	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1	CALFED GAME 6																																															
2	Year	1981										CVP Accounting					EWA								EWA Accounting																			Projects				
3																	Upstream					Export			Export Supply Factors											Storage												
4		Upstream Balance												Export Balance			Upstream Balance					Cuts												Negative values for borrowed water												
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum		SLR:C	SLR:S	MWD	Vidler	Sum -	Chang	Shasta	Folsom	Oroville		SWP S	SWP	CVP	CVP	
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not sp	Debt	XFER	XFER	Export	Export	factors						Export	Export	Storage				500cfs	Gain	JPOD	JPOD	
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts						Storage						50%	25%	50%	Not split	
8				Melones							Offset									Cuts	Cuts												Initial																
9											Negative																						valu	0	0	0	200	200	0	0	0	0						
10	O		67	5	72					20		20	92						O			0								23	23	23	O		23		200	223	23					0	23	0		
11	N		68	5	73						(9)	(9)	64						N		58	58								20	20	38	N		-15		200	185	-38					0	20	0		
12	D	105	65	5	175							0	175						D			0								73	73	73	D		58		200	258	73					0	73	0		
13	J	75	20	5	100							0	100						J		125	125								28	28	97	J		-39		200	161	-97					0	28	0		
14	EWA Gain Reduction				0	Max Re		0																																								
15		180	220	20	420	0	0			20	(9)	11	431	0	0	0	0	0		0	183	183	0	0	0	0	0	0	0	144	144	(39)												0	144	0		
16																																																
17	F				0			0	0		(11)	(11)	(11)			18			F	203		203									0	-203	F	-203	-39		200	-42	-203					0	0	0		
18	M				0			0	0			0	0			25			M	94		94									0	-94	M	-297	-39		200	-136	-94					0	0	0		
19	A		45		45			0	0		(5)	(5)	40			107			A	59		59								6	6	-53	A	-356	-33		200	-189	-53					0	2	0		
20	M		45		45			0	0		(177)	(177)	(132)	57		146			M			0							30	8	38	38	M	-326	-25		200	-151	38					0	2,667	0		
21	J				0			0	0		(33)	(33)	(33)			80			J	-75		-75		30					30		60	135	J	-221	5		200	-16	135					30	0	0		
22	J				0			0	0	84		84	84			0			J			0							30		30	30	J	-191	5		200	14	30					0	0	0		
23	A				0			0	0		(20)	(20)	(20)			0			A			0						30	30		60	60	A	-161	35		200	74	60					0	0	0		
24	S				0			0	0			0	0			5			S			0						30	30		60	60	S	-131	65		200	134	60					0	0	0		
25	Feb	0	90	0	90	0	0	0	0	84	(246)	(162)	(72)	57	0	381	0	0		281	0	281	0	30	0	0	0	60	150	14	254	(27)												30	5	0		
26																																																
27	Total	180	310	20	510	0	0	0	0	104	(255)	(151)	359	57	0	381	0	0		281	183	464	0	30	0	0	0	60	150	158	398	(66)																
28																																																
29	B(2) Accounting																						EWA Accounting						EWA	SWP	CVP		DWRSIM/ Daily Model																
30																Is SWP Gain a windfall only, part							Upstream Releases						0							SWP	CVP												
31	Net WQCP Storage: Oct - January													11		of the base (with compensation if							Water Backed upstream						0																				
32	Net WQCP Flow Changes: February - September													(162)		we cut during afrp releases.							Total Export Cuts made						464																				
33	WQCP Exports													381									Export Supplies Generated						398				SIM continuous Exports																
34	Total Net WQCP													230										E/I					0				SIM yearly exports																
35	Net AFRP storage: Oct - January													420		CVP cost of 2/1 is 75 kaf. Credited in June								500 cfs					30				Daily Base Exports																
36	Net AFRP flow changes: February - September													90										JPOD: Excess flows					0				Daily Final Exports																
37	Net Discretionary export b(2) except Section III													57		EWA in Oroville: Victor says no								JPOD: EWA storage					0				Change in Exports																
38	Upstream Release Reductions (Oct - Jan)													(9)										Transfer NOD Purchases					60				Final DWRSIM Exports																
39	Upstream Release Reductions (Feb - Sep)													(246)		Non ewa use of the 500 cfs?								Net Spill					0				CVP Delivery Cuts																
40	Net Upstream Storage Change (AFRP + WQCP)													431										SOD Purchase					150				Shift for Refuges		Possible in a burst														
41	Net Upstream Release: February - September													(72)		How to interpret 84 increase wqcp releases.								SWP Gain					158																					
42	Net Export Change, not including S III.													438		Does this reduce offset? Would deliveries																	F	11																
43	Section 3 water released													0		be reduced without the 84?								NOD Water Purchases					60				M	0																
44	Section 3 water exported													0		But project changes in ops back up 60 kaf								EWA EOY Balance in CVP SLR					-131				A	0																
45	Section 3 Export cuts													0		in June. Eliminates most of the 84.								EWA EOY Balance in SWP SLR					65				M	132																
46	Gross Upstream fish actions													180										EWA EOY Balance in MWD					0				J	33																
47	Gross Export fish actions													438		Recovery of CVP water.								Vidler					200				J	0																
48	Gross Fish Actions													797										EWA in Shasta					0				A	0																
49	Net Feb - Sep Export reduction													438										EWA in Folsom					0				S	0																
50	Total b(2) Spent													797		Offset was recovered in september. Does								EWA in Oroville					0																					
51	Export cuts beyond WQCP													57		this count? No problem with deliveries since																		165															
52	Unused															slr was 180							Use of Excess Banks Capacity for excess flows																											
53	Unused															there, may be ok.								Net new pumping allowed					0																					
54	Unused																							If no debt or EWA storage					0																					
55	Unused															post analysis. CVP might have done a								If no EWA or b(2).					0																					
56	Unused															source shift for this year.							Unused																											
57	Unused															could represent as 100 kaf higher deliveries							Unused																											
58	Unused															with extra JPOD next year – need to check to							Unused																											
59	Unused															see if enough extra capacity to fill cvp slr.							Unused																											
60	Unused															probably would have led to more jpod and							Unused																											
61	Unused															greater ewa costs to cut down on the jpod.							Unused																											

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 6																															
2	Year	1982										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Curn	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)-				Factors	&Cuts
8				Melones							Offset									Cuts	Cuts											
9											Negative																					
10	O	75		16	91					20		20	111			0			O			0								38	38	38
11	N		60	12	72						(20)	(20)	52			0			N			0								20	20	20
12	D			12	12		(135)					0	(123)	123		0			D		15	15								1	1	14
13	J			12	12							0	12	89		0			J		68	68									0	68
14	EWA Gain Reduction				135	Max Re	(135)																									
15		75	60	52	322	0	(135)			20	(20)	0	322	212	0	0	0	0		0	83	83	0	0	0	0	0	0	0	59	59	(24)
16																																
17	F				0			0	0			0	0	161		19			F	90	(9)	81									0	-81
18	M				0			0	0			0	0			26			M	215	25	240									0	-240
19	A				0			0	0			0	0			27			A	55	137	192			53						53	-139
20	M				0			0	0			0	0			31			M	52	277	329							30		30	-299
21	J				0			0	0			0	0			0			J			0							30		30	30
22	J				0			0	0			0	0			0			J			0		15					30		45	45
23	A				0			0	0			0	0			0			A			0		30					30		60	60
24	S				0			0	0			0	0			2			S			0		30					30		60	60
25	Feb	0	0	0	0	0	0	0	0	0	0	0	0	161	0	105	0	0		412	430	842	0	75	53	0	0	0	150	0	278	(564)
26																																
27	Tota	75	60	52	322	0	(135)	0	0	20	(20)	0	322	373	0	105	0	0		412	513	925	0	75	53	0	0	0	150	59	337	(588)
28																																
29	B(2) Accounting																															
30																																
31	Net WQCP Storage: Oct - January													0																		
32	Net WQCP Flow Changes: February - September													0																		
33	WQCP Exports													105																		
34	Total Net WQCP													105																		
35	Net AFRP storage: Oct - January													322																		
36	Net AFRP flow changes: February - September													0																		
37	Net Discretionary export b(2) except Section III													373																		
38	Upstream Release Reductions (Oct - Jan)													(20)																		
39	Upstream Release Reductions (Feb - Sep)													0																		
40	Net Upstream Storage Change (AFRP + WQCP)													322																		
41	Net Upstream Release: February - September													0																		
42	Net Export Change, not including S III.													478																		
43	Section 3 water released													0																		
44	Section 3 water exported													0																		
45	Section 3 Export cuts													0																		
46	Gross Upstream fish actions													75																		
47	Gross Export fish actions													478																		
48	Gross Fish Actions													800																		
49	Net Feb - Sep Export reduction													266																		
50	Total b(2) Spent													800																		
51	Export cuts beyond WQCP													373																		
52	Unused																															
53	Unused																															
54	Unused																															
55	Unused																															
56	Unused																															
57	Unused																															
58	Unused																															
59	Unused																															
60	Unused																															
61	Unused																															

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville		SWP S	SWP	CVP	CVP	
6						Export	Export	Storage				500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8																
9	Initial values		-66	0	200	134	0	0	0	0						
10	O		-28		200	172	38					0	12.67	0		
11	N		-8		200	192	20					0	6.667	0		
12	D		-22		200	178	-14					0	0.333	0		
13	J		-90		200	110	-68					0	0	0		
14																
15												0	20	0		
16																
17	F	-90	-81		200	29	-81					0	0	0	60	
18	M	-305	-106		200	-211	-240					0	0	0	40	
19	A	-412	-137		200	-349	-138					0	0	53		
20	M	-464	-384		200	-648	-299					0	0	0		
21	J	-464	-354		200	-618	30					0	0	0		
22	J	-464	-309		200	-573	45					15	0	0		
23	A	-464	-249		200	-513	60					30	0	0		
24	S	-464	-189		200	-453	60					30	0	0		
25												75	0	53		
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																
37																
38																
39																
40																
41																
42																
43																
44																
45																
46																
47																
48																
49																
50																
51																
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																

Adjusted debt to put into SWP.
to deal with JPOD, run model w/ jpod
to show benefits. Give 50% to CVP.
We then must pay back for any cuts off the
jpod baseline.

JPOD: is baseline for sharing the WQCP
baseline? I.e., whatever cvp gets under
baselihne is assured? What if b2 creates more
opportunities. Does that create a new
baseline (probably not). Or do we simply
share jpod when available, with no
responsibility

200 kaf of jpod possible in febt/march
from baseline. Charging ewa for 1/2 of
this.

Assume no cost fo 2/1. Is this realistic?
Forced entire cost onto ewa.

135 of reset stranded

250 kaf above collateral
however, good hydrology
let this run, knowing that this might
not be acceptable.

EWA Accounting	EWA	SWP	CVP
Upstream Releases	0		
Water Backed upstream	0		
Total Export Cuts made	925		
Export Supplies Generated	337		
E/I	0		
500 cfs	75		
JPOD: Excess flows	53		
JPOD: EWA storage	0		
Transfer NOD Purchases	0		
Net Spill	0		
SOD Purchase	150		
SWP Gain	59		
NOD Water Purchases	0		
EWA EOY Balance in CVP SLR	-464		
EWA EOY Balance in SWP SLR	-189		
EWA EOY Balance in MWD	0		
Vidler	200		
EWA in Shasta	0		
EWA in Folsom	0		
EWA in Oroville	0		
Use of Excess Banks Capacity for excess flows			
Net new pumping allowed	0		
If no debt or EWA storage	0		
If no EWA or b(2).	0		
Unused			
Unused			
Unused			
Unused			
Unused			
Unused			

DWRSIM/ Daily Model				
			SWP	CVP
SIM continuous Exports				
SIM yearly exports				
Daily Base Exports				
Daily Final Exports				
Change in Exports				
Final DWRSIM Exports				
CVP Delivery Cuts				
Refuge purchases		no capacity		
F	0			
M	0			
A	0			
M	0			
J	0			
J	0			
A	0			
S	0			
	0			

