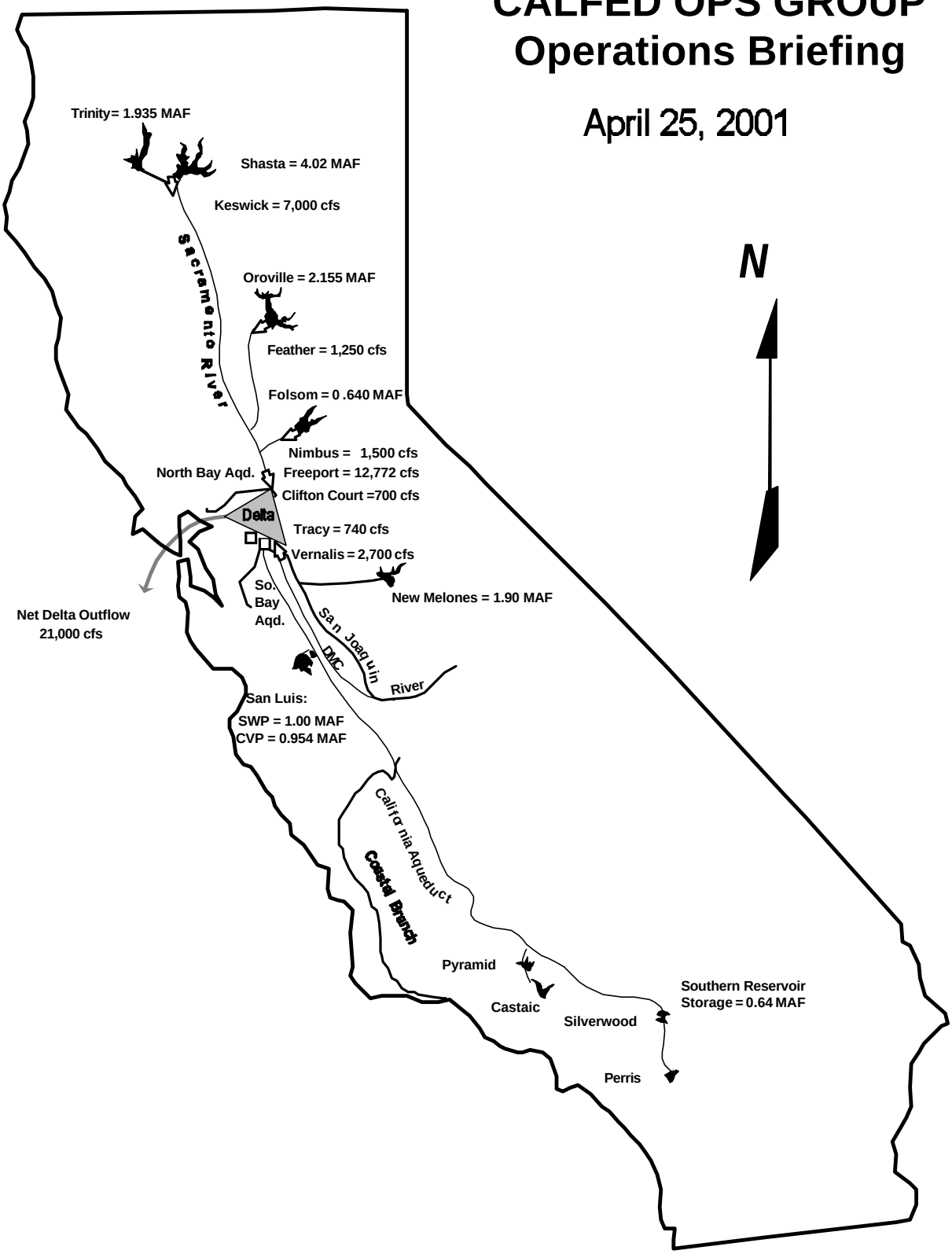
CALFED OPS GROUP
Operations Briefing

April 25, 2001



CURRENT SWP/CVP OPERATIONAL STATUS

DATA AS OF
April 25, 2001

O&M, OSC

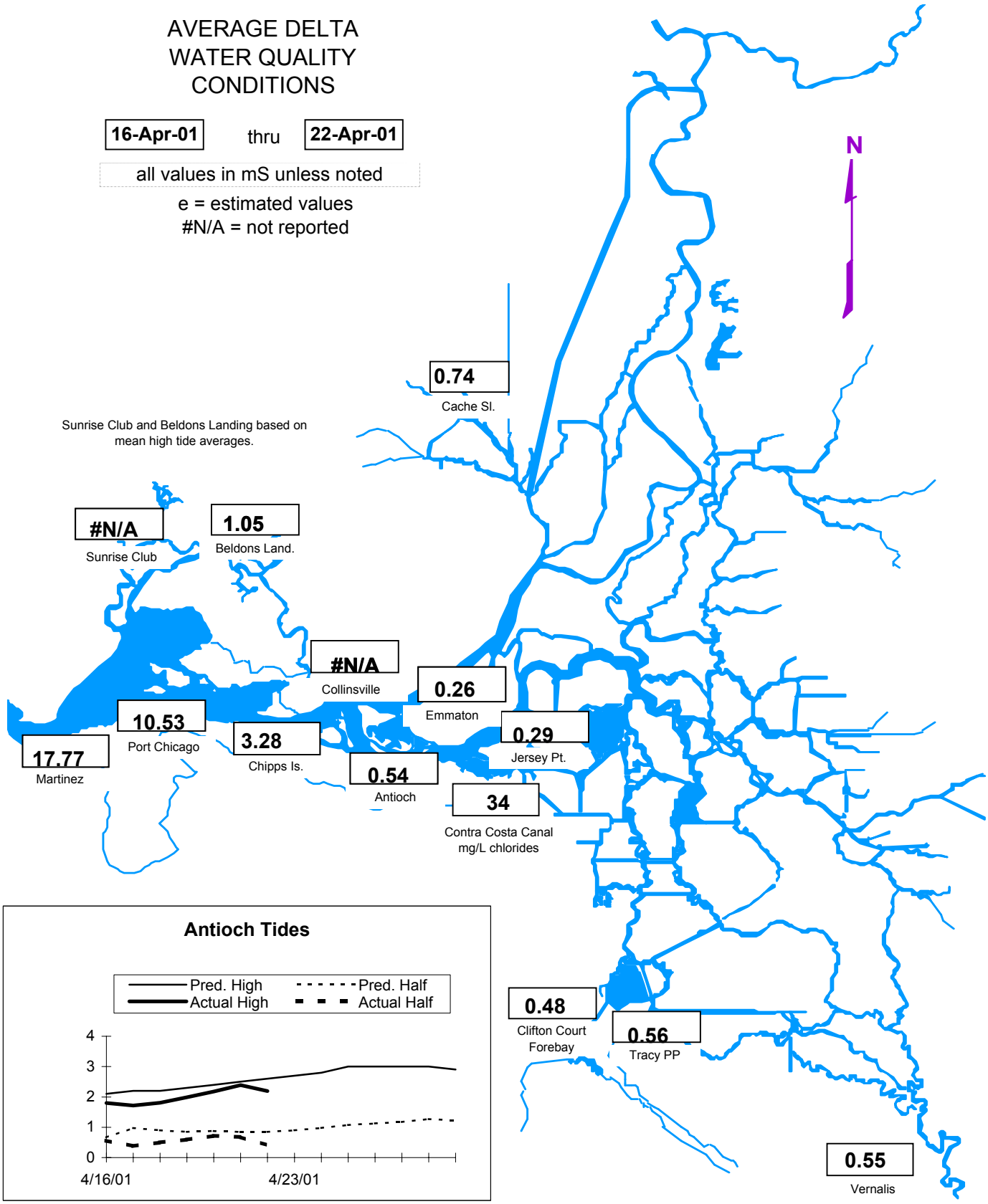
AVERAGE DELTA WATER QUALITY CONDITIONS

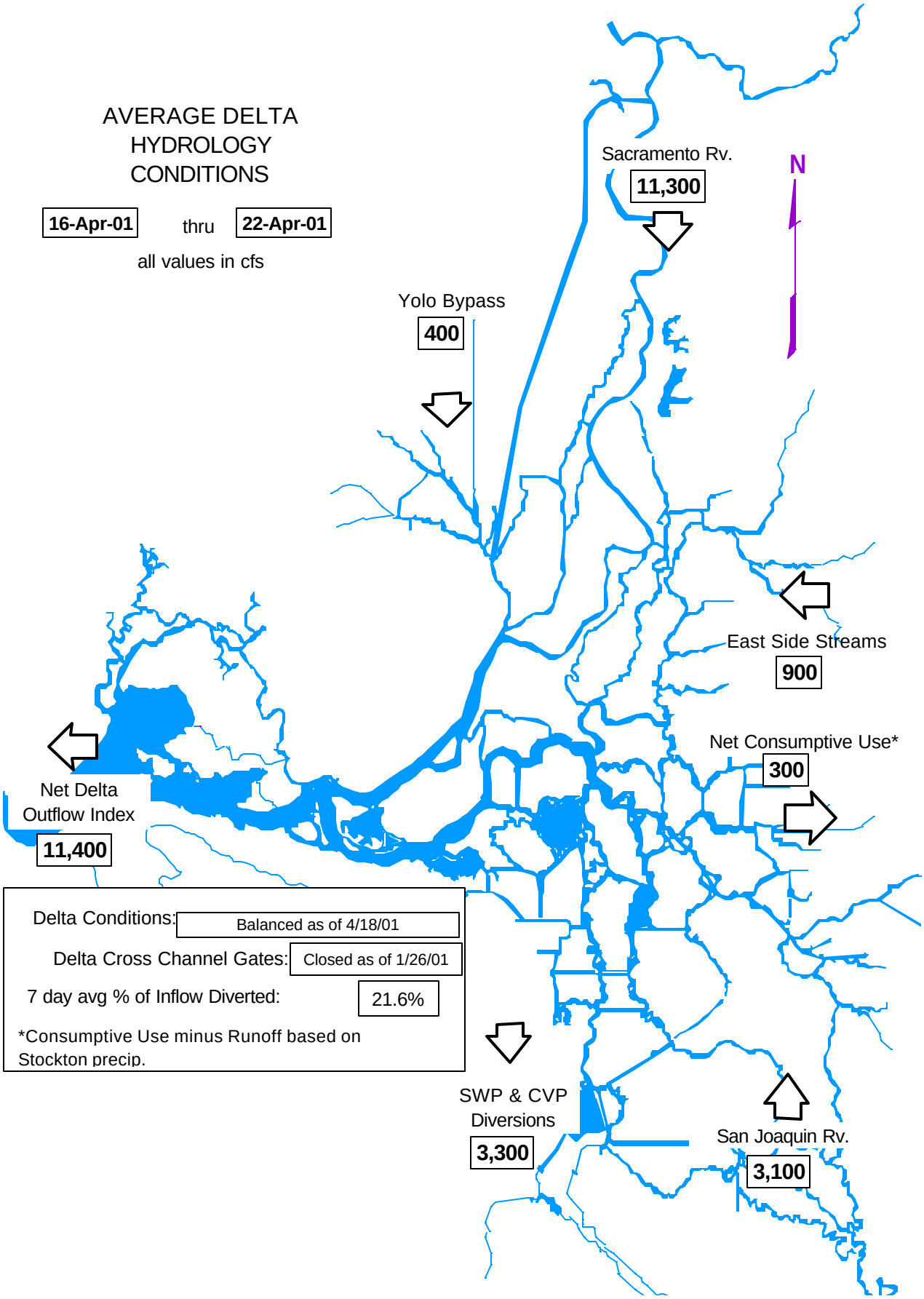
16-Apr-01 thru **22-Apr-01**

all values in mS unless noted

e = estimated values

#N/A = not reported




AVERAGE DELTA
HYDROLOGY
CONDITIONS
16-Apr-01
thru
22-Apr-01
all values in cfs
Sacramento Rv.
11,300
N
Yolo Bypass
