



A P P E N D I X A

VAMP HYDROLOGY & OPERATIONAL INFORMATION

DAILY OPERATION PLAN, MARCH 15
PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

	SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
	[calc]	[calc]	[calc]			[calc]	[calc]						[calc]		
	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	
			2,400		250			250		1,500	1,500		1,500	1,500	
			2,400		250			250		1,500	1,500		1,500	1,500	
Apr 01	6,650	0	6,650	2,400	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 02	6,650	0	6,650	2,383	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 03	6,650	0	6,650	2,367	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 04	6,633	0	6,633	2,350	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 05	6,617	0	6,617	2,333	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 06	6,600	0	6,600	2,317	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 07	6,583	0	6,583	2,300	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 08	6,567	0	6,567	2,283	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 09	6,550	0	6,550	2,267	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 10	6,533	0	6,533	2,250	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 11	6,517	0	6,517	2,233	1,000	250		250	0	1,500	1,500		1,500	1,500	
Apr 12	6,500	0	6,500	2,217	1,000	250	0	250	0	1,500	1,500		1,500	1,500	M
Apr 13	6,483	0	6,483	2,200	1,000	250	0	250	0	1,800	2,050	0	2,050	1,500	M
Apr 14	6,467	0	6,467	2,183	1,000	250	0	250	0	250	2,100	0	2,100	1,500	M
Apr 15	7,000	0	7,000	2,167	1,000	250	0	250	0	3,400	2,200	0	2,200	1,500	M
Apr 16	7,033	0	7,033	2,150	1,000	250	0	250	0	3,400	2,200	0	2,200	1,500	M
Apr 17	7,117	0	7,117	2,133	1,000	250	0	250	0	3,100	2,200	0	2,200	1,500	M
Apr 18	7,100	0	7,100	2,117	1,000	250	0	250	0	3,000	2,200	0	2,200	1,500	M
Apr 19	7,083	0	7,083	2,100	1,000	250	167	417	0	3,000	2,200	0	2,200	1,500	
Apr 20	7,067	0	7,067	2,083	1,000	250	183	433	0	300	2,000	0	2,000	1,500	T
Apr 21	7,050	0	7,050	2,067	1,000	250	200	450	0	300	2,000	0	2,000	1,500	T
Apr 22	6,833	167	7,000	2,050	1,000	250	217	467	0	2,000	2,000	0	2,000	1,500	T
Apr 23	6,817	183	7,000	2,033	1,000	250	233	483	0	1,800	2,000	0	2,000	1,500	T
Apr 24	6,800	200	7,000	2,017	1,000	250	250	500	0	1,000	2,000	0	2,000	1,500	T
Apr 25	6,783	217	7,000	2,000	1,000	250	967	1,217	0	1,000	2,000	0	2,000	1,500	T
Apr 26	6,767	233	7,000	1,983	1,000	250	983	1,233	0	1,000	1,300	0	1,300	1,500	M
Apr 27	6,750	250	7,000	1,967	1,000	250	1,000	1,250	0	1,000	1,300	0	1,300	1,500	M
Apr 28	6,033	967	7,000	1,950	1,000	250	1,017	1,267	0	1,000	1,300	0	1,300	1,500	M
Apr 29	6,017	983	7,000	1,933	1,000	250	1,033	1,283	0	1,000	1,300	0	1,300	1,500	M
Apr 30	6,000	1,000	7,000	1,917	1,000	250	1,050	1,300	0	1,000	1,300	0	1,300	1,500	M
May 01	5,983	1,017	7,000	1,900	1,000	250	1,072	1,322	0	1,000	1,300	0	1,300	1,500	M
May 02	5,967	1,033	7,000	1,878	1,000	250	1,093	1,343	0	1,000	1,300	0	1,300	1,500	T
May 03	5,950	150	7,000	1,857	1,000	250	1,115	1,365	0	1,665	1,800	400	2,200	1,500	T
May 04	5,928	702	7,000	1,835	1,000	250	1,137	1,387	0	1,665	1,800	400	2,200	1,500	T
May 05	6,407	593	7,000	1,813	1,000	250	1,158	1,408	0	1,665	1,800	400	2,200	1,500	T
May 06	6,385	615	7,000	1,792	1,000	250	1,179	1,429	0	1,665	1,800	400	2,200	1,500	T
May 07	6,363	637	7,000	1,770	1,000	250	1,200	1,450	0	1,665	1,800	400	2,200	1,500	T
May 08	6,342	658	7,000	1,748	1,000	250	1,221	1,471	0	1,665	1,800	400	2,200	1,500	T
May 09	6,320	680	7,000	1,727	1,000	250	1,242	1,492	0	1,665	1,500	0	1,500	1,500	M
May 10	6,298	702	7,000	1,705	1,000	250	1,263	1,513	0	1,665	1,500	0	1,500	1,500	M
May 11	5,977	1,023	7,000	1,683	1,000	250	1,284	1,534	0	695	1,500	0	1,500	1,500	M
May 12	5,955	1,045	7,000	1,662	1,000	250	1,305	1,555	0	300	1,500	0	1,500	1,500	T
May 13	5,933	1,067	7,000	1,640	1,000	250	1,326	1,576	0	300	1,500	0	1,500	1,500	T
May 14	5,912	1,088	7,000	1,618	1,000	250	1,347	1,597	0	300	1,500	0	1,500	1,500	T
May 15	5,890	1,110	7,000	1,597	1,000	250	1,368	1,618	0	300	1,500	0	1,500	1,500	T
May 16	5,868	0	5,868	1,575	1,000	250	1,389	1,639	0	300	300	0	300	1,500	
May 17	5,847	0	5,847	1,553	1,000	250	1,410	1,660	0	300	300	0	300	1,500	
May 18	4,625	0	4,625	1,532	1,000	250	1,431	1,681	0	300	300	0	300	1,500	
May 19	4,603	0	4,603	1,510	1,000	250	1,452	1,702	0	300	300	0	300	1,500	
May 20	4,582	0	4,582	1,488	1,000	250	1,473	1,723	0	300	300	0	300	1,500	
May 21	4,560	0	4,560	1,467	1,000	250	1,494	1,744	0	300	300	0	300	1,500	
May 22	4,538	0	4,538	1,445	1,000	250	1,515	1,765	0	300	300	0	300	1,500	
May 23	4,517	0	4,517	1,423	1,000	250	1,536	1,786	0	300	300	0	300	1,500	
May 24	4,495	0	4,495	1,402	1,000	250	1,557	1,807	0	300	300	0	300	1,500	
May 25	4,473	0	4,473	1,380	1,000	250	1,578	1,828	0	300	300	0	300	1,500	
May 26	4,452	0	4,452	1,358	1,000	250	1,599	1,849	0	300	300	0	300	1,500	
May 27	4,430	0	4,430	1,337	1,000	250	1,620	1,870	0	300	300	0	300	1,500	
May 28	4,408	0	4,408	1,315	1,000	250	1,641	1,891	0	300	300	0	300	1,500	
May 29	4,387	0	4,387	1,293	1,000	250	1,662	1,912	0	300	300	0	300	1,500	
May 30	4,365	0	4,365	1,272	1,000	250	1,683	1,933	0	300	300	0	300	1,500	
May 31	4,343	0	4,343	1,250	1,000	250	1,704	1,954	0	300	300	0	300	1,500	
VAMP 31-day period *															
Mean (cfs) total (KAF)	6,447	567 34.9	7,015	1,900		490 30.1	740	0 0.0		1,760	77 4.8	1,837	1,500		

DAILY OPERATION PLAN, MARCH 15
 PULSE PERIOD: MAY 1-MAY 31 • FLOW TARGET: 7,000CFS

SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
[calc]	[calc]	[calc]										[calc]		
cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	
			250		250		1,500		1,500			1,500	1,500	
			2,400		250		250		1,500	1,500		1,500	1,500	
			2,400		250		250		1,500	1,500		1,500	1,500	
6,650	0	6,650	2,400	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 01
6,650	0	6,650	2,383	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 02
6,650	0	6,650	2,367	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 03
6,633	0	6,633	2,350	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 04
6,617	0	6,617	2,333	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 05
6,600	0	6,600	2,317	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 06
6,583	0	6,583	2,300	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 07
6,567	0	6,567	2,283	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 08
6,550	0	6,550	2,267	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 09
6,533	0	6,533	2,250	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 10
6,517	0	6,517	2,233	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 11
6,500	0	6,500	2,217	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 12
6,483	0	6,483	2,200	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 13
6,467	0	6,467	2,183	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 14
6,450	0	6,450	2,167	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 15
6,433	0	6,433	2,150	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 16
6,417	0	6,417	2,133	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 17
6,400	0	6,400	2,117	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 18
6,383	0	6,383	2,100	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 19
6,367	0	6,367	2,083	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 20
6,350	0	6,350	2,067	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 21
6,333	0	6,333	2,050	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 22
6,317	0	6,317	2,033	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 23
6,300	0	6,300	2,017	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 24
6,283	0	6,283	2,000	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 25
6,267	0	6,267	1,983	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 26
6,250	0	6,250	1,967	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 27
6,233	0	6,233	1,950	1,000	250	0	250	0	1,500	1,500		1,500	1,500	Apr 28
6,217	0	6,217	1,933	1,000	250	0	250	0	1,500	2,350	0	2,350	1,500	M
6,200	0	6,200	1,917	1,000	250	0	250	0	1,500	2,350	0	2,350	1,500	M
7,033	0	7,033	1,900	1,000	250	0	250	0	1,800	2,350	0	2,350	1,500	M
7,017	0	7,017	1,878	1,000	250	0	250	0	2,500	2,400	0	2,400	1,500	M
7,000	0	7,000	1,857	1,000	250	15	265	0	3,400	2,400	0	2,400	1,500	M
7,028	0	7,028	1,835	1,000	250	0	250	0	3,400	2,400	0	2,400	1,500	M
7,007	0	7,007	1,813	1,000	250	0	250	0	3,100	2,500	0	2,500	1,500	M
6,985	15	7,000	1,792	1,000	250	0	250	0	3,000	2,500	0	2,500	1,500	T
7,063	0	7,063	1,770	1,000	250	2	252	0	3,000	2,500	0	2,500	1,500	T
7,042	0	7,042	1,748	1,000	250	23	273	0	3,000	2,500	0	2,500	1,500	T
7,020	0	7,020	1,727	1,000	250	45	295	0	3,000	2,500	0	2,500	1,500	T
6,998	2	7,000	1,705	1,000	250	67	317	0	2,000	2,500	0	2,500	1,500	T
6,977	23	7,000	1,683	1,000	250	1,638	1,888	0	1,800	2,500	0	2,500	1,500	T
6,955	45	7,000	1,662	1,000	250	1,410	1,660	250	1,000	950	0	950	1,500	M
6,933	67	7,000	1,640	1,000	250	1,432	1,682	250	1,000	950	0	950	1,500	M
5,362	1,638	7,000	1,618	1,000	250	1,403	1,653	250	1,000	950	0	950	1,500	M
5,340	1,660	7,000	1,597	1,000	250	1,425	1,675	250	1,000	1,000	0	1,000	1,500	M
5,318	1,682	7,000	1,575	1,000	250	1,447	1,697	250	1,000	1,000	0	1,000	1,500	M
5,347	1,653	7,000	1,553	1,000	250	1,468	1,718	250	1,000	1,000	0	1,000	1,500	M
5,325	1,675	7,000	1,532	1,000	250	0	250	250	1,000	1,000	0	1,000	1,500	M
5,303	1,697	7,000	1,510	1,000	250	0	250	250	1,000	1,700	1,300	3,000	1,500	T
5,282	1,718	7,000	1,488	1,000	250	0	250	250	1,000	1,700	1,300	3,000	1,500	T
5,960	1,550	7,510	1,467	1,000	250	0	250	250	1,665	1,700	1,300	3,000	1,500	T
5,938	1,550	7,488	1,445	1,000	250	0	250	0	1,665	1,700	1,300	3,000	1,500	T
5,917	1,550	7,467	1,423	1,000	250	0	250	0	1,665	1,700	1,300	3,000	1,500	T
5,895	1,550	7,445	1,402	1,000	250	1,370	1,620	0	1,665	1,700	1,300	3,000	1,500	T
5,873	1,300	7,173	1,380	1,000	250	1,392	1,642	0	1,665	1,500	0	1,500	1,500	M
5,852	1,300	7,152	1,358	1,000	250	1,413	1,663	0	1,665	1,500	0	1,500	1,500	M
5,630	1,370	7,000	1,337	1,000	250	1,435	1,685	0	1,665	1,500	0	1,500	1,500	M
5,608	1,392	7,000	1,315	1,000	250	1,457	1,707	0	1,665	1,500	0	1,500	1,500	T
5,587	1,413	7,000	1,293	1,000	250	0	250	0	1,695	1,500	0	1,500	1,500	T
5,565	1,435	7,000	1,272	1,000	250	0	250	0	300	1,500	0	1,500	1,500	T
5,543	1,457	7,000	1,250	1,000	250	0	250	0	300	1,500	0	1,500	1,500	T
VAMP 31-day period *														
Mean (cfs)	6,184	895	7,079			563	813	81		1,816	252	2,068	1,500	
total (KAF)		55.0				34.6		5.0			15.5			