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 6																															
2	Year	1983										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts
8				Melones							Offset									Cuts	Cuts											
9											Negative																					
10	O				0							0	0						O			0									0	0
11	N				0							0	0	156					N		-19	-19									0	19
12	D				0							0	0	212					D		60	60			92						92	32
13	J				0							0	0	27					J		-27	-27			91		76				167	194
14	EWA Gain Reduction					Max Re	0																									
15		0	0	0	0	0	0			0	0	0	0	395	0	0	0	0		0	14	14	0	0	183	0	76	0	0	0	259	245
16																																
17	F				0			0	0			0	0			16			F			0			68		285				353	353
18	M				0			0	0			0	0	2		(1)			M		6	6			44		12				56	50
19	A				0			0	0			0	0	69		(2)			A		27	27									0	27
20	M				0			0	0			0	0	154		(2)			M		49	49									0	49
21	J				0			0	0			0	0	117		0			J		40	40									0	40
22	J				0			0	0			0	0			0			J			0		30	58						88	88
23	A				0			0	0			0	0			0			A			0		30	34						64	64
24	S				0			0	0			0	0			0			S			0		30	80		-146				-36	-36
25	Feb	0	0	0	0	0	0	0	0	0	0	0	0	342	0	11	0	0		0	122	122	0	90	284	0	151	0	0	0	525	403
26																																
27	Tota	0	0	0	0	0	0	0	0	0	0	0	0	737	0	11	0	0		0	136	136	0	90	467	0	227	0	0	0	784	648
28																																
29	B(2) Accounting																						EWA Accounting						EWA	SWP	CVP	
30																							Upstream Releases						0			
31	Net WQCP Storage: Oct - January													0		rebalanced debt							Water Backed upstream						0			
32	Net WQCP Flow Changes: February - September													0									Total Export Cuts made						136			
33	WQCP Exports													1		go immediatelyh into JPOD since							Export Supplies Generated						784			
34	Total Net WQCP													11		spilling debt. Subtract entire change								E/I					0			
35	Net AFRP storage: Oct - January													0		in SWP storage from EWA debt, but								500 cfs					90			
36	Net AFRP flow changes: February - September													0		credit back half to CVP.								JPOD: Excess flows					467			
37	Net Discretionary export b(2) except Section III													737										JPOD: EWA storage					0			
38	Upstream Release Reductions (Oct - Jan)													0		92 jpod in dec. 191 in Jan. CVP has right								Transfer NOD Purchases					0			
39	Upstream Release Reductions (Feb - Sep)													0		to halfthis water, even if we cut during these months.								Net Spill					227			
40	Net Upstream Storage Change (AFRP + WQCP)													0		shown as ewa cost.								SOD Purchase					0			
41	Net Upstream Release: February - September													0										SWP Gain					0			
42	Net Export Change, not including S III.													748																		
43	Section 3 water released													0										NOD Water Purchases					0			
44	Section 3 water exported													0										EWA EOY Balance in CVP SLR					0			
45	Section 3 Export cuts													0										EWA EOY Balance in SWP SLR					0			
46	Gross Upstream fish actions													0										EWA EOY Balance in MWD					0			
47	Gross Export fish actions													748										Vidler					200			
48	Gross Fish Actions													748										EWA in Shasta					0			
49	Net Feb - Sep Export reduction													353										EWA in Folsom					0			
50	Total b(2) Spent													748										EWA in Oroville					0			
51	Export cuts beyond WQCP													737																		
52	Unused																						Use of Excess Banks Capacity for excess flows									
53	Unused																							Net new pumping allowed					0			
54	Unused																							If no debt or EWA storage					0			
55	Unused																							If no EWA or b(2).					0			
56	Unused																						Unused									
57	Unused																						Unused									
58	Unused																						Unused									
59	Unused																						Unused									
60	Unused																						Unused									
61	Unused																						Unused									

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville		SWP S	SWP	CVP	CVP	
6						Export	Export	Storage				500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	-464	-189	0	200	-453	-453	0	0	0						
10	O	-464	-189		200	-453	0					0	0	0		
11	N	-464	-170		200	-434	19					0	0	0		
12	D	-556	-47		200	-403	31					0	0	92		
13	J	-409	0		200	-209	194					0	0	91		
14																
15												0	0	183		
16																
17	F	-56	0		200	144	353					0	0	68		
18	M	0	0		200	200	56					0	0	44		
19	A	0	-27		200	173	-27					0	0	0		
20	M	0	-76		200	124	-49					0	0	0		
21	J	0	-116		200	84	-40					0	0	0		
22	J	-28	0		200	172	88					30	0	58		
23	A	36	0		200	236	64					30	0	34		
24	S	0	0		200	200	-36					30	0	80		
25												90	0	284		
26																
27																
28																
29	DWRSIM/ Daily Model															
30				SWP	CVP											
31																
32																
33	SIM continuous Exports															
34	SIM yearly exports															
35	Daily Base Exports															
36	Daily Final Exports															
37	Change in Exports															
38	Final DWRSIM Exports															
39	CVP Delivery Cuts															
40	refuges	no capacity for refuges														
41		EWA could have sold water to														
42		refuges														
43																
44																
45																
46																
47																
48																
49																
50																
51																
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	CALFED GAME 6															
2	Year	1984										CVP Accounting				
3																
4		Upstream Balance												Export Balance		
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCP
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping	
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative	
8				Melones							Offset					
9											Negative					
10	O				0							0	0			
11	N				0							0	0			
12	D				0							0	0			
13	J				0							0	0			
14	EWA Gain Reduction					Max R	0									
15		0	0	0	0	0	0			0	0	0	0	0	0	0
16																
17	F	90			90			0	0			0	90			18
18	M		90		90		(90)	(90)	(90)			0	0	138		27
19	A		90		90			0	0	137		137	227	70		62
20	M				0			0	0		(3)	(3)	(3)			92
21	J				0			0	0		(33)	(33)	(33)			113
22	J				0			0	0		(17)	(17)	(17)			0
23	A				0			0	0		(24)	(24)	(24)			0
24	S				0	36		0	0			0	36			5
25	Feb	90	180	0	270	36	(90)	(90)	(90)	137	(77)	60	276	208	0	317
26																
27	Tota	90	180	0	270	36	(90)	(90)	(90)	137	(77)	60	276	208	0	317
28																
29	B(2) Accounting															
30																
31	Net WQCP Storage: Oct - January													0		
32	Net WQCP Flow Changes: February - September													60		
33	WQCP Exports													317		
34	Total Net WQCP													377		
35	Net AFRP storage: Oct - January													0		
36	Net AFRP flow changes: February - September													306		
37	Net Discretionary export b(2) except Section III													208		
38	Upstream Release Reductions (Oct - Jan)													0		
39	Upstream Release Reductions (Feb - Sep)													(41)		
40	Net Upstream Storage Change (AFRP + WQCP)													0		
41	Net Upstream Release: February - September													366		
42	Net Export Change, not including S III.													525		
43	Section 3 water released													0		
44	Section 3 water exported													0		
45	Section 3 Export cuts													0		
46	Gross Upstream fish actions													150		
47	Gross Export fish actions													525		
48	Gross Fish Actions													915		
49	Net Feb - Sep Export reduction													525		
50	Total b(2) Spent													801		
51	Export cuts beyond WQCP													208		
52	Unused															
53	Unused															
54	Unused															
55	Unused															
56	Unused															
57	Unused															
58	Unused															
59	Unused															
60	Unused															
61	Unused															

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1																
2	EWA								EWA Accounting							
3	Upstream					Export			Export Supply Factors							
4	Upstream Balance					Cuts										
5	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6	Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		(negative		Export	Export						(Storage)				Factors	&Cuts
8				Cuts	Cuts											
9																
10			O			0					0				0	0
11			N			0									0	0
12			D			0									0	0
13			J			0									0	0
14																
15	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
16																
17			F			0									0	0
18			M			0									0	0
19			A	139	82	221									0	221
20			M	121	56	177							30		30	147
21			J	121	-20	101							30		30	-71
22			J			0		30					30		60	60
23			A			0		30					30		60	60
24			S			0		30					30		60	60
25	0	0		381	118	499	0	90	0	0	0	0	150	0	240	(259)
26																
27	0	0		381	118	499	0	90	0	0	0	0	150	0	240	(259)
28																
29							EWA Accounting						EWA	SWP	CVP	
30							Upstream Releases						0			
31							Water Backed upstream						0			
32							Total Export Cuts made						499			
33							Export Supplies Generated						240			
34								E/I					0			
35								500 cfs					90			
36								JPOD: Excess flows					0			
37								JPOD: EWA storage					0			
38								Transfer NOD Purchases					0			
39								Net Spill					0			
40								SOD Purchase					150			
41								SWP Gain					0			
42																
43								NOD Water Purchases					0			
44								EWA EOY Balance in CVP SLR					-231			
45								EWA EOY Balance in SWP SLR					-28			
46								EWA EOY Balance in MWD					0			
47								Vidler					200			
48								EWA in Shasta					0			
49								EWA in Folsom					0			
50								EWA in Oroville					0			
51																
52							Use of Excess Banks Capacity for excess flows									
53								Net new pumping allowed					0			
54								If no debt or EWA storage					0			
55								If no EWA or b(2).					0			
56							Unused									
57							Unused									
58							Unused									
59							Unused									
60							Unused									
61							Unused									

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville		SWP S	SWP	CVP	CVP	
6						Export	Export	Storage				500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8																
9	Initial										New					
10	valu	0	0		200	200	0	0	0	0	Melones					
11	O	0			200	200	0					0	0	0		
12	N	0			200	200	0					0	0	0		
13	D	0			200	200	0					0	0	0		
14	J	0			200	200	0					0	0	0		
15												0	0	0		
16																
17	F	0			200	200	0					0	0	0		
18	M	0			200	200	0					0	0	0		
19	A	-139	-82		200	-21	-221					0	0	0		
20	M	-230	-138		200	-168	-147					0	0	0		
21	J	-321	-118		200	-239	-71					0	0	0		
22	J	-291	-88		200	-179	60					30	0	0		
23	A	-261	-58		200	-119	60					30	0	0		
24	S	-231	-28		200	-59	60				50	30	0	0		
25												90	0	0		
26																
27																
28																
29	DWRSIM/ Daily Model															
30				SWP	CVP											
31																
32																
33	SIM continuous Exports															
34	SIM yearly exports															
35	Daily Base Exports															
36	Daily Final Exports															
37	Change in Exports															
38	Final DWRSIM Exports															
39	CVP Delivery Cuts															
40	refuges	no transfer capacity														
41		but could delivery from surpluses														
42	F	0														
43	M	0														
44	A	0														
45	M	3														
46	J	33														
47	J	0														
48	A	0														
49	S	0														
50																
51		36														
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																

offset of 36

108 = cvp share of moving to 2/1
Caredited in May

didn't give credit for 36 offset.

cvp source shift of 100 kaf to justify
100 of extra deliveries. Need to add this
to numbers from daily model outputs.

Note that daily model includes sod
purchases as reduced deliveries. This
should not be counted as a hit to CVP.

	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z
1	CALFED GAME 5																					
2	Year	1985										CVP Accounting					EWA					
3																	Upstream					Export
4		Upstream Balance												Export Balance			Upstream Balance					Cuts
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCF	Increas	Reduced		CVP	SWP	Total
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export	
8				Melones							Offset									Cuts	Cuts	
9											Negative											
10	O		82		82					4		4	86			(16)	9		O			0
11	N				0						(4)	(4)	(4)				6		N	116	-28	88
12	D				0							0	0			16	6		D	57		57
13	J	75	68		143						(42)	(42)	101				8		J	0		0
14	EWA Gain Reduction					Max Reset																
15		75	150	0	225	0	0			4	(46)	(42)	183	0	0	0	29	0		173	(28)	145
16																						
17	F	75			75			0	0	38		38	113			18			F	103		103
18	M	75	54		129			0	0		(12)	(12)	117			24			M	96	(41)	55
19	A	45		30	75		(30)	(30)	(30)		(28)	(28)	17			144			A	96	57	153
20	M		75	30	105			0	0		(169)	(169)	(64)			124			M	-44	31	-13
21	J		67		67			0	0		(60)	(60)	7			103			J	10	10	20
22	J				0		(6)	(6)	(6)	84		84	78			(97)			J	36	61	97
23	A				0		(12)	(12)	(12)		(24)	(24)	(36)						A	-61	61	0
24	S				0		64	64	64			0	64			5	129		S			0
25	Feb	195	196	60	451	0	16	16	16	122	(293)	(171)	296	0	0	321	129	0		236	179	415
26																						
27	Tota	270	346	60	676	0	16	16	16	126	(339)	(213)	479	0	0	321	158	0		409	151	560
28																						

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																										
2			EWA Accounting																			Projects				
3			Export Supply Factors											Storage												
4												Negative values for borrowed water														
5	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6			split	Not spl	Debt	XFER	XFER	Exports	Export	factors						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7					(Storage)				Factors	&Cuts						Storage						50%	25%	50%	Not split	
8											Initial															
9											valu	-231	-28		200	-59	0	0	0	0	50					
10								42	42	42	O	-231	14		200	-17	42				41	0	14	0		
11								3	3	-85	N	-347	45		200	-102	-85				35	0	1	0		
12				56	-45				11	-46	D	-348	0		200	-148	-46				29	0	0	0		
13			80		63				143	143	J	-205	0		200	-5	143				21	0	0	80		
14																										
15	0	0	80	56	18	0	0	45	199	54												0	15	80		
16																										
17					114			11	125	22	F	-183	0		200	17	22				21	0	3.667	0		
18								20	20	-35	M	-279	61		200	-18	-35				21	0	6.667	0		
19									0	-153	A	-375	4		200	-171	-153				21	0	0	0		
20							30	8	38	51	M	-301	1		180	-120	51	120			21	0	2.667	0		
21							30	25	55	35	J	-281	36		160	-85	35	120			21	0	8.333	0		
22		17					30		47	-50	J	-287	12		140	-135	-50	120			21	17	0	0		
23		12					30		42	42	A	-196	33	-50	120	-93	42	120			21	12	0	0		
24				108			30		138	138	S	-166	211	-100	100	45	138	0			12	0	0	0		
25	0	29	0	108	114	0	150	64	465	50												29	21	0		
26																										
27	0	29	80	164	132	0	150	109	664	104																
28																										

