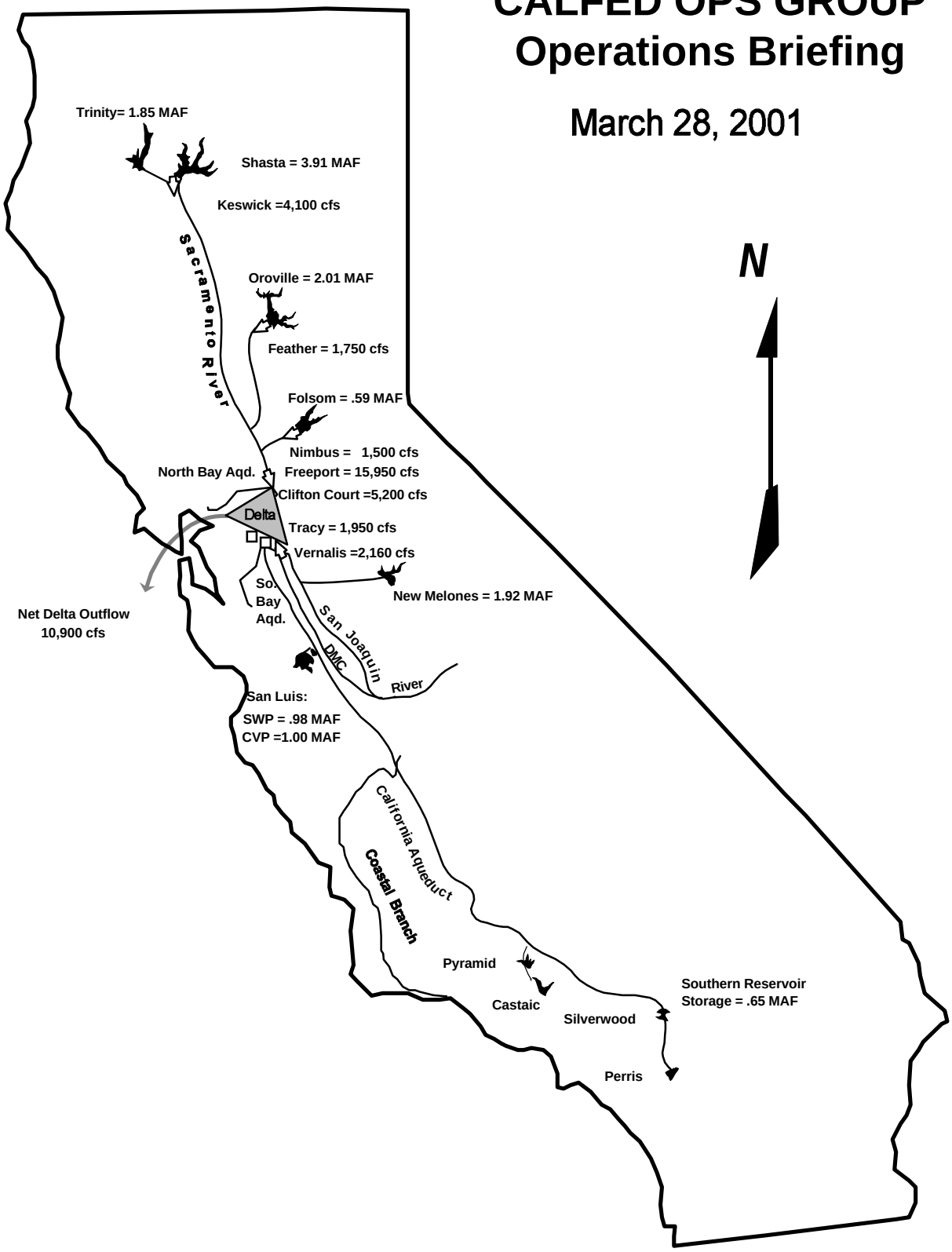
CALFED OPS GROUP
Operations Briefing

March 28, 2001



CURRENT SWP/CVP OPERATIONAL STATUS

DATA AS OF
March 27, 2001

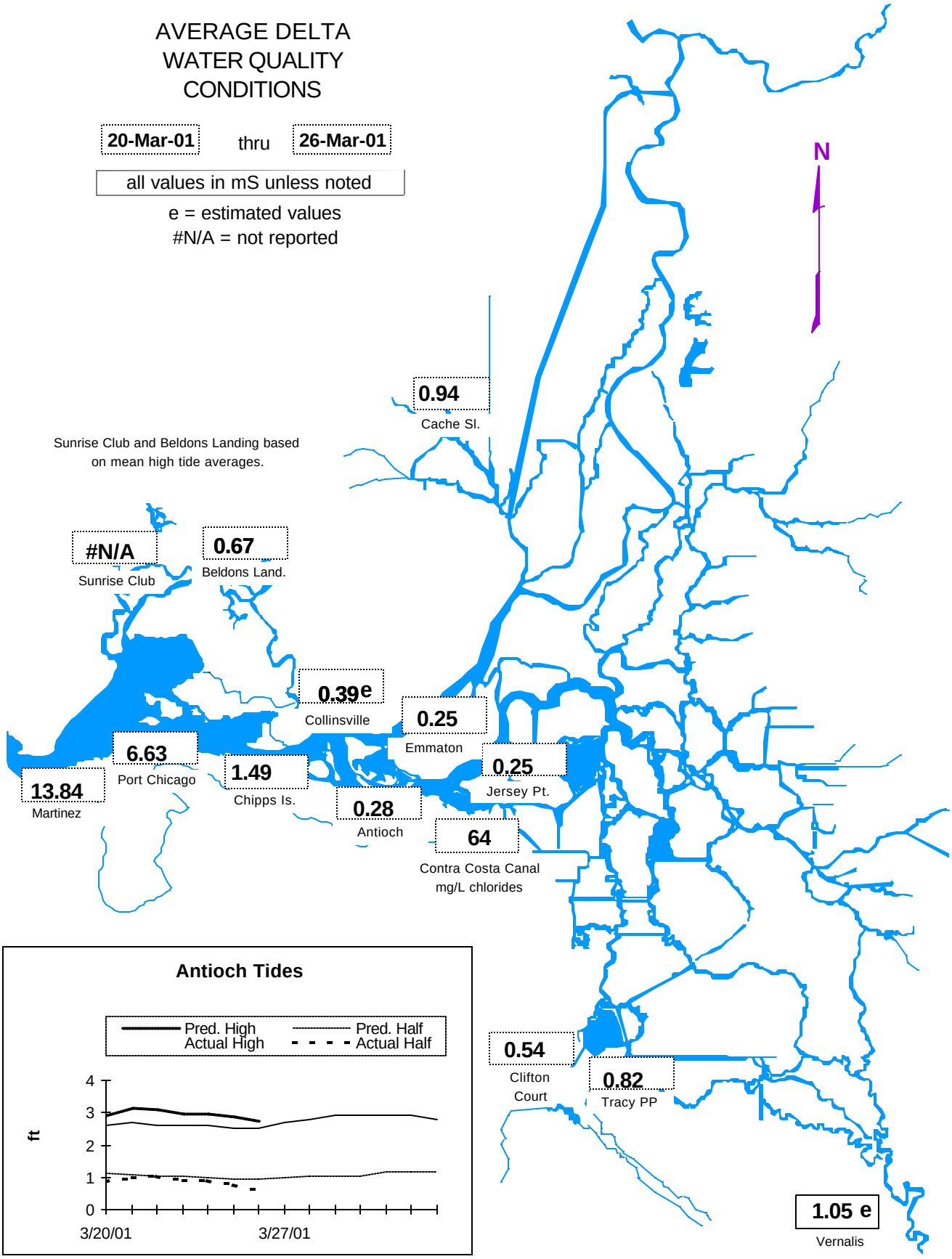
O&M, OSC

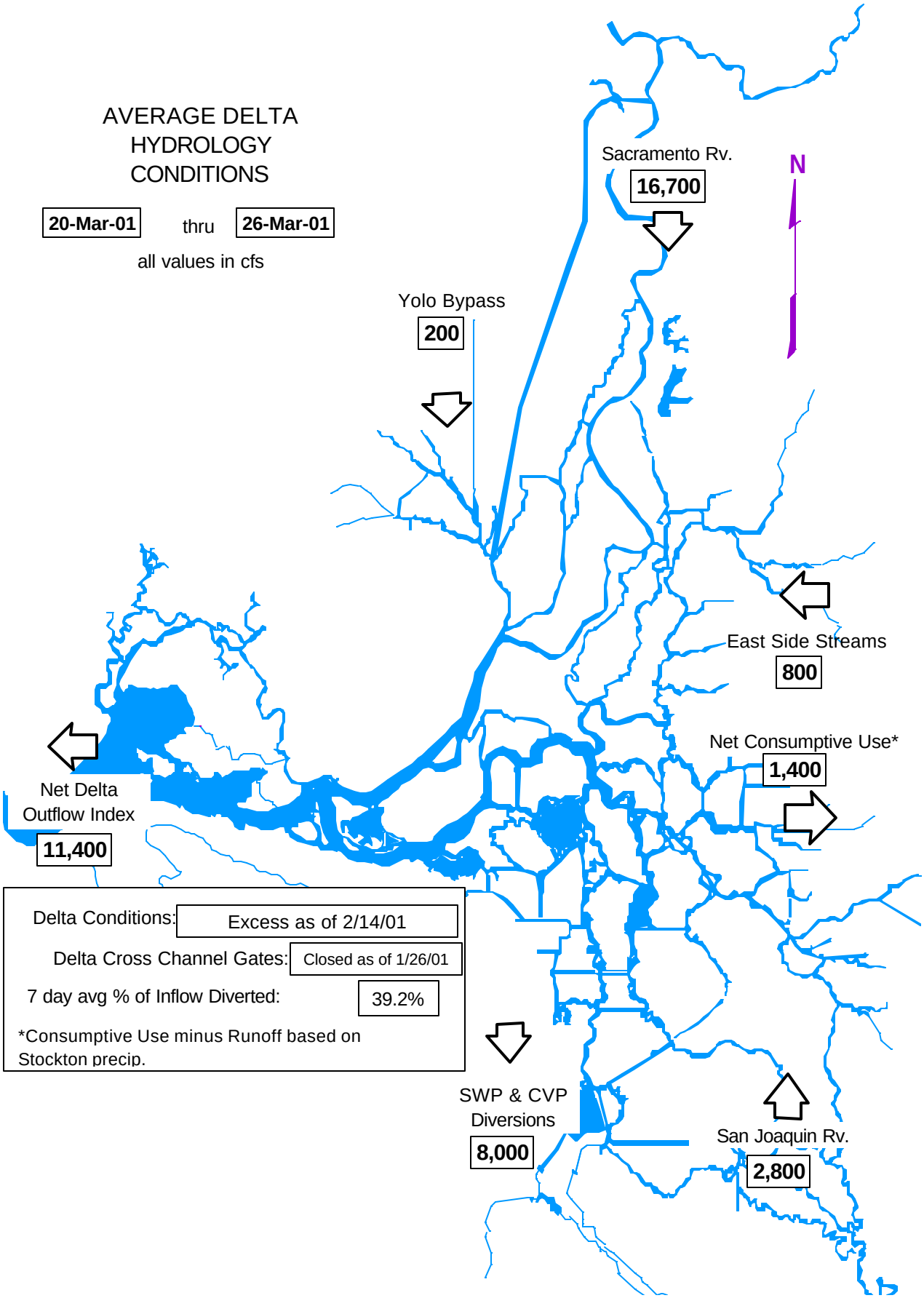
AVERAGE DELTA WATER QUALITY CONDITIONS

20-Mar-01 thru **26-Mar-01**

all values in mS unless noted

