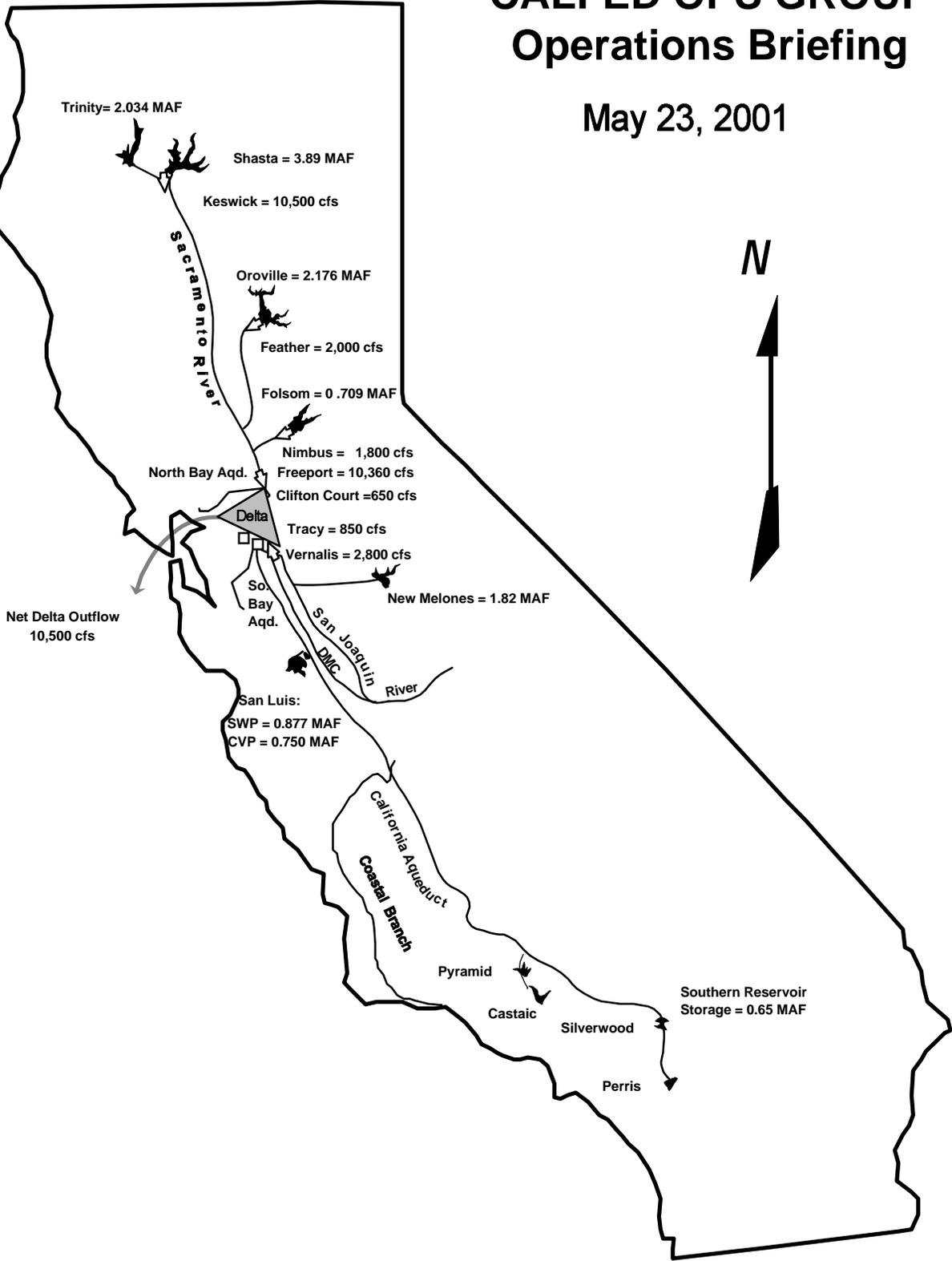


CALFED OPS GROUP Operations Briefing

May 23, 2001



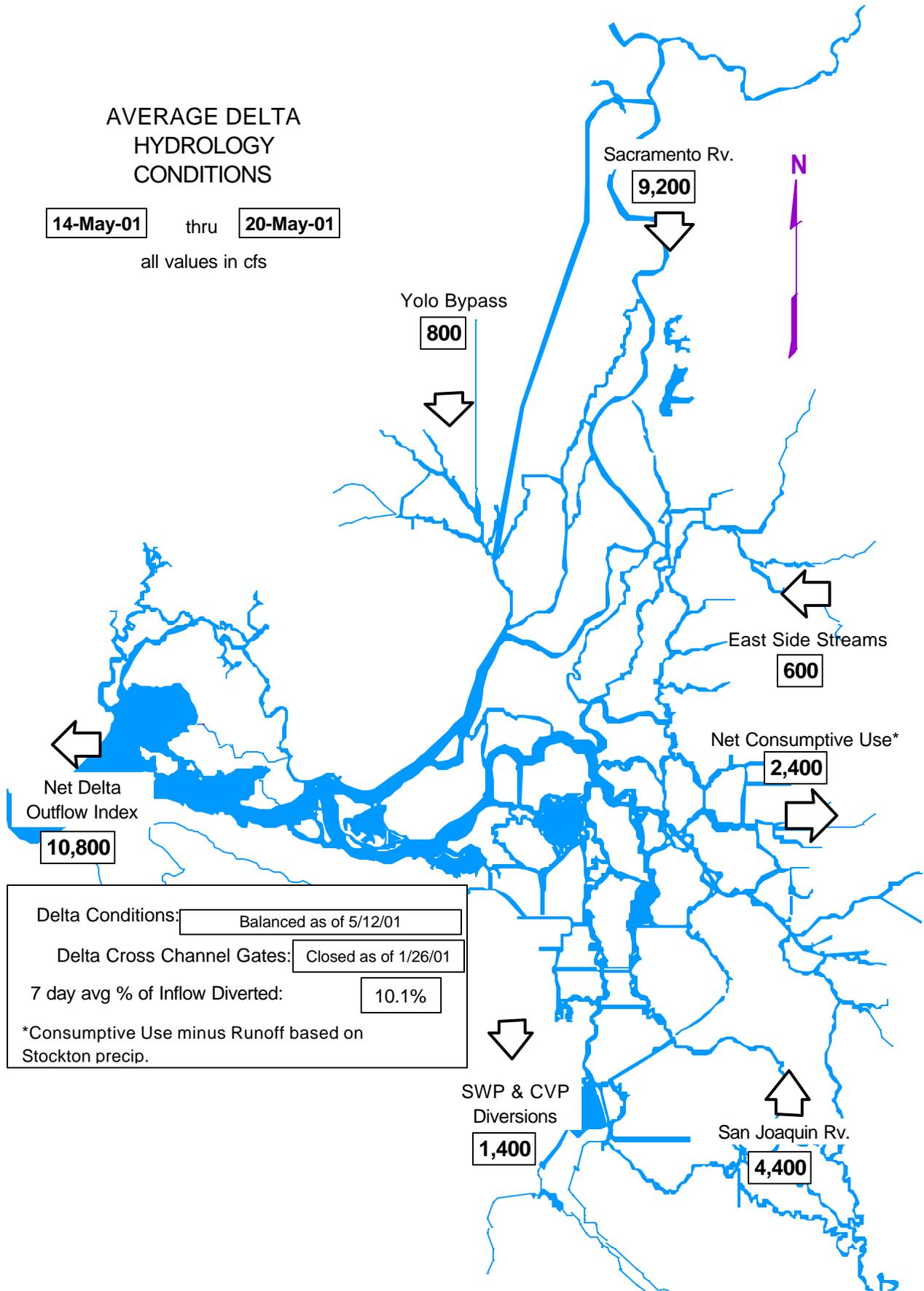
CURRENT SWP/CVP OPERATIONAL STATUS

DATA AS OF
May 23, 2001

**AVERAGE DELTA
HYDROLOGY
CONDITIONS**

14-May-01 thru **20-May-01**

all values in cfs



Delta Conditions:

Delta Cross Channel Gates:

7 day avg % of Inflow Diverted:

*Consumptive Use minus Runoff based on Stockton precip.

