

ROC on LTO CalSimII Simulation Results

North-of-Delta Deliveries to CVP Ag Service Contractors

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
AVG:	4.7	0.2	0.0	0.0	0.1	1.2	18.5	36.9	47.6	56.9
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	14.9	1.9	0.0	0.0	4.4	17.2	44.3	63.8	81.5	95.8
Avg by WYT	PRV	PRV	PRV							
W:	6.9	0.3	0.0	0.0	0.0	0.8	21.5	50.2	68.0	81.4
AN:	5.2	0.1	0.0	0.0	0.0	0.5	23.7	50.0	65.3	77.3
BN:	4.5	0.4	0.0	0.0	0.5	3.2	22.8	38.4	43.1	52.7
D:	3.0	0.0	0.0	0.0	0.2	0.9	13.2	24.9	30.6	35.9
C:	2.1	0.1	0.0	0.0	0.0	1.5	11.1	12.8	17.0	20.3

North-of-Delta Deliveries to CVP M&I Contractors (mostly in Area)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
AVG:	12.5	10.9	10.4	10.3	10.8	13.6	21.4	25.5	27.9	29.1
MIN:	3.4	4.3	3.8	5.4	5.4	9.9	13.3	17.7	14.6	11.1
MAX:	19.8	16.1	13.6	12.0	12.8	18.0	26.9	31.1	33.2	35.6
Avg by WYT	PRV	PRV	PRV							
W:	14.6	12.9	11.4	11.1	11.9	14.6	21.8	27.6	30.9	32.4
AN:	16.0	12.1	11.3	10.4	11.2	13.9	23.0	27.4	30.7	32.2
BN:	12.4	11.6	9.9	10.4	10.7	13.4	22.0	25.4	27.3	28.8
D:	10.5	9.3	9.5	10.3	10.6	12.4	19.9	23.7	25.6	26.6
C:	7.7	7.2	8.9	8.3	8.8	13.0	20.8	21.8	23.1	23.1

North-of-Delta Deliveries to CVP Settlement Contractors

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
AVG:	75.7	24.0	7.3	1.4	0.6	7.1	81.0	305.9	352.0	381.6
MIN:	6.2	3.5	0.0	0.0	0.0	0.0	29.1	145.5	287.4	322.0
MAX:	95.9	43.7	20.1	9.0	13.6	58.6	123.7	358.8	398.9	407.7

Avg by WYT	PRV	PRV	PRV							
W:	78.5	24.1	8.8	0.8	0.0	3.1	70.0	301.7	335.8	392.3
AN:	75.4	23.7	6.2	0.5	0.0	1.6	78.0	300.2	350.0	388.8
BN:	75.3	26.6	7.4	2.9	1.9	13.3	90.3	314.4	364.6	390.3
D:	76.9	20.8	7.6	1.7	0.9	7.3	83.2	320.3	378.9	384.4
C:	68.3	27.3	4.5	1.8	0.9	15.3	95.5	289.8	332.8	338.4

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Factors in TAF

		Full Year			
		Oct-Apr	Mar-Feb	Allocation	
AUG	SEP	TOT	TOT	PCT	
45.4	20.2	24.6	230.3	65%	
0.0	0.0	0.5	0.0	0%	
77.5	37.5	65.5	357.1	100%	
65.4	30.0	27.0	324.7	91%	
61.1	27.5	28.1	308.4	86%	
41.8	16.8	32.3	223.7	63%	
28.7	12.2	20.3	149.4	42%	
16.3	7.5	15.6	88.6	25%	

	OCT	NOV	DEC
AVG:	5.2	0.2	0.0
MIN:	0.0	0.0	0.0
MAX:	14.9	1.9	0.0
Avg by WYT	PRV	PRV	PRV
W:	7.2	0.3	0.0
AN:	5.5	0.1	0.0
BN:	5.7	0.5	0.0
D:	3.7	0.0	0.0
C:	2.4	0.1	0.0

American River Basin) in TAF

		Full Year			
		Oct-Apr	Mar-Feb	Allocation	
AUG	SEP	TOT	TOT	PCT	
26.0	19.2	89.9	217.2	86%	
9.6	4.6	62.3	132.6	52%	
32.7	25.3	111.4	253.5	100%	
29.5	21.6	98.7	240.6	95%	
29.3	23.5	92.7	241.8	95%	
26.3	19.9	91.3	218.0	86%	
23.5	16.8	84.6	197.2	78%	
18.7	12.6	75.2	174.3	69%	

North-

	OCT	NOV	DEC
AVG:	13.4	11.5	10.8
MIN:	2.7	4.5	4.0
MAX:	20.7	16.4	13.6
Avg by WYT	PRV	PRV	PRV
W:	16.5	13.7	12.0
AN:	16.5	13.3	11.6
BN:	13.5	12.4	10.6
D:	10.5	9.6	9.8
C:	7.8	7.3	9.0

Factors in TAF

		Full Year			Fraction of
		Oct-Apr	Mar-Feb	Hist Max	
AUG	SEP	TOT	TOT	PCT	
294.3	77.1	197.1	1608.7	94%	
241.0	23.5	60.2	1388.2	81%	
331.1	89.7	302.1	1719.1	100%	

	OCT	NOV	DEC
AVG:	60	30	7
MIN:	6	12	0
MAX:	86	49	20

318.6	81.3	170.6	1617.0	94%	Avg by WYT	PRV	PRV	PRV
298.8	79.0	179.8	1607.9	94%	W:	62	30	9
293.4	69.8	219.5	1646.4	96%	AN:	60	29	6
282.8	76.8	208.6	1640.5	95%	BN:	61	32	7
256.6	72.9	233.4	1504.2	88%	D:	59	27	8
					C:	59	33	5

**ROC on LTO CalSimII Simulation Results - PA**

**North-of-Delta Deliveries to CVP Ag Service Contractors in TAF**

		Allocation/Contract Year								Full Year		
===== >>>>		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Oct-Apr TOT	Mar-Feb TOT
		0.0	0.1	1.4	20.8	40.6	52.5	62.7	50.1	22.1	27.7	254.8
		0.0	0.0	0.0	0.6	0.9	1.2	1.4	1.1	0.5	0.6	6.2
		0.0	4.4	19.9	51.5	63.8	81.5	95.1	75.8	37.5	72.7	357.1
		0.0	0.0	0.8	22.6	51.0	70.0	83.7	67.1	30.8	28.5	333.8
		0.0	0.0	0.6	25.5	51.2	69.7	82.2	65.1	29.2	30.2	328.3
		0.0	0.5	4.3	28.8	50.0	54.9	67.2	53.3	21.1	40.0	285.8
		0.0	0.2	1.1	16.0	30.4	37.4	44.0	35.2	15.0	24.2	182.8
		0.0	0.0	1.7	12.7	14.9	19.3	23.3	18.8	8.1	18.1	101.4

**North-of-Delta Deliveries to CVP M&I Contractors (mostly in American River Basin) in TAF**

		Allocation/Contract Year								Full Year		
===== >>>>		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Oct-Apr TOT	Mar-Feb TOT
		10.4	11.0	13.7	21.7	25.7	28.7	29.9	26.5	20.0	92.4	222.9
		5.2	5.2	8.3	13.4	18.0	18.4	12.5	9.1	4.6	61.9	135.9
		12.0	12.8	18.0	26.9	31.1	33.2	35.6	32.7	26.3	115.2	259.6
		11.2	12.0	14.7	21.9	27.6	31.0	32.5	29.6	23.1	101.4	245.6
		10.7	11.5	14.1	23.1	27.3	30.6	32.4	29.5	23.8	94.8	244.8
		10.5	10.8	13.7	23.0	26.5	29.7	31.4	28.7	21.6	95.0	233.1
		10.1	10.7	12.6	20.3	24.0	26.5	27.6	24.4	17.5	87.0	202.6
		8.9	8.7	12.8	21.0	22.0	24.3	23.7	18.2	12.2	76.8	176.1

**North-of-Delta Deliveries to CVP Settlement Contractors in TAF**

		Allocation/Contract Year								Full Year		
===== >>>>		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Oct-Apr TOT	Mar-Feb TOT
		1	1	7	81	306	352	382	294	77	187	1599
		0	0	0	29	146	287	322	238	24	66	1372
		9	14	59	124	359	399	408	335	90	295	1715

1	0	3	70	302	336	392	319	81	159	1607
0	0	2	78	300	350	389	299	79	169	1597
3	2	13	90	314	365	390	293	70	208	1637
2	1	7	83	320	379	384	283	77	201	1629
2	1	15	96	290	333	338	255	71	227	1498