DAILY OPERATION PLAN, MARCH 23

PULSE PERIOD: APRIL 20-MAY 20 • FLOW TARGET: 7,000CFS

	SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
	[calc]	[calc]	[calc]										[calc]		
	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs
Apr 01				1,477	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 02				1,432	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 03				1,359	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 04	5,382	0	5,382	1,292	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 05	5,309	0	5,309	1,158	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 06	5,242	0	5,242	1,042	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 07	5,108	0	5,108	997	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 08	4,992	0	4,992	952	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 09	4,947	0	4,947	900	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 10	4,902	0	4,902	940	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 11	4,850	0	4,850	938	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 12	4,890	0	4,890	861	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 13	4,888	0	4,888	779	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 14	4,811	0	4,811	724	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 15	4,729	0	4,729	669	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 16	4,674	0	4,674	659	1,000	250		250		1,500	1,500		1,500	1,200	
Apr 17	4,619	0	4,619	620	1,000	250	2,355	2,605	300	1,500	1,500		1,500	1,200	M
Apr 18	4,609	0	4,609	595	1,000	250	2,369	2,619	300	600	600	400	1,000	1,500	M
Apr 19	4,570	0	4,570	581	1,000	250	2,359	2,609	320	600	600	400	1,000	1,500	M
Apr 20	3,945	3,055	7,000	571	1,000	250	2,351	2,601	340	600	600	400	1,000	1,500	M
Apr 21	3,931	3,069	7,000	559	1,000	250	2,362	2,612	400	600	600	400	1,000	1,500	M
Apr 22	3,921	3,079	7,000	488	1,000	250	2,364	2,614	420	600	600	400	1,000	1,500	M
Apr 23	3,909	3,091	7,000	466	1,000	250	2,372	2,622	0	600	600	400	1,000	1,500	M
Apr 24	3,838	3,162	7,000	478	1,000	250	67	317	0	1,400	1,400	0	1,400	1,500	
Apr 25	3,816	3,184	7,000	483	1,000	250	79	329	0	2,300	2,300	1,400	3,700	1,500	T
Apr 26	4,628	2,372	7,000	471	1,000	250	106	356	0	2,300	2,300	1,400	3,700	1,500	T
Apr 27	5,533	1,467	7,000	444	1,000	250	107	357	0	2,300	2,300	1,400	3,700	1,500	T
Apr 28	5,521	1,479	7,000	443	1,000	250	105	355	0	2,300	2,300	1,400	3,700	1,500	T
Apr 29	5,494	1,506	7,000	445	1,000	250	93	343	0	2,300	2,300	1,400	3,700	1,500	T
Apr 30	5,493	1,507	7,000	457	1,000	250	84	334	200	2,300	2,300	1,400	3,700	1,500	T
May 01	5,495	1,505	7,000	466	1,000	250	1,768	2,018	300	2,200	2,200	1,300	3,500	1,500	M
May 02	5,507	1,493	7,000	482	1,000	250	1,778	2,028	300	1,500	1,500	200	1,700	1,500	M
May 03	5,416	1,584	7,000	472	1,000	250	1,776	2,026	300	1,500	1,500	200	1,700	1,500	M
May 04	4,732	2,268	7,000	474	1,000	250	1,796	2,046	300	1,500	1,500	200	1,700	1,500	M
May 05	4,722	2,278	7,000	454	1,000	250	1,813	2,063	300	1,500	1,500	200	1,700	1,500	M
May 06	4,724	2,276	7,000	437	1,000	250	1,847	2,097	300	1,500	1,500	200	1,700	1,500	M
May 07	4,704	2,296	7,000	403	1,000	250	324	574	300	1,500	1,500	200	1,700	1,500	
May 08	4,687	2,313	7,000	426	1,000	250	230	480	400	2,200	2,200	1,000	3,200	1,500	T
May 09	4,653	2,347	7,000	420	1,000	250	239	489	400	2,200	2,200	1,000	3,200	1,500	T
May 10	5,376	1,624	7,000	411	1,000	250	224	474	400	2,200	2,200	1,000	3,200	1,500	T
May 11	5,370	1,630	7,000	426	1,000	250	309	559	300	2,200	2,200	1,000	3,200	1,500	T
May 12	5,361	1,639	7,000	441	1,000	250	321	571	300	2,200	2,200	1,000	3,200	1,500	T
May 13	5,376	1,624	7,000	429	1,000	250	328	578	300	2,200	2,200	1,000	3,200	1,500	T
May 14	5,391	1,609	7,000	422	1,000	250	1,303	1,553	100	2,200	2,200	1,000	3,200	1,500	M
May 15	5,379	1,621	7,000	447	1,000	250	1,307	1,557	100	2,000	2,000	400	2,400	1,500	M
May 16	5,372	1,628	7,000	443	1,000	250	1,308	1,558	400	2,000	2,000	400	2,400	1,500	M
May 17	5,197	1,803	7,000	442	1,000	250	1,419	1,669	500	2,000	2,000	100	2,100	1,500	T
May 18	5,193	1,807	7,000	431	1,000	250		250		1,900	1,900	0	1,900	1,500	T
May 19	5,192	1,808	7,000	431	1,000	250		250		1,200	1,200		1,200	1,500	T
May 20	5,081	1,919	7,000	414	1,000	250		250		720	720		720	1,500	T
May 21	4,381	0	4,381	395	1,000	250		250		300	300		300	1,500	
May 22	3,884	0	3,884	393	1,000	250		250		300	300		300	1,500	
May 23	3,445	0	3,445	372	1,000	250		250		300	300		300	1,500	
May 24	3,443	0	3,443	389	1,000	250		250		300	300		300	1,500	
May 25	3,422	0	3,422	397	1,000	250		250		300	300		300	1,500	
May 26	3,439	0	3,439	398	1,000	250		250		300	300		300	1,500	
May 27	3,447	0	3,447	365	1,000	250		250		300	300		300	1,500	
May 28	3,448	0	3,448	326	1,000	250		250		300	300		300	1,500	
May 29	3,415	0	3,415	337	1,000	250		250		300	300		300	1,500	
May 30	3,376	0	3,376	343	1,000	250		250		300	300		300	1,500	
May 31	3,387	0	3,387	332	1,000	250		250		300	300		300	1,500	
VAMP 31-day period *															
Mean (cfs)	4,934	2,066	7,000				1,138	1,388	245		1,719	684	2,403	1,500	
total (KAF)		127.0					69.9		15.0			42.0			

Construction period for the Old River Barrier.

Tuolumne FERC volume (TAF) = 89.9

89.9

* April 15 – May 15 Adjusted for lag time

Pulse flow period and tributary flow to meet the pulse flow.

DAILY OPERATION PLAN, MARCH 29
 PULSE PERIOD: APRIL 20-MAY 20 • FLOW TARGET: 7,000CFS

SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.	
[calc]	[calc]	[calc]	[calc]				[calc]	[calc]				[calc]				
cfs	cfs	TAF	cfs	cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs	cfs		
				1,480	1,000	250		250		1,500	1,500		1,500	1,200		Apr 01
				1,430	1,000	250		250		1,500	1,500		1,500	1,200		Apr 02
				1,360	1,000	250		250		1,500	1,500		1,500	1,200		Apr 03
5,380	0		5,380	1,290	1,000	250		250		1,500	1,500		1,500	1,200		Apr 04
5,310	0		5,310	1,160	1,000	250		250		1,500	1,500		1,500	1,200		Apr 05
5,240	0		5,240	1,040	1,000	250		250		1,500	1,500		1,500	1,200		Apr 06
5,110	0		5,110	1,000	1,000	250		250		1,500	1,500		1,500	1,200		Apr 07
4,990	0		4,990	950	1,000	250		250		1,500	1,500		1,500	1,200		Apr 08
4,950	0		4,950	900	1,000	250		250		1,500	1,500		1,500	1,200		Apr 09
4,900	0		4,900	940	1,000	250		250		1,500	1,500		1,500	1,200		Apr 10
4,850	0		4,850	940	1,000	250		250		1,500	1,500		1,500	1,200		Apr 11
4,890	0		4,890	860	1,000	250		250		1,500	1,500		1,500	1,200		Apr 12
4,890	0		4,890	780	1,000	250		250		1,500	1,500		1,500	1,200		Apr 13
4,810	0		4,810	720	1,000	250		250		1,500	1,500		1,500	1,200		Apr 14
4,730	0		4,730	670	1,000	250		250		1,500	1,500		1,500	1,200		Apr 15
4,670	0		4,670	660	1,000	250	1,100	1,350		1,500	1,500		1,500	1,200		Apr 16
4,620	0		4,620	620	1,000	250	2,350	2,600	300	1,500	1,500		1,500	1,200	M	Apr 17
4,610	0		4,610	600	1,000	250	2,370	2,620	300	600	600	400	1,000	1,500	M	Apr 18
4,570	1,100	0	5,670	580	1,000	250	2,360	2,610	320	600	600	400	1,000	1,500	M	Apr 19
3,950	3,050	6	7,000	570	1,000	250	2,350	2,600	340	600	600	400	1,000	1,500	M	Apr 20
3,930	3,070	12.1	7,000	560	1,000	250	2,360	2,610	400	600	600	400	1,000	1,500	M	Apr 21
3,920	3,080	18.2	7,000	490	1,000	250	2,160	2,410	420	600	600	400	1,000	1,500	M	Apr 22
3,910	3,090	24.4	7,000	470	1,000	250	1,370	1,620	0	600	600	600	1,200	1,500	M	Apr 23
3,840	3,160	30.6	7,000	480	1,000	250	0	250	0	1,400	1,400	1,000	2,400	1,500		Apr 24
3,820	3,180	37.0	7,000	480	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T	Apr 25
4,630	2,370	41.7	7,000	470	1,000	250	10	260	0	2,300	2,300	1,500	3,800	1,500	T	Apr 26
5,530	1,500	44.6	7,030	440	1,000	250	10	260	0	2,300	2,300	1,500	3,800	1,500	T	Apr 27
5,520	1,500	47.6	7,020	440	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T	Apr 28
5,490	1,510	50.6	7,000	450	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T	Apr 29
5,490	1,510	53.6	7,000	460	1,000	250	880	1,130	200	2,300	2,300	1,500	3,800	1,500	T	Apr 30
5,500	1,500	56.6	7,000	470	1,000	250	1,870	2,120	300	2,200	2,200	500	2,700	1,500	M	May 01
5,510	1,500	59.5	7,010	480	1,000	250	1,880	2,130	300	1,500	1,500	100	1,600	1,500	M	May 02
5,420	1,580	62.7	7,000	470	1,000	250	1,880	2,130	300	1,500	1,500	100	1,600	1,500	M	May 03
4,730	2,270	67.2	7,000	470	1,000	250	1,900	2,150	300	1,500	1,500	100	1,600	1,500	M	May 04
4,720	2,280	71.7	7,000	450	1,000	250	1,910	2,160	300	1,500	1,500	100	1,600	1,500	M	May 05
4,720	2,280	76.2	7,000	440	1,000	250	1,900	2,150	300	1,500	1,500	100	1,600	1,500	M	May 06
4,700	2,300	80.8	7,000	400	1,000	250	720	970	300	1,500	1,500	150	1,650	1,500		May 07
4,690	2,310	85.4	7,000	430	1,000	250	230	480	400	2,200	2,200	600	2,800	1,500	T	May 08
4,650	2,350	90.0	7,000	420	1,000	250	240	490	400	2,200	2,200	1,000	3,200	1,500	T	May 09
5,380	1,620	93.2	7,000	410	1,000	250	220	470	400	2,200	2,200	1,000	3,200	1,500	T	May 10
5,370	1,630	96.5	7,000	430	1,000	250	310	560	300	2,200	2,200	1,000	3,200	1,500	T	May 11
5,360	1,640	99.7	7,000	440	1,000	250	320	570	300	2,200	2,200	1,000	3,200	1,500	T	May 12
5,380	1,620	102.9	7,000	430	1,000	250	330	580	300	2,200	2,200	1,000	3,200	1,500	T	May 13
5,390	1,610	106.1	7,000	420	1,000	250	1,300	1,550	100	2,200	2,200	1,000	3,200	1,500	M	May 14
5,380	1,620	109.3	7,000	450	1,000	250	1,310	1,560	100	2,000	2,000	400	2,400	1,500	M	May 15
5,370	1,630	112.6	7,000	440	1,000	250	1,310	1,560	400	2,000	2,000	400	2,400	1,500	M	May 16
5,200	1,800	116.2	7,000	440	1,000	250	1,420	1,670	500	2,000	2,000	100	2,100	1,500	T	May 17
5,190	1,810	119.7	7,000	430	1,000	250	700	950		1,900	1,900	0	1,900	1,500	T	May 18
5,190	1,810	123.3	7,000	430	1,000	250		250		1,200	1,200		1,200	1,500	T	May 19
5,080	1,920	127.1	7,000	410	1,000	250		250		720	720		720	1,500	T	May 20
4,380	700		5,080	400	1,000	250		250		300	300		300	1,500		May 21
3,880	0		3,880	390	1,000	250		250		300	300		300	1,500		May 22
3,450	0		3,450	370	1,000	250		250		300	300		300	1,500		May 23
3,440	0		3,440	390	1,000	250		250		300	300		300	1,500		May 24
3,420	0		3,420	400	1,000	250		250		300	300		300	1,500		May 25
3,440	0		3,440	400	1,000	250		250		300	300		300	1,500		May 26
3,450	0		3,450	370	1,000	250		250		300	300		300	1,500		May 27
3,450	0		3,450	330	1,000	250		250		300	300		300	1,500		May 28
3,420	0		3,420	340	1,000	250		250		300	300		300	1,500		May 29
3,380	0		3,380	340	1,000	250		250		300	300		300	1,500		May 30
3,390	0		3,390	330	1,000	250		250		300	300		300	1,500		May 31
VAMP 31-day period *																
Mean (cfs)	4,934	2,068	7,002				1,138	1,388	245		1,719	685	2,405	1,500		
total (KAF)		127.1					70.0		15.0			42.1				

