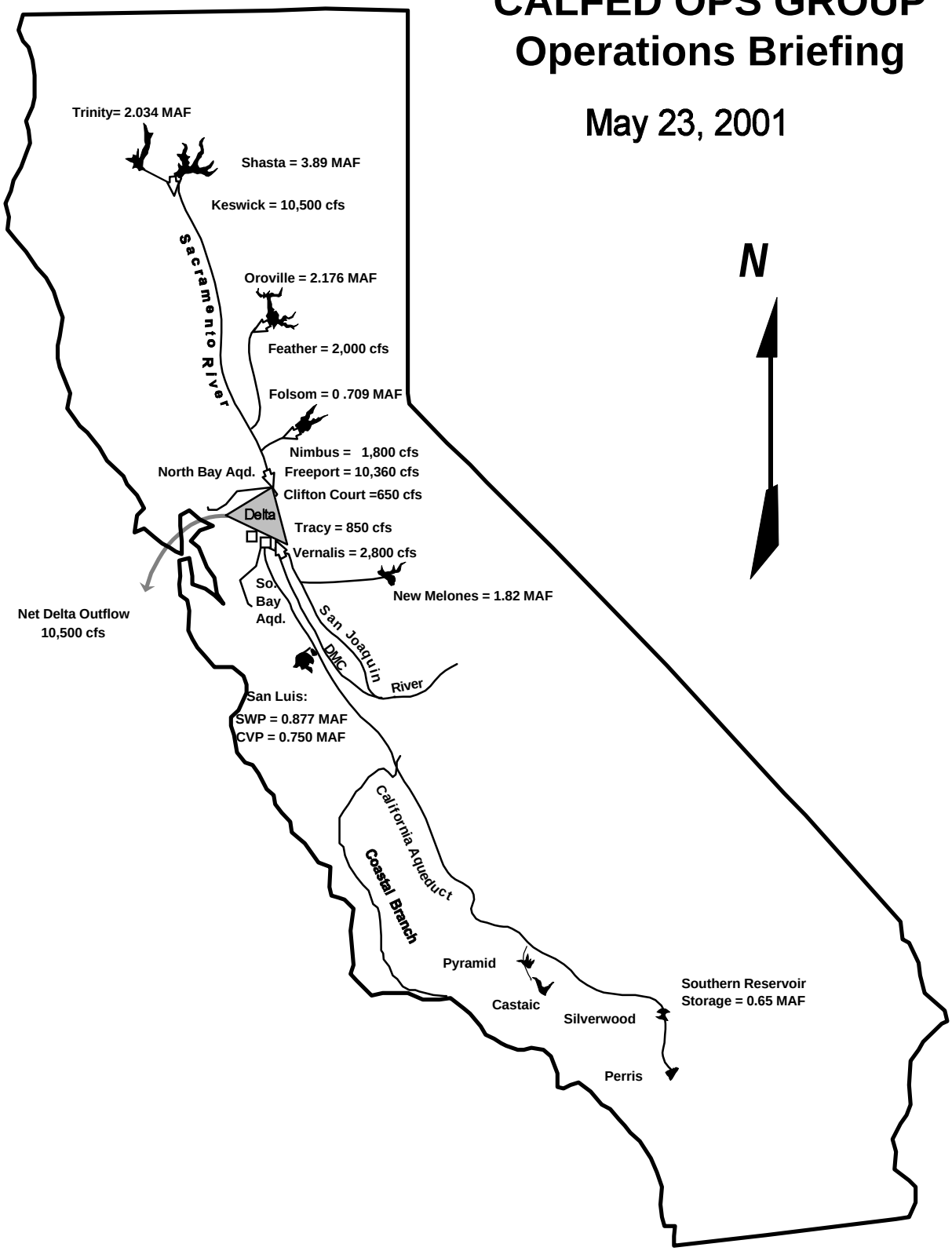
CALFED OPS GROUP
Operations Briefing

May 23, 2001



CURRENT SWP/CVP OPERATIONAL STATUS

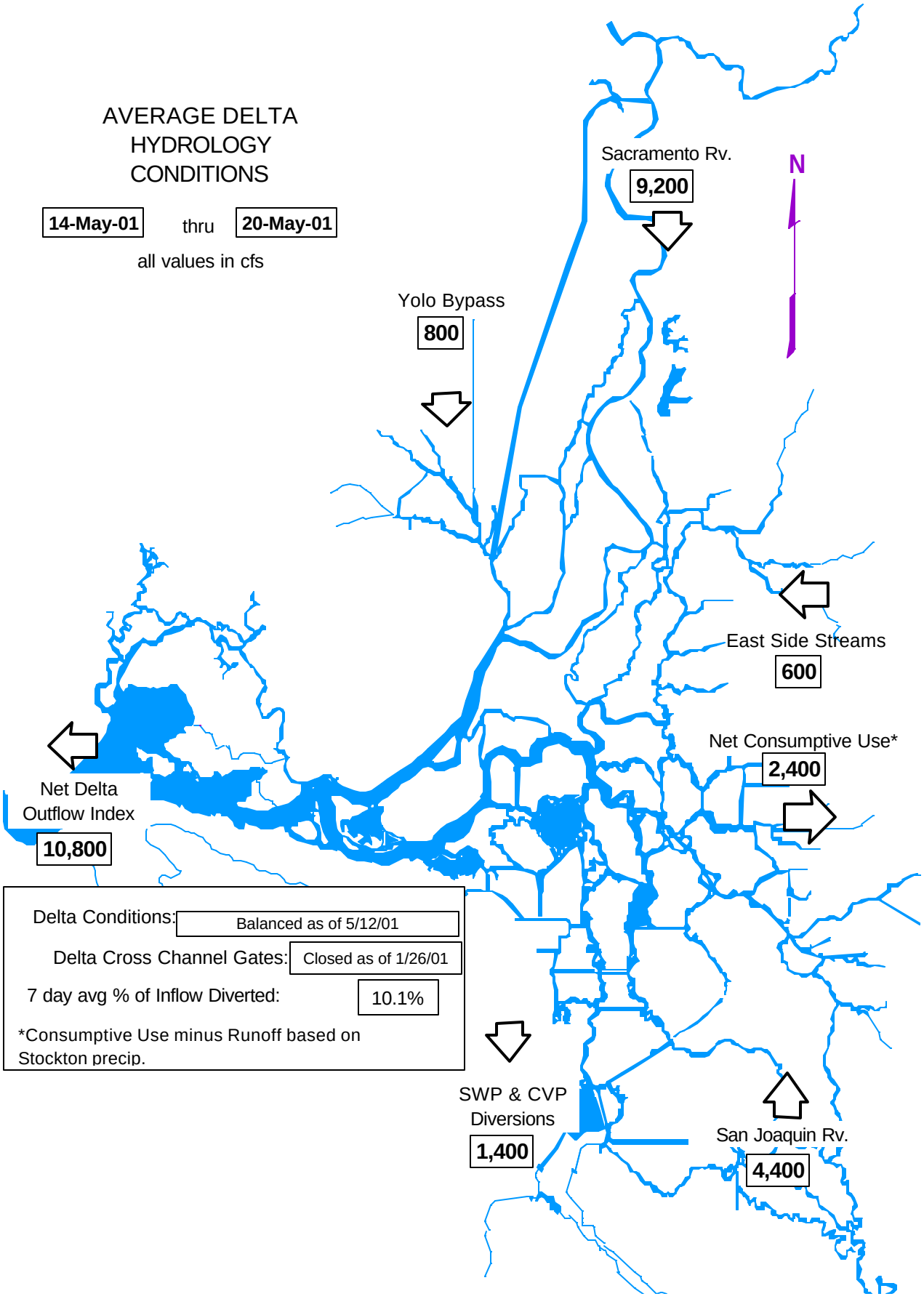
DATA AS OF
May 23, 2001

O&M, OSC

AVERAGE DELTA HYDROLOGY CONDITIONS

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

all values in cfs



Delta Conditions: Balanced as of 5/12/01

Delta Cross Channel Gates: Closed as of 1/26/01

7 day avg % of Inflow Diverted: 10.1%

*Consumptive Use minus Runoff based on Stockton precip.