	A	O	Q	AA	AB	AG	AH	AI	AK	AL	AM	AN
29	B(2) Accounting			EWA Accounting		EWA	SWP	CVP	DWRSIM/ Daily Model			
30				Upstream Releases		158					SWP	CVP
31	Net WQCP Storage: Oct - January	(42)	Jpod in december in base. A bio cut	Water Backed upstream		0						
32	Net WQCP Flow Changes: February - September	(171)	for 1 week there. So must credit cvp	Total Export Cuts made		560						
33	WQCP Exports	321	by 1/2 of lost valu\, or 21 kaf.	Export Supplies Generated		664			SIM continuous Exports			
34	Total Net WQCP	108	baseline continues to be an issue. Should		E/I	0			SIM yearly exports			
35	Net AFRP storage: Oct - January	225	we run afrp first, then calculate jpod potential?		500 cfs	29			Daily Base Exports			
36	Net AFRP flow changes: February - September	451			JPOD: Excess flows	80			Daily Final Exports			
37	Net Discretionary export b(2) except Section III	0	large offset. Look to move water in		JPOD: EWA storage	164			Change in Exports			
38	Upstream Release Reductions (Oct - Jan)	(46)	June or September (if can sustain deliveries).		Transfer NOD Purchases	0			Final DWRSIM Exports			
39	Upstream Release Reductions (Feb - Sep)	(293)			Net Spill	132			CVP Delivery Cuts			
40	Net Upstream Storage Change (AFRP + WQCP)	183	back 120 k into shasta in May.		SOD Purchase	150			reguges			
41	Net Upstream Release: February - September	280	credit to ewa.		SWP Gain	109						
42	Net Export Change, not including S III.	321	2/ ratio = 75						F	0		
43	Section 3 water released	0	credited in may.		NOD Water Purchases	0			M	0		
44	Section 3 water exported	0			EWA EOY Balance in CVP SLR	-166			A	0		
45	Section 3 Export cuts	0	run new melones/ shasta water in september.		EWA EOY Balance in SWP SLR	211			M	64		
46	Gross Upstream fish actions	270			EWA EOY Balance in MWD	-100			J	0		
47	Gross Export fish actions	321	64 stranded offset		Vidler	100			J	0		
48	Gross Fish Actions	784			EWA in Shasta	0			A	0		
49	Net Feb - Sep Export reduction	321	97 over on b2. So shift to ewa		EWA in Folsom	0			S	0		
50	Total b(2) Spent	800	Note that covering b2 wqcp impacts		EWA in Oroville	0						
51	Export cuts beyond WQCP	0	with ewa.							64		
52	Unused			Use of Excess Banks Capacity for excess flows								
53	Unused		should have done another 100 kaf of source		Net new pumping allowed	0						
54	Unused		shift		If no debt or EWA storage	0						
55	Unused				If no EWA or b(2).	0						
56	Unused		questionable whether this operation ok. Should	Unused								
57	Unused		have bought more water or pumped more water	Unused								
58	Unused		or made fewer releases.	Unused								
59	Unused			Unused								
60	Unused		shifting back to mwd next year done by	Unused								
61	Unused		just subtracting from initial slr storage	Unused								

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CALFED GAME 5

Year	1986										CVP Accounting																																			
	Upstream Balance												Export Balance			EWA Upstream Balance									EWA Accounting Export Supply Factors																Negative values for borrowed water											
	Increased Releases			Total AFRP	AFRP Backed Water	AFRP Reset Offset	Cum Offset Potential	Offst Allowed	Increas WQCP	WQCP Reset Offset Negative	Total WQCP	Net Upstrea Balance	Discret Cuts	Increas Pumping (negative	WQCP	Increas Releas	Reduced Releases (negative	CVP EWA Export Cuts	SWP EWA Export Cuts	Total Cuts	E/I	500 cfs	JPOD split	JPOD Not spl	Spill Debt (Storage)	NOD XFER	SOD XFER	SWP E Exports	Sum Export Factors	Sum factors &Cuts		SLR:C	SLR:S	MWD	Vidler	Sum Export Storage	Chang Export	Shasta Storage	Folsom	Oroville	New Melone	SWP S 500cfs 50%	SWP Gain 25%	CVP JPOD 50%	CVP JPOD Not split
	Shasta	Folsom	New Melones																																											
																														Initial valu	-166	111		100	45	0		0	0	62				
10	O	60		60	(120)				10		10	(50)			10	8		O	50	50									0	50	O	-166	61		100	-5	-50				55	0	0	0
11	N	52		52					1		1	53			(10)	2		N		0	20							22	42	42	N	-166	103		100	37	42				53	0	7.333	0
12	D	75	52	127							0	127	89			2		D	44	44								37	37	-7	D	-166	96		100	30	-7				51	0	12.33	0
13	J	75		75		(108)					0	(33)	138			6		J	52	52									0	-52	J	-166	44		100	-22	-52				45	0	0	0
14	EWA Gain Reduction				Max Re	(108)																																								
15		150	164	0	314	(120)	(108)			11	0	11	205	227	0	0	18	0		0	146	146	20	0	0	0	0	0	0	59	79	(67)											0	20	0
16																																														
17	F				0			0	0	0	(11)	(11)	(11)	43		19			F	100	112	212								0	-212	F	-266	-68		100	-234	-212				45	0	0	0
18	M				0			0	0	0		0	0			23			M	21		21			106					106	85	M	-249	0		100	-149	85				45	0	0	106
19	A				0			0	0	0		0	0			31			A	49	56	105			66		150			216	111	A	-82	-56		100	-38	111				45	0	0	66
20	M				0			0	0	0		0	0			35			M	109	105	214						30		30	-184	M	-161	-181		120	-222	-184				45	0	0	0
21	J				0			0	0	0		0	0			49			J	44		44						30		30	-14	J	-175	-201		140	-236	-14				45	0	0	0
22	J				0			0	0	71		71	71			0			J			0		13				30		43	43	J	-145	-208		160	-193	43				45	13	0	0
23	A				0			0	0	0		0	0			0			A			0		30				30		60	60	A	-115	-198		180	-133	60				45	30	0	0
24	S				0			0	0	0		0	0			4			S			0		6				30		36	36	S	-85	-212		200	-97	36				45	6	0	0
25	Feb	0	0	0	0	0	0	0	0	71	(11)	60	60	43	0	161	0	0		323	273	596	0	49	172	0	150	0	150	0	521	(75)											49	0	172
26																																														
27	Tota	150	164	0	314	(120)	(108)	0	0	82	(11)	71	265	270	0	161	18	0		323	419	742	20	49	172	0	150	0	150	59	600	(142)													
28																																														

29 B(2) Accounting

30		
31	Net WQCP Storage: Oct - January	111
32	Net WQCP Flow Changes: February - September	60
33	WQCP Exports	161
34	Total Net WQCP	232
35	Net AFRP storage: Oct - January	194
36	Net AFRP flow changes: February - September	0
37	Net Discretionary export b(2) except Section III	270
38	Upstream Release Reductions (Oct - Jan)	(120)
39	Upstream Release Reductions (Feb - Sep)	(11)
40	Net Upstream Storage Change (AFRP + WQCP)	205
41	Net Upstream Release: February - September	60
42	Net Export Change, not including S III.	431
43	Section 3 water released	0
44	Section 3 water exported	0
45	Section 3 Export cuts	0
46	Gross Upstream fish actions	221
47	Gross Export fish actions	431
48	Gross Fish Actions	887
49	Net Feb - Sep Export reduction	204
50	Total b(2) Spent	696
51	Export cuts beyond WQCP	270
52	Unused	
53	Unused	
54	Unused	
55	Unused	
56	Unused	
57	Unused	
58	Unused	
59	Unused	
60	Unused	
61	Unused	

108 reset this year.
spilled until after jjanuary? Is that right?
or should we say that recovery of storage
is out of flood flows.

difficult accounting. EWA has lots in state.
so when state begins to fill, really spilling
ewa water over into CVP share of slr.
thus, no jpod. This would be clearer
if all debt were on the state side.
Then swp wouldn't fill until much later.

riase both base and final cvp deliveries
by 450 kaf. Post processed. This
lowers 1987 initial slr storage

EWA Accounting	EWA	SWP	CVP
Upstream Releases	18		
Water Backed upstream	0		
Total Export Cuts made	742		
Export Supplies Generated	600		
E/I	20		
500 cfs	49		
JPOD: Excess flows	172		
JPOD: EWA storage	0		
Transfer NOD Purchases	0		
Net Spill	150		
SOD Purchase	150		
SWP Gain	59		
NOD Water Purchases	0		
EWA EOY Balance in CVP SLR	-85		
EWA EOY Balance in SWP SLR	-212		
EWA EOY Balance in MWD	0		
Vidler	200		
EWA in Shasta	0		
EWA in Folsom	0		
EWA in Oroville	0		
Use of Excess Banks Capacity for excess flows			
Net new pumping allowed	0		
If no debt or EWA storage	0		
If no EWA or b(2).	0		
Unused			
Unused			
Unused			
Unused			
Unused			
Unused			

DWRSIM/ Daily Model

	SWP	CVP
SIM continuous Exports		
SIM yearly exports		
Daily Base Exports		
Daily Final Exports		
Change in Exports		
Final DWRSIM Exports		
CVP Delivery Cuts		

refuges. Level 4 could move in november

F	11
M	0
A	0
M	0
J	0
J	0
A	0
S	0
	0

D — 0 5 5 7 6 0

D-055760

	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	CALFED GAME 5															
2	Year	1987										CVP Accounting				
3																
4		Upstream Balance												Export Balance		
5		*Increased*			*Total*	AFRP	AFRP	*Cum*	*Offst*	*Increas*	WQCP	*Total*	*Net*	*Discret*	*Increas*	*WQCP*
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping	
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative	
8				Melones							Offset					
9											Negative					
10	O		53		53					20		20	73			
11	N		53		53						(26)	(26)	27			
12	D		36		36					27		27	63	41		
13	J	60	54		114						(63)	(63)	51			
14	EWA Gain Reduction					Max R[illegible]	0									
15		60	196	0	256	0	0			47	(89)	(42)	214	41	0	0
16																
17	F				0			0	0	5		5	5			18
18	M				0			0	0			0	0	77		28
19	A				0		(120)	(120)	(120)	139		139	19	113		137
20	M				0			0	0		(121)	(121)	(121)	46		173
21	J				0		(240)	(240)	(240)	141		141	(99)	77		74
22	J				0			0	0	54		54	54			
23	A				0			0	0		(21)	(21)	(21)			
24	S				0	100		0	0	91		91	191			(119)
25	Feb	0	0	0	0	100	(360)	(360)	(360)	430	(142)	288	28	313	0	311
26																
27	Tota	60	196	0	256	100	(360)	(360)	(360)	477	(231)	246	242	354	0	311

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1																
2	EWA								EWA Accounting							
3	Upstream					Export			Export Supply Factors							
4	Upstream Balance					Cuts										
5	Increas	*Reduced*		*CVP*	*SWP*	*Total*	*E/I*	*500 cfs*	*JPOD*	*JPOD*	*Spill*	*NOD*	*SOD*	SWP E	Sum	Sum
6	Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		(negative		Export	Export						(Storage)-				Factors	&Cuts
8				Cuts	Cuts											
9																
10	9		O			0						5		16	21	21
11	7		N			0						6		26	32	32
12	7		D		-18	-18						5		13	18	36
13	7		J			0	50				85			43	178	178
14																
15	30	0		0	(18)	(18)	50	0	0	0	85	16	0	98	249	267
16																
17			F		71	71								4	4	-67
18			M		41	41									0	-41
19			A			0									0	0
20			M	-52	(27)	-79							30		30	109
21			J	105	6	111							30		30	-81
22			J			0		21					30		51	51
23			A			0		19					30		49	49
24			S			0						58	30		88	88
25	0	0		53	91	144	0	40	0	0	0	58	150	4	252	108
26																
27	30	0		53	73	126	50	40	0	0	85	74	150	102	501	375

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	*MWD*	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	*CVP*	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	-85	-212		200	-97	0		0	0	15					
10	O	-85	-191		200	-76	21				36	0	5.333	0		
11	N	-85	-159		200	-44	32				29	0	8.667	0		
12	D	-85	-123		200	-8	36				22	0	4.333	0		
13	J	0	-30		200	170	178				15	0	14.33	0		
14																
15												0	33	0		
16																
17	F	0	-97		200	103	-67					0	1.333	0		
18	M	0	-138		200	62	-41					0	0	0		
19	A	0	-138		200	62	0					0	0	0		
20	M	82	-111		200	171	109					0	0	0		
21	J	7	-117		200	90	-81					0	0	0		
22	J	37	-96		200	141	51					21	0	0		
23	A	67	-77		200	190	49					19	0	0		
24	S	97	-19		200	278	88					0	0	0		
25												40	1	0		
26																
27																