Construction period for the Old River Barrier.

Tuolumne FERC volume (TAF) = 91.2

91.2

* April 15 – May 15 Adjusted for lag time

Pulse flow period and tributary flow to meet the pulse flow.

DAILY OPERATION PLAN, APRIL 4
 PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

	SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
	[calc]	[calc]	[calc]	[calc]												
	cfs	cfs		cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	
Mar 29								250			2,519	2,519		2,519	800	
Mar 30								250			2,628	2,628		2,628	800	
Mar 31								250			2,039	2,039		2,039	800	
Apr 01	4,678			4,678	1,480	1,000	250	250			1,567	1,567		1,567	800	
Apr 02	4,089			4,089	1,430	1,000	250	250			1,126	1,126		1,126	800	
Apr 03	5,097			5,097	1,360	1,000	250	250			1,000	1,000		1,000	800	
Apr 04	4,606			4,606	1,290	1,000	250	250			1,000	1,000		1,000	800	
Apr 05	4,410			4,410	1,160	1,000	250	250			1,000	1,000		1,000	800	
Apr 06	4,340			4,340	1,040	1,000	250	250			1,000	1,000		1,000	800	
Apr 07	4,210			4,210	1,000	1,000	250	250			1,000	1,000		1,000	800	
Apr 08	4,090			4,090	950	1,000	250	250			1,000	1,000		1,000	800	
Apr 09	4,050			4,050	900	1,000	250	250			1,000	1,000		1,000	800	
Apr 10	4,000			4,000	940	1,000	250	250			1,000	1,000		1,000	800	
Apr 11	3,950			3,950	938	1,000	250	250			1,000	1,000		1,000	800	
Apr 12	3,990			3,990	861	1,000	250	0	250	0	1,400	1,400		1,400	800	M
Apr 13	3,988			3,988	779	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 14	4,311			4,311	724	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 15	5,829	1,500	3	7,329	669	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 16	5,774	1,500	6	7,274	659	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 17	5,719	1,500	9	7,219	620	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 18	5,709	1,500	12	7,209	595	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T
Apr 19	5,670	1,500	15	7,170	581	1,000	250	1,279	1,529	300	2,200	2,200	1,500	3,700	1,500	T
Apr 20	5,645	1,500	18	7,145	571	1,000	250	2,691	2,941	300	600	600	1,500	2,100	1,500	T
Apr 21	5,531	1,500	21	7,031	559	1,000	250	2,762	3,012	300	600	600	100	700	1,500	
Apr 22	3,921	3,079	27	7,000	488	1,000	250	2,784	3,034	300	600	600	100	700	1,500	
Apr 23	3,909	3,091	33	7,000	466	1,000	250	2,872	3,122	300	600	600	100	700	1,500	
Apr 24	3,838	3,162	39	7,000	478	1,000	250	2,067	2,317	300	600	600	0	600	1,500	M
Apr 25	3,816	3,184	46	7,000	483	1,000	250	2,079	2,329	300	600	600	800	1,400	1,500	M
Apr 26	3,828	3,172	52	7,000	471	1,000	250	2,056	2,306	250	600	600	800	1,400	1,500	M
Apr 27	3,833	3,167	58	7,000	444	1,000	250	2,057	2,307	250	1,500	1,500	0	1,500	1,500	M
Apr 28	3,821	3,179	65	7,000	443	1,000	250	2,055	2,305	250	1,500	1,500	0	1,500	1,500	M
Apr 29	4,694	2,306	69	7,000	445	1,000	250	2,043	2,293	250	1,500	1,500	0	1,500	1,500	M
Apr 30	4,693	2,307	74	7,000	457	1,000	250	2,034	2,284	250	1,500	1,500	0	1,500	1,500	M
May 01	4,695	2,305	78	7,000	466	1,000	250	2,018	2,268	250	1,500	1,500	0	1,500	1,500	M
May 02	4,707	2,293	83	7,000	482	1,000	250	1,378	1,628	200	1,500	1,500	0	1,500	1,500	M
May 03	4,716	2,284	87	7,000	472	1,000	250	376	626	200	2,200	2,200	0	2,200	1,500	T
May 04	4,732	2,268	92	7,000	474	1,000	250	396	646	200	2,200	2,200	1,000	3,200	1,500	T
May 05	5,422	1,578	95	7,000	454	1,000	250	463	713	150	2,200	2,200	1,000	3,200	1,500	T
May 06	5,424	1,576	98	7,000	437	1,000	250	547	797	100	2,200	2,200	1,000	3,200	1,500	T
May 07	5,404	1,596	101	7,000	403	1,000	250	624	874	0	2,200	2,200	1,000	3,200	1,500	T
May 08	5,387	1,613	104	7,000	426	1,000	250	630	880	0	2,200	2,200	1,000	3,200	1,500	T
May 09	5,353	1,647	108	7,000	420	1,000	250	839	1,089	0	2,200	2,200	1,000	3,200	1,500	T
May 10	5,376	1,624	111	7,000	411	1,000	250	924	1,174	300	2,000	2,000	1,000	3,000	1,500	T
May 11	5,370	1,630	114	7,000	426	1,000	250	1,309	1,559	300	2,000	2,000	600	2,600	1,500	
May 12	5,161	1,839	118	7,000	441	1,000	250	1,621	1,871	300	2,000	2,000	200	2,200	1,500	
May 13	5,176	1,824	121	7,000	429	1,000	250		250		1,900	1,900	0	1,900	1,500	
May 14	5,191	1,809	125	7,000	422	1,000	250		250		500	500		500	1,500	
May 15	5,079	1,921	129	7,000	447	1,000	250		250		500	500		500	1,500	
May 16	3,672	0		3,672	443	1,000	250		250		300	300		300	1,500	
May 17	3,697	0		3,697	442	1,000	250		250		300	300		300	1,500	
May 18	3,493	0		3,493	431	1,000	250		250		300	300		300	1,500	
May 19	3,492	0		3,492	431	1,000	250		250		300	300		300	1,500	
May 20	3,481	0		3,481	414	1,000	250		250		300	300		300	1,500	
May 21	3,481	0		3,481	395	1,000	250		250		300	300		300	1,500	
May 22	3,464	0		3,464	393	1,000	250		250		300	300		300	1,500	
May 23	3,445	0		3,445	372	1,000	250		250		300	300		300	1,500	
May 24	3,443	0		3,443	389	1,000	250		250		300	300		300	1,500	
May 25	3,422	0		3,422	397	1,000	250		250		300	300		300	1,500	
May 26	3,439	0		3,439	398	1,000	250		250		300	300		300	1,500	
May 27	3,447	0		3,447	365	1,000	250		250		300	300		300	1,500	
May 28	3,448	0		3,448	326	1,000	250		250		300	300		300	1,500	
May 29	3,415	0		3,415	337	1,000	250		250		300	300		300	1,500	
May 30	3,376	0		3,376	343	1,000	250		250		300	300		300	1,500	
May 31	3,387	0		3,387	332	1,000	250		250		300	300		300	1,500	
VAMP 31-day period *																
Mean (cfs)	4,949	2,095		7,044				1,223	1,473	173		1,694	700	2,394	1,500	
total (KAF)		128.8						75.2		10.6			43.0			

Construction period for the Old River Barrier.

Tuolumne FERC volume (TAF) = 89.9

91.2

* April 15 – May 15 Adjusted for lag time

Pulse flow period and tributary flow to meet the pulse flow.