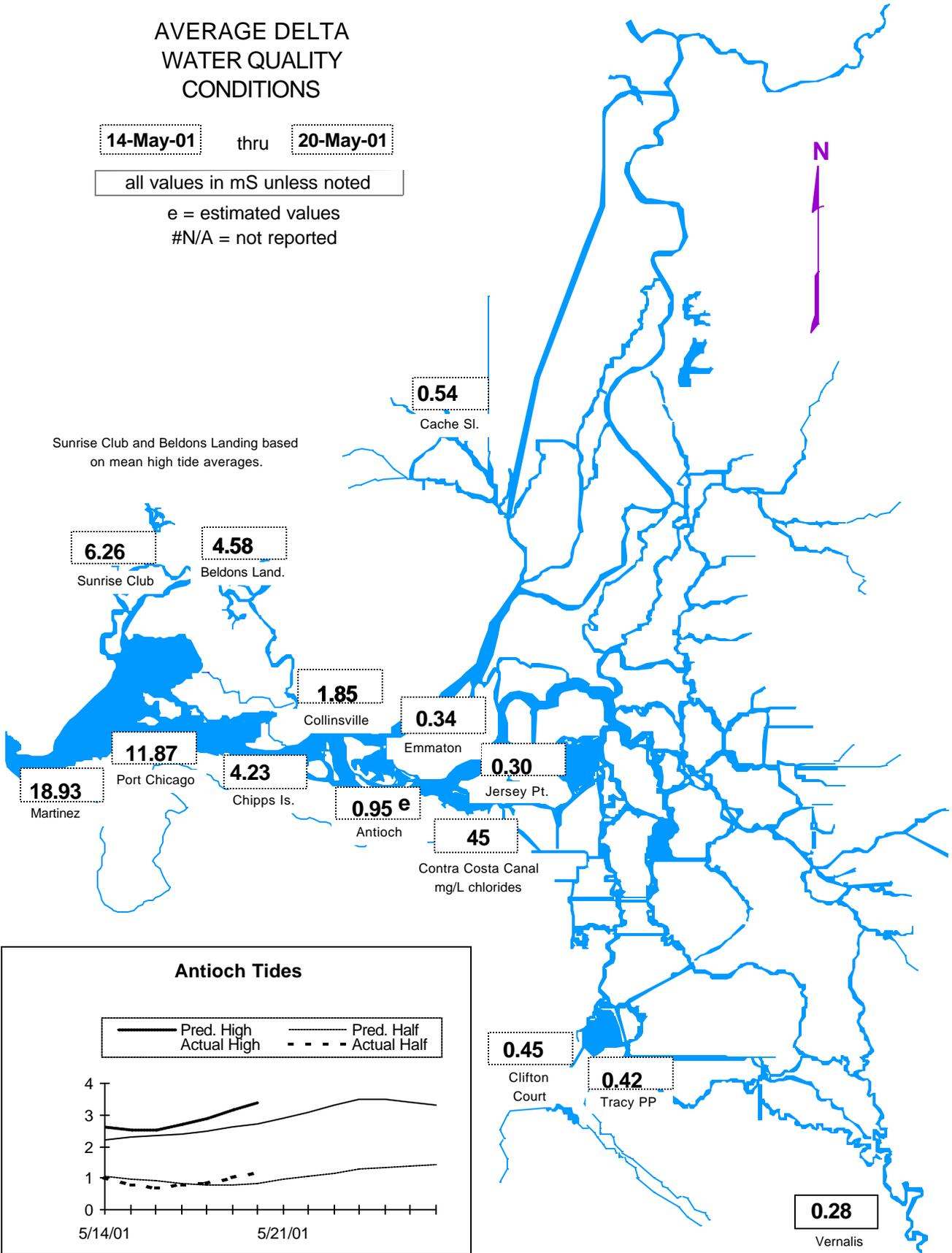
AVERAGE DELTA WATER QUALITY CONDITIONS

14-May-01 thru 20-May-01

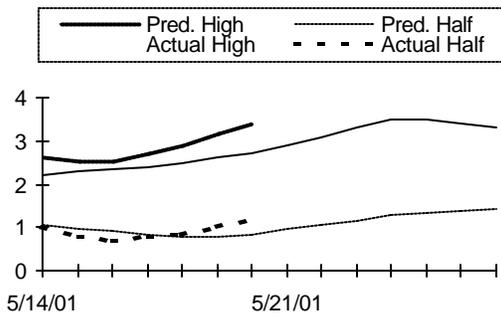
all values in mS unless noted

e = estimated values
#N/A = not reported

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



Antioch Tides



DRAFT

Bay-Delta Standards

Contained in D-1641

DRAFT

CRITERIA	May 01	Jun01	Jul 01
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FLOW/OPERATIONAL

<ul style="list-style-type: none"> • Fish and Wildlife SWP/CVP Export Limits Export/Inflow Ratio Minimum Outflow - mon. - 7 day avg. Habitat Protection Outflow, X2 River Flows: @ Rio Vista - min. mon. avg. - 7 day average @ Vernalis: Base -min. mon. avg. - 7 day average Pulse objective Delta Cross Channel Gates 	<p style="text-align: center;">greater of 1,500 cfs or 100% of 3-day avg. Vernalis flow.</p> <p style="text-align: center;">35 % of Delta Inflow</p> <p style="text-align: center;">7,100cfs - 29,200 cfs</p> <p style="text-align: center;">Chipps Island for 1 day</p> <p style="text-align: center;">2280 cfs</p> <p style="text-align: center;">1824 cfs</p> <p style="text-align: center;">3200 cfs</p> <p style="text-align: center;">Closed: May 21 - June 15 close 14 days per CALFED Op's</p>	<p style="text-align: center;">65% of Delta Inflow</p> <p style="text-align: center;">5000 cfs</p> <p style="text-align: center;">4000 cfs</p>	
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WATER QUALITY STANDARDS

<ul style="list-style-type: none"> • Municipal and Industrial All Export Locations Contra Costa Canal 		<p>Cl <= 250 mg/l</p> <p>Cl <= 150 mg/l for 165 days for Dry Year Type</p>	
<ul style="list-style-type: none"> • Agriculture Western/Interior Delta Southern Delta 		<p>Emmation and Jersey thru June 15th</p> <p>San Andreas thru June 25th</p> <p>Max. 14-day average EC mmhos/cm: 0.45 mS/cm</p> <p>30-day running average EC <= 0.7 mS</p>	
<ul style="list-style-type: none"> • Fish and Wildlife San Joaquin River Salinity Suisun Marsh Salinity 	<p>14-day avg; 0.44 EC</p> <p>11.0 mhtEC</p>		

Water Year Classification: (May 1 forecast)