	A	O	Q	AA	AG	AH	AI	AK	AL	AN	AO
28											
29	B(2) Accounting			EWA Accounting	EWA	SWP	CVP	DWRSIM/ Daily Model			
30				Upstream Releases	30					SWP	CVP
31	Net WQCP Storage: Oct - January	(42)	over cap by 157. Therefore, may shoot	Water Backed upstream	0						
32	Net WQCP Flow Changes: February - September	288	for 957 this year. Assume that special	Total Export Cuts made	126						
33	WQCP Exports	311	effort made to replace this water this year	Export Supplies Generated	501			SIM continuous Exports			
34	Total Net WQCP	557	if remedial acations taken, the ag deliveries	E/I	50			SIM yearly exports			
35	Net AFRP storage: Oct - January	256	coyuld be 150 kaf higher. Note this in	500 cfs	40			Daily Base Exports			
36	Net AFRP flow changes: February - September	100	post analysis.	JPOD: Excess flows	0			Daily Final Exports			
37	Net Discretionary export b(2) except Section III	354	*[error, only over capy by 107]*	JPOD: EWA storage	0			Change in Exports			
38	Upstream Release Reductions (Oct - Jan)	(89)	52 cost to cvp for meeting 2/1	Transfer NOD Purchases	74			Final DWRSIM Exports			
39	Upstream Release Reductions (Feb - Sep)	(42)		Net Spill	85			CVP Delivery Cuts			
40	Net Upstream Storage Change (AFRP + WQCP)	214	major opportunities for transfers in oct	SOD Purchase	150			refuges ok			
41	Net Upstream Release: February - September	388	nov dec. We are not using these well, since	SWP Gain	102						
42	Net Export Change, not including S III.	665	assuming water purchased in following summer					F	0		
43	Section 3 water released	0	better model for sacto purchases would be	NOD Water Purchases	74			M	0		
44	Section 3 water exported	0	for fall releases. More reliable, if can avoid	EWA EOY Balance in CVP SLR	97			A	0		
45	Section 3 Export cuts	0	major losses due to salmon flow stabilization	EWA EOY Balance in SWP SLR	-19			M	121		
46	Gross Upstream fish actions	306	flows.	EWA EOY Balance in MWD	0			J	99		
47	Gross Export fish actions	665		Vidler	200			J	0		
48	Gross Fish Actions	413	100 kaf of unrecovered offsets	EWA in Shasta	0			A	0		
49	Net Feb - Sep Export reduction	624	means 700 target. But 157 over cap	EWA in Folsom	0			S	0		
50	Total b(2) Spent	907	so target becomes 857	EWA in Oroville	0						
51	Export cuts beyond WQCP	354							220		
52	Unused		cvp baseline again underdelivers	Use of Excess Banks Capacity for excess flows							
53	Unused		would have pulled down slr and delivered	Net new pumping allowed	0						
54	Unused		an extra 300 kaf. Thus, would have had to cut	If no debt or EWA storage	0						
55	Unused		b2 deliveries by 300 kaf. This certainly happened	If no EWA or b(2).	0						
56	Unused		in one other year. May have happened in other	Unused							
57	Unused		years. In this case. With drought coming up	Unused							
58	Unused		probably no real difference.	Unused							
59	Unused			Unused							
60	Unused			Unused							
61	Unused			Unused							

	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	CALFED GAME 6															
2	Year	1988										CVP Accounting				
3																
4		Upstream Balance												Export Balance		
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCF
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping	
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative	
8				Melones							Offset					
9											Negative					
10	O				0					65		65	65			(45)
11	N				0					32		32	32			(41)
12	D				0							0	0	46		
13	J		3		3						(2)	(2)	1			
14	EWA Gain Reduction					Max Re	0									
15		0	3	0	3	0	0			97	(2)	95	98	46	0	(86)
16																
17	F		3		3			0	0	208		208	211			64
18	M		3		3			0	0	73		73	76			104
19	A		5		5			0	0		(338)	(338)	(333)			228
20	M				0			0	0	27		27	27			90
21	J				0			0	0	249		249	249			(78)
22	J				0			0	0		(236)	(236)	(236)			260
23	A				0			0	0		(46)	(46)	(46)			(18)
24	S				0	290		0	0	61		61	351			(78)
25	Feb	0	11	0	11	290	0	0	0	618	(620)	(2)	299	0	0	572
26																
27	Tota	0	14	0	14	290	0	0	0	715	(622)	93	397	46	0	486
28																
29	B(2) Accounting															
30																
31	Net WQCP Storage: Oct - January													95		
32	Net WQCP Flow Changes: February - September													(2)		
33	WQCP Exports													486		
34	Total Net WQCP													579		
35	Net AFRP storage: Oct - January													3		
36	Net AFRP flow changes: February - September													301		
37	Net Discretionary export b(2) except Section III													46		
38	Upstream Release Reductions (Oct - Jan)													(2)		
39	Upstream Release Reductions (Feb - Sep)													(330)		
40	Net Upstream Storage Change (AFRP + WQCP)													98		
41	Net Upstream Release: February - September													299		
42	Net Export Change, not including S III.													532		
43	Section 3 water released													0		
44	Section 3 water exported													0		
45	Section 3 Export cuts													0		
46	Gross Upstream fish actions													93		
47	Gross Export fish actions													532		
48	Gross Fish Actions													732		
49	Net Feb - Sep Export reduction													572		
50	Total b(2) Spent													929		
51	Export cuts beyond													46		
52	Unused															
53	Unused															
54	Unused															
55	Unused															
56	Unused															
57	Unused															
58	Unused															
59	Unused															
60	Unused															
61	Unused															

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1																
2	EWA								EWA Accounting							
3	Upstream					Export			Export Supply Factors							
4	Upstream Balance					Cuts										
5	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6	Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		(negative		Export	Export						(Storage)				Factors	&Cuts
8				Cuts	Cuts											
9																
10	4.5		O			0									0	0
11			N			0									0	0
12			D	125	68	193	35								35	-158
13			J			0									0	0
14																
15	5	0		125	68	193	35	0	0	0	0	0	0	0	35	(158)
16																
17	3		F	212	(30)	182									0	-182
18			M	94	(14)	80									0	-80
19	3		A	38	(22)	16									0	-16
20			M	8	(23)	-15							30		30	45
21			J	60	-51	9							30		30	21
22			J			0							30		30	30
23			A			0						50	30		80	80
24			S			0						50	30		80	80
25	6	0		112	(140)	272	0	0	0	0	0	100	150	0	250	(22)
26																
27	11	0		537	(72)	465	35	0	0	0	0	100	150	0	285	(180)
28																
29							EWA Accounting						EWA	SWP	CVP	
30							Upstream Releases						11			
31							Water Backed upstream						0			
32							Total Export Cuts made						465			
33							Export Supplies Generated						285			
34							E/I						35			
35							500 cfs						0			
36							JPOD: Excess flows						0			
37							JPOD: EWA storage						0			
38							Transfer NOD Purchases						100			
39							Net Spill						0			
40							SOD Purchase						150			
41							SWP Gain						0			
42																
43							NOD Water Purchases						100			
44							EWA EOY Balance in CVP SLR						-190			
45							EWA EOY Balance in SWP SLR						388			
46							EWA EOY Balance in MWD						-200			
47							Vidler						100			
48							EWA in Shasta						0			
49							EWA in Folsom						0			
50							EWA in Oroville						0			
51																
52							Use of Excess Banks Capacity for excess flows									
53							Net new pumping allowed						0			
54							If no debt or EWA storage						0			
55							If no EWA or b(2).						0			
56							Unused									
57							Unused									
58							Unused									
59							Unused									
60							Unused									
61							Unused									

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	97	-19		200	278	0		0	0	15					
10	O	97	-19		200	278	0				10	0	0	0		
11	N	97	-19		200	278	0				10	0	0	0		
12	D	-28	-52		200	120	-158				10	0	0	0		
13	J	-28	-52		200	120	0				10	0	0	0		
14																
15												0	0	0		
16																
17	F	-240	-22		200	-62	-182				7	0	0	0		
18	M	-334	-8		200	-142	-80				7	0	0	0		
19	A	-372	14		200	-158	-16				4	0	0	0		
20	M	-350	107	-50	180	-113	45				4	0	0	0		
21	J	-380	228	-100	160	-92	21				4	0	0	0		
22	J	-350	298	-150	140	-62	30				4	0	0	0		
23	A	-270	368	-200	120	18	80				4	0	0	0		
24	S	-190	388	-200	100	98	80				4	0	0	0		
25												0	0	0		
26																
27																
28																
29	DWRSIM/ Daily Model															
30				SWP	CVP											
31																
32																
33	SIM continuous Exports															
34	SIM yearly exports															
35	Daily Base Exports															
36	Daily Final Exports															
37	Change in Exports															
38	Final DWRSIM Exports															
39	CVP Delivery Cuts															
40	refuges															
41																
42	F	0														
43	M	0														
44	A	228														
45	M	0														
46	J	0														
47	J	236														
48	A	-18														
49	S	0														
50																
51		446														
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																

June projects back into Shasta 180 kaf.
if this is part of baseline, will lead to
increased export wqcp impacts in Delta
by about 180 kaf, putting us over the
640 cap.

Cut cvp by 50 (ALL that was allowed)

over the cap by 129.

near the 640 cap for sep.

offset is
WQCP recover
is

464

how to calculate offset. What if
extra water is 174
releases made but not exports after offset?

perverse incentive. Offsets reduce
b2 account, force export controls onto ewa,
but projects gets to keep the storage. So
incentive is to hold water until next water year.

bought 100 nod this year, since need so great
would be nice to assume more.

model incompatibility part of the problem this yea
daily model exports 200 kaf less than calsim
since lowpoint a problem, shooting for 300 kaf
forces ewa to bear burden of this reduced
export. In past games, we allowed lowpoint
violations if simply met daily baseline.

note that collateral must be thought of in terms of time horizon.
there is collateral until lowpoint (this year) and collateral until
lowpoint next year.

if baseline corrected, then evrything shifts up. But since we made
a swp cut to bring up to base, this would not longer be needed (or
not as much). Need to see how could come out.

this year shows value of nod contingency options.

Also, note how offset improves cvp position by forcing cuts onto ewa.

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 6																															
2	Year	1989										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increas	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts
8				Melones							Offset									Cuts	Cuts											
9											Negative																					
10	O				0							0	0		(2)	(14)	4		O			0								1	1	1
11	N	30			30							0	30		(17)	(3)			N			0	46								46	46
12	D	30			30							0	30		(11)	(7)			D			0								8	8	8
13	J		15	6	21						(1)	(1)	20	91		(217)			J			0								5	5	5
14	EWA Gain Reduction					Max Re	0																									
15		60	15	6	81	0	0			0	(1)	(1)	80	91	(30)	(241)	4	0		0	0	0	46	0	0	0	0	0	0	14	60	60
16																																
17	F		23	3	26			0	0	111		111	137			165			F			0	102								102	102
18	M			6	6			0	0	1		1	7			0			M		137	137									0	137
19	A				0			0	0			0	0			110			A	46	104	150									0	150
20	M		60		60		(120)	(120)	(120)	76		76	16	27		223			M	7	35	42							30		30	12
21	J	120	60		180			0	0		(247)	(247)	(67)		(67)	179			J			0							30	33	63	63
22	J		60		60		(60)	(60)	(60)	98		98	98						J	46	-10	36						20	30		50	14
23	A				0			0	0		(28)	(28)	(28)						A			0						24	30		54	54
24	S				0		67	67	67		0	0	67			3			S			0						12	30		42	42
25	Feb	120	203	9	332	0	(113)	(113)	(113)	-286	(275)	11	230	-27	(67)	680	0	0		99	266	365	102	0	0	0	0	56	150	33	341	(24)
26																																
27	Tota	180	218	15	413	0	(113)	(113)	(113)	286	(276)	10	310	118	(97)	439	4	0		99	266	365	148	0	0	0	0	56	150	47	401	36
28																																
29	B(2) Accounting																						EWA Accounting						EWA	SWP	CVP
30																distortions in July August sept							Upstream Releases						4		
31	Net WQCP Storage: Oct - January															in swp operations. Historically, allowed						0	Water Backed upstream						0		
32	Net WQCP Flow Changes: February - September															excess releases from oroville mid july-mid							Total Export Cuts made						365		
33	WQCP Exports															august, then cut delta outflow to zero. With						439	Export Supplies Generated						401		
34	Total Net WQCP															new standards, weould have operated						449	E/I						148		
35	Net AFRP storage: Oct - January															differently. Thus would have picked up more.						81	500 cfs						0		
36	Net AFRP flow changes: February - September															this helps deal with mismatch between daily'						332	JPOD: Excess flows						0		
37	Net Discretionary export b(2) except Section III															and monthly model. This has probably been						21	JPOD: EWA storage						0		
38	Upstream Release Reductions (Oct - Jan)															a frequent problem. May havae led to						(1)	Transfer NOD Purchases						56		
39	Upstream Release Reductions (Feb - Sep)															overestimate of bens from 500 cfs in dry years.						(275)	Net Spill						0		
40	Net Upstream Storage Change (AFRP + WQCP)																					80	SOD Purchase						150		
41	Net Upstream Release: February - September															tricking the model. Outflow appears too						343	SWP Gain						47		
42	Net Export Change, not including S III.															high in the graph.						460									
43	Section 3 water released																					0	NOD Water Purchases						56		
44	Section 3 water exported															cutting swp by 100 kaf to get closer to curve.						0	EWA EOY Balance in CVP SLR						-86		
45	Section 3 Export cuts															remember, though that 300 - 200 = 100 kaf of						0	EWA EOY Balance in SWP SLR						420		
46	Gross Upstream fish actions															swp water is really ewa water at the beginning						190	EWA EOY Balance in MWD						-200		
47	Gross Export fish actions															of the year.						557	Vidler						0		
48	Gross Fish Actions																					990	EWA in Shasta						0		
49	Net Feb - Sep Export reduction															as a aresult of reops, don't assume any 500 water						640	EWA in Folsom						0		
50	Total b(2) Spent															this year.						770	EWA in Oroville						60		
51	Export cuts beyond WQCP																					118									
52	Unused															starting slr seems off. Dailuy swp slr							Use of Excess Banks Capacity for excess flows								
53	Unused			back 120 into shasta may, then rerelease in june.												storage should be above calsim by 100.							Net new pumping allowed						0		
54	Unused			reflect as changeds in exports for the two months.																			If no debt or EWA storage						0		
55	Unused															ovear the feb-sep more than 640. But big							If no EWA or b(2).						0		
56	Unused			undercharged b2, so correct in june												credits from fall. So is 640 limit controlling?							Unused								
57	Unused															I think not. SLR storage is way up. Why set a							Unused								
58	Unused			60 kaf b2 cut.												sublimit under such circumstances?							Unused								
59	Unused															Also, hard to justify when it is from w							Unused								
60	Unused															wqcp							Unused								
61	Unused																						Unused								