DAILY OPERATION PLAN, APRIL 5
 PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
[calc]	[calc]	[calc]	[calc]				[calc]	[calc]					[calc]		
cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs	cfs	
						250		250		2,519	2,519		2,519	800	Mar 29
						250		250		2,628	2,628		2,628	800	Mar 30
						250		250		2,039	2,039		2,039	800	Mar 31
4,678			4,678	1,480	1,000	250		250		1,567	1,567		1,567	800	Apr 01
4,089			4,089	1,430	1,000	250		250		1,126	1,126		1,126	800	Apr 02
5,097			5,097	1,360	1,000	250		250		1,182	1,182		1,182	800	Apr 03
4,606			4,606	1,290	1,000	250		250		738	738		738	800	Apr 04
4,592			4,592	1,160	1,000	250		250		1,000	1,000		1,000	800	Apr 05
4,078			4,078	1,040	1,000	250		250		1,000	1,000		1,000	800	Apr 06
4,210			4,210	1,000	1,000	250		250		1,000	1,000		1,000	800	Apr 07
4,090			4,090	950	1,000	250		250		1,000	1,000		1,000	800	Apr 08
4,050			4,050	900	1,000	250		250		1,000	1,000		1,000	800	Apr 09
4,000			4,000	940	1,000	250		250		1,000	1,000		1,000	800	Apr 10
3,950			3,950	938	1,000	250		250		1,000	1,000		1,000	800	Apr 11
3,990			3,990	861	1,000	250	0	250	0	1,400	1,400		1,400	800	Apr 12
3,988			3,988	779	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 13
4,311			4,311	724	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 14
5,829	1,500	3	7,329	669	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 15
5,774	1,500	6	7,274	659	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 16
5,719	1,500	9	7,219	620	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 17
5,709	1,500	12	7,209	595	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	Apr 18
5,670	1,500	15	7,170	581	1,000	250	879	1,129	300	2,200	2,200	1,500	3,700	1,500	Apr 19
5,645	1,500	18	7,145	571	1,000	250	1,991	2,241	300	600	600	1,900	2,500	1,500	Apr 20
5,531	1,500	21	7,031	559	1,000	250	2,062	2,312	300	600	600	800	1,400	1,500	Apr 21
3,921	3,079	27	7,000	488	1,000	250	2,084	2,334	300	600	600	800	1,400	1,500	Apr 22
3,909	3,091	33	7,000	466	1,000	250	2,072	2,322	300	600	600	800	1,400	1,500	Apr 23
3,838	3,162	39	7,000	478	1,000	250	2,067	2,317	300	600	600	800	1,400	1,500	Apr 24
3,816	3,184	46	7,000	483	1,000	250	2,079	2,329	300	600	600	800	1,400	1,500	Apr 25
3,828	3,172	52	7,000	471	1,000	250	2,056	2,306	250	600	600	800	1,400	1,500	Apr 26
3,833	3,167	58	7,000	444	1,000	250	2,057	2,307	250	1,500	1,500	0	1,500	1,500	Apr 27
3,821	3,179	65	7,000	443	1,000	250	2,055	2,305	250	1,500	1,500	0	1,500	1,500	Apr 28
4,694	2,306	69	7,000	445	1,000	250	2,043	2,293	250	1,500	1,500	0	1,500	1,500	Apr 29
4,693	2,307	74	7,000	457	1,000	250	2,034	2,284	250	1,500	1,500	0	1,500	1,500	Apr 30
4,695	2,305	78	7,000	466	1,000	250	2,018	2,268	250	1,500	1,500	0	1,500	1,500	May 01
4,707	2,293	83	7,000	482	1,000	250	1,478	1,728	100	1,500	1,500	0	1,500	1,500	May 02
4,716	2,284	87	7,000	472	1,000	250	676	926	100	2,200	2,200	0	2,200	1,500	May 03
4,732	2,268	92	7,000	474	1,000	250	696	946	100	2,200	2,200	800	3,000	1,500	May 04
5,422	1,578	95	7,000	454	1,000	250	713	963	100	2,200	2,200	800	3,000	1,500	May 05
5,424	1,576	98	7,000	437	1,000	250	747	997	100	2,200	2,200	800	3,000	1,500	May 06
5,404	1,596	101	7,000	403	1,000	250	724	974	100	2,200	2,200	800	3,000	1,500	May 07
5,387	1,613	104	7,000	426	1,000	250	630	880	200	2,200	2,200	800	3,000	1,500	May 08
5,353	1,647	108	7,000	420	1,000	250	639	889	200	2,200	2,200	800	3,000	1,500	May 09
5,376	1,624	111	7,000	411	1,000	250	524	774	300	2,000	2,000	1,000	3,000	1,500	May 10
5,370	1,630	114	7,000	426	1,000	250	509	759	300	2,000	2,000	1,000	3,000	1,500	May 11
5,161	1,839	118	7,000	441	1,000	250	521	771	300	2,000	2,000	1,000	3,000	1,500	May 12
5,176	1,824	121	7,000	429	1,000	250		250		1,900	1,900	1,100	3,000	1,500	May 13
5,191	1,809	125	7,000	422	1,000	250		250		500	500		500	1,500	May 14
5,079	1,921	129	7,000	447	1,000	250		250		500	500		500	1,500	May 15
3,672	0		3,672	443	1,000	250		250		300	300		300	1,500	May 16
3,697	0		3,697	442	1,000	250		250		300	300		300	1,500	May 17
3,493	0		3,493	431	1,000	250		250		300	300		300	1,500	May 18
3,492	0		3,492	431	1,000	250		250		300	300		300	1,500	May 19
3,481	0		3,481	414	1,000	250		250		300	300		300	1,500	May 20
3,481	0		3,481	395	1,000	250		250		300	300		300	1,500	May 21
3,464	0		3,464	393	1,000	250		250		300	300		300	1,500	May 22
3,445	0		3,445	372	1,000	250		250		300	300		300	1,500	May 23
3,443	0		3,443	389	1,000	250		250		300	300		300	1,500	May 24
3,422	0		3,422	397	1,000	250		250		300	300		300	1,500	May 25
3,439	0		3,439	398	1,000	250		250		300	300		300	1,500	May 26
3,447	0		3,447	365	1,000	250		250		300	300		300	1,500	May 27
3,448	0		3,448	326	1,000	250		250		300	300		300	1,500	May 28
3,415	0		3,415	337	1,000	250		250		300	300		300	1,500	May 29
3,376	0		3,376	343	1,000	250		250		300	300		300	1,500	May 30
3,387	0		3,387	332	1,000	250		250		300	300		300	1,500	May 31
VAMP 31-day period *															
Mean (cfs)	4,949	2,095	7,044				1,076	1,326	177		1,694	842	2,535	1,500	
total (KAF)		128.8					66.2		10.9			51.8			

Construction period for the Old River Barrier.

Tuolumne FERC volume (TAF) = 91.2

91.2

* April 15– May 15 Adjusted for lag time

Pulse flow period and tributary flow to meet the pulse flow.

DAILY OPERATION PLAN, APRIL 11
 PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

	SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressy Suppl.	Merced R. at Cressy w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse "Modified"	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
	[calc]	[calc]	[calc]	[calc]				[calc]	[calc]					[calc]		
	cfs	cfs		cfs	cfs	cfs	cfs	cfs	cfs	cfs		cfs	cfs	cfs	cfs	
Mar 29							660		660		2,519	2,519		2,519	846	
Mar 30							636		636		2,628	2,628		2,628	846	
Mar 31							606		606		2,039	2,039		2,039	846	
Apr 01	6,145			6,145	894	2,011	588		588		1,567	1,567		1,567	846	
Apr 02	5,745			5,745	843	2,224	599		599		1,126	1,126		1,126	846	
Apr 03	5,406			5,406	822	1,493	613		613		1,182	1,182		1,182	846	
Apr 04	5,181			5,181	839	1,778	601		601		738	738		738	851	
Apr 05	4,944			4,944	846	1,495	596		596		626	626		626	860	
Apr 06	4,738			4,738	937	1,697	376		376		616	616		616	831	
Apr 07	4,603			4,603	1,001	1,670	307		307		572	572		572	816	
Apr 08	4,598			4,598	977	1,618	309		309		406	406		406	826	
Apr 09	4,522			4,522	950	1,757	301		301		376	376		376	831	
Apr 10	4,315			4,315	925	1,799	304		304		396	396		396	878	
Apr 11	4,266			4,266	938	1,800	250		250		396	396		396	1,200	
Apr 12	4,300			4,300	861	1,800	250	0	250	0	396	396		396	1,500	M
Apr 13	4,638			4,638	779	1,800	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 14	4,807			4,807	724	1,800	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 15	5,829	1,500	3	7,329	669	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 16	5,774	1,500	6	7,274	659	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 17	5,719	1,500	9	7,219	620	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 18	5,709	1,500	12	7,209	595	1,000	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 19	5,670	1,500	15	7,170	581	1,000	250	779	1,029	100	2,300	2,300	1,500	3,800	1,500	T
Apr 20	5,645	1,500	18	7,145	571	1,000	250	1,791	2,041	200	1,100	1,000	1,800	2,800	1,500	T
Apr 21	5,631	1,500	21	7,131	559	1,000	250	1,812	2,062	250	600	600	1,100	1,700	1,500	
Apr 22	4,321	2,679	26	7,000	488	1,000	250	1,784	2,034	300	600	600	1,100	1,700	1,500	
Apr 23	3,909	3,091	32	7,000	466	1,000	250	1,772	2,022	300	600	600	1,100	1,700	1,500	
Apr 24	3,838	3,162	39	7,000	478	1,000	250	1,767	2,017	300	600	600	1,100	1,700	1,500	M
Apr 25	3,816	3,184	45	7,000	483	1,000	250	1,779	2,029	300	600	600	1,100	1,700	1,500	M
Apr 26	3,828	3,172	51	7,000	471	1,000	250	1,806	2,056	300	600	600	1,100	1,700	1,500	M
Apr 27	3,833	3,167	57	7,000	444	1,000	250	1,807	2,057	300	1,500	1,500	200	1,700	1,500	M
Apr 28	3,821	3,179	64	7,000	443	1,000	250	1,805	2,055	300	1,500	1,500	200	1,700	1,500	M
Apr 29	4,694	2,306	68	7,000	445	1,000	250	1,793	2,043	300	1,500	1,500	200	1,700	1,500	M
Apr 30	4,693	2,307	73	7,000	457	1,000	250	1,784	2,034	300	1,500	1,500	200	1,700	1,500	M
May 01	4,695	2,305	77	7,000	466	1,000	250	1,768	2,018	300	1,500	1,500	200	1,700	1,500	M
May 02	4,707	2,293	82	7,000	482	1,000	250	1,278	1,528	200	1,500	1,500	200	1,700	1,500	M
May 03	4,716	2,284	87	7,000	472	1,000	250	476	726	200	2,200	2,300	0	2,300	1,500	T
May 04	4,732	2,268	91	7,000	474	1,000	250	496	746	200	2,200	2,300	800	3,100	1,500	T
May 05	5,522	1,478	94	7,000	454	1,000	250	513	763	200	2,200	2,300	800	3,100	1,500	T
May 06	5,524	1,476	97	7,000	437	1,000	250	547	797	200	2,200	2,300	800	3,100	1,500	T
May 07	5,504	1,496	100	7,000	403	1,000	250	524	774	200	2,200	2,300	800	3,100	1,500	T
May 08	5,487	1,513	103	7,000	426	1,000	250	530	780	200	2,200	2,300	800	3,100	1,500	T
May 09	5,453	1,547	106	7,000	420	1,000	250	539	789	200	2,200	2,300	800	3,100	1,500	T
May 10	5,476	1,524	109	7,000	411	1,000	250	1,024	1,274	300	2,200	2,300	800	3,100	1,500	T
May 11	5,470	1,530	112	7,000	426	1,000	250	1,009	1,259	300	1,900	2,200	300	2,500	1,500	
May 12	5,461	1,539	115	7,000	441	1,000	250	1,021	1,271	300	1,800	2,200	300	2,500	1,500	
May 13	5,376	1,624	118	7,000	429	1,000	250		250		1,800	2,150	350	2,500	1,500	
May 14	5,391	1,609	121	7,000	422	1,000	250		250		1,550	300		300	1,500	
May 15	5,329	1,671	125	7,000	447	1,000	250		250		800	300		300	1,500	
May 16	3,472	0		3,472	443	1,000	250		250		300	300		300	1,500	
May 17	3,497	0		3,497	442	1,000	250		250		300	300		300	1,500	
May 18	3,493	0		3,493	431	1,000	250		250		300	300		300	1,500	
May 19	3,492	0		3,492	431	1,000	250		250		300	300		300	1,500	
May 20	3,481	0		3,481	414	1,000	250		250		300	300		300	1,500	
May 21	3,481	0		3,481	395	1,000	250		250		300	300		300	1,500	
May 22	3,464	0		3,464	393	1,000	250		250		300	300		300	1,500	
May 23	3,445	0		3,445	372	1,000	250		250		300	300		300	1,500	
May 24	3,443	0		3,443	389	1,000	250		250		300	300		300	1,500	
May 25	3,422	0		3,422	397	1,000	250		250		300	300		300	1,500	
May 26	3,439	0		3,439	398	1,000	250		250		300	300		300	1,500	
May 27	3,447	0		3,447	365	1,000	250		250		300	300		300	1,500	
May 28	3,448	0		3,448	326	1,000	250		250		300	300		300	1,500	
May 29	3,415	0		3,415	337	1,000	250		250		300	300		300	1,500	
May 30	3,376	0		3,376	343	1,000	250		250		300	300		300	1,500	
May 31	3,387	0		3,387	332	1,000	250		250		300	300		300	1,500	
VAMP 31-day period*																
Mean (cfs)	5,018	2,029		7,048				974	1,224	195		1,763	860	2,623	1,500	
total (KAF)		125						59.9		12.0			52.9			

Actual Value
 Barrier Construction
 Stability Target

Tuolumne FERC volume (TAF) = 89.95 (33 days)
 89.95 (31 days)