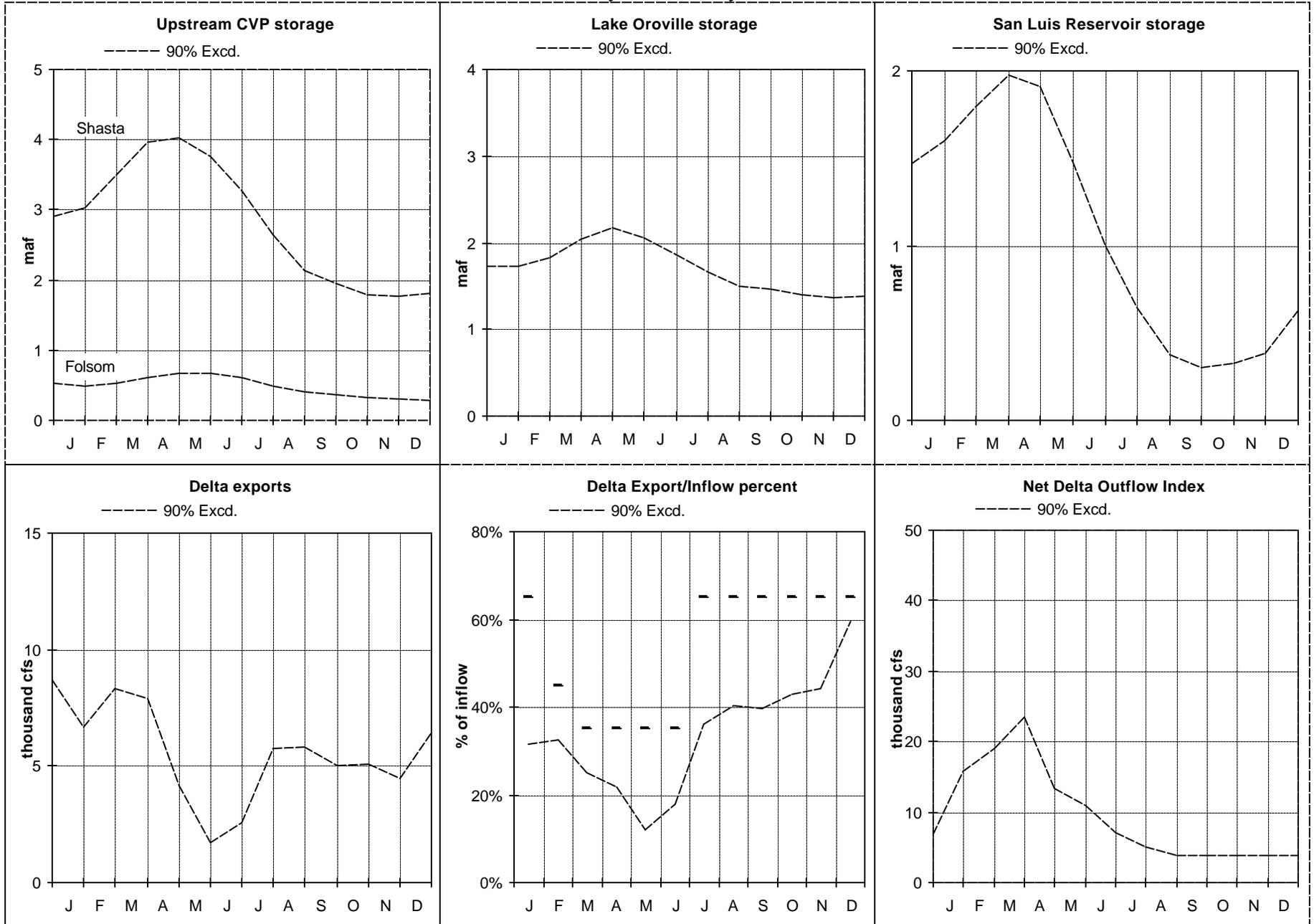
SRI (40-30-30 @ 50%) = 5.9 (Dry)

May 8RI: 2.01 MAF

SJV (60-20-20 @75%) = 2.3 (Dry)

SWP & CVP CY 2001 Forecasted Operations.

Based on May 1 Snow Survey Forecast



Based on 5/2001 CVP operations study. Flows are monthly averages.

