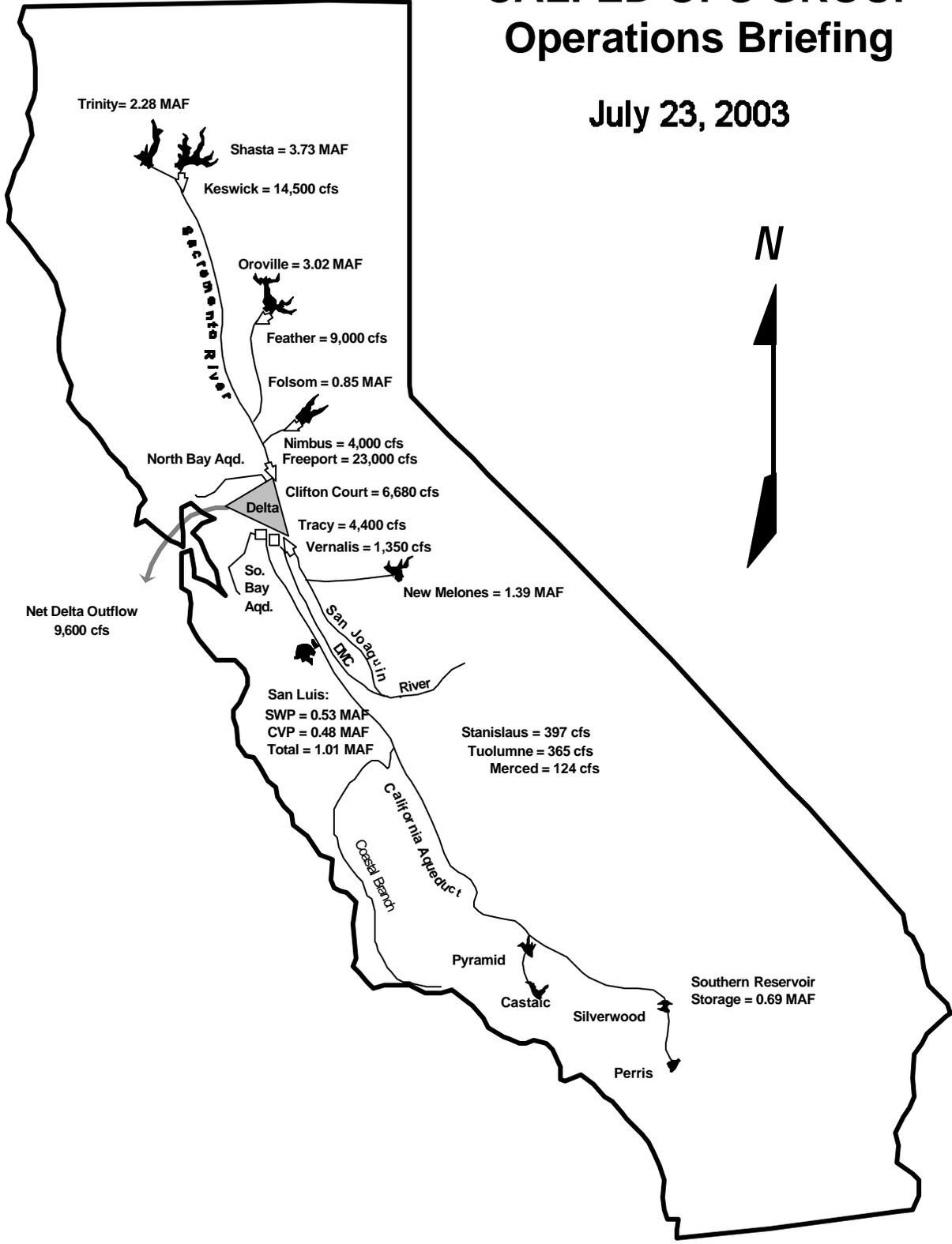


CALFED OPS GROUP Operations Briefing

July 23, 2003



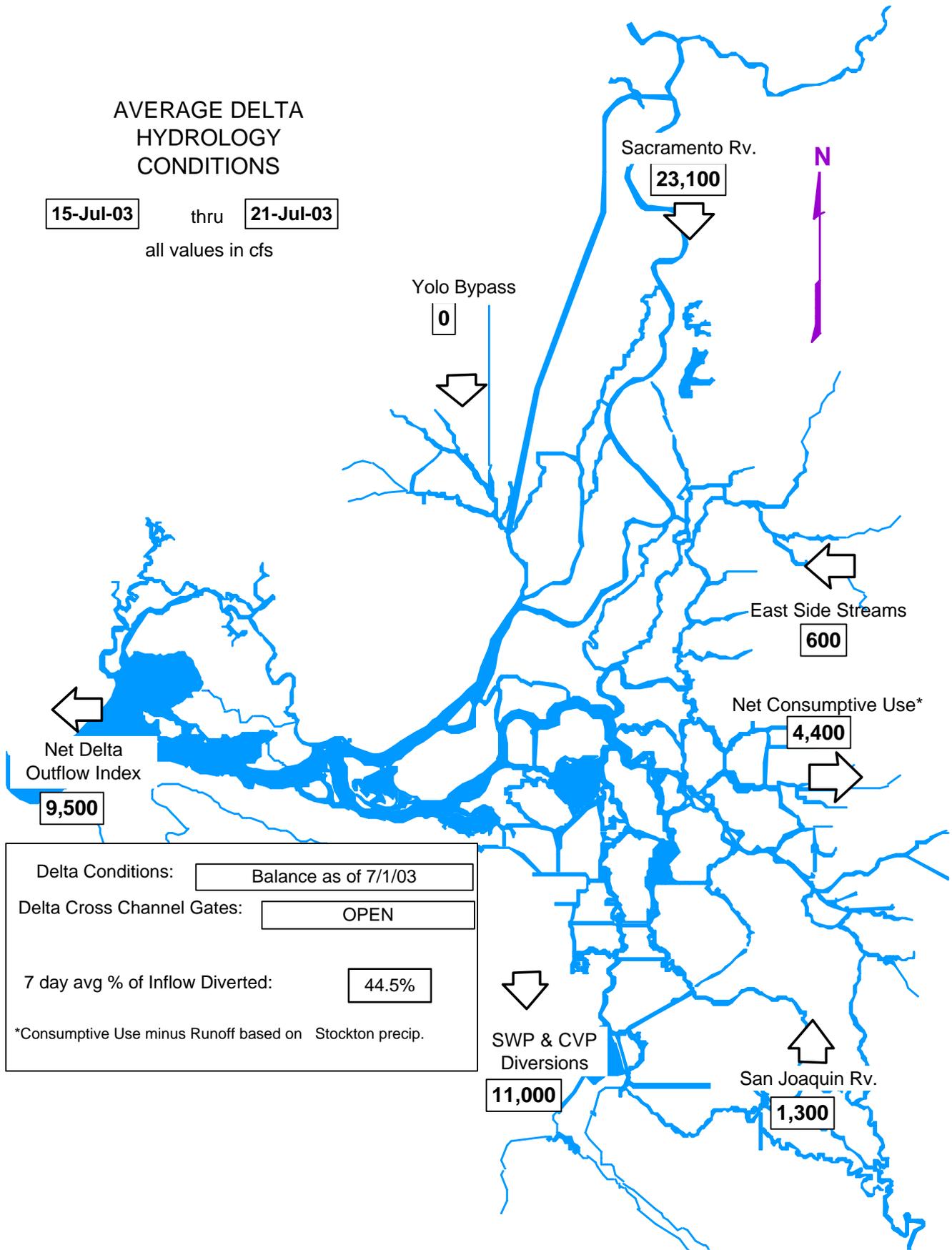
Net Delta Outflow
9,600 cfs

CURRENT SWP/CVP OPERATIONAL STATUS

**DATA AS OF
July 22, 2003**

AVERAGE DELTA HYDROLOGY CONDITIONS

15-Jul-03 thru **21-Jul-03**
all values in cfs



Delta Conditions:	Balance as of 7/1/03
Delta Cross Channel Gates:	OPEN
7 day avg % of Inflow Diverted:	44.5%
*Consumptive Use minus Runoff based on Stockton precip.	