* April 15–May 15 Adjusted for lag time

DAILY OPERATION PLAN, APRIL 13
 PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
[calc]	[calc]	[calc]	[calc]				[calc]	[calc]					[calc]		
cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs	cfs	
								660			2,519	2,519	2,519	846	Mar 29
								636			2,628	2,628	2,628	846	Mar 30
								606			2,039	2,039	2,039	846	Mar 31
4,438			4,438	894	304	588		588		1,567	1,567	1,567	846	Apr 01	
4,055			4,055	843	534	599		599		1,126	1,126	1,126	846	Apr 02	
4,653			4,653	822	740	613		613		1,182	1,182	1,182	846	Apr 03	
4,403			4,403	839	1,000	601		601		738	738	738	851	Apr 04	
4,177			4,177	846	728	596		596		626	626	626	860	Apr 05	
3,985			3,985	937	944	376		376		616	616	616	831	Apr 06	
3,838			3,838	1,001	905	307		307		572	572	572	816	Apr 07	
3,828			3,828	985	848	309		309		406	406	406	826	Apr 08	
3,533			3,533	955	768	301		301		376	376	376	831	Apr 09	
3,256			3,256	925	732	304		304		396	396	396	878	Apr 10	
3,065			3,065	581	594	302		302		395	395	395	1,071	Apr 11	
3,049			3,049	459	549	423	0	423	0	737	737	737	1,200	Apr 12	
3,186			3,186	418	835	326	0	326	0	2,300	2,300	1,479	3,779	1,275	M
3,398			3,398	451	700	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
5,116	1,479	3	6,595	447	700	250	0	250	0	2,300	2,300	1,500	3,800	1,200	T+M
5,277	1,500	6	6,777	443	700	250	0	250	0	2,300	2,300	1,400	3,700	1,100	T+M
4,897	1,500	9	6,397	439	700	250	0	250	0	2,300	2,300	1,300	3,600	1,100	T+M
4,643	1,400	12	6,043	436	550	250	768	1,018	0	2,300	2,300	1,300	3,600	1,100	T+M
4,639	1,300	14	5,939	432	550	250	772	1,022	100	2,300	2,300	300	2,600	1,100	T
4,636	1,300	17	5,936	428	550	250	1,476	1,726	200	1,100	1,000	1,100	2,100	1,500	T
4,632	1,068	19	5,700	424	550	250	1,680	1,930	200	600	600	700	1,300	1,500	
3,728	1,972	23	5,700	420	550	250	1,684	1,934	200	600	600	500	1,100	1,500	
3,324	2,376	28	5,700	416	550	250	1,588	1,838	300	600	600	500	1,100	1,500	
3,320	2,380	32	5,700	412	550	250	1,592	1,842	300	600	600	500	1,100	1,500	M
3,316	2,384	37	5,700	408	550	250	1,596	1,846	300	600	600	500	1,100	1,500	M
3,312	2,388	42	5,700	404	550	250	1,500	1,750	0	600	600	500	1,100	1,500	M
3,308	2,392	46	5,700	400	550	250	1,504	1,754	0	1,500	1,500	0	1,500	1,500	M
3,304	2,396	51	5,700	396	550	250	1,507	1,757	0	1,500	1,500	0	1,500	1,500	M
4,200	1,500	54	5,700	393	550	250	1,511	1,761	0	1,500	1,500	0	1,500	1,500	M
4,196	1,504	57	5,700	389	550	250	1,515	1,765	0	1,500	1,500	0	1,500	1,500	M
4,193	1,507	60	5,700	385	550	250	1,519	1,769	0	1,500	1,500	0	1,500	1,500	M
4,189	1,511	63	5,700	381	550	250	723	973		1,500	1,500	0	1,500	1,500	M
4,185	1,515	66	5,700	377	550	250	527	777	100	2,200	2,300		2,300	1,500	T
4,181	1,519	69	5,700	373	550	250	431	681	200	2,200	2,300	100	2,400	1,500	T
4,977	723	71	5,700	369	550	250	335	585	300	2,200	2,300	100	2,400	1,500	T
4,973	727	72	5,700	365	550	250	339	589	300	2,200	2,300	100	2,400	1,500	T
4,969	731	74	5,700	361	550	250	343	593	300	2,200	2,300	100	2,400	1,500	T
4,965	735	75	5,700	357	550	250	347	597	300	2,200	2,300	100	2,400	1,500	T
4,961	739	76	5,700	353	550	250	350	600	300	2,200	2,300	100	2,400	1,500	T
4,957	743	78	5,700	350	550	250	354	604	300	2,200	2,300	100	2,400	1,500	T
4,953	747	79	5,700	346	550	250	358	608	300	1,900	2,200	200	2,400	1,500	
4,950	750	81	5,700	342	550	250	362	612	300	1,800	2,200	200	2,400	1,500	
4,846	854	83	5,700	338	550	250		250		1,800	2,150	250	2,400	1,500	
4,842	858	84	5,700	334	550	250		250		1,550	300		300	1,500	
4,788	912	86	5,700	330	550	250		250		800	300		300	1,500	
2,934	0		2,934	443	550	250		250		300	300		300	1,500	
2,930	0		2,930	442	550	250		250		300	300		300	1,500	
3,043	0		3,043	431	550	250		250		300	300		300	1,500	
3,042	0		3,042	431	550	250		250		300	300		300	1,500	
3,031	0		3,031	414	550	250		250		300	300		300	1,500	
3,031	0		3,031	395	550	250		250		300	300		300	1,500	
3,014	0		3,014	393	550	250		250		300	300		300	1,500	
2,995	0		2,995	372	550	250		250		300	300		300	1,500	
2,993	0		2,993	389	550	250		250		300	300		300	1,500	
2,972	0		2,972	397	550	250		250		300	300		300	1,500	
2,989	0		2,989	398	550	250		250		300	300		300	1,500	
2,997	0		2,997	365	550	250		250		300	300		300	1,500	
2,998	0		2,998	326	550	250		250		300	300		300	1,500	
2,965	0		2,965	337	550	250		250		300	300		300	1,500	
2,926	0		2,926	343	550	250		250		300	300		300	1,500	
2,937	0		2,937	332	550	250		250		300	300		300	1,500	
VAMP 31-day period *															
Mean (cfs)	4,412	1,400	5,813				796	1,054	143		1,763	481	2,228	1,439	
total (KAF)		86					49.0		8.8			29.6			

Actual Value
 Barrier Construction
 Stability Target

Tuolumne FERC volume (TAF) = 89.95 (33 days) 89.95 (31 days)

* April 15 – May 15 Adjusted for lag time

DAILY OPERATION PLAN, APRIL 14
PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

	SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/ VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/ VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/ VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
	[calc]	[calc]	[calc]	[calc]										[calc]		
	cfs	cfs	TAF	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	cfs	
Apr 01					894	304	300		300		1,567	1,567		1,567	846	
Apr 02					843	534	300		300		1,126	1,126		1,126	846	
Apr 03					822	740	300		300		1,182	1,182		1,182	846	
Apr 04	4,122			4,122	839	1,007	300		300		738	738		738	851	
Apr 05	3,885			3,885	846	735	300		300		626	626		626	860	
Apr 06	3,678			3,678	937	950	300		300		616	616		616	831	
Apr 07	3,543			3,543	1,001	911	307		307		572	572		572	816	
Apr 08	3,523			3,523	985	839	309		309		416	416		416	819	
Apr 09	3,385			3,385	955	696	301		301		407	407		407	853	
Apr 10	3,246			3,246	925	719	304		304		397	397		397	878	
Apr 11	3,085	0		3,085	581	561	302	0	302		395	395		395	1,071	
Apr 12	3,040	0		3,040	459	539	317	0	317	0	737	737		737	1,200	M
Apr 13	3,191	0		3,191	418		326	0	326	0	2,300	2,300	1,480	3,780	1,275	T+M
Apr 14	3,998	0	0	3,998	414	1,300	250	0	250	0	2,300	2,300	1,500	3,800	1,500	T+M
Apr 15	4,810	1,480	3	6,290	411	500	250	0	250	0	2,300	2,300	1,500	3,800	1,100	T+M
Apr 16	5,040	1,500	5.9	6,540	407	500	250	0	250	0	2,300	2,300	1,400	3,700	1,100	T+M
Apr 17	4,561	1,500	8.9	6,061	403	500	250	0	250	0	2,300	2,300	1,300	3,600	1,100	T+M
Apr 18	4,557	1,400	11.7	5,957	400	500	250	154	404	100	2,300	2,300	1,300	3,600	1,100	T+M
Apr 19	4,553	1,300	14.2	5,853	396	500	250	858	1,108	100	2,300	2,300	500	2,800	1,500	T
Apr 20	4,550	1,300	16.8	5,850	392	500	250	1,562	1,812	200	1,100	1,400	700	2,100	1,500	T
Apr 21	4,946	754	18.3	5,700	389	500	250	1,765	2,015	200	600	800	500	1,300	1,500	
Apr 22	4,042	1,658	21.6	5,700	385	500	250	1,869	2,119	200	600	800	300	1,100	1,500	
Apr 23	3,439	2,262	26.1	5,700	381	500	250	1,823	2,073	250	600	800	200	1,000	1,500	
Apr 24	3,435	2,265	30.6	5,700	377	500	250	1,476	1,726	300	600	800	200	1,000	1,500	M
Apr 25	3,431	2,269	35.1	5,700	374	500	250	1,480	1,730	300	600	800	500	1,300	1,500	M
Apr 26	3,427	2,273	39.6	5,700	370	500	250	1,484	1,734	0	600	800	500	1,300	1,500	M
Apr 27	3,424	2,276	44.1	5,700	366	500	250	1,487	1,737	0	1,500	1,500	100	1,600	1,500	M
Apr 28	3,420	2,280	48.6	5,700	363	500	250	1,491	1,741	0	1,500	1,500	100	1,600	1,500	M
Apr 29	4,116	1,584	51.8	5,700	359	500	250	1,495	1,745	0	1,500	1,500	100	1,600	1,500	M
Apr 30	4,113	1,587	54.9	5,700	355	500	250	1,498	1,748	0	1,500	1,500	100	1,600	1,500	M
May 01	4,109	1,591	58.1	5,700	352	500	250	1,502	1,752	0	1,500	1,500	100	1,600	1,500	M
May 02	4,105	1,595	61.2	5,700	348	500	250	706	956	0	1,500	1,500	100	1,600	1,500	M
May 03	4,102	1,598	64.4	5,700	344	500	250	309	559	200	2,200	2,400	0	2,400	1,500	T
May 04	4,098	1,602	67.6	5,700	341	500	250	313	563	200	2,200	2,400	200	2,600	1,500	T
May 05	4,994	706	69.0	5,700	337	500	250	217	467	300	2,200	2,400	200	2,600	1,500	T
May 06	4,991	709	70.4	5,700	333	500	250	221	471	300	2,200	2,400	200	2,600	1,500	T
May 07	4,987	713	71.8	5,700	330	500	250	224	474	300	2,200	2,400	200	2,600	1,500	T
May 08	4,983	717	73.2	5,700	326	500	250	228	478	300	2,200	2,400	200	2,600	1,500	T
May 09	4,980	721	74.7	5,700	322	500	250	232	482	300	2,200	2,400	200	2,600	1,500	T
May 10	4,976	724	76.1	5,700	318	500	250	635	885	300	2,200	2,400	200	2,600	1,500	T
May 11	4,972	728	77.5	5,700	315	500	250	1,039	1,289	300	1,900	1,900	300	2,200	1,500	
May 12	4,968	732	79.0	5,700	311	500	250	1,143	1,393	400	1,800	1,400	400	1,800	1,500	
May 13	4,465	1,235	81.4	5,700	307	500	250	500	750		1,800	800	800	1,600	1,500	
May 14	3,961	1,739	84.9	5,700	304	500	250		250		1,550	300	500	800	1,500	
May 15	3,357	2,343	89.5	5,700	300	500	250		250		800	300		300	1,500	
May 16	2,854	1,000		3,854		500	250		250		300	300		300	1,500	
May 17	2,850	0		2,850		500	250		250		300	300		300	1,500	
May 18	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 19	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 20	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 21	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 22	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 23	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 24	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 25	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 26	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 27	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 28	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 29	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 30	2,550	0		2,550		500	250		250		300	300		300	1,500	
May 31	2,550	0		2,550		500	250		250		300	300		300	1,500	
VAMP 31-day period *																
Mean (cfs)	4,320	1,456		5,776				813	1,068	147		1,761	496	2,257	1,441	
total (KAF)		89.5						50.0		9.0			30.5			