e = estimated values
#N/A = not reported




AVERAGE DELTA
HYDROLOGY
CONDITIONS
20-Mar-01
thru
26-Mar-01
all values in cfs
Sacramento Rv.
16,700
N
Yolo Bypass
200
East Side Streams
800
Net Consumptive Use*
1,400
Net Delta
Outflow Index
11,400
Delta Conditions:
Excess as of 2/14/01
Delta Cross Channel Gates:
Closed as of 1/26/01
7 day avg % of Inflow Diverted:
39.2%
*Consumptive Use minus Runoff based on
Stockton precip.
SWP & CVP
Diversions
8,000
San Joaquin Rv.
2,800

DRAFT

Bay-Delta Standards

Contained in D-1641

DRAFT

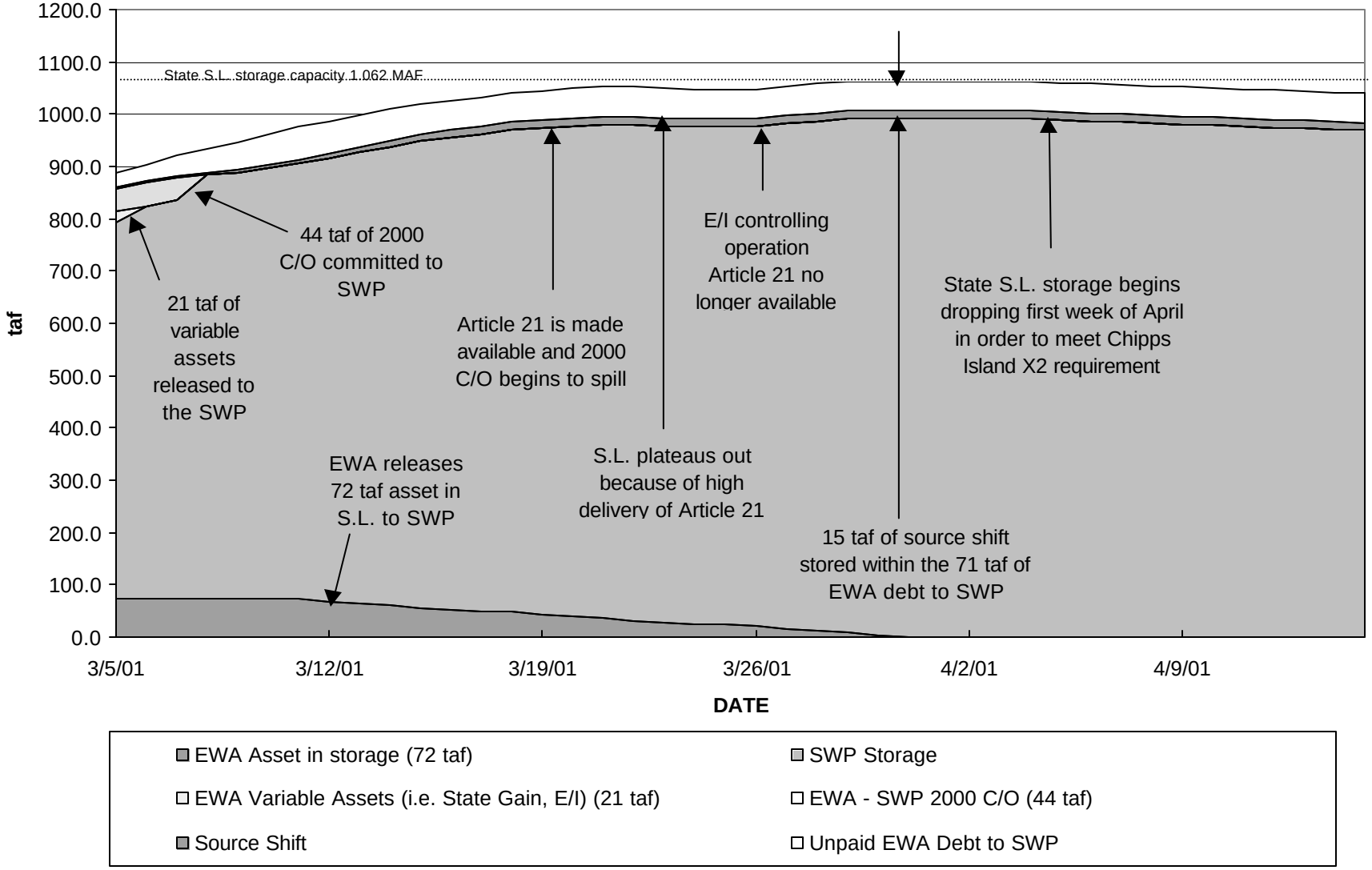
CRITERIA	Mar 2001	Apr 2001	May 2001
FLOW/OPERATIONAL			
• Fish and Wildlife			
SWP/CVP Export Limits		Greater of 1,500 cfs or 100% of 3-day avg. Vernalis flow	
Export/Inflow Ratio	35 % of Delta Inflow		
Minimum Outflow - mon.			
- 7 day avg.			
Habitat Protection Outflow, X2	7100 - 29,200 cfs		
	3-day running avg. of 11,400 cfs Chipps Island for 31 days	Port Chicago for 0 days Chipps Island between 25 and 26 days	
River Flows:			
@ Rio Vista - min. mon. avg.			
- 7 day average			
@ Vernalis: Base -min. mon. avg.	2280 cfs	2280 cfs	2280 cfs
- 7 day average	1824 cfs	1824 cfs	1824 cfs
Pulse objective		Preliminary VAMP target is 3200 cfs	
Delta Cross Channel Gates	Closed		
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			
Western/Interior Delta		Max. 14-day average EC mmhos/cm: 0.45 mS/cm for Dry 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	8.0 mhtEC	11.0 mhtEC	