Year 2001 EWA Accounting Summary
Based on May 1 -- 90% Exceedence Hydrology (35% SWP Allocation)

EWA NOD Storage and SOD Groundwater Acquisition																
1	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD	10		50													60
SOD								10 ¹								10

EWA Asset Acquisition in SWP San Luis																
2	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I	2															2
Project Pumping to reduce EWA debt																0
JPOD using excess flows																0
JPOD using excess NOD storage																0
Xfer NOD purchases										24	24					48
SOD SWP surface purchases						44 ²		30 ³	37 ³		3 ³		10 ⁴	10 ⁴	10 ⁴	144
EWA share of SWP gain			11	8	1	1	1									23
Groundwater pumping SOD																0
Exchange from CVP to SWP in SL						72										72
Total Monthly EWA Assets	2	0	11	8	1	117	1	30	37	24	27	0	10	10	10	289

EWA Asset Acquisition in CVP San Luis																
3	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I																0
Project Pumping to reduce EWA debt																0
JPOD using excess flows																0
JPOD using excess NOD storage																0
Xfer NOD purchases																0
SOD federal surface purchases	72															72
Groundwater pumping																0
Exchange from SWP to CVP in SL						-72										-72
Total Monthly EWA Assets	72	0	0	0	0	-72	0									

EWA Expenditures at the Export Pumps																
4	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts				-69	-69	-65	-29 ⁷	-38 ⁸								-270
CVP export cuts																0
Total Expenditures	0	0	0	-69	-69	-65	-29	-38	0	-270						

EWA Monthly Incremental Storage Changes																
5	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	2	0	11	-61	-68	52	-27	-8	37	24	27	0	10	10	10	18
CVP in SL	72	0	0	0	0	-72	0	0	0	0	0	0	0	0	0	0
NOD Storage	10	0	50	0	0	0	0	0	0	-30	-30	0	0	0	0	0
Groundwater SOD	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Total Incremental Storage Changes	84	0	61	-61	-68	-20	-27	2	37	-6	-4	0	10	10	10	28

EWA Storage Balance at Various Sites																
6	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	2	2	13	-48	-116	-64	-91	-99	-62	-38	-12	-12	-2	8	18	
CVP SL	72	72	72	72	72	0	0	0	0	0	0	0	0	0	0	0
NOD Storage	10	10	60	60	60	60	60	60	60	30	0	0	0	0	0	0
Groundwater SOD	0	0	0	0	0	0	0	10	10	10	10	10	10	10	10	10
EWA Asset Balance	84	84	146	84	16	-4	-31	-29	8	2	-2	-2	8	18	28	

San Luis Reservoir Storage Conditions																
7	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ⁵	978	1225	1385	1572	1841	2012	1952	1526	1012	636	339	266	276	352	612	
Encroachment						15 ⁶										
Total Storage (EWA case)	1052	1299	1470	1596	1797	1963	1861	1427	950	598	327	254	274	360	630	
MWD Source Shifting						15	35							-25	-25	
Storage (with MWD source shifting)	1052	1299	1470	1596	1797	1978	1911	1477	1000	648	377	304	324	385	630	

¹ SOD G/W Acquisition = 5(Cawelo)+ 5(Semitropic/Tulare ID). SWP prefers surface (i.e.: an exchange).

² SOD 2000 SWP surface purchase in March = 15 (Westside) + 19 (Rosedale) + 10 (Arvin Edison)

³ SOD 2001 SWP pre lowpoint purchases = 10(KCWA/Nickel LLC/ID4) + 15(Semitropic/Tulare ID) + 23.5(Buena Vista) + 21(Westside)

⁴ SOD 2001 SWP post lowpoint purchase = 30(Semitropic/Santa Clara)

⁵ Based upon the 5/21/01 USBR's 90% exceedance EWA forecast study.

⁶ CVP water was encroached in the state's share of San Luis.

⁷ April's estimated costs: 20.5 TAF for the 4/5-4/9 export curtailment & 8 TAF for VAMP.

⁸ As of 5/22, VAMP's estimated cost is 29 TAF for the month of May. An additional 9 TAF is estimated to be expended for the rest of May due to export curtailment.