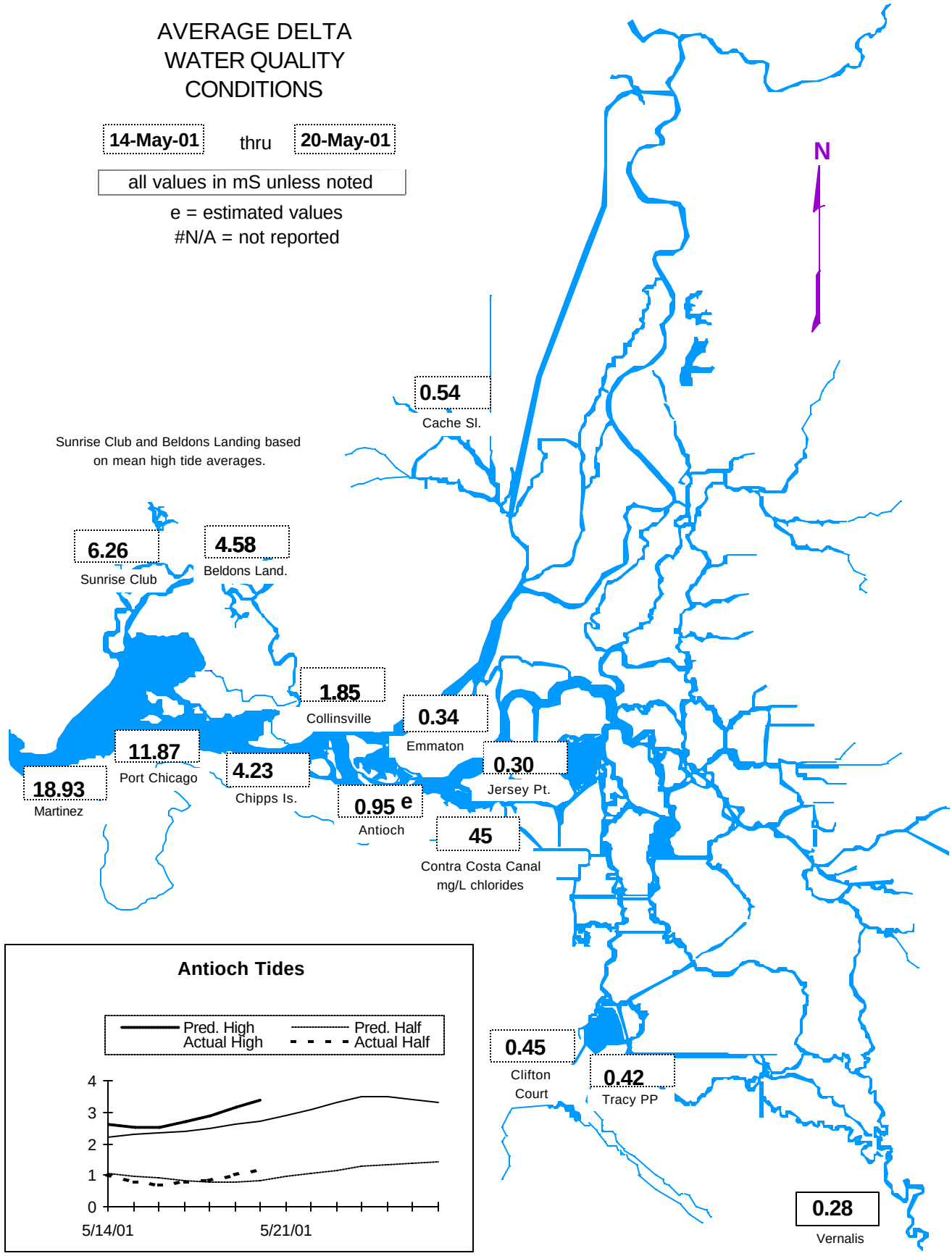
AVERAGE DELTA WATER QUALITY CONDITIONS

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

all values in mS unless noted

e = estimated values

#N/A = not reported



DRAFT

Bay-Delta Standards

Contained in D-1641

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CRITERIA	May 01	Jun01	Jul 01
FLOW/OPERATIONAL			
• Fish and Wildlife	greater of 1,500 cfs or 100% of 3-day avg. Vernalis flow.		
SWP/CVP Export Limits			
Export/Inflow Ratio	35 % of Delta Inflow		65% of Delta Inflow
Minimum Outflow - mon.			5000 cfs
- 7 day avg.			4000 cfs
Habitat Protection Outflow, X2	7,100cfs - 29,200 cfs		
	Chipps Island for 1 day		
River Flows:			
@ Rio Vista - min. mon. avg.			
- 7 day average			
@ Vernalis: Base -min. mon. avg.		2280 cfs	
- 7 day average		1824 cfs	
Pulse objective	3200 cfs		
Delta Cross Channel Gates	Closed	May 21 - June 15 close 14 days per CALFED Op's	
WATER QUALITY STANDARDS			
• Municipal and Industrial			
All Export Locations	Cl <= 250 mg/l		
Contra Costa Canal	Cl <= 150 mg/l for165 days for Dry Year Type		
• Agriculture		Emmaton and Jersey thru June 15th / San Andreas thru June 25th	
Western/Interior Delta	Max. 14-day average EC mmhos/cm: 0.45 mS/cm		
Southern Delta	30-day running average EC <= 0.7 mS		
• Fish and Wildlife			
San Joaquin River Salinity	14-day avg; 0.44 EC		
Suisun Marsh Salinity	11.0 mhtEC		