400
East Side Streams
900
Net Consumptive Use*
300
Net Delta
Outflow Index
11,400
Delta Conditions:
Balanced as of 4/18/01
Delta Cross Channel Gates:
Closed as of 1/26/01
7 day avg % of Inflow Diverted:
21.6%
*Consumptive Use minus Runoff based on
Stockton precip.
SWP & CVP
Diversions
3,300
San Joaquin Rv.
3,100

DRAFT

Bay-Delta Standards

DRAFT

Contained in D-1641

CRITERIA	Apr 2001	May 2001	Jun 2001
FLOW/OPERATIONAL			
• Fish and Wildlife			
SWP/CVP Export Limits	Greater of 1,500 cfs or 100% of the 3-day avg. flow at		
Export/Inflow Ratio	35 % of Delta Inflow		
Minimum Outflow - mon.			
- 7 day avg.			
Habitat Protection Outflow, X2	X2 at Collinsville - NDOI >= 7100 cfs		
	Chipps Island for 28	Chipps Island for 0- 2 days	
River Flows:			
@ Rio Vista - min. mon. avg.			
- 7 day average			
@ Vernalis: Base -min. mon. avg.	1140 cfs		710 cfs
- 7 day average	912 cfs		568 cfs
Pulse objective - mon. avg.		3300 cfs	
Delta Cross Channel Gates	Closed		14 days per Op's Group
WATER QUALITY STANDARDS			
• Municipal and Industrial			
All Export Locations	Cl <= 250 mg/l		
Contra Costa Canal	Cl <= 150 mg/l for 165 days for Dry Year Type		
• Agriculture		Emmaton and Jersey Point thru June 15th	San Andreas Thru June 25
Western/Interior Delta	Max. 14-day average EC mmhos/cm: 0.45 mS/cm for Wet year		
Southern Delta	30 day running avg. EC <= 1.0 mS/cm	30 day running avg. EC <= 0.7 mS/cm	30 day running avg. EC <= 0.7 mS/cm
• Fish and Wildlife			
San Joaquin River Salinity	14-day avg; 0.44 EC		
Suisun Marsh Salinity	11.0 mhtEC		