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	-190	388	-200	100	98	0		0	0	4					
10	O	-190	389	-200	100	99	1				0	0	0.333	0		
11	N	-167	412	-200	100	145	46					0	0	0		
12	D	-167	420	-200	100	153	8					0	2.667	0		
13	J	-167	425	-200	100	158	5					0	1.667	0		
14																
15												0	5	0		
16																
17	F	-137	497	-200	100	260	102					0	0	0		
18	M	-137	360	-200	100	123	-137					0	0	0		
19	A	-183	256	-200	100	-27	-150					0	0	0		
20	M	-160	241	-200	80	-39	-12					0	0	0		
21	J	-130	294	-200	60	24	63					0	11	0		
22	J	-146	344	-200	40	38	14			60		0	0	0		
23	A	-116	388	-200	20	92	54			60		0	0	0		
24	S	-86	420	-200	0	134	42			60		0	0	0		
25												0	11	0		
26																
27																
28																
29		DWRSIM/ Daily Model														
30				SWP	CVP											
31																
32																
33		SIM continuous Exports														
34		SIM yearly exports														
35		Daily Base Exports														
36		Daily Final Exports														
37		Change in Exports														
38		Final DWRSIM Exports														
39		CVP Delivery Cuts														
40																
41																
42		F	0													
43		M	0													
44		A	0													
45		M	0													
46		J	67													
47		J	0													
48		A	0													
49		S	0													
50																
51			67													
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z
1	CALFED GAME 6																					
2	Year	1990										CVP Accounting					EWA					
3																	Upstream					Export
4		Upstream Balance												Export Balance			Upstream Balance					Cuts
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increa	WQCF	Increas	Reduced		CVP	SWP	Total
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export	
8				Melones							Offset									Cuts	Cuts	
9											Negative											
10	O		45	5	50						(38)	(38)	12		(13)	(67)			O			0
11	N				0						(76)	(76)	(76)			67			N			0
12	D		60		60					27		27	87						D			0
13	J	75	60	3	138							0	138	123			30		J		8	8
14	EWA Gain Reduction					Max Re	0															
15		75	165	8	248	0	0			27	(114)	(87)	161	123	(13)	0	30	0		0	8	8
16																						
17	F				0			0	0	108		108	108			-68	30		F	41	(41)	0
18	M			3	3			0	0	3		3	6	77		19			M			0
19	A		30		30		(120)	(120)	(120)		(43)	(43)	(133)	95		110			A		(26)	-26
20	M		30		30			0	0		(112)	(112)	(82)	42		196			M		(30)	-30
21	J		30		30		(120)	(120)	(120)	165		165	75	34		6			J	38	29	67
22	J	120			120		(240)	(240)	(240)	13		13	(107)			4			J	92	55	147
23	A		60		60			0	0		(20)	(20)	40			(38)			A			0
24	S				0		163	163	163			0	163			(18)			S			0
25	Feb	120	150	3	273	0	(317)	(317)	(317)	289	(175)	114	70	248	0	211	30	0		171	(13)	158
26																						
27	Tota	195	315	11	521	0	(317)	(317)	(317)	316	(289)	27	231	371	(13)	211	60	0		171	(5)	166
28																						
29	B(2) Accounting																					
30																cut swp 300 to align to base.						
31	Net WQCP Storage: Oct - January													(87)								
32	Net WQCP Flow Changes: February - September													114		incraese cvp base delivereis to						
33	WQCP Exports													211		draw down to 300 kaf. 250 kaf.						
34	Total Net WQCP													238								
35	Net AFRP storage: Oct - January													248		recurring problem -- calsim delivers						
36	Net AFRP flow changes: February - September													273		too little to cvp. If leave in baseline, then						
37	Net Discretionary export b(2) except Section III													358		allows b2 cuts without reductino from base						
38	Upstream Release Reductions (Oct - Jan)													(114)		illusory.						
39	Upstream Release Reductions (Feb - Sep)													(175)								
40	Net Upstream Storage Change (AFRP + WQCP)													161		Again, a reop issue. Big backup in July						
41	Net Upstream Release: February - September													387		maybe projects wouldn't have releases.						
42	Net Export Change, not including S III.													569		then not available for b2 reop.						
43	Section 3 water released													0								
44	Section 3 water exported													0		projects appear to be borrowing water from						
45	Section 3 Export cuts													0		ewa to maintain delivery levels.						
46	Gross Upstream fish actions													222		w/o ewa storage, slr goes negative.						
47	Gross Export fish actions													582								
48	Gross Fish Actions													1157								
49	Net Feb - Sep Export reduction													459								
50	Total b(2) Spent													800								
51	Export cuts beyond WQCP													371								
52	Unused																					
53	Unused																					
54	Unused																					
55	Unused																					
56	Unused																					
57	Unused																					
58	Unused																					
59	Unused																					
60	Unused																					
61	Unused																					

	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
2			EWA Accounting							
3			Export Supply Factors							
5	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7					(Storage)				Factors	&Cuts
10								18	18	18
11									0	0
12								27	27	27
13								8	8	0
15	0	0	0	0	0	0	0	53	53	45
17									0	0
18									0	0
19									0	26
20							30	3	33	63
21							30		30	37
22							30		30	117
23						60	30	31	121	121
24							30		30	30
25	0	0	0	0	0	60	150	34	244	186
27	0	0	0	0	0	60	150	87	297	131
29	EWA Accounting						EWA	SWP	CVP	
30	Upstream Releases						60			
31	Water Backed upstream						0			
32	Total Export Cuts made						166			
33	Export Supplies Generated						297			
34		E/I					0			
35		500 cfs					0			
36		JPOD: Excess flows					0			
37		JPOD: EWA storage					0			
38		Transfer NOD Purchases					60			
39		Net Spill					0			
40		SOD Purchase					150			
41		SWP Gain					87			
42										
43		NOD Water Purchases					60			
44		EWA EOY Balance in CVP SLR					-107			
45		EWA EOY Balance in SWP SLR					572			
46		EWA EOY Balance in MWD					-200			
47		Vidler					0			
48		EWA in Shasta					0			
49		EWA in Folsom					0			
50		EWA in Oroville					0			
52	Use of Excess Banks Capacity for excess flows									
53		Net new pumping allowed					0			
54		If no debt or EWA storage					0			
55		If no EWA or b(2).					0			
56	Unused									
57	Unused									
58	Unused									
59	Unused									
60	Unused									
61	Unused									

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Change	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	-86	420	-200	0	134	0		0	60						
10	O	-86	438	-200	0	152	18			60		0	6	0		
11	N	-86	438	-200	0	152	0			60		0	0	0		
12	D	-86	465	-200	0	179	27			60		0	9	0		
13	J	-86	465	-200	0	179	0			30		0	2.697	0		
15												0	18	0		
17	F	-127	506	-200	0	179	0			0		0	0	0		
18	M	-127	506	-200	0	179	0					0	0	0		
19	A	-127	532	-200	0	205	26					0	0	0		
20	M	-97	565	-200	0	268	63					0	1	0		
21	J	-105	536	-200	0	231	-37					0	0	0		
22	J	-167	481	-200	0	114	-117					0	0	0		
23	A	-137	572	-200	0	235	121					0	10.33	0		
24	S	-107	572	-200	0	265	30					0	0	0		
25												0	11	0		
29	DWRSIM/ Daily Model															
34	SIM continuous Exports															
35	SIM yearly exports															
36	Daily Base Exports															
37	Daily Final Exports															
38	Change in Exports															
39	Final DWRSIM Exports															
40	CVP Delivery Cuts															
42	F	0														
43	M	0														
44	A	133														
45	M	82														
46	J	0														
47	J	4														
48	A															
49	S	0														
50																
51		219														
53		56 in credits														

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 6																															
2	Year	1991										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increa	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			Offset		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts
8				Melones							Negative									Cuts	Cuts											
9																																
10	O			5	5							0	5		(4)	(14)			O			0									0	0
11	N	12			12					20		20	32		(12)	(23)			N			0	23								23	23
12	D	15			15							0	15		(15)	(7)			D			0	48								48	48
13	J	15	18		33						(154)	(154)	(121)		(17)	(121)			J			0								8	8	8
14	EWA Gain Reduction					Max Re	0																									
15		42	18	5	65	0	0			20	(154)	(134)	(69)	0	(48)	(165)	0	0		0	0	0	71	0	0	0	0	0	0	8	79	79
16																																
17	F		24		24		(60)	0	0	145		145	109	5		184			F		5	5									0	5
18	M		45	5	50			0	0			0	50	56					M		142	142									0	142
19	A		48		48			0	0			0	48	9		156			A	107	156	263								5	5	258
20	M		48		48	(6)		0	0			0	42		(10)	64			M	4	4	8									0	-8
21	J				0			0	0	16		16	16			106			J			0									0	0
22	J				0			0	0	11		11	11			9			J			0						50			50	50
23	A		45		45			0	0		(50)	(50)	(5)		(12)	(1)			A			0						50		12	62	62
24	S			6	6	(30)		0	0	29		29	5			(55)			S			0									0	0
25	Feb	0	210	11	221	(36)	(60)	0	0	201	(50)	151	276	70	(22)	463	0	0		111	307	418	0	0	0	0	0	100	0	17	117	(301)
26																																
27	Tota	42	228	16	286	(36)	(60)	0	0	221	(204)	17	207	70	(70)	298	0	0		111	307	418	71	0	0	0	0	100	0	25	196	(222)
28																																
29	B(2) Accounting																															
30																600 kaf year for b2																
31	Net WQCP Storage: Oct - January													(134)																		
32	Net WQCP Flow Changes: February - September													151		cvp already cut to 5%, so no more, even																
33	WQCP Exports													298		though b2 exists.																
34	Total Net WQCP													315																		
35	Net AFRP storage: Oct - January													65		buy 100																
36	Net AFRP flow changes: February - September													185																		
37	Net Discretionary export b(2) except Section III													0		state closes athe year negataive.																
38	Upstream Release Reductions (Oct - Jan)													(154)		probablyu the result of accumulated errors																
39	Upstream Release Reductions (Feb - Sep)													(86)		allowing the baseline to delivery too much																
40	Net Upstream Storage Change (AFRP + WQCP)													(69)		water during the drought.																
41	Net Upstream Release: February - September													336																		
42	Net Export Change, not including S III.													298		lowpoint of 150 kaf. For this year																
43	Section 3 water released													0		probbaly ok. But if needed higher, then																
44	Section 3 water exported													0		should have purchased 150 kaf more.																
45	Section 3 Export cuts													0																		
46	Gross Upstream fish actions													59		Do a corarection for next year. Set swp at 0																
47	Gross Export fish actions													368		for 1992.																
48	Gross Fish Actions													688																		
49	Net Feb - Sep Export reduction													511																		
50	Total b(2) Spent													505																		
51	Export cuts beyond WQCP													70																		
52	Unused																															
53	Unused																															
54	Unused																															
55	Unused																															
56	Unused																															
57	Unused																															
58	Unused																															
59	Unused																															
60	Unused																															
61	Unused																															