Water Year Classification: Dry (Based on forecast, 3/1/2001)

SRI (40-30-30 @ 50%) = 6.3 MAF

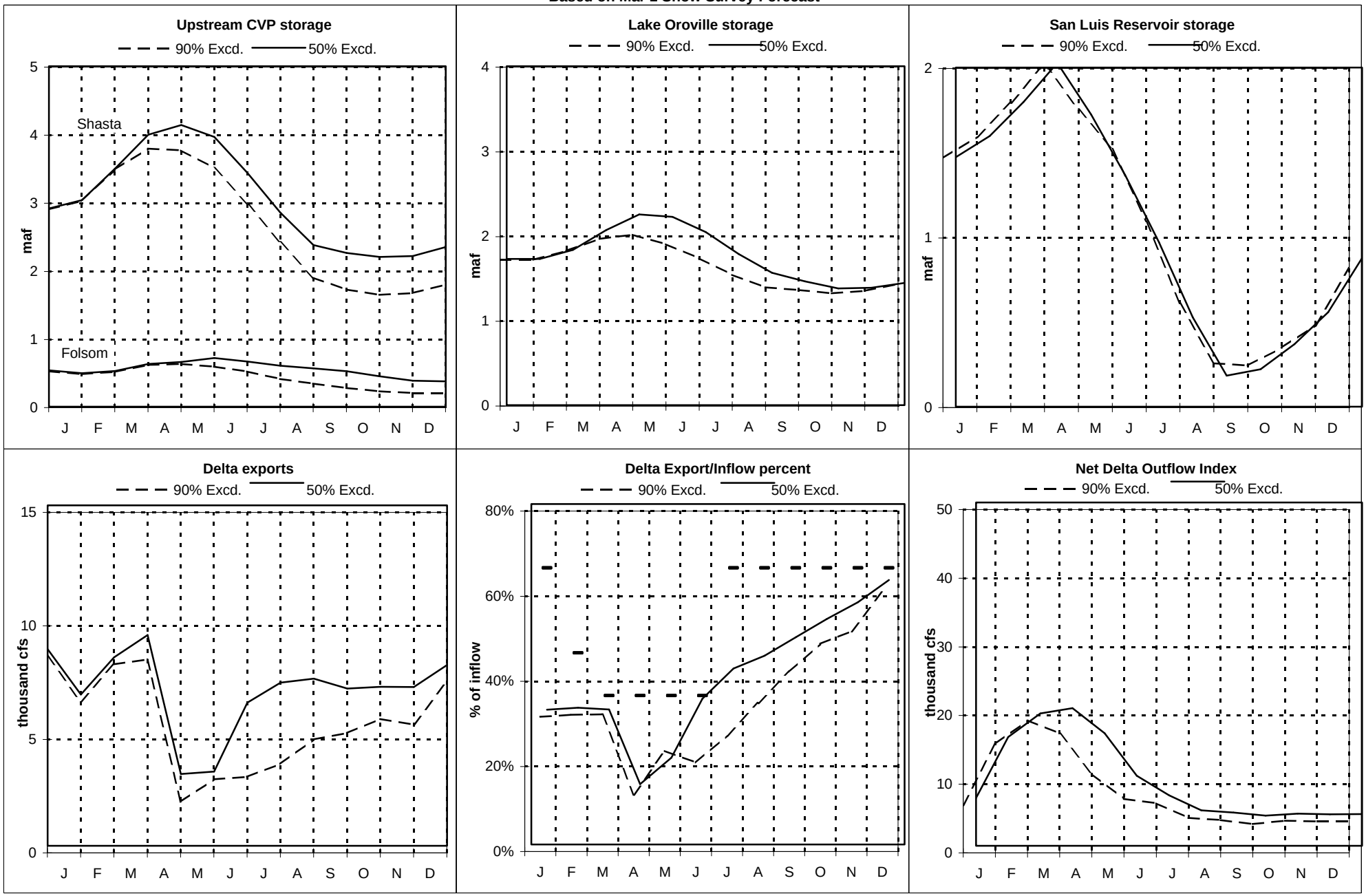
SJV (60-20-20 @75%) =2.1 MAF

State San Luis Reservoir Storage
(actual case with EWA)



SWP & CVP CY 2001 Forecasted Operations.

Based on Mar 1 Snow Survey Forecast



Based on 3/2001 SWP & CVP operations studies. Flows are monthly averages.

Year 2001 EWA Operations Summary
Based on March 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								65 [1]								65

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]		25 [3]	25 [3]			10 [3]	10 [3]	10 [3]		124
EWA share of SWP gain			11	8												19
Groundwater pumping SOD								5 [4]	5 [4]							10
Exchange CVP to SWP in SL						72										72
Total Monthly EWA Assets	**2**	**0**	**11**	**8**	**0**	**116**	**0**	**30**	**30**	**24**	**24**	**10**	**10**	**10**	**0**	**275**

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 CVP to SWP 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				-65	-76	-75 [5]										-217
CVP export cuts																0
Total Expenditures	**0**	**0**	**0**	**-65**	**-76**	**-75**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-217**

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	-57	-76	41	0	30	30	24	24	10	10	10	0	58
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	60	-5	0	0	0	0	0	0	55
Total Incremental Storage Changes	**84**	**0**	**61**	**-57**	**-76**	**-31**	**0**	**90**	**25**	**-6**	**-6**	**10**	**10**	**10**	**0**	**113**

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	-44	-121	-80	-80	-50	-20	4	28	38	48	58	58
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	60	55	55	55	55	55	55	55
EWA Asset Balance	**84**	**84**	**145**	**88**	**11**	**-20**	**-20**	**70**	**95**	**89**	**83**	**93**	**103**	**113**	**113**

