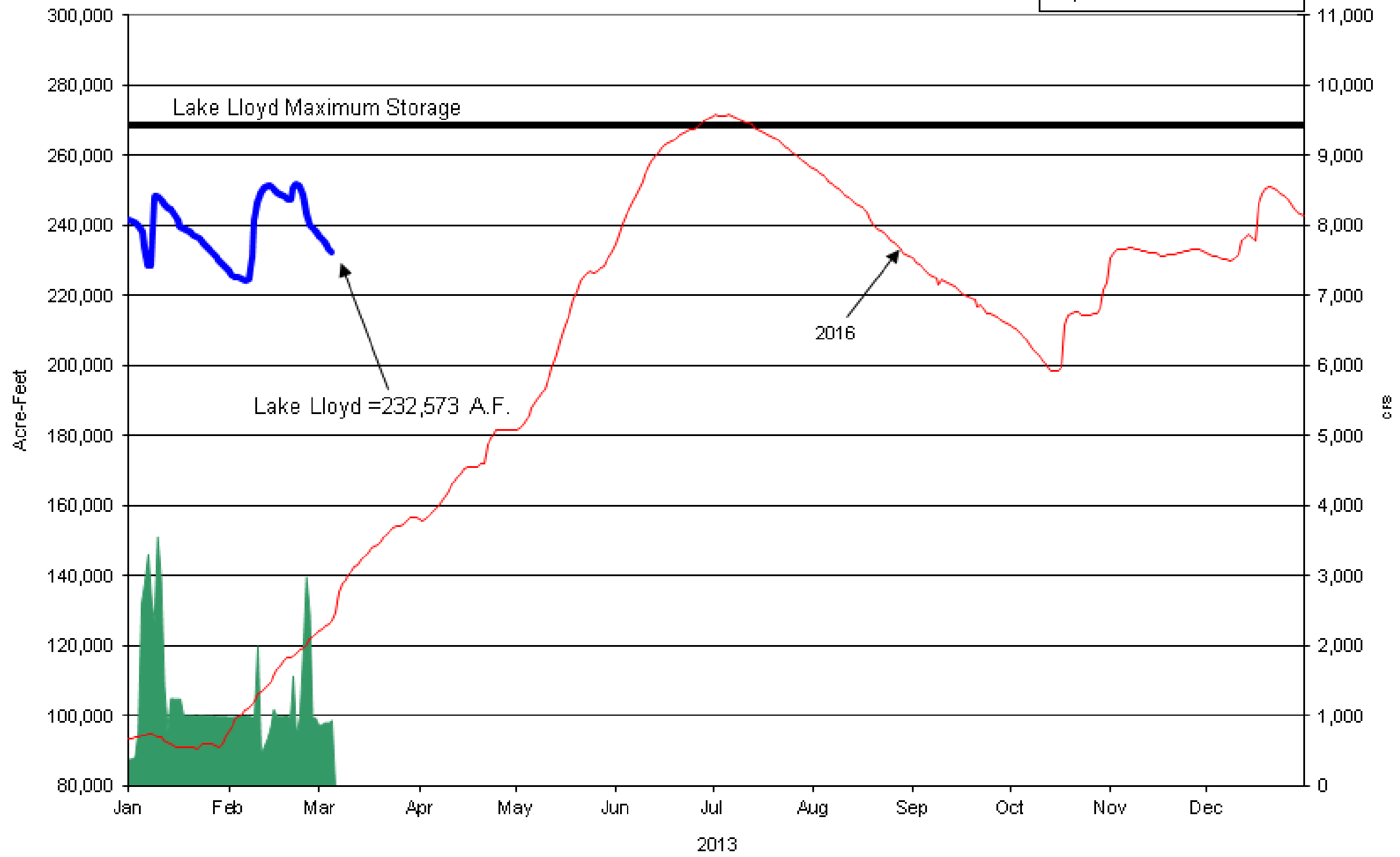
Daily Releases: 1478 C.F.S.
 7-Day Average Diversion: 00 cfs



■ Diversion
 ■ Releases Above Diversion
 — Max Storage
 — HH 2016
 — HH 2017

Lake Lloyd (Cherry Valley Reservoir) Storage

Daily Releases: 912 C.F.S.