	A	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1	CALFED GAME 6																
2	Year												Projects				
3																	
4			Negative values for borrowed water														
5			SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6							Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7							Storage						50%	25%	50%	Not split	
8		Initial															
9		valu	-107	572	-200	0	265	0		0	0						
10	O	O	-107	572	-200	0	265	0					0	0	0		
11	N	N	-107	595	-200		288	23					0	0	0		
12	D	D	-107	643	-200		336	48					0	0	0		
13	J	J	-107	643	-200		336	0					0	2.667	0		
14	EWA Gain Reduction																
15													0	3	0		
16																	
17	F	F	-107	638	-200		331	-5					0	0	0		
18	M	M	-107	496	-200		189	-142					0	0	0		
19	A	A	-214	345	-200		-69	-258					0	1.667	0		
20	M	M	-218	341	-200		-77	-8					0	0	0		
21	J	J	-218	291	-150		-77	0					0	0	0		
22	J	J	-193	266	-100		-27	50					0	0	0		
23	A	A	-168	253	-50		35	62					0	4	0		
24	S	S	-168	203	0		35	0					0	0	0		
25	Feb												0	6	0		
26																	
27	Tota																
28																	
29	B(2) Accounting																
30																	
31	Net WQCP Storage: Oct - January																
32	Net WQCP Flow Changes: February - September																
33	WQCP Exports																
34	Total Net WQCP																
35	Net AFRP storage: Oct - January																
36	Net AFRP flow changes: February - September																
37	Net Discretionary export b(2) except Section III																
38	Upstream Release Reductions (Oct - Jan)																
39	Upstream Release Reductions (Feb - Sep)																
40	Net Upstream Storage Change (AFRP + WQCP)																
41	Net Upstream Release: February - September																
42	Net Export Change, not including S III.																
43	Section 3 water released																
44	Section 3 water exported																
45	Section 3 Export cuts																
46	Gross Upstream fish actions																
47	Gross Export fish actions																
48	Gross Fish Actions																
49	Net Feb - Sep Export reduction																
50	Total b(2) Spent																
51	Export cuts beyond WQCP																
52	Unused																
53	Unused																
54	Unused																
55	Unused																
56	Unused																
57	Unused																
58	Unused																
59	Unused																
60	Unused																
61	Unused																

29	EWA Accounting	EWA
30	Upstream Releases	0
31	Water Backed upstream	0
32	Total Export Cuts made	418
33	Export Supplies Generated	196
34	E/I	71
35	500 cfs	0
36	JPOD: Excess flows	0
37	JPOD: EWA storage	0
38	Transfer NOD Purchases	100
39	Net Spill	0
40	SOD Purchase	0
41	SWP Gain	25
42		
43	NOD Water Purchases	100
44	EWA EOY Balance in CVP SLR	-168
45	EWA EOY Balance in SWP SLR	203
46	EWA EOY Balance in MWD	0
47	Vidler	0
48	EWA in Shasta	0
49	EWA in Folsom	0
50	EWA in Oroville	0
51		
52	Use of Excess Banks Capacity for excess flows	
53	Net new pumping allowed	0
54	If no debt or EWA storage	0
55	If no EWA or b(2).	0
56	Unused	
57	Unused	
58	Unused	
59	Unused	
60	Unused	
61	Unused	

29	DWRSIM/ Daily Model		
30		SWP	CVP
31			
32			
33	SIM continuous Exports		
34	SIM yearly exports		
35	Daily Base Exports		
36	Daily Final Exports		
37	Change in Exports		
38	Final DWRSIM Exports		
39	CVP Delivery Cuts		
40			
41			
42	F	0	
43	M	0	
44	A	0	
45	M	0	
46	J	0	
47	J	0	
48	A	-1	
49	S	0	
50			
51		-1	

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	CALFED GAME 6															
2	Year	1992										CVP Accounting				
3																
4		Upstream Balance												Export Balance		
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discretic	Increase	WQCP
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping	
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative	
8				Melones							Offset					
9											Negative					
10	O		30	5	35							0	35		(25)	(14)
11	N		30		30					32		32	62		(14)	(30)
12	D		30		30					12		12	42		(11)	(19)
13	J		45		45						(2)	(2)	43	81	(8)	(226)
14	EWA Gain Reduction					Max R	0									
15		0	135	5	140	0	0			44	(2)	42	182	81	(58)	(289)
16																
17	F				0			0	0	2		2	2	109		1
18	M			3	3			0	0			0	3	195		83
19	A		24		24			0	0	20		20	44	16		202
20	M		24		24		(60)	(60)	(60)		(157)	(157)	(193)	24		244
21	J	30			30		(300)	(300)	(300)	239		239	(31)	27		(76)
22	J	30	60		90			0	0		(3)	(3)	87		(40)	6
23	A		60		60			0	0			0	60		(60)	(43)
24	S				0		42	42	42	14		14	56			(32)
25	Feb	60	168	3	231	0	(318)	(318)	(318)	275	(160)	115	28	371	(100)	385
26																
27	Tota	60	303	8	371	0	(318)	(318)	(318)	319	(162)	157	210	452	(158)	96
28																
29	B(2) Accounting															
30																
31	Net WQCP Storage: Oct - January													42		
32	Net WQCP Flow Changes: February - September													115		
33	WQCP Exports													96		
34	Total Net WQCP													253		
35	Net AFRP storage: Oct - January													140		
36	Net AFRP flow changes: February - September													231		
37	Net Discretionary export b(2) except Section III													294		
38	Upstream Release Reductions (Oct - Jan)													(2)		
39	Upstream Release Reductions (Feb - Sep)													(160)		
40	Net Upstream Storage Change (AFRP + WQCP)													182		
41	Net Upstream Release: February - September													346		
42	Net Export Change, not including S III.													390		
43	Section 3 water released													0		
44	Section 3 water exported													0		
45	Section 3 Export cuts													0		
46	Gross Upstream fish actions													217		
47	Gross Export fish actions													548		
48	Gross Fish Actions													1233		
49	Net Feb - Sep Export reduction													656		
50	Total b(2) Spent													600		
51	Export cuts beyond WQCP													452		
52	Unused															
53	Unused															
54	Unused															
55	Unused															
56	Unused															
57	Unused															
58	Unused															
59	Unused															
60	Unused															
61	Unused															

	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	EWA								EWA Accounting							
2	Upstream					Export			Export Supply Factors							
3	Upstream Balance					Cuts										
4																
5	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6	Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		(negative		Export	Export						(Storage)				Factors	&Cuts
8				Cuts	Cuts											
9																
10			O			0	24							12	36	36
11			N			0								7	7	7
12			D			0								5	5	5
13			J		-50	-50								9	9	59
14																
15	0	0		0	(50)	(50)	24	0	0	0	0	0	0	33	57	107
16																
17			F		42	42									0	-42
18			M		(27)	-27									0	27
19			A		16	16									0	-16
20			M		17	17							30		30	13
21			J	155	41	196							30		30	166
22			J	-100	41	-59						50	30		80	139
23			A	-74	73	-1							30		30	31
24			S			0							30		30	30
25	0	0		(19)	203	184	0	0	0	0	0	50	150	0	200	16
26																
27	0	0		(19)	153	134	24	0	0	0	0	50	150	33	257	123
28																
29																
30																
31																
32																
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	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3																
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8																
9	Initial															
10	valu	-168	203	0	0	35	0		0	0						
11	O	-156	227	0	0	71	36					0	4	0		
12	N	-156	234	0	0	78	7					0	2.333	0		
13	D	-156	239	0	0	83	5					0	1.667	0		
14	J	-156	298	0	0	142	59					0	13	0		
15												0	11	0		
16																
17	F	-156	256	0	0	100	-42					0	0	0		
18	M	-156	283	0	0	127	27					0	0	0		
19	A	-156	267	0	0	111	-16					0	0	0		
20	M	-126	250	0	0	124	13					0	0	0		
21	J	-251	209	0	0	-42	-166					0	0	0		
22	J	-71	168	0	0	97	139					0	0	0		
23	A	33	95	0	0	128	31					0	0	0		
24	S	63	95	0	0	158	30					0	0	0		
25												0	0	0		
26																
27																
28																
29																
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59																
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61																

600 kaf year for b2

general note. Problem with modeling
coa continues to make state federal splits
problematic. This could skew results.
ikn general swp should come out ahead, though
as long as this is true, then maybe ok.

largeoffset. Recovery in wqcp
plus extra pumping july and august.
all recovered by end of year.

again, a modellikng mismatch problem
swp ends negative, because their baseline
delivered too much water.

EWA Accounting	EWA	SWP	CVP
Upstream Releases	0		
Water Backed upstream	0		
Total Export Cuts made	134		
Export Supplies Generated	257		
E/I	24		
500 cfs	0		
JPOD: Excess flows	0		
JPOD: EWA storage	0		
Transfer NOD Purchases	50		
Net Spill	0		
SOD Purchase	150		
SWP Gain	33		
NOD Water Purchases	50		
EWA EOY Balance in CVP SLR	63		
EWA EOY Balance in SWP SLR	95		
EWA EOY Balance in MWD	0		
Vidler	0		
EWA in Shasta	0		
EWA in Folsom	0		
EWA in Oroville	0		
Use of Excess Banks Capacity for excess flows			
Net new pumping allowed	0		
If no debt or EWA storage	0		
If no EWA or b(2).	0		
Unused			
Unused			
Unused			
Unused			
Unused			
Unused			

DWRSIM/ Daily Model		SWP	CVP
SIM continuous Exports			
SIM yearly exports			
Daily Base Exports			
Daily Final Exports			
Change in Exports			
Final DWRSIM Exports			
CVP Delivery Cuts			
F	0		
M	0		
A	0		
M	193		
J			
J	0		
A	0		
S	0		
	193		

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 6																															
2	Year	1993										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increa	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts
8				Melones							Offset									Cuts	Cuts											
9											Negative																					
10	O		4	4	8					13		13	21			(27)			O			0	31								31	31
11	N		5		5					12		12	17			(15)			N			0	26								26	26
12	D	15	12		27							0	27						D		46	46	65								65	19
13	J	45		3	48		(21)					0	27						J		280	280									0	(280)
14	EWA Gain Reduction					Max Re	(21)																									
15		60	21	7	88	0	(21)			25	0	25	113	0	0	(42)	0	0		0	326	326	122	0	0	0	0	0	0	0	122	(204)
16																																
17	F	45			45			0	0			0	45	191		5			F		40	40									0	-40
18	M			6	6		(45)	(45)	(45)	25		25	(14)	27		54			M			0	50								50	50
19	A			15	15			0	0			0	15	183		64			A	-132	126	-6									0	6
20	M			15	15			0	0			0	15	140					M	56	110	166							40		40	-126
21	J				0			0	0			0	0						J	99	62	161							40		40	-121
22	J				0			0	0		(14)	(14)	(14)						J			0		13					40		53	53
23	A			9	9			0	0		(4)	(4)	5			(4)			A			0		18					40		58	58
24	S				0		10	10	10			0	10						S			0		14				50	40		104	104
25	Feb	45	0	45	90	0	(35)	(35)	(35)	25	(18)	7	62	541	0	149	0	0		28	338	366	150	45	0	0	0	50	200	0	345	(16)
26																																
27	Tota	105	21	52	178	0	(56)	(35)	(35)	50	(18)	32	175	541	0	77	0	0		23	664	687	172	45	0	0	0	50	200	0	467	(220)
28																																
29	B(2) Accounting																															
30																general note. Haven't been giving b2																
31	Net WQCP Storage: Oct - January													25		account for reductions in releases post																
32	Net WQCP Flow Changes: February - September													7		feb. Probably should cancel any post																
33	WQCP Exports													77		feb afrp releases, if spills later. I did																
34	Total Net WQCP													109		this year for shasta.																
35	Net AFRP storage: Oct - January													88																		
36	Net AFRP flow changes: February - September													90		Assume 40 kaf cvp credit for 2/1 bo ratio.																
37	Net Discretionary export b(2) except Section III													541		didn't check after 1985, but probably not an issue																
38	Upstream Release Reductions (Oct - Jan)													0		during much of the drought.																
39	Upstream Release Reductions (Feb - Sep)													(18)																		
40	Net Upstream Storage Change (AFRP + WQCP)													113		cut cvp 350 kaf. Plus assume 100 kaf source																
41	Net Upstream Release: February - September													97		shift for cvp if necessary																
42	Net Export Change, not including S III.													618																		
43	Section 3 water released													0		couldn't make all desired cuts. Did make some																
44	Section 3 water exported													0		reductions in protection, but might argue																
45	Section 3 Export cuts													0		that tier 3 might be needed this year.																
46	Gross Upstream fish actions													137																		
47	Gross Export fish actions													618		collateral =																
48	Gross Fish Actions													860		300 sod purchases																
49	Net Feb - Sep Export reduction													660		50 nod purchases																
50	Total b(2) Spent													793		50 500 cfs.																
51	Export cuts beyond WQCP													541																		
52	Unused															8.5 should include possibilities for cvp							Use of Excess Banks Capacity for excess flows										
53	Unused															borrowing from swp or a share of 8.5									Net new pumping allowed					0			
54	Unused															to avoid situatino this year, where cvp is									If no debt or EWA storage					0			
55	Unused															cutting deliveries while slr total storage									If no EWA or b(2).					0			
56	Unused															is ok.							Unused										
57	Unused																						Unused									
58	Unused															Needed 200 kaf to meet collateral reqs.							Unused									
59	Unused															132 kaf credit from cvp for 2:1							Unused									
60	Unused																						Unused									
61	Unused																						Unused									