Allocation

PCT

71%  
2%  
100%

93%  
92%  
80%  
51%  
28%



Allocation

PCT

86%  
52%  
100%

95%  
94%  
90%  
78%  
68%



Fraction of

Hist Max

PCT

93%  
80%  
100%

94%

93%

95%

95%

87%



North-of-Delta Deliveries to CVP Ag Service Contractors

SIMULATED						Allocation/Contract Year						
WATER	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922	4.9	0.0	0.0	0.0	0.0	0.5	44.3	57.9	72.6	82.4	66.2	32.1
1923	1.0	0.0	0.0	0.0	0.0	5.2	14.7	30.8	34.1	42.1	34.0	9.2
1924	4.6	0.4	0.0	0.0	0.0	2.7	13.3	14.9	16.6	18.6	14.9	7.2
1925	0.0	0.0	0.0	0.0	0.0	0.0	10.0	35.6	51.6	66.2	53.0	20.9
1926	9.9	0.0	0.0	0.0	0.0	1.4	3.3	17.2	25.7	29.0	22.7	11.2
1927	1.4	0.0	0.0	0.0	0.0	0.5	34.4	59.2	69.8	87.0	70.3	33.8
1928	1.7	0.0	0.0	0.0	0.0	0.0	13.0	34.3	42.7	48.7	39.3	18.7
1929	6.8	0.0	0.0	0.0	0.0	0.6	14.1	20.8	18.2	25.9	20.9	10.1
1930	4.0	0.6	0.0	0.0	0.0	0.0	3.1	8.8	13.0	14.7	11.9	4.7
1931	1.9	0.0	0.0	0.0	0.0	3.0	10.9	10.2	11.8	15.6	12.6	6.0
1932	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1933	0.0	0.0	0.0	0.0	0.0	1.3	11.6	11.4	13.9	15.7	12.7	6.1
1934	1.4	0.4	0.0	0.0	0.0	0.3	10.1	15.1	17.7	20.9	16.9	6.6
1935	0.0	0.0	0.0	0.0	0.0	0.0	0.5	15.1	23.3	26.1	21.1	9.8
1936	1.6	0.1	0.0	0.0	0.0	0.2	12.9	29.3	33.7	46.5	37.7	17.1
1937	6.9	1.1	0.0	0.0	0.0	0.0	11.4	30.6	33.5	42.4	34.4	16.6
1938	1.4	0.0	0.0	0.0	0.0	0.0	16.7	56.2	81.2	91.3	73.8	28.5
1939	4.6	0.1	0.0	0.0	4.4	17.2	39.3	33.1	44.2	49.3	40.2	15.2
1940	5.0	1.0	0.0	0.0	0.0	0.0	17.0	41.9	57.9	66.2	53.5	24.8
1941	1.3	0.0	0.0	0.0	0.0	0.0	6.8	36.7	77.4	91.8	74.2	35.3
1942	2.5	0.0	0.0	0.0	0.0	0.0	7.3	45.3	81.4	93.5	75.5	35.4
1943	11.4	0.0	0.0	0.0	0.0	0.1	14.6	51.9	55.3	63.9	51.9	25.0
1944	8.2	0.2	0.0	0.0	0.0	0.4	6.8	10.8	14.9	17.9	14.5	7.0
1945	1.7	0.0	0.0	0.0	0.0	0.0	17.1	26.9	38.4	49.2	39.7	19.1
1946	0.1	0.0	0.0	0.0	0.0	1.0	37.4	58.2	56.8	62.6	51.6	24.1
1947	8.8	0.0	0.0	0.0	0.0	0.0	13.3	20.6	22.4	30.2	24.3	11.9
1948	0.1	0.0	0.0	0.0	0.5	1.0	2.8	28.0	47.7	69.7	56.2	23.3
1949	5.1	0.4	0.0	0.0	0.0	0.0	18.1	37.2	45.4	51.2	41.2	19.6
1950	8.3	0.1	0.0	0.0	0.0	0.3	17.5	24.7	28.5	32.8	26.5	11.7
1951	0.3	0.0	0.0	0.0	0.0	1.5	37.5	48.6	64.7	73.2	59.0	28.1
1952	0.5	0.0	0.0	0.0	0.0	0.0	27.2	59.7	67.1	86.0	70.4	33.3
1953	13.3	0.0	0.0	0.0	0.0	3.0	27.2	55.4	71.7	87.8	64.6	34.4
1954	10.4	0.0	0.0	0.0	0.0	0.0	18.2	59.1	67.8	80.3	56.6	30.6
1955	10.5	0.0	0.0	0.0	0.0	3.2	14.3	24.7	29.0	32.8	26.5	10.7
1956	3.9	0.0	0.0	0.0	0.0	5.3	38.5	47.6	71.6	86.8	70.2	29.9
1957	5.5	1.6	0.0	0.0	0.0	3.5	30.2	47.0	57.8	65.0	52.8	9.7
1958	0.0	0.2	0.0	0.0	0.0	0.0	7.9	41.9	73.3	90.2	75.5	35.8
1959	12.9	1.6	0.0	0.0	0.0	1.7	34.6	52.7	49.5	55.8	43.9	9.0
1960	9.0	1.3	0.0	0.0	0.0	0.0	13.9	21.3	30.1	33.9	27.4	13.1

1961	4.6	0.0	0.0	0.0	0.0	0.0	14.7	27.7	34.1	41.3	32.8	13.8
1962	5.9	0.0	0.0	0.0	0.0	0.0	27.6	53.6	52.8	63.3	50.6	23.4
1963	0.0	0.0	0.0	0.0	0.0	0.0	6.3	46.5	81.0	93.9	75.8	36.1
1964	2.5	0.0	0.0	0.0	0.0	3.2	20.9	22.3	23.3	28.7	22.8	9.5
1965	1.1	0.0	0.0	0.0	0.0	2.6	12.0	53.4	55.1	62.5	41.4	24.3
1966	10.1	0.0	0.0	0.0	0.0	1.4	33.4	53.5	50.6	56.8	45.8	21.8
1967	9.3	0.0	0.0	0.0	0.0	0.1	7.3	53.7	62.0	92.4	74.6	35.4
1968	12.7	0.0	0.0	0.0	0.0	0.1	24.9	49.5	46.6	58.9	40.7	22.8
1969	3.9	0.0	0.0	0.0	0.0	0.1	31.4	63.0	71.9	84.2	68.2	32.3
1970	5.4	0.2	0.0	0.0	0.0	0.1	25.2	48.8	42.5	53.1	42.9	20.6
1971	3.9	0.0	0.0	0.0	0.0	2.6	42.6	48.5	56.1	66.0	53.1	24.5
1972	9.5	0.1	0.0	0.0	0.2	8.5	21.0	24.5	28.3	33.5	27.1	9.9
1973	0.1	0.0	0.0	0.0	0.0	0.0	28.6	60.8	68.8	77.5	62.6	28.4
1974	1.2	0.0	0.0	0.0	0.0	0.0	19.7	63.1	80.4	77.1	74.5	36.1
1975	3.8	0.1	0.0	0.0	0.0	0.0	23.0	62.5	78.1	84.9	69.2	34.2
1976	0.6	0.2	0.0	0.0	4.3	7.2	10.2	13.7	15.0	16.9	11.7	5.6
1977	2.5	0.1	0.0	0.0	0.4	4.5	13.2	8.2	14.6	16.6	13.5	4.0
1978	2.3	0.0	0.0	0.0	0.0	0.0	9.1	57.3	81.2	91.6	73.8	26.9
1979	14.9	0.0	0.0	0.0	0.0	0.0	13.9	31.9	40.7	45.8	36.0	16.2
1980	0.8	0.0	0.0	0.0	0.0	0.0	22.8	55.4	58.7	72.1	58.9	27.7
1981	9.4	0.8	0.0	0.0	0.0	0.0	14.7	43.4	54.5	61.4	49.7	20.4
1982	0.4	0.0	0.0	0.0	0.0	0.0	12.0	58.0	69.4	93.5	75.8	21.9
1983	0.0	0.0	0.0	0.0	0.0	0.0	7.4	50.3	77.3	94.2	72.5	28.6
1984	10.2	0.0	0.0	0.0	0.0	1.9	39.6	63.8	59.5	68.6	51.8	25.9
1985	2.5	0.0	0.0	0.0	0.0	0.0	22.5	40.7	48.2	54.9	43.9	13.4
1986	5.4	0.0	0.0	0.0	0.0	0.0	12.1	29.3	40.5	45.6	36.9	11.9
1987	6.6	0.8	0.0	0.0	0.0	0.0	11.9	16.8	19.3	21.6	17.5	8.4
1988	2.2	0.0	0.0	0.0	0.0	1.9	7.7	9.8	13.1	16.4	13.3	6.4
1989	2.5	0.0	0.0	0.0	0.3	0.0	17.4	31.7	34.4	41.7	33.4	1.8
1990	0.9	0.1	0.0	0.0	0.0	1.5	10.8	6.3	13.7	15.5	11.9	5.7
1991	2.2	0.1	0.0	0.0	0.2	0.0	7.2	17.6	23.7	28.4	23.0	11.0
1992	3.6	0.1	0.0	0.0	0.0	0.0	2.2	5.9	6.3	8.4	6.8	3.3
1993	0.1	0.0	0.0	0.0	0.0	0.0	27.9	39.8	68.3	95.1	75.6	37.5
1994	7.1	0.0	0.0	0.0	0.0	2.0	31.9	33.0	54.0	61.1	49.4	23.4
1995	6.8	0.0	0.0	0.0	0.0	0.0	21.5	43.2	70.3	91.6	74.0	35.4
1996	14.8	1.9	0.0	0.0	0.0	0.0	23.3	34.6	79.7	93.3	75.7	33.9
1997	3.6	0.0	0.0	0.0	0.0	3.3	39.9	59.4	49.9	61.1	45.5	21.3
1998	5.3	0.0	0.0	0.0	0.0	0.0	16.1	14.8	72.3	95.8	77.5	34.6
1999	7.2	0.0	0.0	0.0	0.0	0.0	29.2	59.2	69.2	86.0	68.6	33.2
2000	11.5	0.0	0.0	0.0	0.0	0.0	21.0	44.8	73.3	91.0	74.3	30.5
2001	0.1	0.1	0.0	0.0	0.0	0.1	9.8	19.1	22.2	26.7	21.5	8.9
2002	2.4	0.0	0.0	0.0	0.0	2.1	37.7	44.8	50.3	56.7	45.8	22.0
2003	9.3	0.0	0.0	0.0	0.0	0.0	10.8	43.5	81.5	94.1	66.2	36.6

ion results

iveries (TAF

AVG:	4.7	0.2	0.0	0.0	0.1	1.2	18.5	36.9	47.6	56.9	45.4	20.2
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	14.9	1.9	0.0	0.0	4.4	17.2	44.3	63.8	81.5	95.8	77.5	37.5