Year 2001 EWA Accounting Summary
Based on May 1 -- 50% Exceedence Hydrology (40% SWP Allocation)

EWA NOD Storage and SOD Groundwater Acquisition																
1	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD	10		50													60
SOD								10 ¹								10

EWA Asset Acquisition in SWP San Luis																
2	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I	2															2
Project Pumping to reduce EWA debt																0
JPOD using excess flows																0
JPOD using excess NOD storage																0
Xfer NOD purchases										24	24					48
SOD SWP surface purchases						44 ²		30 ³	37 ³		3 ³		10 ⁴	10 ⁴	10 ⁴	144
EWA share of SWP gain			11	8	1	1	1									23
Groundwater pumping SOD																0
Exchange from CVP to SWP in SL						72										72
Total Monthly EWA Assets	2	0	11	8	1	117	1	30	37	24	27	0	10	10	10	289

EWA Asset Acquisition in CVP San Luis																
3	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I																0
Project Pumping to reduce EWA debt																0
JPOD using excess flows																0
JPOD using excess NOD storage																0
Xfer NOD purchases																0
SOD federal surface purchases	72															72
Groundwater pumping																0
Exchange from SWP to CVP in SL						-72										-72
Total Monthly EWA Assets	72	0	0	0	0	-72	0									

EWA Expenditures at the Export Pumps																
4	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts				-69	-69	-65	-29 ⁷	-38 ⁸	-15 ⁸							-285
CVP export cuts																0
Total Expenditures	0	0	0	-69	-69	-65	-29	-38	-15	0	0	0	0	0	0	-285

EWA Monthly Incremental Storage Changes																
5	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	2	0	11	-61	-68	52	-27	-8	22	24	27	0	10	10	10	3
CVP in SL	72	0	0	0	0	-72	0	0	0	0	0	0	0	0	0	0
NOD Storage	10	0	50	0	0	0	0	0	0	-30	-30	0	0	0	0	0
Groundwater SOD	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
Total Incremental Storage Changes	84	0	61	-61	-68	-20	-27	2	22	-6	-4	0	10	10	10	13

EWA Storage Balance at Various Sites																
6	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)	2	2	13	-48	-116	-64	-91	-99	-77	-53	-27	-27	-17	-7	3	
CVP in SL	72	72	72	72	72	0	0	0	0	0	0	0	0	0	0	
NOD Storage	10	10	60	60	60	60	60	60	60	30	0	0	0	0	0	
Groundwater SOD	0	0	0	0	0	0	0	10	10	10	10	10	10	10	10	
EWA Asset Balance	84	84	146	84	16	-4	-31	-29	-7	-13	-17	-17	-7	3	13	

San Luis Reservoir Storage Conditions																
7	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ⁵	978	1225	1385	1572	1841	2012	1952	1451	991	550	206	222	292	358	630	
Encroachment						15 ⁶										
Total Storage (EWA case)	1052	1299	1470	1596	1797	1963	1861	1352	914	497	179	195	275	351	633	
MWD Source Shifting						15	35							-25	-25	
Storage (with MWD source shift)	1052	1299	1470	1596	1797	1978	1911	1402	964	547	229	245	325	376	658	

¹ SOD G/W Acquisition = 5(Cawelo)+ 5(Semiotropic/Tulare ID). SWP prefers surface (i.e.: an exchange).

² SOD 2000 SWP surface purchase in March = 15 (Westside) + 19 (Rosedale) + 10 (Arvin Edison)

³ SOD 2001 SWP pre lowpoint purchases = 10(KCWA/Nickel LLC/ID4) + 15(Semiotropic/Tulare ID) + 23.5(Buena Vista) + 21(Westside)

⁴ SOD 2001 SWP post lowpoint purchase = 30(Semiotropic/Santa Clara)

⁵ Based upon the 5/18/01 DWR OCO's 50% exceedence forecast study.

⁶ CVP water was encroached in the state's share of San Luis.

⁷ April's estimated costs: 20.5 TAF for the 4/5-4/9 export curtailment & 8 TAF for VAMP.

⁸ These placeholders cover VAMP and June delta smelt costs. As of 5/22, VAMP's estimated cost is 29 TAF for the month of May.

An additional 9 TAF is estimated to be expended for the rest of May due to export curtailment.