Lake Lloyd = 232,573 A.F.

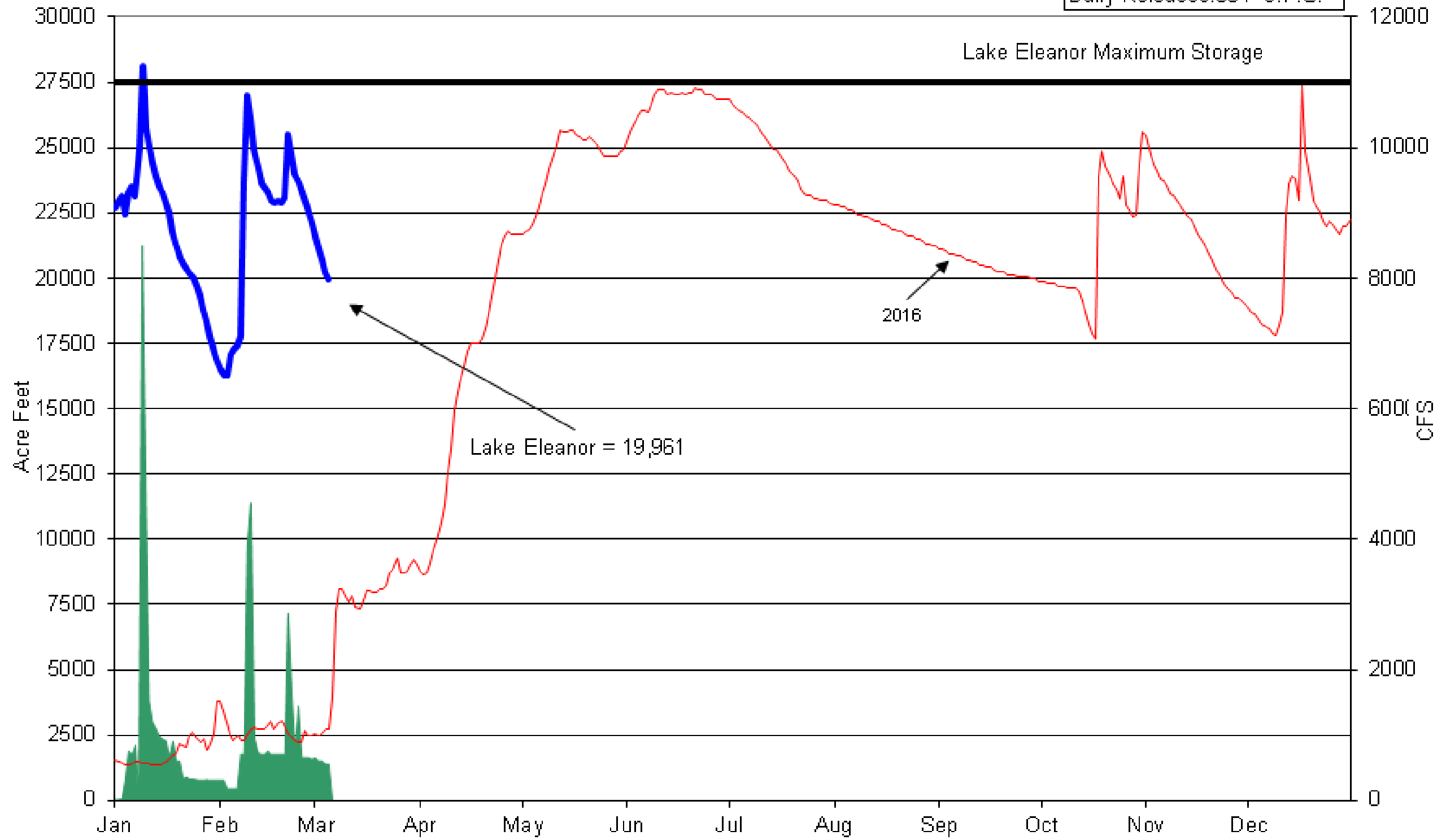
Lake Lloyd Maximum Storage