Pulse flow period
 Tributary test flow periods
Green Type Actual flow

DAILY OPERATION PLAN, APRIL 17
 PULSE PERIOD: APRIL 15-MAY 15 • FLOW TARGET: 7,000CFS

SJR nr Vernalis Existing	VAMP Suppl. flow at Vernalis	VAMP Cum. Suppl. Flow	SJR nr Vernalis w/VAMP	SJR above Merced R. (2-day lag)	Vernalis Accretion	Merced R. at Cressey Existing	Merced R. at Cressey Suppl.	Merced R. at Cressey w/VAMP (3-day lag)	Exchange Contractors Suppl. (3-day lag)	Tuolumne R. at LaGrange FERC pulse Desired	Tuolumne R. at LaGrange FERC pulse Existing	Tuolumne R. at LaGrange Suppl.	Tuolumne R. at LaGrange w/VAMP (2-day lag)	Stan. R. blw Goodwin (2-day lag)	Maintain Priority Flow Level M=Merced T=Tuol.
[calc]	[calc]	[calc]	[calc]				[calc]	[calc]					[calc]		
cfs	cfs	TAF	cfs	cfs	cfs		cfs	cfs	cfs		cfs	cfs	cfs	cfs	
				894	304	300		300		1,567	1,567		1,567	846	Apr 01
				843	534	300		300		1,126	1,126		1,126	846	Apr 02
				822	740	300		300		1,182	1,182		1,182	846	Apr 03
4,122			4,122	839	1,007	300		300		738	738		738	851	Apr 04
3,885			3,885	846	735	300		300		626	626		626	860	Apr 05
3,678			3,678	937	950	300		300		616	616		616	831	Apr 06
3,543			3,543	1,001	911	307		307		572	572		572	816	Apr 07
3,523			3,523	985	839	309		309		416	416		416	819	Apr 08
3,385			3,385	955	696	301		301		407	407		407	853	Apr 09
3,246			3,246	925	719	304		304		397	397		397	878	Apr 10
3,085	0		3,085	581	561	302	0	302		395	395		395	1,071	Apr 11
3,040	0		3,040	459	539	317	0	317	0	737	737		737	1,200	Apr 12
3,191	0		3,191	418	840	326	0	326	0	2,300	2,300	1,480	3,780	1,275	Apr 13
4,195	0	0	4,195	389	1,497	331	0	331	0	2,300	2,300	1,543	3,843	1,434	Apr 14
3,852	1,480	3	5,332	417	-458	339	0	339	0	2,300	2,300	1,503	3,803	1,109	Apr 15
3,969	1,543	6.0	5,512	454	-480	353	0	353	0	2,300	2,300	1,385	3,685	1,514	Apr 16
4,657	1,503	9.0	6,160	403	500	250	0	250	0	2,300	2,300	1,300	3,600	1,100	Apr 17
4,697	1,385	11.7	6,082	400	500	250	150	400	100	2,300	2,300	1,300	3,600	1,100	Apr 18
4,656	1,300	14.3	5,956	396	500	250	860	1,110	200	2,300	2,300	500	2,800	1,500	Apr 19
4,550	1,300	16.9	5,850	392	500	250	1,560	1,810	200	1,100	1,400	700	2,100	1,500	Apr 20
4,946	750	18.4	5,696	389	500	250	1,770	2,020	250	600	800	500	1,300	1,500	Apr 21
4,042	1,760	21.9	5,802	385	500	250	1,870	2,120	300	600	800	250	1,050	1,500	Apr 22
3,439	2,260	26.3	5,699	381	500	250	1,820	2,070	300	600	800	200	1,000	1,500	Apr 23
3,435	2,270	30.8	5,705	377	500	250	1,480	1,730	300	600	800	200	1,000	1,500	Apr 24
3,431	2,370	35.5	5,801	374	500	250	1,480	1,730	200	600	800	500	1,300	1,500	Apr 25
3,427	2,320	40.1	5,747	370	500	250	1,480	1,730	100	600	800	500	1,300	1,500	Apr 26
3,424	2,280	44.7	5,704	366	500	250	1,490	1,740	0	1,500	1,500	100	1,600	1,500	Apr 27
3,420	2,180	49.0	5,600	363	500	250	1,490	1,740	0	1,500	1,500	100	1,600	1,500	Apr 28
4,116	1,680	52.3	5,796	359	500	250	1,490	1,740	0	1,500	1,500	100	1,600	1,500	Apr 29
4,113	1,590	55.5	5,703	355	500	250	1,500	1,750	0	1,500	1,500	100	1,600	1,500	Apr 30
4,109	1,590	58.6	5,699	352	500	250	1,500	1,750	0	1,500	1,500	100	1,600	1,500	May 01
4,105	1,590	61.8	5,695	348	500	250	710	960	0	1,500	1,500	100	1,600	1,500	May 02
4,102	1,600	65.0	5,702	344	500	250	310	560	100	2,200	2,400	0	2,400	1,500	May 03
4,098	1,600	68.1	5,698	341	500	250	310	560	200	2,200	2,400	200	2,600	1,500	May 04
4,994	710	69.5	5,704	337	500	250	220	470	300	2,200	2,400	200	2,600	1,500	May 05
4,991	610	70.8	5,601	333	500	250	220	470	300	2,200	2,400	200	2,600	1,500	May 06
4,987	710	72.2	5,697	330	500	250	220	470	300	2,200	2,400	200	2,600	1,500	May 07
4,983	720	73.6	5,703	326	500	250	230	480	300	2,200	2,400	200	2,600	1,500	May 08
4,980	720	75.0	5,700	322	500	250	230	480	300	2,200	2,400	200	2,600	1,500	May 09
4,976	720	76.4	5,696	318	500	250	640	890	300	2,200	2,400	200	2,600	1,500	May 10
4,972	730	77.9	5,702	315	500	250	1,040	1,290	300	1,900	1,900	300	2,200	1,500	May 11
4,968	730	79.3	5,698	311	500	250	1,140	1,390	200	1,800	1,400	400	1,800	1,500	May 12
4,465	1,240	81.8	5,705	307	500	250	500	750		1,800	800	800	1,600	1,500	May 13
3,961	1,740	85.3	5,701	304	500	250		250		1,550	300	500	800	1,500	May 14
3,357	2,140	89.5	5,497	300	500	250		250		800	300		300	1,500	May 15
2,854	1,000		3,854		500	250		250		300	300		300	1,500	May 16
2,850	0		2,850		500	250		250		300	300		300	1,500	May 17
2,550	0		2,550		500	250		250		300	300		300	1,500	May 18
2,550	0		2,550		500	250		250		300	300		300	1,500	May 19
2,550	0		2,550		500	250		250		300	300		300	1,500	May 20
2,550	0		2,550		500	250		250		300	300		300	1,500	May 21
2,550	0		2,550		500	250		250		300	300		300	1,500	May 22
2,550	0		2,550		500	250		250		300	300		300	1,500	May 23
2,550	0		2,550		500	250		250		300	300		300	1,500	May 24
2,550	0		2,550		500	250		250		300	300		300	1,500	May 25
2,550	0		2,550		500	250		250		300	300		300	1,500	May 26
2,550	0		2,550		500	250		250		300	300		300	1,500	May 27
2,550	0		2,550		500	250		250		300	300		300	1,500	May 28
2,550	0		2,550		500	250		250		300	300		300	1,500	May 29
2,550	0		2,550		500	250		250		300	300		300	1,500	May 30
2,550	0		2,550		500	250		250		300	300		300	1,500	May 31
VAMP 31-day period *															
Mean (cfs) total (KAF)	4,265	1,456	5,721				813	1,077	147		1,761	496	2,257	1,439	
		89.5					50.0		9.0			30.5			

Pulse flow period
 Tributary test flow periods
 Green Type Actual flow

VERNALIS ADAPTIVE MANAGEMENT PLAN (VAMP)