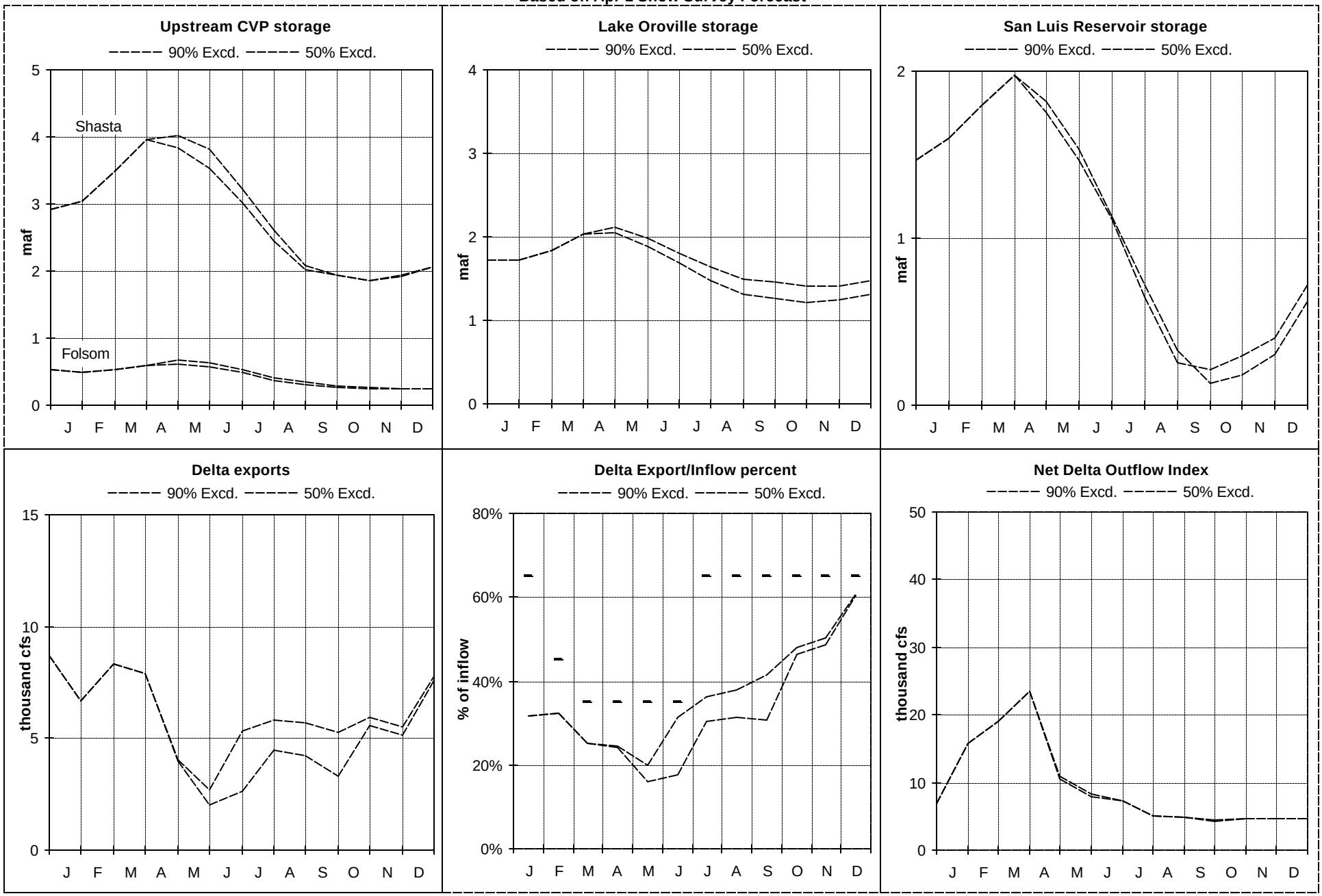
Water Year Classification: (April 1 forecast)

SRI (40-30-30 @ 50%) = 5.8 MAF (Dry)

SJV (60-20-20 @75%) = 2.1 MAF(Critical)

SWP & CVP CY 2001 Forecasted Operations.

Based on Apr 1 Snow Survey Forecast



Based on 4/2001 SWP & CVP operations studies. Flows are monthly averages.

Year 2001 EWA Accounting Summary
Based on April 1 -- 90% Exceedence Hydrology (30% 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								15 [1]								15

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]		35 [3]	35 [3]				20 [4]	20 [4]	20	182
EWA share of SWP gain			11	8												19
Groundwater pumping SOD																0
Exchange from CVP to SWP in SL						72										72
Total Monthly EWA Assets	**2**	**0**	**11**	**8**	**0**	**116**	**0**	**35**	**35**	**24**	**24**	**0**	**20**	**20**	**20**	**323**

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	-71	-65	-30 [7]	-10 [7]								-245
CVP export cuts																0
Total Expenditures	**0**	**0**	**0**	**-69**	**-71**	**-65**	**-30**	**-10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-245**

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	-71	51	-30	25	35	24	24	0	20	20	20	78
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	15	0	0	0	0	0	0	0	15
Total Incremental Storage Changes	**84**	**0**	**61**	**-61**	**-71**	**-21**	**-30**	**40**	**35**	**-6**	**-6**	**0**	**20**	**20**	**20**	**93**

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	-119	-68	-98	-73	-38	-14	10	10	30	50	70
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	15	15	15	15	15	15	15	15
EWA Asset Balance	**84**	**84**	**145**	**84**	**13**	**-8**	**-38**	**2**	**37**	**31**	**25**	**25**	**45**	**65**	**85**