2016



Lake Eleanor Storage

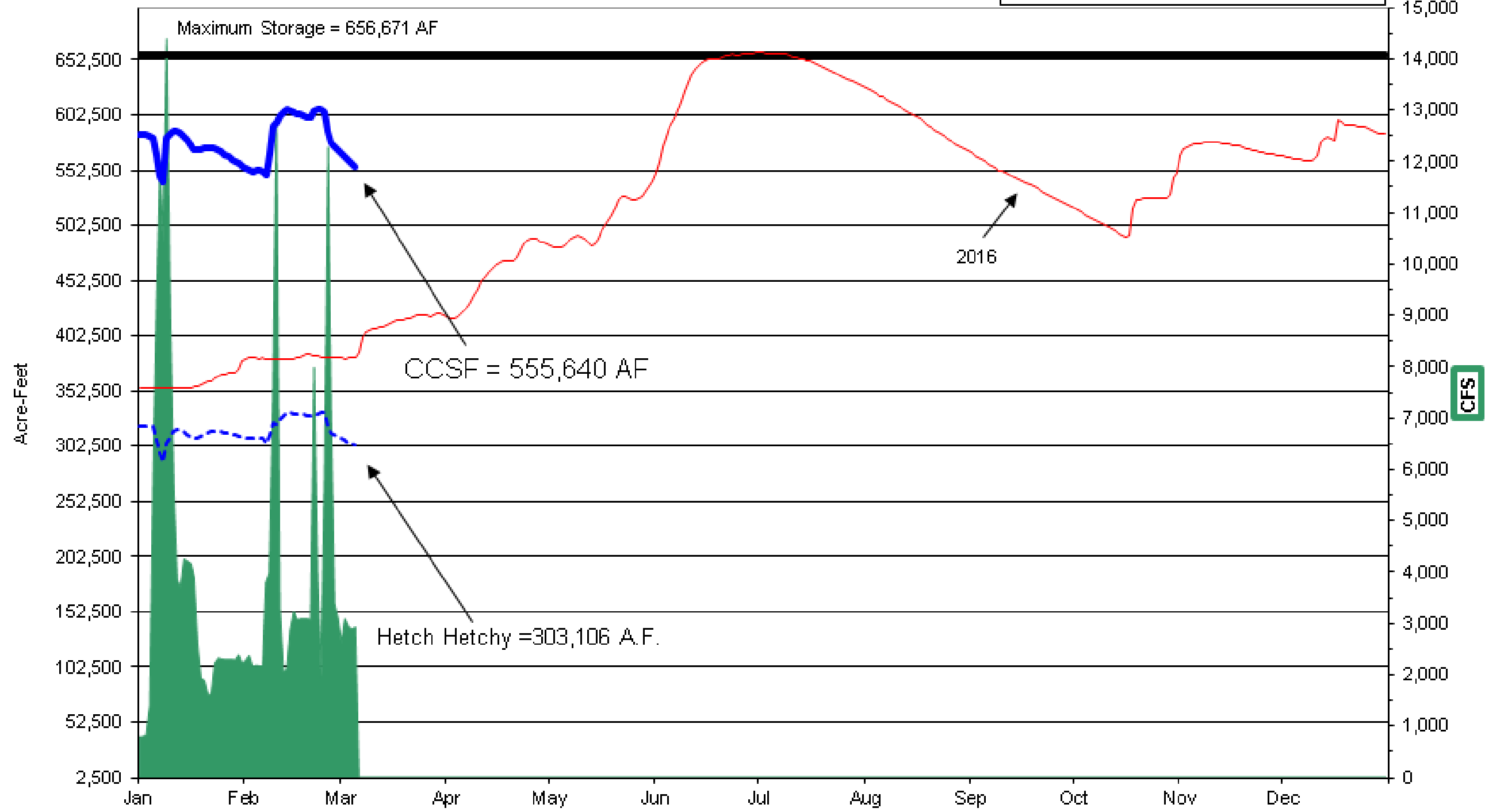
Daily Releases: 604 C.F.S.