	Merced R. at Cressey (3-day log)									Tuolumne R. Near La Grange (2-day log)									Stanislaus R. blw Goodwin Dam (2-day log)								
	SCHEDULED				OBSERVED					SCHEDULED				OBSERVED					SCHEDULED				OBSERVED				
	Existing	Suppl.	Total Flow	Cum. Suppl.	Existing	Ramping	Suppl.	Total Flow	Cum. Suppl.	Existing	Suppl.	Total Flow	Cum. Suppl.	Existing	Ramping	Suppl.	Total Flow	Cum. Suppl.	Existing	Suppl.	Total Flow	Cum. Suppl.	Existing	Suppl.	Total Flow	Cum. Suppl.	
	(cfs)	(cfs)	(cfs)	(TAF)	(cfs)	(cfs)	(cfs)	(cfs)	(TAF)	(cfs)	(cfs)	(cfs)	(TAF)	(cfs)	(cfs)	(cfs)	(AF)	(cfs)	(cfs)	(cfs)	(AF)	(cfs)	(cfs)	(cfs)	(AF)		
Apr 01	250	0	250		300	0	0	300		1,567	0	1,567		1,570	0	0	1,570		846	0	800		850	0	850		
Apr 02	250	0	250	0.0	300	0	0	300	0	1,126	0	1,126	0.0	1,130	0	0	1,130	0.0	846	0	800	0	850	0	850	0	
Apr 03	250	0	250	0.0	300	0	0	300	0	1,182	0	1,182	0.0	1,180	0	0	1,180	0.0	846	0	800	0	850	0	850	0	
Apr 04	250	0	250	0.0	300	0	0	300	0	738	0	738	0.0	740	0	0	740	0.0	851	0	800	0	850	0	850	0	
Apr 05	250	0	250	0.0	300	0	0	300	0	626	0	626	0.0	630	0	0	630	0.0	860	0	800	0	860	0	860	0	
Apr 06	250	0	250	0.0	300	0	0	300	0	616	0	616	0.0	620	0	0	620	0.0	831	0	800	0	830	0	830	0	
Apr 07	250	0	250	0.0	310	0	0	310	0	572	0	572	0.0	570	0	0	570	0.0	816	0	800	0	820	0	820	0	
Apr 08	250	0	250	0.0	310	0	0	310	0	416	0	416	0.0	420	0	0	420	0.0	819	0	800	0	820	0	820	0	
Apr 09	250	0	250	0.0	310	0	0	310	0.0	407	0	407	0.0	410	0	0	410	0.0	853	0	800	0	860	0	860	0	
Apr 10	250	0	250	0.0	300	0	0	300	0.0	397	0	397	0.0	400	0	0	400	0.0	878	0	800	0	890	0	890	0	
Apr 11	250	0	250	0.0	300	0	0	300	0.0	395	0	395	0.0	400	0	0	400	0.0	1,071	0	1,000	0	1,070	0	1,070	0	
Apr 12	250	0	250	0.0	290		0	290	0.0	737	0	737	0.0	740	440	0	740	0.0	1,200	0	1,200	0	1,200	0	1,200	0	
Apr 13	250	0	250	0.0	300		0	300	0.0	2,300	1,480	3,780	2.9	2,300		1,480	3,780	2.9	1,275	0	1,500	0	1,280	0	1,280	0	
Apr 14	250	0	250	0.0	310		0	310	0.0	2,300	1,500	3,800	5.9	2,300		1,540	3,840	6.0	1,500	0	1,500	0	1,430	0	1,430	0	
Apr 15	250	0	250	0.0	310		0	310	0.0	2,300	1,500	3,800	8.9	2,300		1,500	3,800	9.0	1,100	0	1,100	0	1,110	0	1,110	0	
Apr 16	250	0	250	0.0	330		0	330	0.0	2,300	1,400	3,700	11.7	2,300		1,390	3,690	11.7	1,100	0	1,100	0	1,100	0	1,100	0	
Apr 17	250	0	250	0.0	380		0	380	0.0	2,300	1,300	3,600	14.2	2,300		1,310	3,610	14.3	1,100	0	1,100	0	1,120	0	1,120	0	
Apr 18	250	150	400	0.3	250		290	540	0.6	2,300	1,300	3,600	16.8	2,300		990	3,290	16.3	1,100	0	1,100	0	1,080	0	1,080	0	
Apr 19	250	1,550	1,800	3.4	250		1,470	1,720	3.5	2,300	200	2,500	17.2	2,300		70	2,370	16.4	950	0	950	0	870	0	870	0	
Apr 20	250	1,550	1,800	6.4	250		1,650	1,900	6.8	1,400	100	1,500	17.4	1,400		0	1,370	16.4	1,250	0	1,250	0	1,170	0	1,170	0	
Apr 21	250	1,550	1,800	9.5	250		1,590	1,840	9.9	800	300	1,100	18.0	800		260	1,060	16.9	1,500	0	1,500	0	1,500	0	1,500	0	
Apr 22	250	1,550	1,800	12.6	250		1,570	1,820	13.0	800	300	1,100	18.6	800		320	1,120	17.6	1,500	0	1,500	0	1,490	0	1,490	0	
Apr 23	250	1,480	1,730	15.5	250		1,550	1,800	16.1	800	300	1,100	19.2	800		330	1,130	18.2	1,500	0	1,500	0	1,490	0	1,490	0	
Apr 24	250	1,480	1,730	18.5	250		1,560	1,810	19.2	800	300	1,100	19.8	800		330	1,130	18.9	1,500	0	1,500	0	1,480	0	1,480	0	
Apr 25	250	1,480	1,730	21.4	250		1,470	1,720	22.1	800	300	1,100	20.4	800		290	1,090	19.5	1,500	0	1,500	0	1,510	0	1,510	0	
Apr 26	250	1,490	1,740	24.4	250					800	300	1,100	21.0	800					1,500	0	1,500	0					
Apr 27	250	1,490	1,740	27.3	250					1,500	0	1,500	21.0	1,500					1,500	0	1,500	0					
Apr 28	250	1,490	1,740	30.3	250					1,500	0	1,500	21.0	1,500					1,500	0	1,500	0					
Apr 29	250	1,500	1,750	33.2	250					1,500	0	1,500	21.0	1,500					1,500	0	1,500	0					
Apr 30	250	1,500	1,750	36.2	250					1,500	0	1,500	21.0	1,500					1,500	0	1,500	0					
May 01	250	710	960	37.6	250					1,500	0	1,500	21.0	1,500					1,500	0	1,500	0					
May 02	250	200	450	38.0	250					1,500	500	2,000	22.0	1,500					1,500	0	1,500	0					
May 03	250	0	250	38.0	250					2,400	0	2,400	22.0	2,400					1,500	0	1,500	0					
May 04	250	0	250	38.0	250					2,400	50	2,450	22.1	2,400					1,500	0	1,500	0					
May 05	250	0	250	38.0	250					2,400	50	2,450	22.2	2,400					1,500	0	1,500	0					
May 06	250	0	250	38.0	250					2,400	50	2,450	22.3	2,400					1,500	0	1,500	0					
May 07	250	0	250	38.0	250					2,400	50	2,450	22.4	2,400					1,500	0	1,500	0					
May 08	250	0	250	38.0	250					2,400	50	2,450	22.5	2,400					1,500	0	1,500	0					
May 09	250	50	300	38.1	250					2,400	50	2,450	22.6	2,400					1,500	0	1,500	0					
May 10	250	250	500	38.6	250					2,400	0	2,400	22.6	2,400					1,500	0	1,500	0					
May 11	250	450	700	39.5	250					1,900	300	2,200	23.2	1,900					1,500	0	1,500	0					
May 12	250	800	1,050	41.1	250					1,400	700	2,100	24.6	1,400					1,500	0	1,500	0					
May 13	250	400	650	41.9	250					800	900	1,700	26.3	800					1,500	0	1,500	0					
May 14	250	0	250	41.9	250					300	500	800	27.3	300					1,500	0	1,500	0					
May 15	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 16	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 17	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 18	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 19	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 20	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 21	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 22	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 23	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 24	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 25	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 26	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 27	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 28	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 29	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 30	250	0	250	41.9	250					300	0	300	27.3	300					1,500	0	1,500	0					
May 31	250																										

TRACKING OF SPRING PULSE FLOW 2000

Exchange Contractors (3-day log)				Upper SJR		SJR Accretions		San Joaquin R. at Vernalis										
SUPPLEMENTAL								SCHEDULED			OBSERVED							
Scheduled	Cum. Scheduled	Observed	Cum. Observed	Forecast	Observed	Forecast	Observed	Existing	Suppl.	Total	Target	Cum. Suppl.	Existing	Ramping	Suppl.	Total	Cum. Suppl.	
(cfs)	(TAF)	(cfs)	(TAF)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(cfs)	(TAF)	(cfs)	(cfs)	(cfs)	(cfs)	(AF)	
0		0		894	900	304	300						5,090			5,090		Apr 01
0	0.0	0	0.0	843	840	534	530						4,690			4,690		Apr 02
0	0.0	0	0.0	822	820	740	730						4,350			4,350		Apr 03
0	0.0	0	0.0	839	840	1,007	1,000	4,072	0	4,072			4,120	0	0	4,120		Apr 04
0	0.0	0	0.0	846	850	735	730	3,835	0	3,835		0.0	3,880	0	0	3,880	0	Apr 05
0	0.0	0	0.0	937	940	950	950	3,628	0	3,628		0.0	3,680	0	0	3,680	0.0	Apr 06
0	0.0	0	0.0	1,001	1,000	911	900	3,493	0	3,493		0.0	3,540	0	0	3,540	0.0	Apr 07
0	0.0	0	0.0	985	980	839	830	3,473	0	3,473		0.0	3,520	0	0	3,520	0.0	Apr 08
0	0.0	0	0.0	955	950	696	700	3,335	0	3,335		0.0	3,390	0	0	3,390	0.0	Apr 09
0	0.0	0	0.0	925	930	719	720	3,189	0	3,189		0.0	3,250	0	0	3,250	0.0	Apr 10
0	0.0	0	0.0	581	580	561	600	3,026	0	3,026		0.0	3,130	0	0	3,130	0.0	Apr 11
0	0.0	0	0.0	459	460	539	580	2,989	0	2,989		0.0	3,110	0	0	3,110	0.0	Apr 12
0	0.0	0	0.0	418	420	840	850	3,137	0	3,137		0.0	3,200	0	0	3,200	0.0	Apr 13
0	0.0	0	0.0	414	390	1,300	1,590	3,946	0	3,946		0.0	3,850	440	0	4,290	0.0	Apr 14
0	0.0	0	0.0	411	420	500	-210	4,743	1,480	6,223	5,700	2.9	4,080		1,480	5,560	2.9	Apr 15
0	0.0	0	0.0	407	460	500	-70	4,964	1,500	6,464	5,700	5.9	4,350		1,540	5,890	6.0	Apr 16
0	0.0	0	0.0	403	490	500	680	4,561	1,500	6,061	5,700	8.9	4,820		1,500	6,320	9.0	Apr 17
100	0.2	100	0.2	400	550	500	1,490	4,557	1,400	5,957	5,700	11.7	5,660		1,390	7,050	11.7	Apr 18
200	0.6	200	0.6	500	570	1,400	1,380	5,453	1,300	6,753	5,700	14.2	5,620		1,310	6,930	14.3	Apr 19
200	1.0	200	1.0	392	660	1,300	830	5,350	1,300	6,650	5,700	16.8	5,240		990	6,230	16.3	Apr 20
200	1.4	200	1.4	646	780	1,500	1,700	5,500	450	5,950	5,700	17.7	5,790		460	6,250	17.2	Apr 21
200	1.8	200	1.8	636	750	1,100	1,160	4,392	1,850	6,242	5,700	21.4	4,610		1,670	6,280	20.5	Apr 22
200	2.2	200	2.2	625	640	1,000	830	4,196	2,050	6,246	5,700	25.4	4,160		2,110	6,270	24.7	Apr 23
200	2.6	200	2.6	615	600	900	860	4,086	2,050	6,136	5,700	29.5	4,150		2,110	6,260	28.9	Apr 24
200	3.0	200	3.0	605	570	800	790	3,975	2,050	6,025	5,700	33.6	3,970		2,100	6,070	33.0	Apr 25
100	3.2			595		800		3,965	1,980	5,945	5,700	37.5						Apr 26
0	3.2			584		800		3,955	1,980	5,935	5,700	41.4						Apr 27
0	3.2			574		800		3,945	1,980	5,925	5,700	45.4						Apr 28
0	3.2			564		800		4,634	1,590	6,224	5,700	48.5						Apr 29
0	3.2			554		800		4,624	1,490	6,114	5,700	51.5						Apr 30
0	3.2			543		800		4,614	1,490	6,104	5,700	54.4						May 01
100	3.4			533		800		4,604	1,500	6,104	5,700	57.4						May 02
200	3.8			523		800		4,593	1,500	6,093	5,700	60.4						May 03
200	4.2			513		800		4,583	1,210	5,793	5,700	62.8						May 04
200	4.6			502		800		5,473	300	5,773	5,700	63.4						May 05
200	5.0			492		800		5,463	250	5,713	5,700	63.9						May 06
200	5.4			482		800		5,452	250	5,702	5,700	64.4						May 07
200	5.8			472		800		5,442	250	5,692	5,700	64.9						May 08
200	6.1			461		800		5,432	250	5,682	5,700	65.4						May 09
300	6.7			451		800		5,422	250	5,672	5,700	65.9						May 10
200	7.1			441		800		5,411	250	5,661	5,700	66.3						May 11
100	7.3			431		800		5,401	250	5,651	5,700	66.8						May 12
0	7.3			420		800		4,891	850	5,741	5,700	68.5						May 13
0	7.3			410		800		4,381	1,350	5,731	5,700	71.2						May 14
0	7.3			400		800		3,770	1,800	5,570	5,700	74.8						May 15
0	7.3			0		500		2,960	0	2,960		74.8	0					May 16
0	7.3			0		500		2,950	0	2,950		74.8	0					May 17
0	7.3			0		500		2,550	0	2,550		74.8	0					May 18
0	7.3			0		500		2,550	0	2,550		74.8	0					May 19
0	7.3			0		500		2,550	0	2,550		74.8	0					May 20
0	7.3			0		500		2,550	0	2,550		74.8	0					May 21
0	7.3			0		500		2,550	0	2,550		74.8	0					May 22
0	7.3			0		500		2,550	0	2,550		74.8	0					May 23
0	7.3			0		500		2,550	0	2,550		74.8	0					May 24
0	7.3			0		500		2,550	0	2,550		74.8	0					May 25
0	7.3			0		500		2,550	0	2,550		74.8	0					May 26
0	7.3			0		500		2,550	0	2,550		74.8	0					May 27
0	7.3			0		500		2,550	0	2,550		74.8	0					May 28
0	7.3			0		500		2,550	0	2,550		74.8	0					May 29
0	7.3			0		500		2,550	0	2,550		74.8	0					May 30
0	7.3			0		500		2,550	0	2,550		74.8	0					May 31

*Pulse period average: 6406.6667

COMPARISON OF "REAL-TIME" AND PROVISIONAL FLOWS

Merced River Near Cressey



Merced River Near Stevinson



— "Real-Time" (CDEC)
 — Provisional (DWR)