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	63	95			158	0	32	81	0	39					
10	O	78	110		0	188	30	32	81		39	0	0	0		
11	N	86	128			214	26	32	81		39	0	0	0		
12	D	86	147			233	19	32	81		39	0	0	0		
13	J	86	-133			-47	-280	32	81		39	0	0	0		
14																
15												0	0	0		
16																
17	F	86	-173			-87	-40	32	81		39	0	0	0		
18	M	86	-123			-37	50	32	81		39	0	0	0		
19	A	218	-249			-31	6	32	81		39	0	0	0		
20	M	202	-359			-157	-126	0	0		0	0	0	0		
21	J	143	-421			-278	-121	0	0		0	0	0	0		
22	J	183	-408			-225	53	0	0		0	13	0	0		
23	A	223	-390			-167	58	0	0		0	18	0	0		
24	S	263	-326			-63	104	0	0		0	14	0	0		
25												45	0	0		
26																
27																
28																
29																
30																
31																
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	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
29	DWRSIM/ Daily Model														
30			SWP	CVP											
31															
32															
33	SIM continuous Exports														
34	SIM yearly exports														
35	Daily Base Exports														
36	Daily Final Exports														
37	Change in Exports														
38	Final DWRSIM Exports														
39	CVP Delivery Cuts														
40	a problem for refuges														
41															
42	F	0													
43	M	14													
44	A	0													
45	M	0													
46	J	0													
47	J	0													
48	A														
49	S	0													
50															
51		14													
52															
53															
54															
55															
56															
57															
58															
59															
60															
61															

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	A	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
1	CALFED GAME 5																															
2	Year	1994										CVP Accounting					EWA								EWA Accounting							
3																	Upstream					Export			Export Supply Factors							
4		Upstream Balance												Export Balance			Upstream Balance					Cuts										
5		Increased			Total	AFRP	AFRP	Cum	Offst	Increas	WQCP	Total	Net	Discret	Increase	WQCP	Increas	Reduced		CVP	SWP	Total	E/I	500 cfs	JPOD	JPOD	Spill	NOD	SOD	SWP E	Sum	Sum
6		Releases			AFRP	Backed	Reset	Offset	Allowe	WQCP	Reset	WQCP	Upstre	Cuts	Pumping		Releas	Releases		EWA	EWA	Cuts			split	Not spl	Debt	XFER	XFER	Exports	Export	factors
7		Shasta	Folsom	New		Water	Offset	Potential			(negative		Balance		(negative			(negative		Export	Export						(Storage)				Factors	&Cuts
8				Melones							Offset									Cuts	Cuts											
9											Negative																					
10	O		30		30		(90)			20		20	(40)	16					O		22	22	15								15	7
11	N	90			90		(30)					0	60						N			0	10							26	36	36
12	D	105	60		165							0	165		(25)				D			0								36	36	36
13	J	105	60		165						(145)	(145)	20						J			0	28							68	96	96
14	EWA Gain Reduction					Max Re	(90)																									
15		300	150	0	450	0	(120)			20	(145)	(125)	325		(25)	0	0	0		0	22	22	53	0	0	0	0	0	0	130	183	161
16																																
17	F	105	30		135			0	0	8		8	143			1			F	136		136			40						40	-96
18	M		30		30		(72)	(72)	(72)	183		183	141			3			M	67		67			37						37	-30
19	A		30		30		(21)	(21)	(21)		(46)	(46)	(37)			161			A	16	66	82									0	-82
20	M		15		15			0	0		(182)	(182)	(167)		(8)	187			M	27	27	54							30	4	34	-20
21	J		15		15			0	0		(92)	(92)	(77)		(7)	133			J			0							30	3	33	33
22	J		15		15			0	0	3		3	18	(110)					J	110		110		9				25	30		64	-46
23	A		15		15			0	0		(45)	(45)	(30)						A			0		13				25	30		68	68
24	S		6		6		161	161	161	6		6	173			3			S			0				60			30		90	90
25	Feb	105	156	0	261	0	68	68	68	200	(365)	(165)	164	(110)	(15)	488	0	0		356	93	449	0	22	77	60	0	50	150	7	366	(83)
26																																
27	Tota	405	306	0	711	0	(52)	68	68	220	(510)	(290)	489	(110)	(40)	488	0	0		356	115	471	53	22	77	60	0	50	150	137	549	78
28																																
29	B(2) Accounting															30 over cap. Shoot for 830																
30																																
31	Net WQCP Storage: Oct - January													(125)		800 kaf/year																
32	Net WQCP Flow Changes: February - September													(165)																		
33	WQCP Exports													488		take 200 kaf of state deliveries to deal																
34	Total Net WQCP													198		w/ model mishatch.																
35	Net AFRP storage: Oct - January													450																		
36	Net AFRP flow changes: February - September													261		note that b2 account sometimes overspends																
37	Net Discretionary export b(2) except Section III													(150)		with just afrp + wqcp. Either they must hedge																
38	Upstream Release Reductions (Oct - Jan)													(145)		or be clear that ewa is picking up the overages.																
39	Upstream Release Reductions (Feb - Sep)													(365)																		
40	Net Upstream Storage Change (AFRP + WQCP)													325		2/1 credit. 50																
41	Net Upstream Release: February - September													96																		
42	Net Export Change, not including S III.													338		move nod water using thte 500 cfs.																
43	Section 3 water released													0																		
44	Section 3 water exported													0		100 kaf source shift for cvp.																
45	Section 3 Export cuts													0																		
46	Gross Upstream fish actions													405		Collateral problem again. Make it through																
47	Gross Export fish actions													378		low point, but without collateral. Really, the same																
48	Gross Fish Actions													799		problem as last year. If we had addressed then,																
49	Net Feb - Sep Export reduction													363		wouldn't have had the same level of problem now.																
50	Total b(2) Spent													827																		
51	Export cuts beyond WQCP													(110)		300 beyond collateral																
52	Unused																															
53	Unused																															
54	Unused																															
55	Unused																															
56	Unused																															
57	Unused																															
58	Unused																															
59	Unused																															
60	Unused																															
61	Unused																															

	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ
1																
2												Projects				
3				Storage												
4		Negative values for borrowed water														
5		SLR:C	SLR:S	MWD	Vidler	Sum	Chang	Shasta	Folsom	Oroville	New	SWP S	SWP	CVP	CVP	
6						Export	Export	Storage			Melone	500cfs	Gain	JPOD	JPOD	
7						Storage						50%	25%	50%	Not split	
8	Initial															
9	valu	263	-326			-63	0	0	0	0	0					
10	O	263	-333			-70	-7					0	0	0		
11	N	263	-297			-34	36					0	8.667	0		
12	D	263	-261			2	36					0	12	0		
13	J	263	-165			98	96					0	22.67	0		
14																
15												0	43	0		
16																
17	F	87	-85			2	-96					0	0	40		
18	M	-17	-10			-27	-29					0	0	37		
19	A	-33	-76			-109	-82					0	0	0		
20	M	-30	-99			-129	-20	0	0	60		0	1.333	0		
21	J	0	-96			-96	33	0		60		0	1	0		
22	J	-80	-62			-142	-46	0		60		9	0	0		
23	A	-50	-24			-74	68	0		60		13	0	0		
24	S	-20	36			16	90	0		0		0	0	0		
25												22	2	77		
26																
27																
28																
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29	EWA Accounting		EWA	SWP	CVP
31	Upstream Releases		0		
32	Water Backed upstream		0		
33	Total Export Cuts made		471		
34	Export Supplies Generated		549		
35	E/I		53		
36	500 cfs		22		
37	JPOD: Excess flows		77		
38	JPOD: EWA storage		60		
39	Transfer NOD Purchases		50		
40	Net Spill		0		
41	SOD Purchase		150		
42	SWP Gain		137		
43	NOD Water Purchases		50		
44	EWA EOY Balance in CVP SLR		-20		
45	EWA EOY Balance in SWP SLR		36		
46	EWA EOY Balance in MWD		0		
47	Vidler		0		
48	EWA in Shasta		0		
49	EWA in Folsom		0		
50	EWA in Oroville		0		
51					
52	Use of Excess Banks Capacity for excess flows				
53	Net new pumping allowed		0		
54	If no debt or EWA storage		0		
55	If no EWA or b(2).		0		
56	Unused				
57	Unused				
58	Unused				
59	Unused				
60	Unused				
61	Unused				

29	DWRSIM/ Daily Model				
31			SWP	CVP	
33	SIM continuous Exports				
34	SIM yearly exports				
35	Daily Base Exports				
36	Daily Final Exports				
37	Change in Exports				
38	Final DWRSIM Exports				
39	CVP Delivery Cuts				
42	F	0			
43	M	0			
44	A	37			
45	M	167			
46	J	77			
47	J	0			
48	A	0			
49	S	0			
51		281			
53	120 k from shasta in sept.				

D-055768

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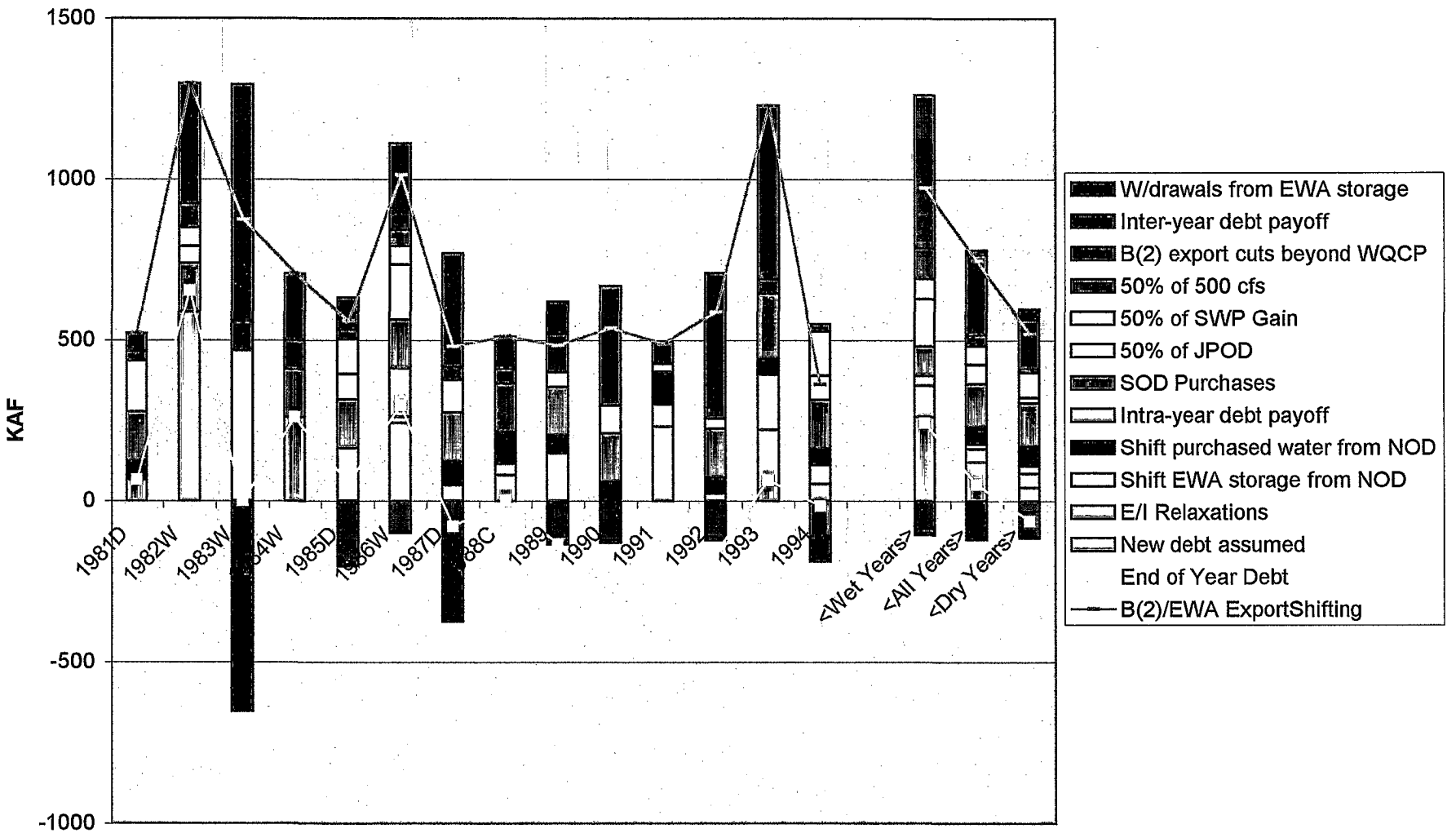
Operations in Support of EWA Export Shifts
Game 4