AVERAGE DELTA WATER QUALITY CONDITIONS

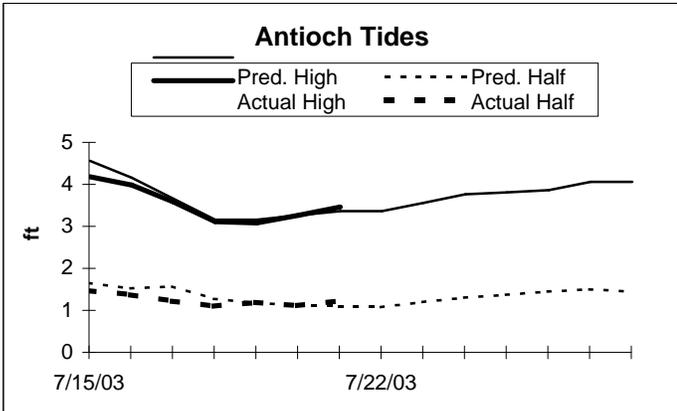
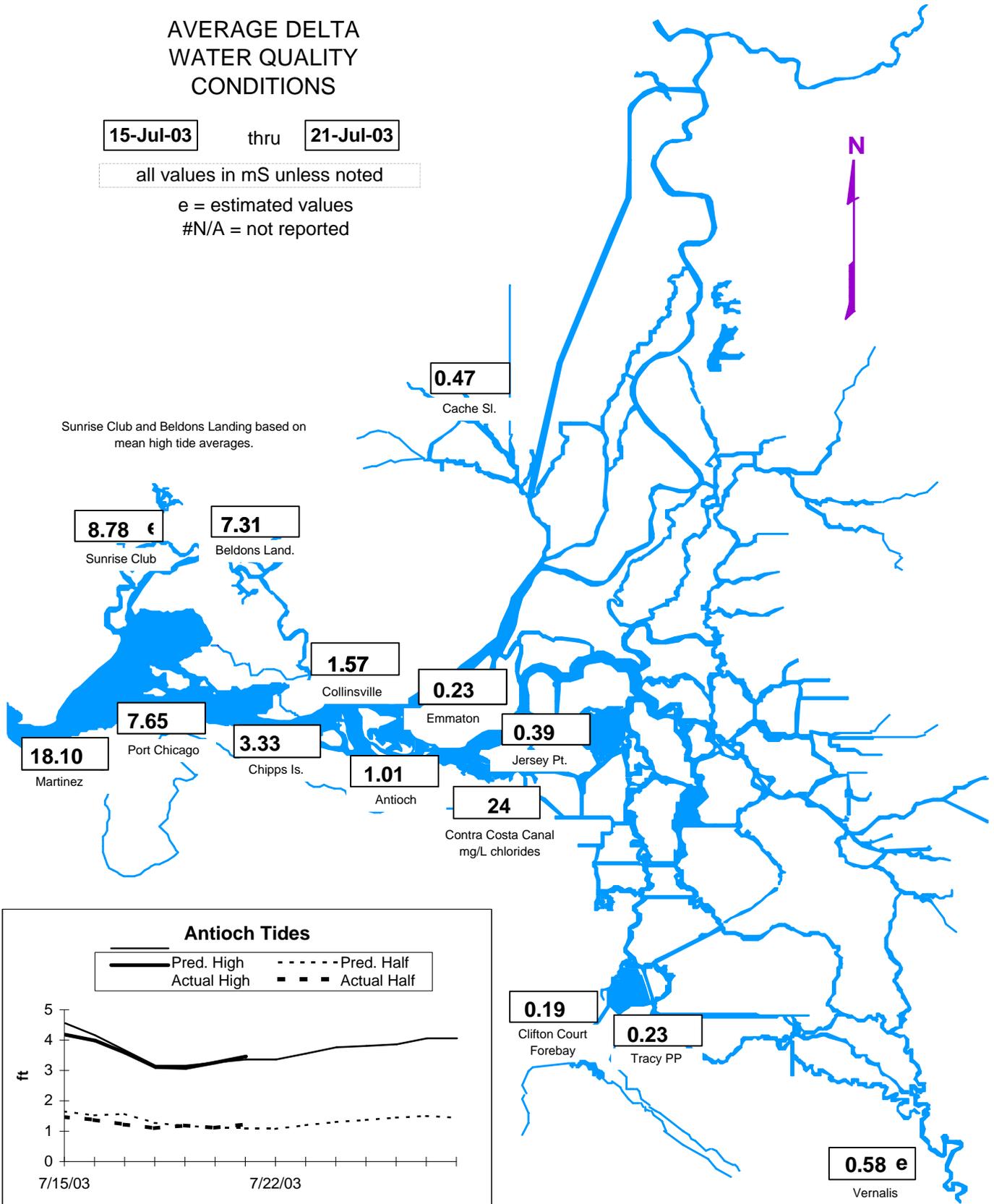
15-Jul-03 thru 21-Jul-03