Legend: Daily Releases (Green Area), 2017 (Blue Line), 2016 (Red Line), Maximum Storage (Black Line)

CCSF Total Storage

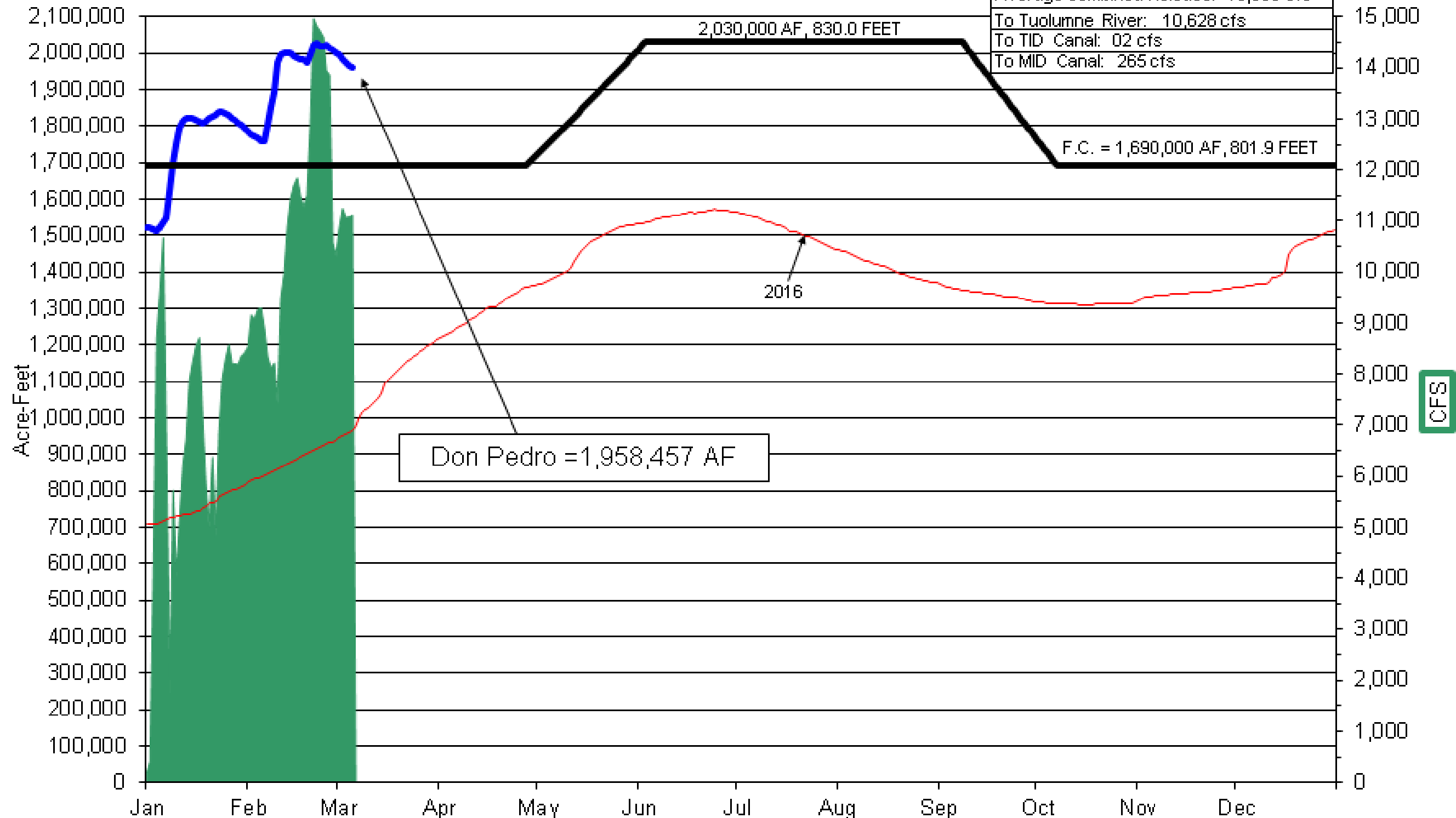
7-Day Average Release: 2,994 cfs
 7-Day Average Diversion: 00 cfs



■ Releases (cfs)
 Max Storage
 — CCSF 2016
 — CCSF 2017
 - - - Hetch Hetchy

DON PEDRO STORAGE

Releases During Past 7 Days	
Average Combined Release:	10,895 cfs
To Tuolumne River:	10,628 cfs
To TID Canal:	02 cfs
To MID Canal:	265 cfs