ROC on LTO **COS** simulat

CVP NOD Ag Service Del

Avg by WYT	PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD
W:	6.9	0.3	0.0	0.0	0.0	0.8	21.5	50.2	68.0	81.4	65.4	30.0	
AN:	5.2	0.1	0.0	0.0	0.0	0.5	23.7	50.0	65.3	77.3	61.1	27.5	
BN:	4.5	0.4	0.0	0.0	0.5	3.2	22.8	38.4	43.1	52.7	41.8	16.8	
D:	3.0	0.0	0.0	0.0	0.2	0.9	13.2	24.9	30.6	35.9	28.7	12.2	
C:	2.1	0.1	0.0	0.0	0.0	1.5	11.1	12.8	17.0	20.3	16.3	7.5	

ts - COS

in TAF

Shasta Storage

Full Year			End-of-April	SIMULATED
Oct-Apr	Mar-Feb	Allocation	(May 1st)	WATER
TOT	TOT	PCT	Volume (TAF)	YEAR
49.7	357.1	100%	4552.0	1922
21.0	175.2	49%	3743.1	1923
20.9	88.2	25%	2500.0	1924
10.0	247.1	69%	4202.8	1925
14.6	112.0	31%	3896.7	1926
36.4	356.8	100%	4552.0	1927
14.7	203.5	57%	4536.7	1928
21.5	115.0	32%	2771.1	1929
7.7	58.1	16%	2916.8	1930
15.8	72.1	20%	1860.3	1931
1.9	0.0	0%	1787.3	1932
12.9	74.6	21%	1716.4	1933
12.1	87.6	25%	1640.1	1934
0.5	97.6	27%	2701.3	1935
14.9	185.4	52%	4126.4	1936
19.4	170.2	48%	4047.6	1937
18.1	356.8	100%	4058.0	1938
65.5	244.5	68%	3617.4	1939
23.0	262.6	74%	4211.6	1940
8.0	324.7	91%	4456.0	1941
9.9	349.9	98%	4510.0	1942
26.1	271.0	76%	4552.0	1943
15.6	74.0	21%	3187.8	1944
18.8	190.6	53%	4155.4	1945
38.4	300.5	84%	4552.0	1946
22.2	123.4	35%	3390.0	1947
4.4	234.2	66%	4304.8	1948
23.5	221.0	62%	4435.9	1949
26.1	142.2	40%	4233.7	1950
39.3	313.1	88%	4516.5	1951
27.7	357.0	100%	4290.0	1952
43.5	354.5	99%	4552.0	1953
28.6	323.1	90%	4546.0	1954
28.0	145.1	41%	3901.0	1955
47.7	356.9	100%	4526.0	1956
40.8	266.2	75%	4535.8	1957
8.1	339.0	95%	4173.0	1958
50.8	257.6	72%	4403.0	1959
24.2	144.2	40%	4173.0	1960

19.3	170.4	48%	4552.0	1961
33.6	271.4	76%	4552.0	1962
6.3	342.1	96%	4137.0	1963
26.6	131.6	37%	3746.6	1964
15.6	261.5	73%	4500.0	1965
44.9	272.7	76%	4552.0	1966
16.7	338.2	95%	4479.0	1967
37.6	247.2	69%	4387.3	1968
35.4	356.9	100%	4434.0	1969
30.9	236.9	66%	4291.1	1970
49.0	303.0	85%	4470.4	1971
39.1	152.9	43%	4552.0	1972
28.7	327.9	92%	4464.5	1973
20.9	354.7	99%	4289.0	1974
26.9	357.0	100%	4449.7	1975
22.5	83.3	23%	3878.5	1976
20.8	77.1	22%	1944.7	1977
11.4	354.7	99%	4552.0	1978
28.8	185.2	52%	4053.4	1979
23.6	305.8	86%	4390.5	1980
24.8	244.4	68%	4273.5	1981
12.4	330.6	93%	4094.0	1982
7.4	340.5	95%	4074.0	1983
51.8	313.5	88%	4552.0	1984
25.0	229.0	64%	3952.7	1985
17.5	183.6	51%	4012.6	1986
19.3	97.7	27%	3623.0	1987
11.8	71.3	20%	3432.6	1988
20.1	161.3	45%	4257.5	1989
13.2	67.9	19%	3256.0	1990
9.7	114.8	32%	2608.7	1991
5.9	33.0	9%	2746.1	1992
28.1	351.4	98%	4552.0	1993
41.0	261.6	73%	3428.3	1994
28.3	352.7	99%	4216.8	1995
40.0	344.1	96%	4477.1	1996
46.8	285.7	80%	4284.2	1997
21.4	318.2	89%	4367.8	1998
36.3	357.0	100%	4552.1	1999
32.5	335.1	94%	4550.5	2000
10.1	110.6	31%	3754.8	2001
42.1	268.7	75%	4552.1	2002
20.0			4552.1	2003

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24.6	230.3	65%
0.5	0.0	0%
65.5	357.1	100%

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ion results	ies (TAF)	AVG:
		MIN:
		MAX:

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FWD	FWD	FWD
27.0	324.7	91%
28.1	308.4	86%
32.3	223.7	63%
20.3	149.4	42%
15.6	88.6	25%

ROC on LTO COS simulat	CVP NOD M&I Deliveri	Avg by WYT
		W:
		AN:
		BN:
		D:
		C:



9.0	6.1	11.0	9.5	10.3	12.5	17.9	21.2	23.9	25.0	23.0	18.3
11.4	7.0	11.2	6.8	10.4	12.5	25.4	27.6	30.4	31.8	28.8	22.6
17.3	16.0	12.8	11.3	12.1	14.4	19.0	28.1	32.6	34.0	31.1	25.3
16.9	10.8	12.4	11.4	8.1	13.7	21.4	20.3	24.0	25.6	22.3	17.6
8.0	14.1	11.0	9.5	10.3	13.8	17.5	29.0	30.3	31.5	27.6	23.5
16.5	10.5	8.4	11.2	12.0	15.8	25.2	26.9	29.5	30.5	28.3	22.2
14.4	16.0	12.8	11.3	12.1	14.4	18.0	29.6	30.8	32.4	30.9	21.6
14.6	14.5	8.7	11.4	12.2	13.0	23.7	28.4	28.0	29.7	26.4	22.8
14.9	9.9	12.3	10.8	11.6	14.5	24.0	28.9	30.8	32.0	29.5	24.5
13.2	14.5	13.0	11.4	12.2	13.1	24.6	28.6	26.3	28.3	26.1	21.9
13.8	9.6	12.1	10.6	11.4	15.0	26.1	26.4	30.3	31.7	29.2	20.3
19.4	14.4	13.0	11.4	12.2	13.7	20.9	23.3	23.8	25.2	23.3	17.4
9.7	14.1	11.0	9.5	10.3	14.4	25.1	28.8	30.9	32.2	29.6	23.8
14.7	16.1	13.0	11.4	12.2	14.4	22.4	29.8	31.2	30.2	30.5	21.5
13.0	14.5	8.7	11.4	12.2	14.4	23.3	29.4	31.7	32.4	29.6	21.2
11.2	14.8	12.5	11.4	12.3	15.1	20.7	23.3	24.5	25.4	21.1	14.0
9.2	6.8	6.2	6.2	6.3	14.9	22.7	20.6	14.6	11.1	9.6	4.6
3.4	6.5	11.6	10.1	10.9	13.1	19.6	29.4	31.5	32.9	30.2	23.8
19.8	12.3	8.7	11.4	12.2	12.4	19.6	24.1	24.8	25.4	23.2	19.6
11.1	14.2	11.2	9.7	10.4	14.4	23.2	28.0	30.3	31.5	29.7	24.4
17.1	11.6	8.7	11.4	12.2	12.5	23.0	28.1	29.2	30.2	27.8	22.2
13.4	15.5	12.4	10.9	11.7	14.4	18.4	31.1	32.7	35.0	32.0	18.7
17.4	16.1	13.0	11.4	12.2	14.4	18.2	29.1	32.6	34.5	31.1	24.6
14.2	16.1	13.0	11.4	12.2	16.2	25.8	28.6	29.4	31.7	28.8	24.1
15.2	16.1	13.0	11.4	12.2	12.5	23.4	25.2	27.4	28.8	26.3	19.2
11.7	9.6	12.1	10.6	11.4	12.4	19.9	23.5	24.5	25.4	23.4	17.2
11.9	7.7	6.5	9.6	10.4	11.6	20.2	23.0	25.3	26.1	22.9	17.2
9.5	6.5	11.4	9.9	6.0	14.9	19.2	21.4	23.5	24.0	18.4	12.3
8.8	6.2	5.9	5.9	5.9	11.0	20.5	23.7	25.6	27.3	23.1	13.2
7.9	6.3	5.8	9.5	10.3	12.7	21.0	19.1	24.6	23.3	19.5	11.1
8.0	5.9	5.4	5.4	5.4	12.1	20.3	23.6	25.6	26.5	22.7	17.6
7.6	6.5	5.7	5.7	10.3	11.1	17.6	19.2	20.0	21.7	19.5	14.6
6.9	5.8	10.3	8.8	9.6	14.4	24.0	26.1	30.2	33.3	30.3	25.3
18.6	15.0	12.6	11.5	12.2	16.0	25.4	25.7	29.9	30.8	27.7	21.6
13.7	10.6	12.8	11.3	12.1	14.4	21.6	25.7	30.3	33.8	31.1	24.0
15.5	10.6	13.0	11.4	12.2	14.8	22.9	23.9	33.2	34.9	31.3	22.6
11.8	8.7	13.3	11.8	12.6	18.0	26.9	28.6	30.0	31.5	24.3	16.7
10.5	8.6	13.6	12.0	12.8	14.4	22.1	21.8	33.2	35.6	32.7	21.4
12.6	16.1	13.0	11.4	12.2	14.5	24.7	29.3	31.5	30.8	26.1	16.0
11.4	8.2	7.7	11.5	12.3	14.7	24.7	28.2	32.2	33.9	29.5	21.2
8.4	8.6	7.7	11.4	12.2	12.9	19.7	23.6	25.4	26.6	23.3	16.9
9.9	6.6	11.5	10.0	10.8	13.1	25.6	26.5	27.6	31.0	28.6	23.9
19.5	14.8	12.8	11.3	12.1	14.6	19.3	28.0	32.6	33.6	28.9	23.3

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12.5	10.9	10.4	10.3	10.8	13.6	21.4	25.5	27.9	29.1	26.0	19.2
3.4	4.3	3.8	5.4	5.4	9.9	13.3	17.7	14.6	11.1	9.6	4.6
19.8	16.1	13.6	12.0	12.8	18.0	26.9	31.1	33.2	35.6	32.7	25.3

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PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD
14.6	12.9	11.4	11.1	11.9	14.6	21.8	27.6	30.9	32.4	29.5	21.6
16.0	12.1	11.3	10.4	11.2	13.9	23.0	27.4	30.7	32.2	29.3	23.5
12.4	11.6	9.9	10.4	10.7	13.4	22.0	25.4	27.3	28.8	26.3	19.9
10.5	9.3	9.5	10.3	10.6	12.4	19.9	23.7	25.6	26.6	23.5	16.8
7.7	7.2	8.9	8.3	8.8	13.0	20.8	21.8	23.1	23.1	18.7	12.6