all values in mS unless noted

e = estimated values

#N/A = not reported

Sunrise Club and Beldons Landing based on mean high tide averages.



DRAFT

Bay-Delta Standards

Contained in D-1641

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CRITERIA	Jul 03	Aug 03	Sep 03
FLOW/OPERATIONAL			
<ul style="list-style-type: none"> Fish and Wildlife <ul style="list-style-type: none"> SWP/CVP Export Limits Export/Inflow Ratio Minimum Outflow - mon. <ul style="list-style-type: none"> - 7 day avg. Suisun Marsh <ul style="list-style-type: none"> Habitat Protection Outflow, X2 River Flows: <ul style="list-style-type: none"> @ Rio Vista - min. mon. avg. <ul style="list-style-type: none"> - 7 day average @ Vernalis: Base -min. mon. avg. <ul style="list-style-type: none"> - 7 day average Delta Cross Channel Gates 			
	65% of Delta Inflow		
	8,000 cfs	4,000 cfs	3,000 cfs
	6,400 cfs	3,000 cfs	2,000 cfs
			3,000 cfs
			2,000 cfs

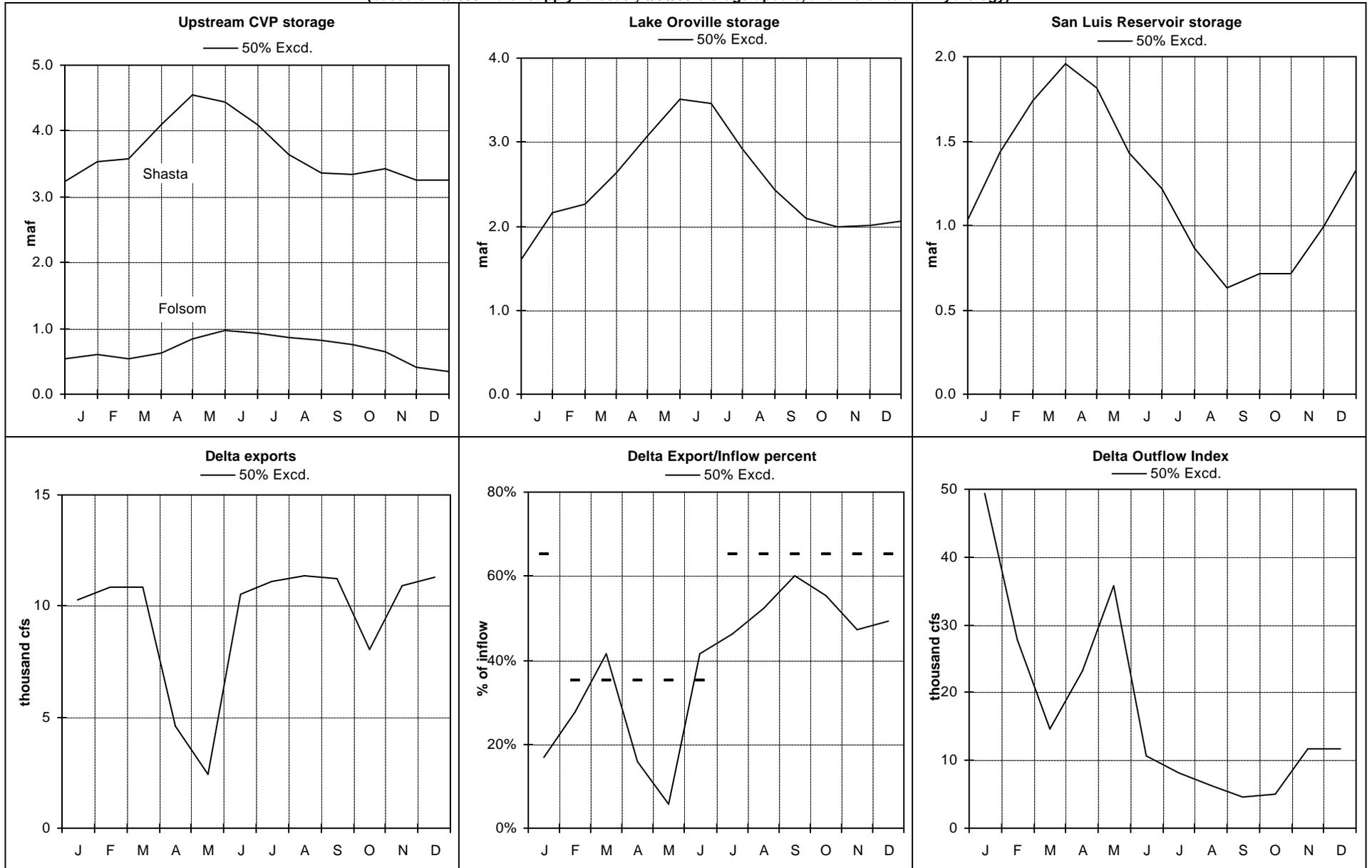
WATER QUALITY STANDARDS			
<ul style="list-style-type: none"> Municipal and Industrial <ul style="list-style-type: none"> All Export Locations Contra Costa Canal 	Cl <= 250 mg/l		
	Cl <= 150 mg/l for 190 days		
<ul style="list-style-type: none"> Agriculture <ul style="list-style-type: none"> Western/Interior Delta Southern Delta 	14-dm <= 0.45 mS/cm EC		
	30-day running average EC <= 0.7 mS		
<ul style="list-style-type: none"> Fish and Wildlife <ul style="list-style-type: none"> San Joaquin River Salinity Suisun Marsh Salinity 			