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)	978	1225	1385	1568	1846	2061	1773	1435	968	571	232	153	180	245	528
Total Storage (EWA case) [6]	1052	1299	1470	1596	1797	1981	1693	1385	948	575	260	191	228	303	586
MWD Source Shifting						15	25	25	13	13	10	0	-25	-33	-43
Storage (with MWD source shifting)	**1052**	**1299**	**1470**	**1596**	**1797**	**1996**	**1733**	**1450**	**1026**	**665**	**360**	**291**	**303**	**346**	**586**

[1] SOD G/W Acquisition = 50(Westside) + 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 Purchases = 20(KCWA/Nickel LLC/ID4) + 15(Semitropic/Tulare) + 30(Santa Clara) + 15(Buena Vista)
[4] Pumpable G/W = 5(Tulare) + 5(Cawelo)
[5] An estimated total of 66 TAF has been expended: 27 TAF for the 3/1-3/5 curtailments; 26 TAF for the 3/7-3/9 curtailments; 12 TAF for the 3/10-3/11 curtailments.
[6] Based upon the 3/14/01 USBR's 90% exceedance forecast study.

Year 2001 EWA Operations Summary

Based on March 1 -- 50% Exceedence Hydrology (45% 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								65 [1]								65

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]		25 [3]	25 [3]	10 [3]		10 [3]	10 [3]	10 [3]		134
EWA share of SWP gain			11	8												19
Groundwater pumping SOD								5 [4]	5 [4]							10
Exchange from SWP to CVP in SL						72										72
Total Monthly EWA Assets	**2**	**0**	**11**	**8**	**0**	**116**	**0**	**30**	**30**	**34**	**24**	**10**	**10**	**10**	**0**	**285**

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 CVP to SWP 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]				-65	-76	-66 [6]	-50	-50	-50							-358
CVP export cuts																0
Total Expenditures	**0**	**0**	**0**	**-65**	**-76**	**-66**	**-50**	**-50**	**-50**	**0**	**0**	**0**	**0**	**0**	**0**	**-358**

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	-57	-76	50	-50	-20	-20	34	24	10	10	10	0	-73
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	60	-5	0	0	0	0	0	0	55
Total Incremental Storage Changes	**84**	**0**	**61**	**-57**	**-76**	**-22**	**-50**	**40**	**-25**	**4**	**-6**	**10**	**10**	**10**	**0**	**-18**

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	-44	-121	-71	-121	-141	-161	-127	-103	-93	-83	-73	-73
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	60	55	55	55	55	55	55	55
EWA Asset Balance	**84**	**84**	**145**	**88**	**11**	**-11**	**-61**	**-21**	**-46**	**-42**	**-48**	**-38**	**-28**	**-18**	**-18**

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)	978	1225	1385	1568	1846	2098	1860	1528	1103	664	299	339	484	642	1042
Total Storage (EWA case) [7]	1052	1299	1470	1596	1797	2027	1739	1387	942	537	196	246	401	569	969
MWD Source Shifting						15	25	25	13	13	10	0	-25	-33	-43
Storage (with MWD source shift)	**1052**	**1299**	**1470**	**1596**	**1797**	**2042**	**1779**	**1452**	**1020**	**627**	**296**	**346**	**476**	**612**	**969**

[1] SOD G/W Acquisition = 50(Westside) + 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 Surface Purchases = 20(KCWA/Nickel LLC/ID4) + 25(Buena Vista) + 15(Tulare) + 30(Santa Clara).

[4] Pumpable G/W = 5(Tulare) + 5(Cawelo).

[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] An estimated total of 66 TAF has been expended: 27 TAF for the 3/1-3/5 curtailments; 26 TAF for the 3/7-3/9 curtailments; 12 TAF for the 3/10-3/11 curtailments.