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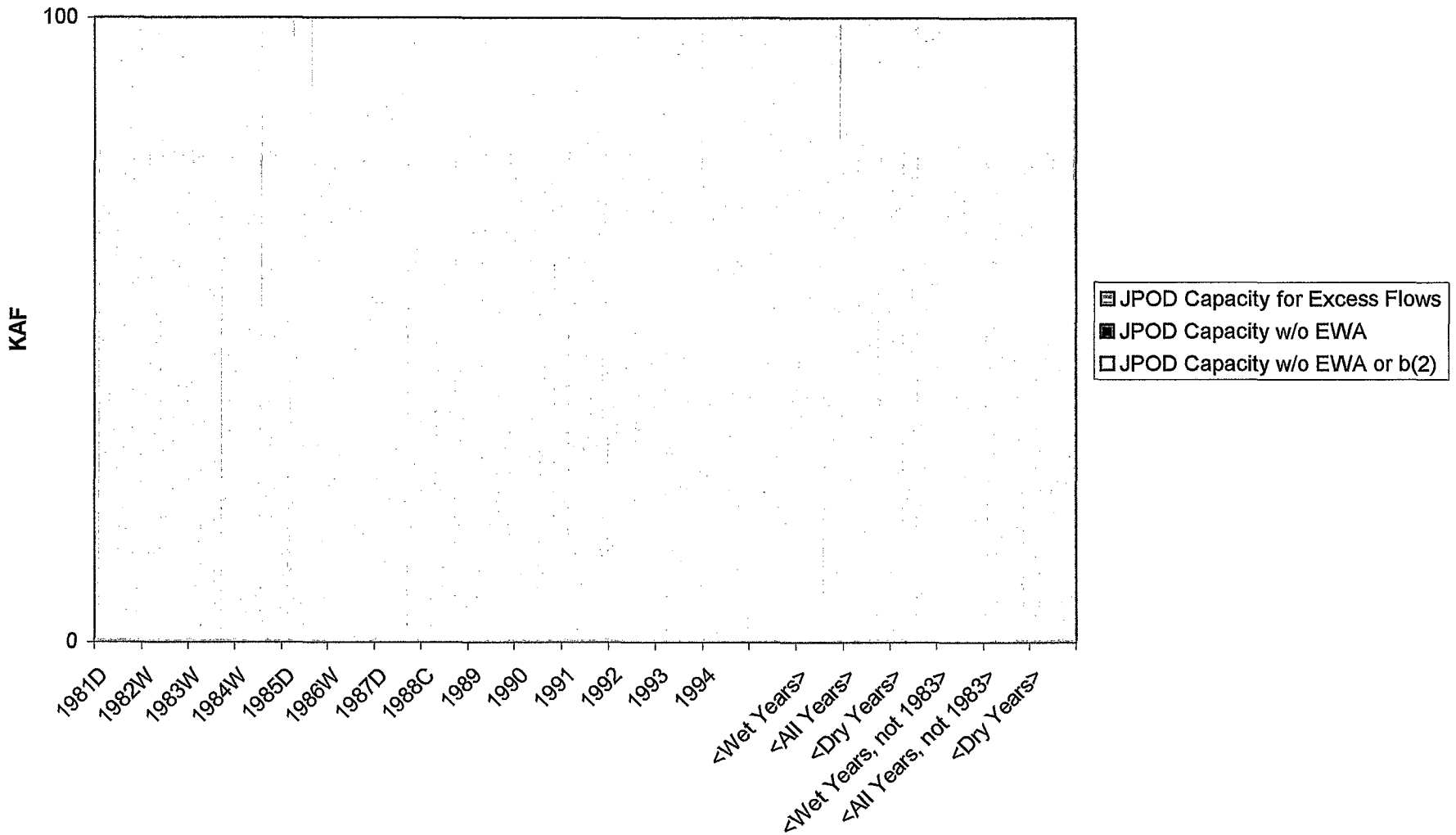
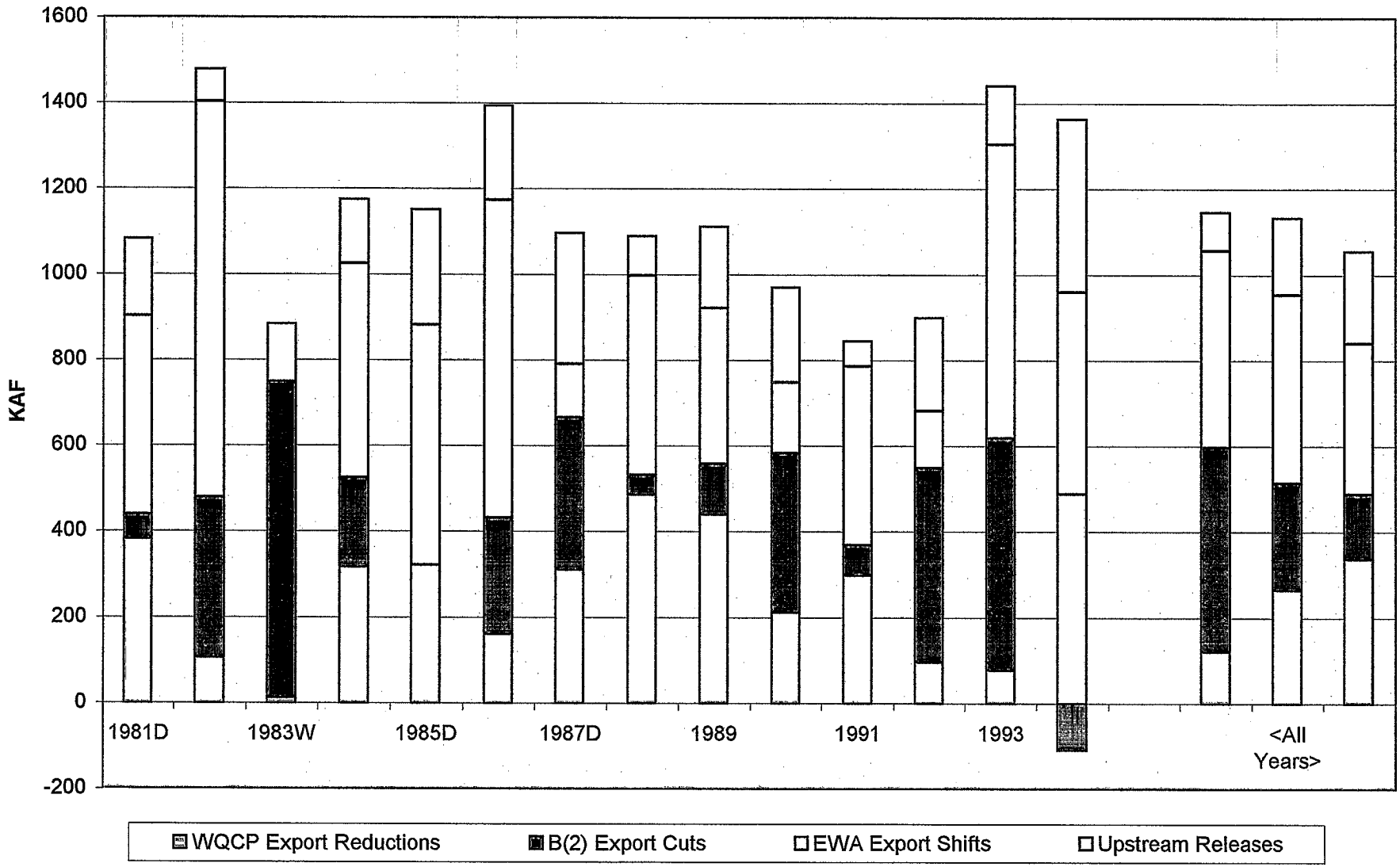
Total Excess Export Capacity for Excess Flows
CALFED Game 4



Operational Shifting for Fish: Game 5



D—055771

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Analysis
Game 4
36647

	1981D	1982W	1983W	1984W	1985D	1986W	1987D	1988C	1989	1990	1991	1992	1993	1994	<Wet Y	<All Ye	<Dry Y	W/O 1983 <Wet Y	<All Ye	<Dry Years>
B(2) Accounting																				
Net WQCP Storage: Oct - January	11	0	0	0	-42	11	-42	95	-1	-87	-134	42	25	-125	2	-18	-31			
Net WQCP Flow Changes: February - Sept	-162	0	0	60	-171	60	288	-2	11	114	151	115	7	-165	29	22	20			
WQCP Exports	381	105	11	317	321	161	311	486	439	211	298	96	77	488	120	264	337			
Total Net WQCP	230	105	11	377	108	232	557	579	449	238	315	253	109	198	160	269	325			
Net AFRP storage: Oct - January	420	322	0	0	225	194	256	3	81	248	65	140	88	450	125	178	210			
Net AFRP flow changes: February - Septen	90	0	0	306	451	0	100	301	332	273	185	231	90	261	79	187	247			
Net Discretionary export b(2) except Sectio	57	373	737	208	0	270	354	46	21	358	0	294	541	-150	336	222	109			
Upstream Release Reductions (Oct - Jan)	-9	-20	0	0	-46	-120	-89	-2	-1	-114	-154	-2	0	-145	80	-50	-62			
Upstream Release Reductions (Feb - Sep)	-246	0	0	-41	-293	-11	-42	-330	-275	-175	-86	-160	-18	-365	-10	-146	-219			
Net Upstream Storage Change (AFRP + W	431	322	0	0	183	205	214	98	80	161	-69	182	113	325	102	160	178			
Net Upstream Release: February - Septem	-72	0	0	366	280	60	388	299	343	387	336	346	97	96	108	209	267			
Net Export Change, not including S III.	438	478	748	525	321	431	665	532	460	569	298	390	618	338	456	487	446			
Section 3 water released	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124	0	0			
Section 3 water exported	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Section 3 Export cuts	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Gross Upstream fish actions	180	75	0	150	270	221	306	93	190	222	59	217	137	405	89	180	216			
Gross Export fish actions	438	478	748	525	321	431	665	532	557	582	368	548	618	378	464	514	488			
Gross Fish Actions	797	800	748	915	784	887	1413	732	990	1157	688	1233	860	799	794	915	955			
Net Feb - Sep Export reduction	438	266	353	525	321	204	624	572	640	459	511	656	660	363	442	471	509			
Total b(2) Spent	797	800	748	801	800	696	907	929	770	800	505	600	793	827	741	770	771			
Export cuts beyond WQCP	57	373	737	208	0	270	354	46	118	371	70	452	541	-110	476	249	151			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

	1981D	1982W	1983W	1984W	1985D	1986W	1987D	1988C	1989	1990	1991	1992	1993	1994						
EWA Accounting																				
Upstream Releases	0	0	0	0	158	18	30	11	4	60	0	0	0	0	4	20	29			
Water Backed upstream	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total Export Cuts made	464	925	136	499	560	742	126	465	365	166	418	134	687	471	460	440	352	722	483	404
Export Supplies Generated for EWA	398	337	784	240	664	600	501	285	401	297	196	257	467	549	530	427	394	392	376	462
E/I	0	0	0	0	0	20	50	35	148	0	71	24	172	53	97	41	42	7	47	21
500 cfs	30	75	90	90	29	49	40	0	0	0	0	0	45	22	95	34	13	71	26	25
JPOD: Excess flows	0	53	467	0	80	172	0	0	0	0	0	0	0	77	147	61	17	75	3	20
JPOD: Transfer NOD storag	0	0	0	0	164	0	0	0	0	0	0	0	0	60	0	16	25	0	18	41
Transfer NOD Purchases	60	0	0	0	0	0	74	100	56	60	100	50	50	50	0	43	61	0	49	59
Net Spill	0	0	227	0	132	150	85	0	0	0	0	0	0	0	85	42	24	50	16	54
SOD Purchase	150	150	0	150	150	150	150	150	150	150	0	150	200	150	90	132	133	150	151	150
SWP Gain	158	59	0	0	109	59	102	0	47	87	25	33	0	137	64	58	78	39	67	92
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOD Water Purchases	60	0	0	0	0	0	74	100	56	60	100	50	50	50	0	43	61			
EWA EOY Balance in CVP S	-131	-464	0	-231	-166	-85	97	-190	-86	-107	-168	63	263	-20	-146	-88	-79			
EWA EOY Balance in SWP S	65	-189	0	-28	211	-212	-19	388	420	572	203	95	-326	36	-33	87	219			
EWA EOY Balance in MWD	0	0	0	0	-100	0	0	-200	-200	-200	0	0	0	0	-65	-50	-78			
Vidler	200	200	200	200	100	200	200	100	0	0	0	0	0	0	160	100	67			
EWA in Shasta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
EWA in Folsom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
EWA in Oroville	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	4	7			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Use of Excess Banks Capacity for excess f	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		w/o 1983	
Net new pumping allowed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
If no debt or EWA storage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
If no EWA or b(2).	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unused	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															0	#####	0	0	#####	0
															0	#####	0	0	#####	0
															0	#####	0	0	#####	0
SWP Supplies															0	#####	0	0	#####	0
Export Supplies Generated	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
E/I	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
500 cfs	30	90	90	80	60	70	50	0	45	0	0	0	75	60	83	59	35	80	54	35
JPOD: Excess flows	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
JPOD: Transfer	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
JPOD: 100%	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Net Spill	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
SOD Purchase	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
SWP Gain	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
															0	#####	0	0	#####	0
CVP Supplies															0	#####	0	0	#####	0
Export Supplies Generated	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
E/I	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
500 cfs	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
JPOD: Excess flows	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
JPOD: Transfer	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
JPOD: 100%	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
Net Spill	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
SOD Purchase	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
SWP Gain	0	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!							#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
															0	#####	0	0	#####	0
Total b(2) and EWA discretionary	521	1298	873	707	560	1012	480	511	483	537	488	586	1228	361	973	745	518	1006	727	518
Net debt SOD	66	653	0	259	55	297	-78	2	-134	-265	-35	-158	63	-16	242	51	-63			
Net Change in Debt	66	587	-653	259	-204	242	-375	80	-136	-131	230	-123	221	-79	100	-1	-75			
New debt Assumed	66	587	0	259	0	242	0	80	0	0	230	0	221	0	262	120	42			
Inter-year debt payoff	0	0	-653	0	-204	0	-375	0	-136	-131	0	-123	0	-79	-86	-122	-116			
Intra-year debt payoff	0	0	0	0	0	150	0	0	0	0	0	0	0	0	30	11	0			
W/drawals from EWA storag	0	0	0	0	100	-100	0	100	100	0	0	0	0	0	-20	14	33			