Don Pedro = 1,958,457 AF

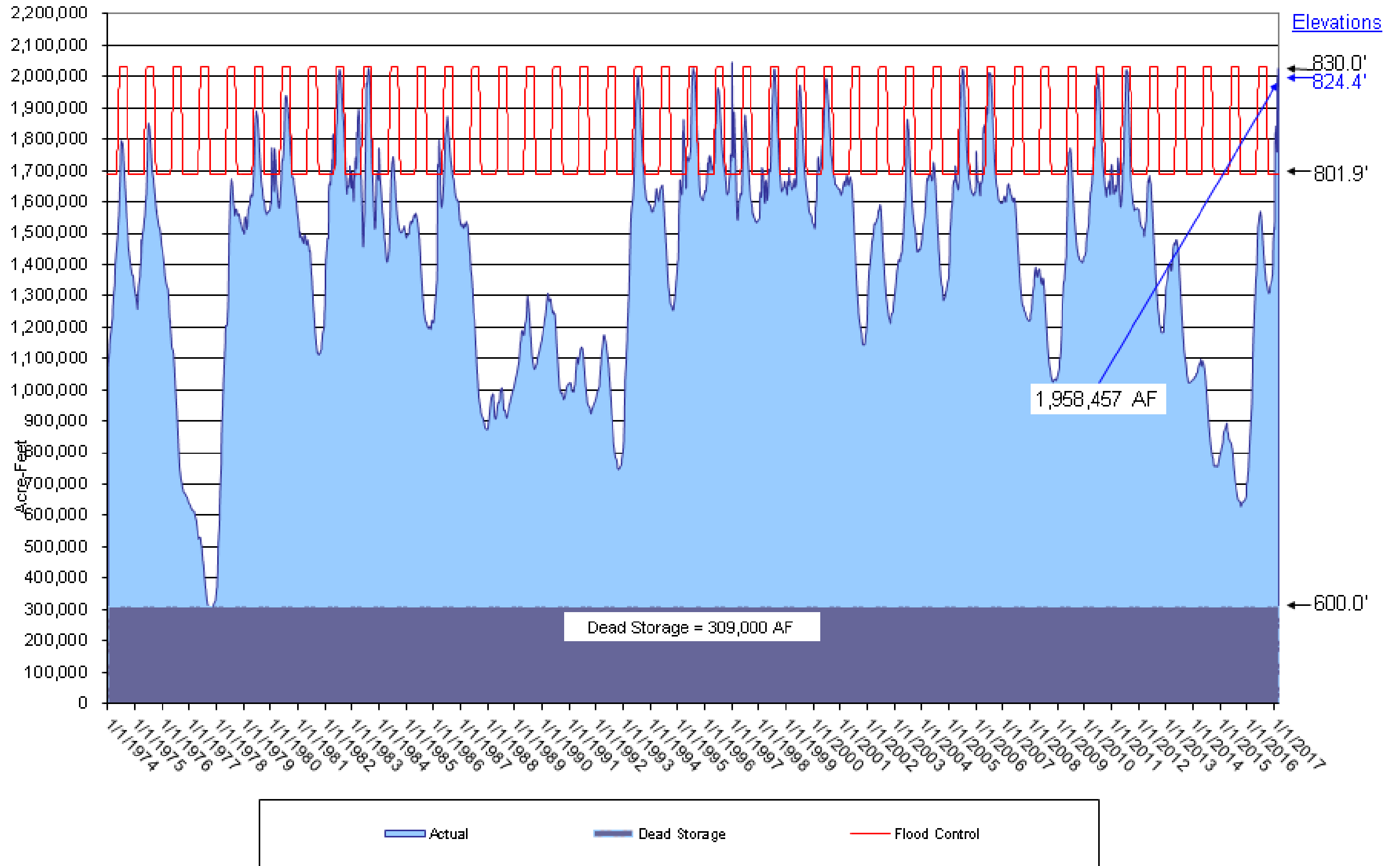
2016

2,030,000 AF, 830.0 FEET

F.C. = 1,690,000 AF, 801.9 FEET

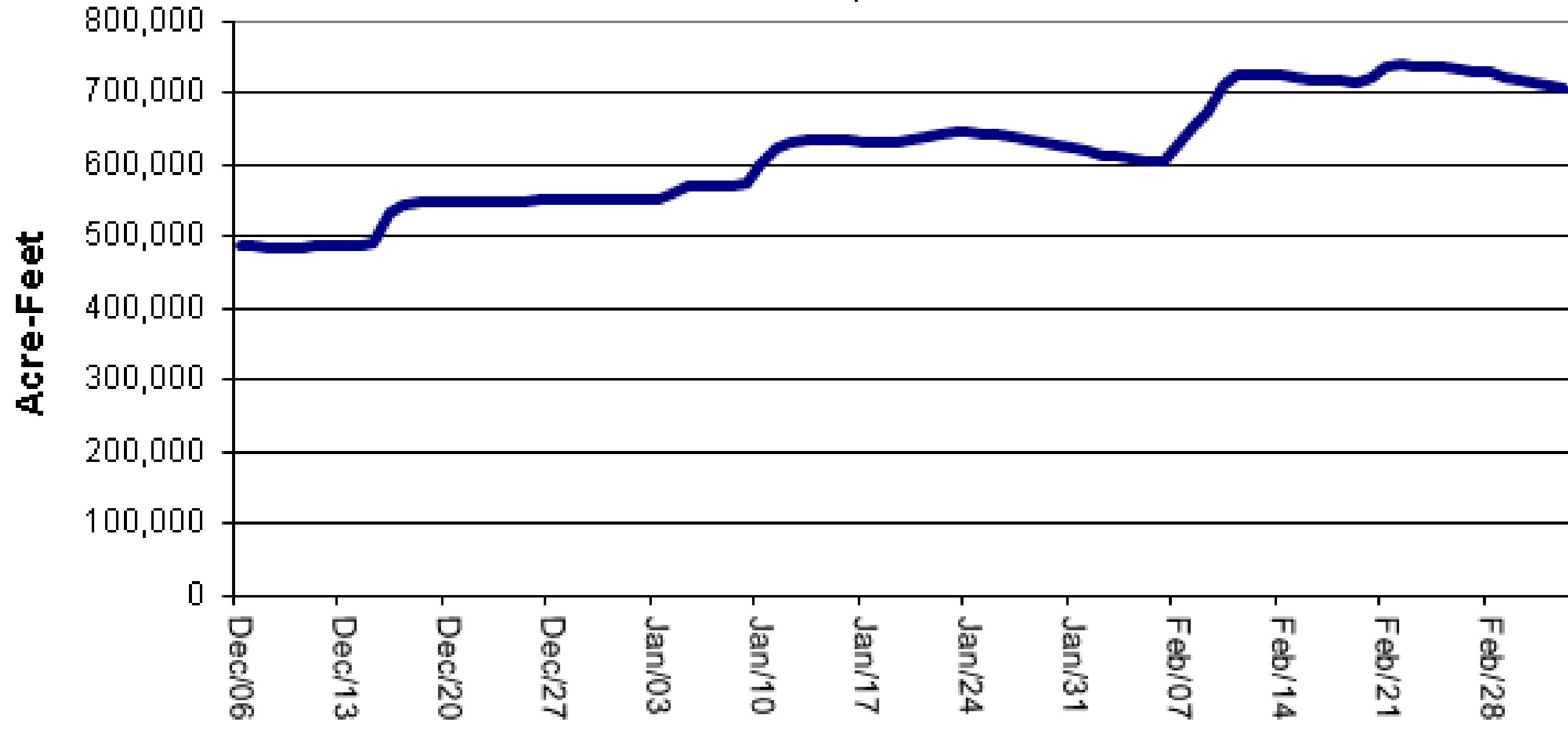
█ Average Combined Release (cfs)
 — 2016
 — 2017
 — FLOOD CONTROL
 Dry
 Avg.

HISTORIC DON PEDRO STORAGE



Don Pedro Water Bank

Water Bank = 704,229 Acre-Feet



Water Bank

Turlock Lake Storage