**TAF****Shasta Storage**

Full Year			End-of-April
Oct-Apr	Mar-Feb	Allocation	(May 1st)
TOT	TOT	PCT	Volume (TAF)
109.3	249.4	98%	4552.0
95.0	183.7	72%	3743.1
78.4	188.4	74%	2500.0
79.1	215.1	85%	4202.8
80.0	193.2	76%	3896.7
89.3	249.7	98%	4552.0
98.0	206.4	81%	4536.7
82.8	182.8	72%	2771.1
75.5	168.1	66%	2916.8
72.2	173.8	69%	1860.3
66.1	132.6	52%	1787.3
62.5	174.9	69%	1716.4
79.1	184.0	73%	1640.1
67.8	187.4	74%	2701.3
74.0	188.0	74%	4126.4
71.1	206.0	81%	4047.6
93.4	240.3	95%	4058.0
98.9	225.5	89%	3617.4
87.9	243.1	96%	4211.6
97.3	249.3	98%	4456.0
101.3	240.9	95%	4510.0
96.9	243.3	96%	4552.0
95.2	180.4	71%	3187.8
77.8	204.9	81%	4155.4
94.2	241.8	95%	4552.0
93.9	177.7	70%	3390.0
62.3	223.5	88%	4304.8
90.3	211.0	83%	4435.9
81.9	204.2	81%	4233.7
101.3	246.8	97%	4516.5
100.0	244.6	96%	4290.0
103.5	239.3	94%	4552.0
96.2	244.5	96%	4546.0
94.6	190.2	75%	3901.0
87.7	244.1	96%	4526.0
99.8	243.3	96%	4535.8
95.5	244.1	96%	4173.0
105.2	227.4	90%	4403.0
89.2	184.8	73%	4173.0

76.3	188.5	74%	4552.0
84.7	248.5	98%	4552.0
102.9	244.2	96%	4137.0
94.8	198.0	78%	3746.6
84.2	231.8	91%	4500.0
99.5	245.0	97%	4552.0
99.0	239.1	94%	4479.0
98.0	231.4	91%	4387.3
98.0	248.3	98%	4434.0
101.9	226.3	89%	4291.1
98.5	249.3	98%	4470.4
104.9	202.3	80%	4552.0
94.1	252.2	99%	4464.5
104.2	239.9	95%	4289.0
97.5	244.1	96%	4449.7
97.9	178.7	71%	3878.5
72.2	140.6	55%	1944.7
75.2	244.9	97%	4552.0
96.4	205.7	81%	4053.4
94.2	242.5	96%	4390.5
96.4	236.8	93%	4273.5
96.7	252.5	100%	4094.0
102.8	251.5	99%	4074.0
108.9	252.5	100%	4552.0
103.7	218.1	86%	3952.7
87.6	192.4	76%	4012.6
78.0	189.8	75%	3623.0
77.5	166.6	66%	3432.6
64.3	184.2	73%	4257.5
73.4	161.3	64%	3256.0
62.4	184.3	73%	2608.7
64.6	164.9	65%	2746.1
79.8	253.5	100%	4552.0
111.4	237.7	94%	3428.3
96.5	243.6	96%	4216.8
100.4	241.8	95%	4477.1
103.1	233.6	92%	4284.2
94.1	246.7	97%	4367.8
104.6	224.0	88%	4552.1
90.5	232.6	92%	4550.5
80.9	197.1	78%	3754.8
87.4	246.7	97%	4552.1
104.2			4552.1

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89.9	217.2	86%
62.3	132.6	52%
111.4	253.5	100%

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ion results

FWD	FWD	FWD
98.7	240.6	95%
92.7	241.8	95%
91.3	218.0	86%
84.6	197.2	78%
75.2	174.3	69%

ROC on LTO **COS** simulat

North-of-Delta Deliveries to CVP Settlement Contr

SIMULATED						<===== Allocation/Contract Year				
WATER	=====	=====	=====	=====	=====					
YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
1922	79.5	29.1	0.0	1.5	0.0	0.8	103.7	321.6	353.4	385.8
1923	63.8	9.4	0.0	0.0	0.0	31.9	62.6	340.3	372.2	399.1
1924	83.5	36.8	16.0	0.0	0.0	23.0	103.1	325.4	331.7	322.0
1925	49.5	25.2	0.0	3.8	0.0	0.0	67.5	250.3	369.8	388.8
1926	92.8	30.9	12.2	0.0	0.0	14.8	41.5	311.1	398.9	384.2
1927	67.0	6.1	13.3	0.0	0.0	1.2	80.0	321.4	325.8	394.2
1928	67.0	18.5	5.0	0.0	0.0	0.0	75.2	329.2	347.4	382.8
1929	89.0	15.8	5.8	7.4	0.0	8.1	85.8	330.1	287.4	325.7
1930	76.8	37.7	0.0	0.0	0.0	0.0	73.4	303.1	390.7	383.1
1931	86.9	30.3	19.2	0.0	0.0	31.4	106.0	281.3	302.7	325.7
1932	68.4	24.3	0.0	0.9	0.0	9.3	97.5	296.3	373.2	379.3
1933	92.0	37.1	8.9	0.0	0.0	17.7	101.2	302.7	333.8	324.3
1934	63.5	37.7	0.0	5.1	0.0	4.6	88.7	305.3	323.6	327.2
1935	6.2	11.6	9.3	0.0	0.0	0.0	33.2	316.7	394.4	397.1
1936	70.9	30.5	10.1	0.0	0.0	1.9	76.4	305.0	339.5	393.1
1937	90.7	43.6	10.2	0.0	0.0	0.0	75.5	337.1	358.7	396.0
1938	71.5	12.2	2.2	0.0	0.0	0.0	66.8	308.3	349.1	394.8
1939	70.3	33.5	15.7	4.3	13.0	42.5	107.4	287.1	353.9	345.9
1940	68.0	32.4	12.1	0.0	0.0	0.0	77.4	278.0	354.9	388.7
1941	67.7	25.1	0.0	0.0	0.0	0.0	32.3	251.4	351.6	402.3
1942	69.5	25.2	0.0	0.0	0.0	0.0	33.4	280.0	355.2	397.5
1943	87.9	26.0	2.6	0.0	0.0	0.1	61.9	327.4	339.3	392.1
1944	88.0	33.9	10.4	0.0	0.0	6.3	88.9	293.5	375.1	383.4
1945	76.8	14.4	8.1	1.5	0.0	0.0	95.5	282.2	359.4	397.9
1946	57.7	21.3	0.0	6.5	0.0	4.5	108.7	327.9	379.0	384.3
1947	86.3	25.1	1.8	8.7	0.0	1.6	89.5	327.0	350.5	389.2
1948	58.7	29.0	13.9	7.9	6.2	11.8	31.9	220.4	347.4	407.7
1949	81.9	35.2	2.7	5.0	0.4	0.0	91.9	293.8	385.6	379.8
1950	92.3	31.8	14.4	0.0	0.0	4.3	96.3	341.2	381.1	393.8
1951	59.0	17.1	0.0	0.0	0.0	3.5	101.9	280.3	357.0	388.4
1952	61.6	17.0	0.0	0.0	0.0	0.0	81.5	326.3	314.4	389.1
1953	92.3	25.6	0.0	0.0	0.0	10.5	71.6	309.7	329.9	397.6
1954	86.8	20.5	18.4	0.0	0.0	0.0	62.7	324.4	346.8	388.3
1955	89.3	13.4	3.3	0.0	0.0	23.2	84.8	333.7	384.6	378.1
1956	84.5	23.8	0.0	0.0	0.0	16.6	95.6	281.7	333.9	394.2
1957	68.0	41.3	20.0	0.0	0.0	11.2	89.0	292.9	368.0	396.3
1958	59.5	36.6	7.4	0.0	0.0	0.0	34.4	272.7	329.3	387.9
1959	91.5	41.4	14.4	0.0	0.0	7.6	112.7	349.1	378.1	392.5
1960	91.5	43.7	12.7	0.0	0.0	0.3	85.3	301.2	387.6	381.1

1961	88.7	13.0	10.0	0.0	0.0	0.0	86.2	318.3	372.3	383.0
1962	89.8	20.1	6.8	6.0	0.0	0.0	100.5	329.8	371.7	395.2
1963	52.5	33.8	6.5	0.0	0.0	0.0	34.2	290.2	352.3	398.4
1964	66.8	10.2	17.7	0.0	0.0	26.3	123.7	343.6	362.6	378.0
1965	67.8	11.6	3.3	0.0	0.0	15.7	60.3	334.6	345.1	393.7
1966	93.7	10.0	9.3	0.3	0.0	6.9	104.1	341.7	374.6	386.3
1967	91.6	6.5	4.6	0.0	0.0	0.0	29.1	319.4	296.4	396.3
1968	90.0	30.3	13.8	0.0	0.0	0.0	95.5	327.3	357.9	395.9
1969	73.8	18.5	0.3	0.0	0.0	0.3	87.3	340.1	333.5	389.2
1970	74.1	33.8	0.0	0.0	0.0	0.5	106.5	343.6	319.7	390.1
1971	73.1	4.6	2.7	3.3	0.0	10.9	112.6	285.9	335.9	392.6
1972	89.3	31.5	3.9	5.7	1.2	43.6	110.2	335.5	371.6	395.9
1973	59.8	7.5	8.3	0.0	0.0	0.0	93.4	330.0	353.5	385.0
1974	63.5	5.8	5.6	0.0	0.0	0.0	64.2	333.1	344.4	345.3
1975	69.7	32.5	1.8	8.2	0.0	0.0	75.6	335.3	347.4	383.7
1976	58.3	35.5	17.5	9.0	13.6	58.6	100.5	358.8	360.7	356.6
1977	91.3	34.5	15.8	0.0	7.5	38.8	114.2	241.9	336.8	329.6
1978	75.1	18.7	2.9	0.0	0.0	0.0	47.0	320.6	357.6	388.4
1979	95.1	25.9	17.0	0.0	0.0	0.1	78.5	330.8	387.7	395.4
1980	61.3	18.5	0.0	0.0	0.0	0.0	79.2	309.1	337.9	382.5
1981	86.4	38.1	4.4	0.0	0.0	0.0	78.5	305.8	395.7	387.3
1982	59.6	7.5	2.9	0.0	0.0	0.0	43.9	330.9	322.6	401.4
1983	56.0	9.8	8.2	0.0	0.0	0.0	35.1	302.0	340.8	400.3
1984	85.1	3.5	0.0	8.2	0.0	8.8	106.3	352.0	335.2	392.3
1985	66.8	3.6	11.9	6.0	0.0	0.0	96.1	340.0	384.7	384.2
1986	77.6	12.7	8.3	0.0	0.0	0.0	78.6	318.6	346.0	394.6
1987	89.9	40.6	14.1	0.0	0.3	0.7	96.9	345.0	383.5	376.8
1988	81.7	20.4	0.0	0.0	0.0	29.6	89.2	293.5	341.3	355.9
1989	92.8	22.3	6.8	7.8	4.4	1.0	84.4	355.8	380.3	395.8
1990	63.7	31.8	20.1	0.0	0.0	12.1	119.8	223.9	369.0	358.8
1991	90.3	37.0	15.1	8.2	3.2	0.0	71.1	287.9	323.7	327.7
1992	70.0	30.6	6.2	0.0	0.0	0.0	78.2	337.4	334.2	357.1
1993	63.4	35.1	0.0	0.0	0.0	0.0	79.0	245.7	316.5	391.7
1994	77.4	24.2	12.2	0.0	0.0	9.6	91.7	251.5	336.0	327.0
1995	72.3	10.6	4.9	0.0	0.0	0.0	66.8	254.0	318.8	395.3
1996	95.9	43.4	0.0	0.0	0.0	0.0	74.6	217.2	351.7	398.4
1997	72.6	25.1	0.0	0.0	0.0	17.6	117.7	334.0	325.9	393.3
1998	74.7	7.8	9.8	0.0	0.0	0.0	65.9	145.5	335.1	402.5
1999	81.5	21.4	15.9	0.7	0.0	0.0	80.5	327.3	322.9	390.5
2000	86.6	25.1	19.7	0.0	0.0	0.2	75.4	266.5	341.4	393.2
2001	58.0	33.7	18.7	0.0	0.0	0.0	76.1	338.8	373.7	382.1
2002	81.9	9.5	0.0	0.0	0.0	9.7	111.6	300.3	384.2	378.4
2003	92.0	22.7	0.0	0.0	0.0	0.0	45.3	277.0	364.3	390.0