Water Year Classification: (May 1 forecast)

SRI (40-30-30 @ 50%) = 8.0 (AN)
 SJV (60-20-20 @75%) =2.7 (BN)

SWP & CVP CY 2003 Forecasted Operations.

(based on 5/1/03 water supply forecast, 6/30/03 storage update, and historical fall hydrology)



Flows are monthly averages.

WY 2002/2003 EWA Accounting Summary
 Based upon June 1 - 90% Exceedance Hydrology
Assumptions: SWP Allocation - 90%; NOD Purchases - 69.9 TAF; SOD Purchases - 145 TAF

EWA NOD and SOD Storage																	
1	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD ⁰	27 ^{*,3}	1.7 ³	0.7 ³	5 ⁵							17 ⁶	32 ⁶	12 ⁶	4 ⁶			72
Oroville								-20 ¹³		-11 ¹⁴							-31
SOD	37 ⁴																0

EWA Asset Acquisition in SWP San Luis ¹																	
2	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation							35			31 ¹⁴							66
EWA share of SWP gain							19										19
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²											13 ⁶	10 ⁶	4 ⁵	3 ⁶			30
Xfer NOD - San Joaquin River ²																	0
SOD SWP Surface/GW Purchases							7 ⁴		30 ⁴	36 ⁷	36 ⁷	36 ⁷	36 ⁷				182
Exchange of EWA assets																	0
Groundwater pumping SOD																	0
Exchange from CVP to SWP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	62	0	30	67	50	46	40	3	0	0	297

EWA Asset Acquisition in CVP San Luis																	
3	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
Project Pumping to reduce EWA debt							6										6
JPOD using excess flows																	0
JPOD using NOD storage												16 ⁶	10 ⁶				26
Xfer NOD - Sacramento River ²				0.5 ³													0
Xfer NOD - San Joaquin River ²																	0
SOD CVP Surface/GW purchases																	0
Exchange of EWA assets																	0
Groundwater pumping																	0
Exchange from SWP to CVP in SL																	0
Total Monthly EWA Assets	0	0	0	0	0	0	6	0	0	0	0	16	10	0	0	0	32

EWA Expenditures at the Export Pumps																	
4	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts				-32 ⁸	-89 ⁹			-19 ¹⁰	-182 ¹¹								-322
CVP export cuts									-26 ¹¹								-26
Total Expenditures	0	0	0	-32	-89	0	0	-19	-208	0	0	0	0	0	0	0	-348