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	1844	2016	1834	1569	1093	672	361	153	151	232	552
Encroachment						15 [6]									
Total Storage (EWA case)	1052	1299	1470	1596	1797	1963	1736	1496	1055	658	371	163	181	282	622
MWD Source Shifting						15	35							-25	-25
Storage (with MWD source shifting)	**1052**	**1299**	**1470**	**1596**	**1797**	**1978**	**1786**	**1546**	**1105**	**708**	**421**	**213**	**231**	**307**	**622**

[1] SOD G/W Acquisition = 10(Cawelo)+ 5(Tulare). 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 = 20(KCWA/Nickel LLC/ID4) + 15(Semitropic/Tulare) + 15(Buena Vista) + 20(Westside)
[4] SOD 2001 SWP post lowpoint purchase = 30(Semitropic/Santa Clara) + 30(Westside)
[6] Based upon the 4/19/01 USBR's 90% exceedance B2 forecast study.
[6] CVP water was encroached in the state's share of San Luis.
[7] These placeholders cover projected VAMP and June delta smelt costs. However, an estimated 20 TAF has been expended for the April 5-9 export curtailment.

Year 2001 EWA Accounting Summary
Based on April 1 -- 50% Exceedence Hydrology

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								15 [1]								15

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]		35 [3]	35 [3]				20 [4]	20 [4]	20	182
EWA share of SWP gain			11	8												19
Groundwater pumping SOD																0
Exchange from CVP to SWP in SL						72										72
Total Monthly EWA Assets	**2**	**0**	**11**	**8**	**0**	**116**	**0**	**35**	**35**	**24**	**24**	**0**	**20**	**20**	**20**	**323**

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 [5]				-69	-71	-65	-35 [7]	-20 [7]	-15 [7]							-275
CVP export cuts																0
Total Expenditures	**0**	**0**	**0**	**-69**	**-71**	**-65**	**-35**	**-20**	**-15**	**0**	**0**	**0**	**0**	**0**	**0**	**-275**

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	-71	51	-35	15	20	24	24	0	20	20	20	48
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	15	0	0	0	0	0	0	0	15
Total Incremental Storage Changes	**84**	**0**	**61**	**-61**	**-71**	**-21**	**-35**	**30**	**20**	**-6**	**-6**	**0**	**20**	**20**	**20**	**63**

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 Souce Shift)	2	2	13	-48	-119	-68	-103	-88	-68	-44	-20	-20	0	20	40
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	15	15	15	15	15	15	15	15
EWA Asset Balance	**84**	**84**	**145**	**84**	**13**	**-8**	**-43**	**-13**	**7**	**1**	**-5**	**-5**	**15**	**35**	**55**

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) [6]	978	1225	1385	1572	1844	2016	1791	1441	939	460	118	148	306	517	863
Encroachment						15 [8]									
Total Storage (EWA case)	1052	1299	1470	1596	1797	1963	1688	1353	871	416	98	128	306	537	903
MWD Source Shifting						15	35					0		-25	-25
Storage (with MWD source shift)	**1052**	**1299**	**1470**	**1596**	**1797**	**1978**	**1738**	**1403**	**921**	**466**	**148**	**178**	**356**	**562**	**903**

[1] SOD G/W Acquisition = 10(Cawelo)+ 5(Tulare). 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 = 20(KCWA/Nickel LLC/ID4) + 15(Semitropic/Tulare) + 15(Buena Vista) + 20(Westside)

[4] SOD 2001 SWP post lowpoint purchase = 30(Semitropic/Santa Clara) + 30(Westside)

[5] None of the export cuts and only 25 TAF of MWD's source shift (and its payback) were included in the 3/14/01 USBR's 50% forecast.

[6] Based upon the 4/19/01 USBR's 50% exceedance B2 forecast study.

[7] These placeholders cover projected VAMP and June delta smelt costs. However, an estimated 20 TAF has been expended for the April 5-9 export curtailment.

[8] CVP water was encroached in the state's share of San Luis.