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AVG:	75.7	24.0	7.3	1.4	0.6	7.1	81.0	305.9	352.0	381.6
MIN:	6.2	3.5	0.0	0.0	0.0	0.0	29.1	145.5	287.4	322.0
MAX:	95.9	43.7	20.1	9.0	13.6	58.6	123.7	358.8	398.9	407.7

CVP Settlement Cont  
Deliveries (TAF)

Avg by WYT	PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD
W:	78.5	24.1	8.8	0.8	0.0	3.1	70.0	301.7	335.8	392.3	
AN:	75.4	23.7	6.2	0.5	0.0	1.6	78.0	300.2	350.0	388.8	
BN:	75.3	26.6	7.4	2.9	1.9	13.3	90.3	314.4	364.6	390.3	
D:	76.9	20.8	7.6	1.7	0.9	7.3	83.2	320.3	378.9	384.4	
C:	68.3	27.3	4.5	1.8	0.9	15.3	95.5	289.8	332.8	338.4	

Results - COS

actors in TAF

Shasta Storage

=====		Full Year		Fraction of	End-of-April
AUG	SEP	Oct-Apr	Mar-Feb	Hist Max	(May 1st)
		TOT	TOT	PCT	Volume (TAF)
298.6	85.3	214.6	1622.5	94%	4552.0
305.8	53.6	167.7	1701.7	99%	3743.1
244.7	70.9	262.4	1499.2	87%	2500.0
283.9	74.5	146.0	1570.8	91%	4202.8
276.4	86.0	192.2	1599.3	93%	3896.7
323.3	86.2	167.5	1622.6	94%	4552.0
296.7	82.8	165.7	1632.1	95%	4536.7
248.3	72.4	211.9	1472.3	86%	2771.1
280.6	71.6	187.9	1638.8	95%	2916.8
248.4	72.1	273.8	1461.1	85%	1860.3
278.0	82.9	200.3	1654.6	96%	1787.3
247.3	71.0	257.0	1504.3	88%	1716.4
249.7	62.1	199.4	1388.2	81%	1640.1
305.1	84.1	60.2	1642.0	96%	2701.3
302.7	81.8	189.8	1645.0	96%	4126.4
304.4	86.7	220.0	1644.3	96%	4047.6
323.9	72.0	152.7	1651.8	96%	4058.0
253.8	58.8	286.7	1561.9	91%	3617.4
301.9	83.8	189.9	1577.6	92%	4211.6
330.5	89.7	125.2	1552.6	90%	4456.0
326.3	85.9	128.1	1594.7	93%	4510.0
322.6	85.8	178.5	1661.5	97%	4552.0
281.6	85.5	227.4	1614.9	94%	3187.8
305.2	87.0	196.3	1612.7	94%	4155.4
299.1	80.3	198.7	1705.7	99%	4552.0
284.9	88.9	213.1	1647.5	96%	3390.0
311.8	78.6	159.5	1534.8	89%	4304.8
277.5	82.4	217.1	1649.6	96%	4435.9
301.9	78.3	239.1	1673.0	97%	4233.7
300.8	84.9	181.4	1595.3	93%	4516.5
322.0	82.9	160.1	1634.1	95%	4290.0
299.9	88.3	200.1	1633.3	95%	4552.0
272.5	84.8	188.3	1585.4	92%	4546.0
277.3	69.7	214.0	1659.6	97%	3901.0
323.3	76.9	220.5	1651.5	96%	4526.0
308.6	44.5	229.6	1614.2	94%	4535.8
325.6	86.5	137.9	1583.9	92%	4173.0
295.2	36.0	267.7	1719.1	100%	4403.0
280.5	84.3	233.5	1631.9	95%	4173.0



277.6	76.2	198.0	1636.3	95%	4552.0
300.7	81.9	223.3	1672.8	97%	4552.0
327.1	86.7	127.0	1583.6	92%	4137.0
274.7	75.0	244.7	1666.8	97%	3746.6
276.7	86.0	158.7	1625.5	95%	4500.0
296.1	80.6	224.3	1693.0	98%	4552.0
325.0	85.6	131.8	1585.9	92%	4479.0
272.2	85.7	229.5	1627.1	95%	4387.3
319.6	82.5	180.2	1660.3	97%	4434.0
319.7	83.1	214.8	1646.8	96%	4291.1
320.9	79.7	207.2	1670.2	97%	4470.4
304.1	66.2	285.5	1702.8	99%	4552.0
298.7	78.3	169.0	1613.6	94%	4464.5
327.7	89.6	139.1	1616.5	94%	4289.0
315.5	86.2	187.8	1677.5	98%	4449.7
241.0	73.5	293.0	1698.9	99%	3878.5
252.7	45.9	302.1	1456.6	85%	1944.7
301.0	67.4	143.7	1620.0	94%	4552.0
299.9	81.0	216.6	1653.1	96%	4053.4
301.3	83.8	158.9	1622.7	94%	4390.5
285.7	75.4	207.4	1598.4	93%	4273.5
329.8	56.9	114.0	1559.5	91%	4094.0
317.1	70.7	109.1	1562.9	91%	4074.0
305.1	81.4	211.9	1669.5	97%	4552.0
279.4	57.1	184.4	1640.1	95%	3952.7
323.7	59.1	177.2	1665.6	97%	4012.6
276.4	82.1	242.5	1663.5	97%	3623.0
272.8	84.7	220.9	1601.2	93%	3432.6
288.7	23.5	219.4	1645.0	96%	4257.5
263.2	82.2	247.5	1582.8	92%	3256.0
249.6	73.1	224.9	1439.8	84%	2608.7
275.2	86.3	184.9	1566.8	91%	2746.1
300.9	88.1	177.5	1535.6	89%	4552.0
249.3	71.4	215.1	1424.1	83%	3428.3
324.2	85.8	154.5	1584.3	92%	4216.8
328.0	82.9	213.9	1550.5	90%	4477.1
301.6	77.5	233.0	1659.9	97%	4284.2
331.1	82.8	158.3	1482.4	86%	4367.8
317.9	83.8	200.0	1654.2	96%	4552.1
308.2	74.4	207.0	1569.7	91%	4550.5
280.5	75.4	186.5	1618.0	94%	3754.8
277.3	82.4	212.6	1658.7	96%	4552.1
271.9	87.9	160.0			4552.1

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294.3	77.1	197.1	1608.7	94%
241.0	23.5	60.2	1388.2	81%
331.1	89.7	302.1	1719.1	100%

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FWD	FWD	FWD	FWD	FWD
318.6	81.3	170.6	1617.0	94%
298.8	79.0	179.8	1607.9	94%
293.4	69.8	219.5	1646.4	96%
282.8	76.8	208.6	1640.5	95%
256.6	72.9	233.4	1504.2	88%