EWA End-of-Month Incremental Storage Changes																	
5	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	11	0	0	-32	-89	0	62	-19	-152	67	50	46	40	3	0	0	-14
CVP in SL	-6	0	0	0	0	0	6	0	-26	0	0	16	10	0	0	0	0
NOD Storage ¹²	24	2	1	0	-2	0	0	-20	0	-11	0	0	-5	0	0	0	-11
Groundwater SOD	37	0	0	0	0	0	-7	0	-30	0	0	0	0	0	0	0	0
Total Incremental Storage Changes	66	2	1	-32	-91	0	60	-39	-208	56	50	62	45	3	0	0	-25

EWA End-of-Month Storage Balance at Various Sites																	
6	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	11	11	11	-21	-111	-111	-49	-68	-220	-153	-103	-57	-17	-14	-14	-14	
CVP SL	-6	-6	-6	-6	-6	-6	0	0	-26	-26	-26	-10	0	0	0	0	
NOD Storage	24	26	27	26	25	25	25	5	5	-6	-6	-6	-11	-11	-11	-11	
Groundwater SOD	37	37	37	37	37	37	30	30	0	0	0	0	0	0	0	0	
EWA Asset Balance	66	68	68	37	-54	-54	6	-33	-241	-185	-135	-73	-28	-25	-25	-25	

San Luis Reservoir Storage Conditions																	
7	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ¹⁵		645	783	1037	1554	1856	2003	1886	1674	1396	909	624	667	637	656	709	
Encroachment																	
Total Storage (EWA case)		650	788	1010	1438	1739	1954	1819	1428	1218	780	557	650	623	642	695	
MWD Source Shifting																	
Storage (with MWD source shifting)		650	788	1010	1438	1739	1954	1819	1428	1218	780	557	650	623	642	695	

⁰ 2002 NOD Purchases = 135(YCWA) + 10(SGA). 2003 NOD Purchases = 185(YCWA) + 10(OWID). YCWA has firm 55 TAF; exercised option for an additional amount - 10 TAF.
¹ The SWP was able to back 20 TAF of water for the EWA into Lake Oroville between September 14 and October 6, 2002 (which includes a 20% carriage water loss). SOD equivalent = 16 TAF (not a 1:1 Exchange).
² Aqueduct conveyance and evaporation losses are not included.
³ Carriage water loss applies to water transfers from the Sacramento River; a 10% conveyance loss applies to water transfers from the San Joaquin River. A carriage water loss of 20% was applied to the 2002 water transfers.
⁴ 2002 SGA Transfer (CVP place of use). ⁵ 2002 KCWA Transfer (SWP place of use)
⁶ 2003 OWID Transfer (Joint place of use) ⁷ 2003 YCWA Transfer (Joint place of use) ⁸ 2003 SOD Transfers (SWP Place of Use) - 125 TAF from KCWA and 20 TAF from SCVWD
⁹ About 32 TAF was expended for the December portion of the 12/27/02 - 1/2/03 curtailment.
¹⁰ Of this amount, approximately 9.5 TAF was expended for the 1/1-1/2/03 portion of the 12/31/02-1/2/03 curtailment; about 60 TAF was expended for the 1/15-1/20/03 curtailment; about 20 TAF was expended for the 1/25-1/28/03 curtailment.
¹¹ The VAMP cost is estimated to be about 32 TAF for the SWP and is based upon the 4/30 estimate of base flows.
¹² The cost for VAMP shoulders is about 169 TAF for the SWP; and 26 TAF for CVP.
¹³ The CVP released the following for instream benefits: 4.645 TAF of water (which is the San Juan portion of the SGA) between 12/20-12/29/02 from Folsom Reservoir.
¹⁴ The SWP released the 20 TAF of EWA water stored in Oroville for flood control purposes.
¹⁵ The SWP was able to transfer 10.87 TAF of EWA debt into Lake Oroville from San Luis Reservoir between June 29 and 30, 2003. (which includes an assumed 20% carriage water loss). SOD equivalent = 8.7 TAF (not a 1:1 Exchange).
¹⁶ Based upon the 6/1/2003 DWR's 90% (90% Fall) allocation study.