Water Year Classification: (May 1 forecast)

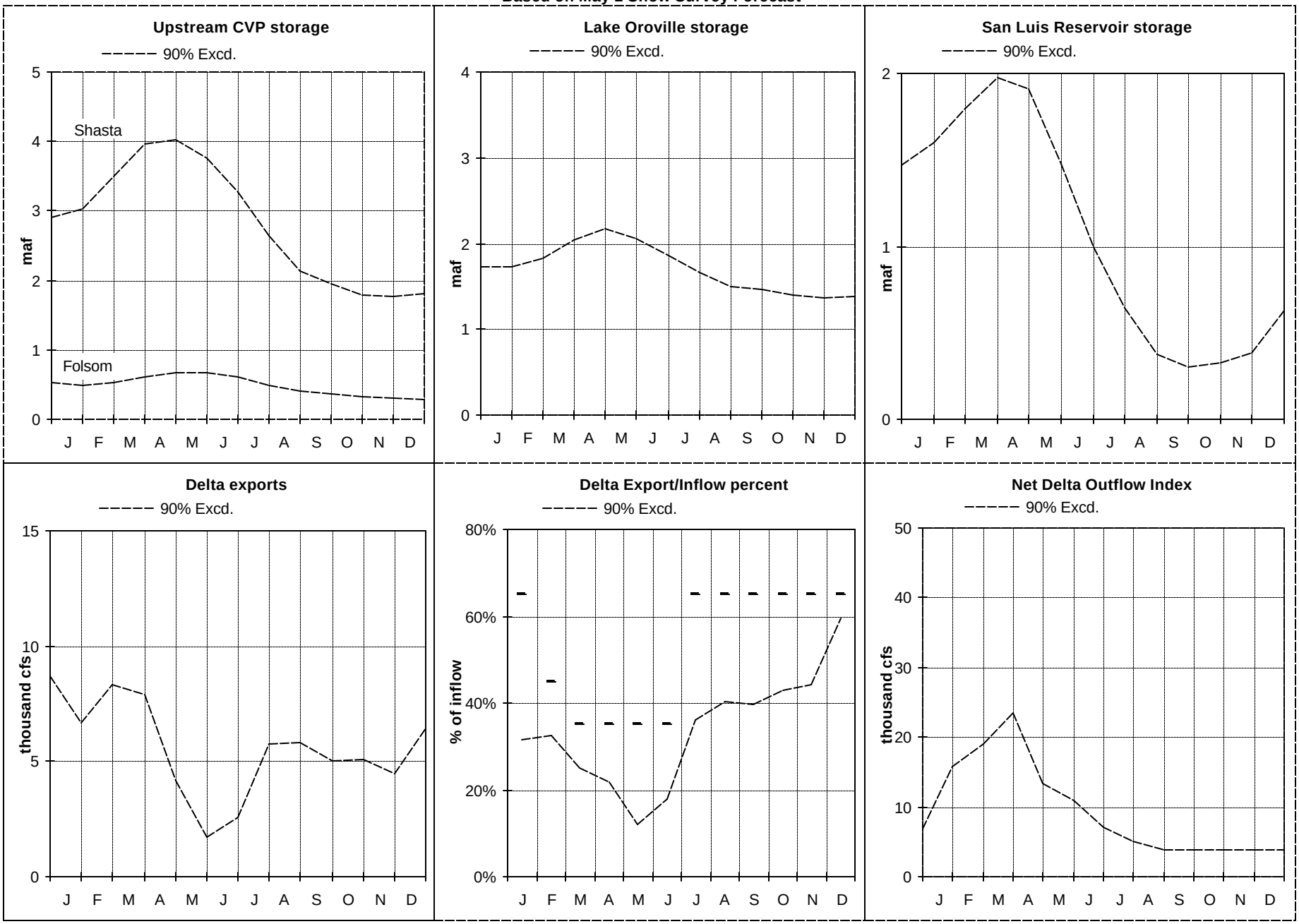
SRI (40-30-30 @ 50%) = 5.9 (Dry) May 8RI: 2.01 MAF

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

Preliminary, Subject to Revision

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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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**	**0**	**0**	**0**	**0**	**0**	**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
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
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**	**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 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**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**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
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 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(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 5/18/01 DWR OCO's 50% exceedance 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.