ROC on LTO CalSimII Simulation

North-of-Delta Deliveries to CVP Ag Service Contra

SIMULATED		Allocation/Contract Year											
WATER		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1922		4.9	0.0	0.0	0.0	0.0	0.5	44.3	57.9	72.6	82.4	66.2	32.1
1923		1.0	0.0	0.0	0.0	0.0	9.2	26.2	62.8	61.7	76.1	61.4	16.5
1924		8.3	0.7	0.0	0.0	0.0	3.0	14.9	16.8	18.6	20.9	16.8	8.1
1925		0.0	0.0	0.0	0.0	0.0	0.0	10.7	42.1	67.1	86.0	68.9	27.1
1926		12.9	0.0	0.0	0.0	0.0	1.5	3.4	17.8	26.7	30.1	23.6	11.6
1927		1.5	0.0	0.0	0.0	0.0	0.5	34.4	59.2	69.8	87.0	70.3	33.8
1928		1.7	0.0	0.0	0.0	0.0	0.0	13.1	36.1	44.8	51.1	41.3	19.7
1929		7.1	0.0	0.0	0.0	0.0	0.9	20.3	29.9	26.2	37.3	30.2	14.5
1930		5.7	0.9	0.0	0.0	0.0	0.0	5.1	13.9	20.6	23.2	18.7	7.5
1931		3.0	0.0	0.0	0.0	0.0	3.6	12.9	12.1	14.0	18.5	14.9	7.1
1932		2.2	0.0	0.0	0.0	0.0	0.1	0.7	0.9	1.2	1.4	1.1	0.5
1933		0.2	0.0	0.0	0.0	0.0	1.4	13.0	12.7	15.5	17.6	14.2	6.8
1934		1.5	0.4	0.0	0.0	0.0	0.3	11.3	16.9	19.8	23.4	19.0	0.8
1935		0.0	0.0	0.0	0.0	0.0	0.0	0.6	16.8	25.8	29.0	23.4	10.8
1936		1.7	0.2	0.0	0.0	0.0	0.2	13.5	30.7	35.4	48.7	39.5	17.9
1937		7.2	1.1	0.0	0.0	0.0	0.0	11.6	31.3	34.2	43.4	35.1	16.9
1938		1.4	0.0	0.0	0.0	0.0	0.0	16.7	56.2	81.2	91.3	73.8	28.5
1939		4.6	0.1	0.0	0.0	4.4	19.9	43.7	36.6	49.6	55.1	45.2	17.2
1940		5.8	1.3	0.0	0.0	0.0	0.0	18.0	48.4	61.4	70.3	56.8	26.3
1941		1.3	0.0	0.0	0.0	0.0	0.0	6.8	36.7	77.4	91.8	74.2	35.3
1942		2.5	0.0	0.0	0.0	0.0	0.0	7.3	45.3	81.4	93.5	75.5	35.4
1943		11.4	0.0	0.0	0.0	0.0	0.1	17.2	58.9	65.1	75.1	61.0	29.4
1944		9.6	0.2	0.0	0.0	0.0	0.8	12.3	20.3	27.8	33.5	27.1	13.0
1945		3.1	0.0	0.0	0.0	0.0	0.0	25.3	50.2	56.7	72.6	58.6	28.2
1946		0.1	0.0	0.0	0.0	0.0	1.1	45.2	58.2	68.7	75.7	62.4	29.1
1947		10.7	0.0	0.0	0.0	0.0	0.0	18.1	28.0	30.4	41.0	33.0	16.1
1948		0.2	0.0	0.0	0.0	0.7	1.8	3.7	30.7	61.3	89.6	72.1	29.7
1949		6.2	0.5	0.0	0.0	0.0	0.0	21.4	43.9	53.6	60.5	48.7	23.1
1950		9.8	0.1	0.0	0.0	0.0	0.2	17.2	24.2	27.9	32.2	26.0	11.4
1951		0.3	0.0	0.0	0.0	0.0	1.6	42.0	48.6	72.5	82.1	66.2	31.5
1952		0.5	0.0	0.0	0.0	0.0	0.0	27.2	59.7	67.1	86.0	70.4	33.3
1953		13.3	0.0	0.0	0.0	0.0	3.7	28.0	55.4	71.7	87.8	64.6	34.4
1954		10.4	0.0	0.0	0.0	0.0	0.0	18.7	59.1	71.3	84.4	59.5	32.2
1955		11.1	0.0	0.0	0.0	0.0	3.6	15.9	27.6	32.3	36.6	29.6	12.0
1956		4.4	0.0	0.0	0.0	0.0	5.3	38.5	47.6	71.6	86.8	70.2	29.9
1957		5.5	1.6	0.0	0.0	0.0	4.1	32.3	54.1	67.1	75.7	61.2	11.2
1958		0.0	0.2	0.0	0.0	0.0	0.0	7.9	41.9	73.3	90.2	75.5	35.8
1959		12.9	1.6	0.0	0.0	0.0	2.2	44.2	63.1	63.4	71.4	56.2	11.6
1960		11.5	1.7	0.0	0.0	0.0	0.0	11.1	17.1	24.1	27.2	22.0	10.5

1961	3.7	0.0	0.0	0.0	0.0	0.0	16.4	30.8	37.8	45.8	36.4	15.3
1962	6.6	0.0	0.0	0.0	0.0	0.0	31.6	60.8	60.3	72.4	57.9	26.8
1963	0.0	0.0	0.0	0.0	0.0	0.0	6.3	46.5	80.9	93.8	75.8	36.1
1964	2.5	0.0	0.0	0.0	0.0	4.2	27.5	29.3	30.6	37.7	29.9	12.5
1965	1.4	0.0	0.0	0.0	0.0	2.7	12.4	61.5	64.6	73.3	48.6	28.5
1966	11.8	0.0	0.0	0.0	0.0	1.9	44.2	60.4	67.0	75.2	60.6	28.8
1967	12.4	0.0	0.0	0.0	0.0	0.1	7.3	53.7	62.0	92.4	74.7	35.4
1968	12.7	0.0	0.0	0.0	0.0	0.1	30.5	61.6	57.1	72.3	49.9	28.0
1969	4.8	0.0	0.0	0.0	0.0	0.1	31.4	63.0	71.9	84.2	68.2	32.3
1970	5.4	0.2	0.0	0.0	0.0	0.1	27.9	54.0	47.0	58.7	47.4	22.8
1971	4.3	0.0	0.0	0.0	0.0	3.3	51.5	48.5	67.9	79.9	64.3	29.6
1972	11.4	0.1	0.0	0.0	0.2	11.5	27.7	29.8	34.5	40.8	33.0	12.1
1973	0.2	0.0	0.0	0.0	0.0	0.0	31.7	60.8	76.3	85.9	69.4	31.5
1974	1.3	0.0	0.0	0.0	0.0	0.0	19.7	63.1	80.4	77.1	74.5	36.1
1975	3.8	0.1	0.0	0.0	0.0	0.0	23.0	62.5	78.1	84.9	69.2	34.2
1976	0.6	0.2	0.0	0.0	4.3	8.3	11.7	15.7	17.1	19.4	13.4	6.4
1977	2.9	0.1	0.0	0.0	0.4	4.6	13.3	8.3	14.7	16.7	13.6	4.1
1978	1.7	0.0	0.0	0.0	0.0	0.0	9.5	57.3	81.2	91.6	73.8	26.9
1979	14.9	0.0	0.0	0.0	0.0	0.0	19.2	52.8	56.2	63.2	49.7	22.3
1980	1.1	0.0	0.0	0.0	0.0	0.0	26.2	55.4	69.3	85.0	69.5	32.6
1981	11.0	0.9	0.0	0.0	0.0	0.0	19.7	54.4	73.2	82.5	66.8	27.4
1982	0.5	0.0	0.0	0.0	0.0	0.0	12.0	58.0	69.4	93.5	75.8	21.9
1983	0.0	0.0	0.0	0.0	0.0	0.0	7.4	50.3	77.3	94.2	72.5	28.6
1984	10.2	0.0	0.0	0.0	0.0	2.2	45.4	63.8	68.1	78.5	59.3	29.6
1985	2.8	0.0	0.0	0.0	0.0	0.0	26.5	63.4	56.8	64.5	51.6	15.8
1986	6.4	0.0	0.0	0.0	0.0	0.0	12.6	30.5	42.3	47.6	38.4	12.4
1987	6.9	0.8	0.0	0.0	0.0	0.1	22.0	31.0	35.5	39.8	32.2	15.4
1988	4.1	0.0	0.0	0.0	0.0	3.0	12.1	15.5	20.6	25.8	20.9	10.0
1989	3.9	0.0	0.0	0.0	0.4	0.0	19.1	34.8	37.8	45.8	36.7	1.9
1990	1.0	0.1	0.0	0.0	0.0	1.3	9.9	5.7	12.5	14.1	10.8	5.2
1991	2.0	0.1	0.0	0.0	0.1	0.0	7.3	17.8	24.0	28.8	23.3	11.1
1992	3.7	0.1	0.0	0.0	0.0	0.0	3.1	8.4	9.0	11.8	9.6	4.6
1993	0.2	0.0	0.0	0.0	0.0	0.0	27.9	39.8	68.3	95.1	75.6	37.5
1994	7.1	0.0	0.0	0.0	0.0	2.1	33.0	34.2	56.0	63.4	51.2	24.5
1995	7.3	0.0	0.0	0.0	0.0	0.0	21.5	43.2	70.3	91.6	74.0	35.4
1996	14.8	1.9	0.0	0.0	0.0	0.0	23.3	34.6	79.7	93.3	75.7	33.9
1997	3.6	0.0	0.0	0.0	0.0	3.9	46.8	59.4	58.5	71.8	53.4	25.0
1998	6.3	0.0	0.0	0.0	0.0	0.0	16.1	14.8	69.8	91.2	73.6	31.9
1999	6.4	0.0	0.0	0.0	0.0	0.0	29.2	59.2	69.2	86.0	68.6	33.2
2000	11.5	0.0	0.0	0.0	0.0	0.0	21.0	44.8	73.3	91.0	74.3	30.5
2001	0.1	0.1	0.0	0.0	0.0	0.1	13.0	25.1	29.2	35.2	28.4	11.7
2002	3.1	0.0	0.0	0.0	0.0	2.4	45.1	50.9	60.2	67.9	54.9	26.3
2003	11.1	0.0	0.0	0.0	0.0	0.0	10.8	43.5	81.5	94.1	66.2	36.6

on results

veries (TAF

AVG:	5.2	0.2	0.0	0.0	0.1	1.4	20.8	40.6	52.5	62.7	50.1	22.1
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9	1.2	1.4	1.1	0.5
MAX:	14.9	1.9	0.0	0.0	4.4	19.9	51.5	63.8	81.5	95.1	75.8	37.5

ROC on LTO PA simulatit

CVP NOD Ag Service Deli

Avg by WYT	PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD
W:	7.2	0.3	0.0	0.0	0.0	0.8	22.6	51.0	70.0	83.7	67.1	30.8	
AN:	5.5	0.1	0.0	0.0	0.0	0.6	25.5	51.2	69.7	82.2	65.1	29.2	
BN:	5.7	0.5	0.0	0.0	0.5	4.3	28.8	50.0	54.9	67.2	53.3	21.1	
D:	3.7	0.0	0.0	0.0	0.2	1.1	16.0	30.4	37.4	44.0	35.2	15.0	
C:	2.4	0.1	0.0	0.0	0.0	1.7	12.7	14.9	19.3	23.3	18.8	8.1	