COMPARISON OF "REAL-TIME" AND PROVISIONAL FLOWS

San Joaquin River Near Newman



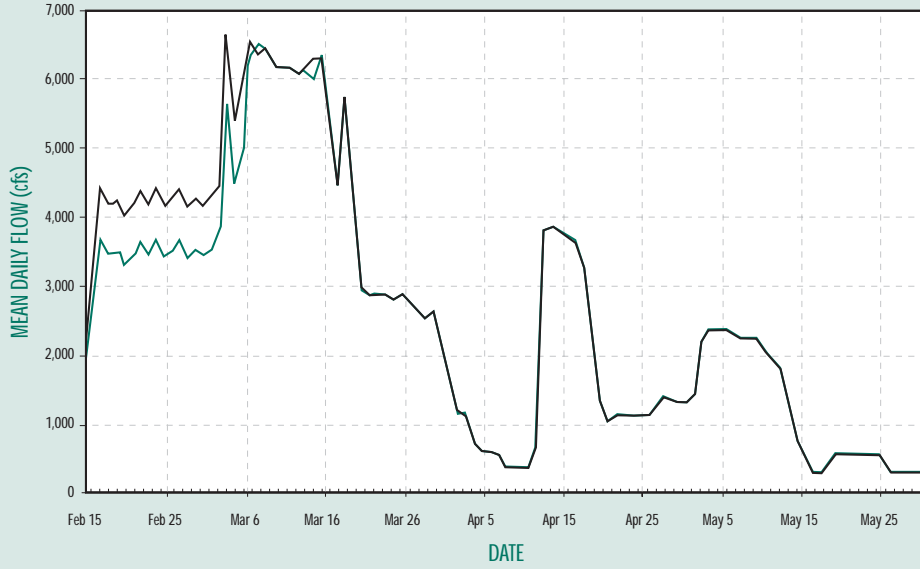
San Joaquin River Above Merced River



— "Real-Time" (CDEC)
 — Provisional (DWR)

COMPARISON OF "REAL-TIME" AND PROVISIONAL FLOWS

Tuolumne River Near LaGrange



Stanislaus River At Blossom Ridge



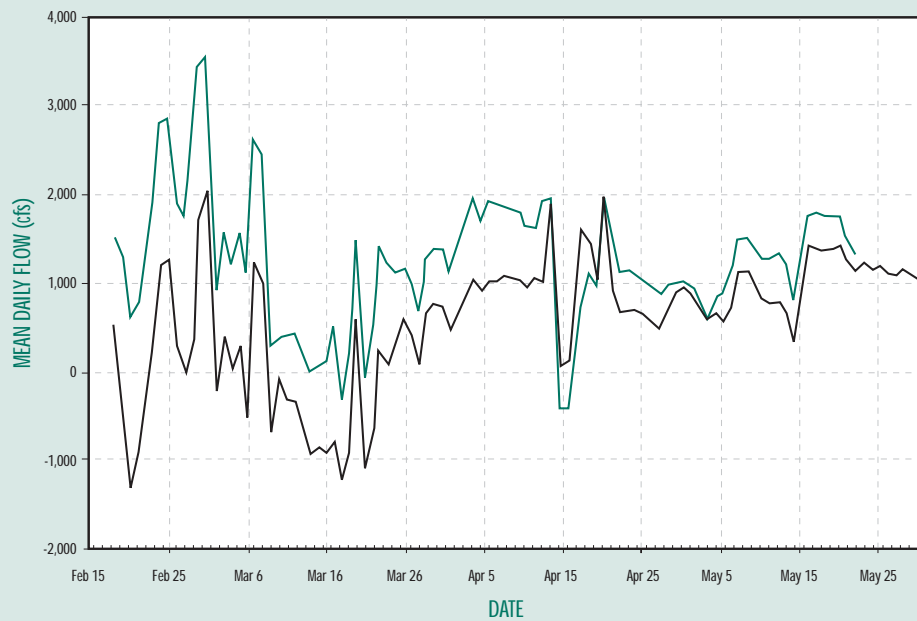
— "Real-Time" (CDEC)
 — Provisional (DWR)

COMPARISON OF "REAL-TIME" AND PROVISIONAL FLOWS

San Joaquin River Near Vernalis



Ungaged Flow At San Joaquin River Near Vernalis



— "Real-Time" (CDEC)
— Provisional (DWR)

ACCOUNTING OF SUPPLEMENTAL WATER CONTRIBUTIONS

HYDROLOGY SUBGROUP OF THE SAN JOAQUIN RIVER TECHNICAL COMMITTEE • PULSE FLOW PERIOD: APRIL 15-MAY 15

Date	Merced R. at Cressey (3 day Travel Time to Vernalis)				Tuolumne R. blw LaGrange Dam (2 day Travel Time to Vernalis)				Stanislaus R. at Orange Blossom Br. (2 day Travel Time to Vernalis)				Exch. Contractors (3 day Travel Time)		San Joaquin R. at Vernalis			
	Existing Flow (cfs)	Observed Flow (cfs)	Supplemental Water (cfs) (TAF)		Existing Flow (cfs)	Observed Flow (cfs)	Supplemental Water (cfs) (TAF)		Existing Flow (cfs)	Observed Flow (cfs)	Supplemental Water (cfs) (TAF)		Supplemental Water (cfs) (TAF)		Existing Flow (cfs)	Observed Flow (cfs)	Supplemental Water (cfs) (TAF)	
Apr 01	342	342			1,580	1,580			1,500	800					5,050	5,050		
Apr 02	340	340			1,200	1,200			1,500	796					4,580	4,580		
Apr 03	342	342			1,110	1,110			1,500	791					4,200	4,200		
Apr 04	328	328			768	768			1,500	788					3,940	3,940		
Apr 05	322	322			626	626			1,500	796					3,700	3,700		
Apr 06	306	306			616	616			1,500	807					3,490	3,490		
Apr 07	297	297			575	575			1,500	820					3,340	3,340		
Apr 08	297	297			404	403			1,500	830					3,340	3,340		
Apr 09	288	288			390	387			1,500	835					3,260	3,260		
Apr 10	288	288			393	390			1,500	885					3,050	3,050		
Apr 11	284	284			391	388			1,500	1,080					2,960	2,960		
Apr 12	297	297	0	0.00	688	683			1,500	1,210			0	0.00	3,050	3,050		
Apr 13	303	303	0	0.00	2,300	3,780	1,480	2.94	1,500	1,290	0	0	0	0.00	3,180	3,180		
Apr 14	306	306	0	0.00	2,300	3,830	1,530	3.03	1,500	1,440	0	0	0	0.00	4,460	4,460		
Apr 15	310	310	0	0.00	2,300	3,800	1,500	2.98	1,500	1,120	0	0	0	0.00	4,480	5,750	1,480	2.94
Apr 16	323	323	0	0.00	2,300	3,670	1,370	2.72	1,500	1,120	0	0	0	0.00	4,500	5,970	1,530	3.03
Apr 17	377	377	0	0.00	2,300	3,580	1,280	2.54	1,500	1,130	0	0	0	0.00	5,230	6,350	1,500	2.98
Apr 18	250	556	306	0.61	2,300	3,290	990	1.96	1,500	1,090	0	0	100	0.20	6,070	7,060	1,370	2.72
Apr 19	250	1,780	1,530	3.03	2,300	2,360	60	0.12	1,500	800	0	0	199	0.39	6,010	6,920	1,280	2.54
Apr 20	250	1,910	1,660	3.29	1,100	1,380	280	0.56	1,500	1,190	0	0	200	0.40	5,710	6,290	990	1.96
Apr 21	250	1,870	1,620	3.21	800	1,040	240	0.48	1,500	1,500	0	0	200	0.40	6,524	6,290	466	0.92
Apr 22	250	1,830	1,580	3.13	800	1,110	310	0.61	1,490	1,490	0	0	236	0.47	4,620	6,320	2,009	3.98
Apr 23	250	1,780	1,530	3.03	800	1,120	320	0.63	1,490	1,490	0	0	251	0.50	4,210	6,310	2,100	4.17
Apr 24	250	1,750	1,500	2.98	800	1,110	310	0.61	1,490	1,490	0	0	245	0.49	4,170	6,300	2,130	4.22
Apr 25	250	1,660	1,410	2.80	800	1,120	320	0.63	1,520	1,520	0	0	236	0.47	4,020	6,120	2,136	4.24
Apr 26	250	1,600	1,350	2.68	800	1,120	320	0.63	1,510	1,510	0	0	138	0.27	3,910	5,950	2,091	4.15
Apr 27	250	1,570	1,320	2.62	1,300	1,250	0	0.00	1,510	1,510	0	0	0	0.00	3,810	5,830	2,065	4.10
Apr 28	250	1,590	1,340	2.66	1,300	1,370	70	0.14	1,510	1,510	0	0	0	0.00	3,700	5,630	1,966	3.90
Apr 29	250	1,640	1,390	2.76	1,300	1,350	50	0.10	1,510	1,510	0	0	0	0.00	4,360	5,760	1,488	2.95
Apr 30	250	1,660	1,410	2.80	1,300	1,320	20	0.04	1,520	1,520	0	0	0	0.00	4,400	5,790	1,390	2.76
May 01	250	1,570	1,320	2.62	1,300	1,320	20	0.04	1,510	1,510	0	0	0	0.00	4,380	5,770	1,390	2.76
May 02	250	857	607	1.20	1,300	1,410	110	0.22	1,510	1,510	0	0	129	0.26	4,260	5,670	1,410	2.80
May 03	250	744	494	0.98	2,200	2,210	10	0.02	1,520	1,520	0	0	178	0.35	4,090	5,520	1,430	2.84
May 04	250	611	361	0.72	2,200	2,330	130	0.26	1,520	1,520	0	0	249	0.49	4,030	5,460	1,430	2.84
May 05	250	582	332	0.66	2,200	2,330	130	0.26	1,520	1,520	0	0	234	0.46	4,943	5,660	746	1.48
May 06	250	586	336	0.67	2,200	2,330	130	0.26	1,530	1,530	0	0	231	0.46	4,796	5,620	802	1.59
May 07	250	646	396	0.79	2,200	2,290	90	0.18	1,540	1,540	0	0	266	0.53	5,029	5,720	740	1.47
May 08	250	678	428	0.85	2,200	2,220	20	0.04	1,540	1,540	0	0	273	0.54	5,388	6,050	696	1.38
May 09	250	629	379	0.75	2,200	2,230	30	0.06	1,540	1,540	0	0	247	0.49	5,384	6,010	657	1.30
May 10	250	648	398	0.79	2,200	2,220	20	0.04	1,550	1,550	0	0	241	0.48	5,264	5,880	682	1.35
May 11	250	821	571	1.13	1,900	2,040	140	0.28	1,540	1,540	0	0	202	0.40	5,212	5,870	731	1.45
May 12	1,362	971	0	0.00	1,800	1,940	140	0.28	1,550	1,550			119	0.24	5,201	5,800	646	1.28
May 13	1,716	522			1,800	1,770	0	0.00	1,540	1,540					4,832	5,670	779	1.55
May 14	1,930	406			1,550	1,330			1,550	1,550					4,709	5,620	913	1.81
May 15	1,833	399			800	785			1,560	1,560					5,551	5,230	119	0.24
May 16	1,398	409			300	527			1,570	1,570					4,870	4,870		
May 17	1,416	377			300	312			1,540	1,540					4,590	4,590		
May 18	1,600	382			300	307			1,540	1,540					4,280	4,280		
May 19	1,690	371			300	419			1,520	1,520					4,050	4,050		
May 20	1,702	338			300	570			1,500	1,500					4,020	4,020		
May 21	1,692	345			300	570			1,510	1,510					4,210	4,210		
May 22	635	354			300	566			1,490	1,490					4,190	4,190		
May 23	391	356			300	568			1,480	1,480					4,050	4,050		
May 24	250	346			300	570			1,480	1,480					4,110	4,110		
May 25	346	346			300	572			1,470	1,470					4,040	4,040		
May 26	326	326			300	543			1,460	1,460					4,020	4,020		
May 27	263	263			300	319			1,460	1,460					3,870	3,870		
May 28	250	248			300	323			1,450	1,450					3,770	3,770		
May 29	250	238			300	323			1,450	1,450					3,610	3,610		
May 30	250	231			300	322			1,430	1,430					3,480	3,480		
May 31	250	229			300	319			1,420	1,420					3,400	3,400		
Total Supplemental Water (TAF):			46.75				22.65				0.0		8.28				77.68	

Pulse period average: 4,815 5,869

Observed Flow Sources: Merced River at Cressey (CA DWR B05155): DWR San Joaquin District, provisional data received 6/13/00
 Tuolumne River below LaGrange Dam near LaGrange (USGS 11289650): USGS, provisional data dated 6/9/00
 San Joaquin River near Vernalis (USGS 11303500): USGS, provisional data dated 6/9/00
 Stanislaus River at Orange Blossom Bridge (CA DWR B03175): DWR San Joaquin District, provisional data received 6/13/00