**Results - PA**

**ctors in TAF**

**Shasta Storage**

Full Year		Allocation	End-of-April
Oct-Apr	Mar-Feb		(May 1st)
TOT	TOT	PCT	Volume (TAF)
49.7	357.1	100%	4552.0
36.5	322.9	90%	4303.7
27.0	99.2	28%	2520.9
10.7	314.8	88%	4271.7
17.7	116.1	33%	3888.7
36.4	356.9	100%	4552.0
14.8	213.2	60%	4536.7
28.3	165.9	46%	3205.2
11.6	92.0	26%	3229.9
19.5	85.3	24%	2072.0
3.0	6.2	2%	1884.3
14.6	83.1	23%	1853.1
13.6	91.6	26%	1667.0
0.6	108.4	30%	2701.3
15.7	194.4	54%	4133.1
20.0	173.9	49%	4078.8
18.2	356.8	100%	4058.0
72.7	274.4	77%	3845.6
25.0	282.6	79%	4211.6
8.1	324.7	91%	4456.0
9.9	349.9	98%	4510.0
28.7	316.5	89%	4552.0
22.9	137.8	39%	3750.6
28.3	291.6	82%	4517.6
46.4	351.1	98%	4552.0
28.8	167.4	47%	3822.6
6.3	295.7	83%	4405.4
28.1	261.0	73%	4431.0
27.3	139.4	39%	4117.0
44.0	345.1	97%	4516.5
27.8	357.0	100%	4290.0
45.0	356.0	100%	4552.0
29.1	336.3	94%	4546.0
30.5	161.9	45%	4107.9
48.1	356.9	100%	4526.0
43.5	306.0	86%	4535.8
8.1	339.0	95%	4173.0
61.0	325.3	91%	4330.6
24.3	115.7	32%	4117.5

20.0	189.0	53%	4512.9
38.2	309.7	87%	4552.0
6.3	342.0	96%	4137.0
34.2	173.0	48%	3964.4
16.5	303.4	85%	4500.0
57.9	350.5	98%	4552.0
19.7	338.2	95%	4479.0
43.3	304.3	85%	4387.3
36.3	356.8	100%	4434.0
33.6	262.2	73%	4291.1
59.1	356.7	100%	4470.4
51.0	189.6	53%	4536.6
31.8	357.0	100%	4459.3
21.0	354.7	99%	4289.0
26.9	357.0	100%	4449.7
25.0	95.3	27%	4083.8
21.4	77.0	22%	1751.9
11.2	355.2	99%	4552.0
34.1	264.5	74%	4441.6
27.3	350.0	98%	4421.4
31.6	324.5	91%	4462.4
12.5	330.6	93%	4094.0
7.4	340.5	95%	4074.0
57.8	349.7	98%	4552.0
29.3	285.0	80%	4041.1
19.0	191.5	54%	3892.5
29.8	180.1	50%	4198.4
19.2	112.3	31%	3757.8
23.4	177.2	50%	4273.1
12.2	61.9	17%	3201.3
9.6	116.2	33%	2424.1
6.9	46.7	13%	2703.3
28.1	351.4	98%	4552.0
42.2	271.5	76%	3750.2
28.7	352.7	99%	4216.8
40.0	344.1	96%	4477.1
54.3	325.1	91%	4278.7
22.3	303.7	85%	4367.8
35.5	357.0	100%	4552.1
32.5	335.1	94%	4550.5
13.3	145.8	41%	4158.2
50.7	318.8	89%	4552.1
21.9			4552.1

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27.7	254.8	71%
0.6	6.2	2%
72.7	357.1	100%

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on results  
ies (TAF)

FWD	FWD	FWD
28.5	333.8	93%
30.2	328.3	92%
40.0	285.8	80%
24.2	182.8	51%
18.1	101.4	28%

ROC on LTO PA simulation  
CVP NOD M&I Deliveri



ROC on LTO CalSimII Simulation Result

North-of-Delta Deliveries to CVP M&I Contractors (mostly in American R

SIMULATED	Allocation/Contract Year										
WATER	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1922	19.0	14.6	13.0	11.4	12.2	14.4	24.8	27.3	31.5	32.5	29.8
1923	17.3	16.1	13.0	11.4	8.1	17.3	19.7	29.0	30.4	32.8	30.1
1924	13.7	11.4	8.7	8.1	12.2	13.8	22.9	23.0	25.6	25.3	9.1
1925	6.8	6.8	11.9	10.3	11.1	12.5	20.5	26.7	31.2	33.8	29.3
1926	13.2	8.4	7.7	11.4	12.2	14.1	15.9	24.0	26.7	25.7	21.3
1927	6.9	13.9	11.0	9.5	10.3	14.8	22.8	28.3	28.1	32.7	30.1
1928	17.7	16.1	10.9	11.4	12.2	12.6	20.6	24.6	27.0	28.1	26.0
1929	15.6	7.8	6.8	10.3	11.0	12.4	20.3	24.1	23.8	24.7	18.5
1930	8.7	7.0	11.0	9.5	10.3	12.0	19.2	22.9	26.0	26.4	22.5
1931	9.2	6.1	5.7	9.5	10.3	13.3	22.8	22.5	23.8	25.3	18.7
1932	8.0	6.5	11.5	10.0	5.6	10.2	16.5	18.0	18.4	18.0	15.0
1933	6.2	4.5	4.0	7.7	8.5	11.8	21.1	22.4	25.0	24.3	18.1
1934	7.1	6.9	10.9	9.4	5.6	14.0	21.7	23.0	24.7	24.8	19.7
1935	8.1	13.9	6.1	9.9	6.1	10.4	13.4	23.7	26.5	27.4	24.9
1936	9.0	6.4	5.8	9.5	10.3	13.2	20.5	23.8	25.6	27.3	23.9
1937	10.2	7.7	6.1	6.1	10.6	12.4	19.2	24.0	24.6	26.3	24.2
1938	11.2	14.1	11.0	9.5	10.3	14.4	22.8	28.4	31.8	32.6	30.0
1939	19.0	14.8	8.7	11.4	12.2	9.4	26.7	25.9	31.3	32.5	30.2
1940	11.6	10.4	8.0	11.5	12.3	13.4	24.1	27.8	31.0	32.3	29.7
1941	17.6	12.1	13.0	11.4	12.2	14.4	18.2	26.3	32.9	34.6	31.7
1942	17.9	14.5	13.0	11.4	12.2	14.4	17.9	26.4	33.1	34.1	31.2
1943	14.6	10.8	13.0	11.4	12.2	14.4	20.8	28.0	30.6	32.6	30.0
1944	19.3	12.4	8.7	8.1	12.2	13.1	20.1	22.0	24.8	25.8	22.7
1945	8.4	6.3	11.0	9.5	10.3	13.0	25.5	27.2	30.3	32.9	30.2
1946	11.2	16.1	13.0	11.4	12.2	14.3	25.9	26.4	30.5	31.5	29.2
1947	14.0	10.7	13.0	11.4	12.2	12.4	19.5	22.9	24.1	26.2	23.0
1948	7.5	6.3	5.8	9.5	5.7	12.4	15.8	26.0	32.2	34.8	31.7
1949	15.6	10.8	8.7	11.5	12.2	12.4	24.5	26.5	29.8	30.9	28.5
1950	14.6	8.8	8.2	11.1	11.9	12.4	19.9	23.7	25.7	26.0	22.9
1951	7.2	14.1	11.0	9.5	10.3	15.3	25.8	25.5	31.0	32.2	29.6
1952	14.6	16.1	13.0	11.4	12.2	14.4	23.6	28.6	29.8	32.1	29.7
1953	14.8	14.5	13.0	11.4	12.2	16.1	22.5	27.6	30.2	32.5	29.2
1954	17.9	10.8	8.7	11.4	12.2	13.7	21.7	27.9	30.5	32.6	29.1
1955	19.5	16.1	13.0	11.4	8.1	10.8	18.6	22.3	25.1	25.9	22.8
1956	9.3	6.3	11.0	9.5	10.3	16.9	24.4	26.0	31.0	32.2	29.6
1957	18.5	15.7	12.4	11.4	12.2	13.8	23.5	25.8	32.6	34.0	31.2
1958	18.3	15.2	13.0	11.4	12.2	14.4	18.0	28.0	31.3	33.4	30.9
1959	14.8	15.6	12.5	11.4	12.2	16.0	24.6	27.6	30.3	31.5	29.1
1960	14.7	12.0	8.7	8.1	12.3	12.0	20.3	22.7	25.6	24.6	20.0

1961	9.0	6.1	11.0	9.5	10.3	12.5	18.5	22.0	24.7	25.8	23.8
1962	11.8	7.3	11.4	7.0	10.7	12.8	25.7	27.6	30.8	32.3	29.2
1963	17.4	16.1	13.0	11.4	12.2	14.4	19.0	28.1	32.6	34.0	31.1
1964	18.6	16.1	12.4	11.4	8.1	13.7	21.4	20.3	24.0	25.6	22.3
1965	8.0	14.1	11.0	9.5	10.3	14.0	17.7	28.0	31.1	32.3	28.3
1966	16.9	16.1	13.0	11.4	12.2	15.9	25.4	26.9	29.8	30.9	28.6
1967	14.6	16.1	12.9	11.4	12.2	14.4	18.0	29.6	30.8	32.4	30.9
1968	14.6	14.5	13.0	11.4	12.2	14.3	24.1	27.4	30.3	32.2	28.7
1969	16.0	10.8	13.0	11.4	12.2	14.5	24.0	28.9	30.8	32.0	29.5
1970	19.4	14.5	13.0	11.4	12.2	13.7	24.7	27.6	28.1	30.4	28.0
1971	14.7	15.8	12.6	11.1	11.9	15.2	26.1	26.4	29.9	31.7	29.2
1972	19.4	14.4	13.0	11.4	12.2	14.0	19.8	22.2	24.7	26.2	24.2
1973	10.0	14.3	11.3	9.8	10.5	14.4	25.1	28.8	30.9	32.2	29.6
1974	14.7	16.1	13.0	11.4	12.2	14.4	22.4	29.8	31.2	30.2	30.5
1975	19.2	14.5	13.0	11.2	12.2	14.4	23.3	29.4	31.7	32.4	29.6
1976	17.4	16.4	12.5	11.4	12.3	13.1	21.0	23.6	24.9	25.8	21.4
1977	9.4	6.9	6.3	6.3	6.4	14.9	22.7	20.7	24.7	12.5	9.5
1978	2.7	6.6	11.6	10.1	10.9	13.0	19.6	29.4	31.5	32.9	30.2
1979	19.8	12.3	8.7	11.4	12.2	13.1	22.6	29.0	30.6	31.6	28.9
1980	13.3	15.8	12.7	11.2	11.9	14.4	23.2	28.0	30.3	31.5	29.7
1981	17.1	11.6	13.0	11.4	12.2	13.6	24.4	27.2	31.7	32.9	30.3
1982	14.4	16.2	13.1	11.5	12.3	14.4	18.4	31.1	32.8	35.0	32.0
1983	17.4	16.1	13.0	11.4	12.2	14.4	18.2	29.1	32.6	34.3	31.1
1984	20.5	16.1	13.0	11.4	12.2	16.2	25.8	28.6	29.4	31.7	28.8
1985	15.2	16.1	13.0	11.4	12.2	12.5	25.3	27.9	30.4	32.2	29.4
1986	13.2	10.8	13.0	11.4	12.2	12.4	20.2	24.0	25.1	26.1	24.1
1987	12.1	7.9	6.7	6.0	10.6	12.8	20.3	23.1	25.4	26.2	23.0
1988	9.6	6.6	11.4	9.9	6.1	15.5	19.9	22.4	24.7	25.3	19.6
1989	9.4	6.6	6.3	10.1	6.3	11.9	20.5	23.7	25.6	27.3	23.1
1990	7.9	6.3	5.8	9.5	10.3	8.3	20.7	18.8	24.2	22.9	19.1
1991	7.8	5.7	5.2	5.2	5.2	12.3	20.3	22.6	25.6	26.5	22.7
1992	7.6	6.5	5.7	9.5	10.3	11.2	18.2	20.3	21.1	22.9	20.4
1993	7.3	6.1	10.6	9.1	9.9	14.4	24.0	26.1	30.2	33.3	30.3
1994	18.6	15.0	13.0	11.5	12.2	15.6	24.8	26.0	30.4	31.4	28.2
1995	14.0	10.8	13.0	11.4	12.2	14.4	21.6	25.7	30.3	33.8	31.1
1996	15.6	10.6	13.0	11.4	12.2	14.8	22.9	23.9	33.2	34.9	31.3
1997	11.8	8.7	13.3	11.8	12.6	18.0	26.9	28.6	30.0	31.5	24.3
1998	10.5	8.6	13.6	12.0	12.8	14.4	22.1	21.8	33.2	35.6	32.7
1999	20.7	16.1	13.0	11.4	12.2	14.5	24.7	29.3	31.5	30.8	26.1
2000	11.4	8.2	7.7	11.5	12.3	14.7	24.7	28.2	32.2	33.9	29.5
2001	8.4	8.6	7.7	11.4	12.2	12.9	19.7	23.6	25.4	26.6	23.3
2002	9.9	6.6	11.5	10.0	10.8	13.9	25.9	26.5	28.1	31.6	29.1
2003	19.7	15.0	12.9	11.4	12.2	14.6	19.3	28.0	32.6	33.6	28.9

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<b>AVG:</b>	13.4	11.5	10.8	10.4	11.0	13.7	21.7	25.7	28.7	29.9	26.5
<b>MIN:</b>	2.7	4.5	4.0	5.2	5.2	8.3	13.4	18.0	18.4	12.5	9.1
<b>MAX:</b>	20.7	16.4	13.6	12.0	12.8	18.0	26.9	31.1	33.2	35.6	32.7

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Avg by WYT	PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD	FWD	FWD
W:	16.5	13.7	12.0	11.2	12.0	14.7	21.9	27.6	31.0	32.5	29.6
AN:	16.5	13.3	11.6	10.7	11.5	14.1	23.1	27.3	30.6	32.4	29.5
BN:	13.5	12.4	10.6	10.5	10.8	13.7	23.0	26.5	29.7	31.4	28.7
D:	10.5	9.6	9.8	10.1	10.7	12.6	20.3	24.0	26.5	27.6	24.4
C:	7.8	7.3	9.0	8.9	8.7	12.8	21.0	22.0	24.3	23.7	18.2

is - PA

iver Basin) in TAF

Shasta Storage

=====	Full Year			End-of-April
	Oct-Apr	Mar-Feb	Allocation	(May 1st)
SEP	TOT	TOT	PCT	Volume (TAF)
24.8	109.3	250.9	97%	4552.0
21.1	102.9	234.6	90%	4303.7
4.8	90.9	171.5	66%	2520.9
18.0	79.9	225.0	87%	4271.7
13.8	83.0	193.2	74%	3888.7
24.9	89.3	250.2	96%	4552.0
22.4	101.5	212.8	82%	4536.7
12.4	84.1	182.8	70%	3205.2
15.5	77.8	185.3	71%	3229.9
12.4	76.9	180.4	69%	2072.0
9.0	68.2	135.9	52%	1884.3
12.0	63.9	174.7	67%	1853.1
12.0	75.6	184.0	71%	1667.0
19.3	67.8	186.6	72%	2701.3
18.0	74.7	192.9	74%	4133.1
19.0	72.3	206.0	79%	4078.8
20.3	93.4	246.6	95%	4058.0
22.2	102.2	232.3	89%	3845.6
24.6	91.4	249.1	96%	4211.6
26.3	98.9	253.5	98%	4456.0
21.8	101.3	240.9	93%	4510.0
25.4	97.2	242.4	93%	4552.0
13.9	93.8	187.8	72%	3750.6
23.5	84.0	246.5	95%	4517.6
22.5	104.2	241.6	93%	4552.0
14.1	93.2	177.1	68%	3822.6
23.9	63.1	235.7	91%	4405.4
22.4	95.7	229.6	88%	4431.0
13.4	86.9	196.2	76%	4117.0
24.5	93.2	251.2	97%	4516.5
24.7	105.3	248.8	96%	4290.0
21.1	104.5	240.3	93%	4552.0
24.8	96.4	248.5	96%	4546.0
16.4	97.5	188.4	73%	4107.9
20.1	87.7	250.3	96%	4526.0
22.7	107.5	253.7	98%	4535.8
25.7	102.6	248.3	96%	4173.0
19.3	107.1	234.1	90%	4330.6
13.2	88.1	184.4	71%	4117.5

18.8	77.0	194.3	75%	<b>4512.9</b>
22.9	86.6	251.4	97%	<b>4552.0</b>
25.3	103.5	251.2	97%	<b>4137.0</b>
17.6	101.8	198.0	76%	<b>3964.4</b>
24.1	84.6	245.0	94%	<b>4500.0</b>
22.4	110.8	247.1	95%	<b>4552.0</b>
25.8	99.6	247.6	95%	<b>4479.0</b>
24.5	104.1	244.8	94%	<b>4387.3</b>
25.0	101.8	255.1	98%	<b>4434.0</b>
23.3	108.9	242.0	93%	<b>4291.1</b>
20.3	107.4	249.2	96%	<b>4470.4</b>
18.0	104.2	204.9	79%	<b>4536.6</b>
23.8	95.4	252.2	97%	<b>4459.3</b>
25.7	104.2	254.4	98%	<b>4289.0</b>
25.4	107.8	256.2	99%	<b>4449.7</b>
14.3	104.1	179.6	69%	<b>4083.8</b>
4.6	73.0	151.5	58%	<b>1751.9</b>
23.8	74.5	244.8	94%	<b>4552.0</b>
23.8	100.1	244.4	94%	<b>4441.6</b>
25.1	102.6	247.5	95%	<b>4421.4</b>
23.9	103.3	251.6	97%	<b>4462.4</b>
22.9	100.3	256.7	99%	<b>4094.0</b>
24.6	102.8	257.6	99%	<b>4074.0</b>
24.1	115.2	252.5	97%	<b>4552.0</b>
21.3	105.7	239.7	92%	<b>4041.1</b>
17.6	93.1	192.8	74%	<b>3892.5</b>
17.3	76.4	191.7	74%	<b>4198.4</b>
13.2	79.0	179.3	69%	<b>3757.8</b>
13.2	71.1	185.0	71%	<b>4273.1</b>
10.9	68.8	154.2	59%	<b>3201.3</b>
17.6	61.9	187.2	72%	<b>2424.1</b>
15.3	69.1	172.4	66%	<b>2703.3</b>
25.3	81.4	253.9	98%	<b>4552.0</b>
22.0	110.7	239.7	92%	<b>3750.2</b>
25.7	97.3	245.3	95%	<b>4216.8</b>
22.6	100.4	241.8	93%	<b>4477.1</b>
16.7	103.1	233.6	90%	<b>4278.7</b>
26.3	94.1	259.6	100%	<b>4367.8</b>
16.0	112.7	223.9	86%	<b>4552.1</b>
21.2	90.5	232.6	90%	<b>4550.5</b>
16.9	80.9	197.1	76%	<b>4158.2</b>
24.3	88.6	250.6	97%	<b>4552.1</b>
23.3	105.1			<b>4552.1</b>

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20.0	92.4	222.9	86%
4.6	61.9	135.9	52%
26.3	115.2	259.6	100%

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<b>FWD</b>	<b>FWD</b>	<b>FWD</b>	<b>FWD</b>
23.1	101.4	245.6	95%
23.8	94.8	244.8	94%
21.6	95.0	233.1	90%
17.5	87.0	202.6	78%
12.2	76.8	176.1	68%

North-of-Delta Deliveries to CVP Settlement

SIMULATED						Allocation/Contract Year			
WATER	=====	=====	=====	=====	=====				
YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1922	66.3	31.8	0.0	1.5	0.0	0.8	103.7	321.6	353.4
1923	41.4	15.9	0.0	0.0	0.0	31.9	62.6	340.3	372.2
1924	72.5	39.0	16.0	0.0	0.0	23.0	103.1	325.4	331.7
1925	43.4	27.9	0.0	3.8	0.0	0.0	67.5	250.3	369.8
1926	79.5	33.1	12.2	0.0	0.0	14.8	41.5	311.1	398.9
1927	42.1	13.8	13.3	0.0	0.0	1.2	80.0	321.4	325.8
1928	49.9	22.2	5.0	0.0	0.0	0.0	75.2	329.2	347.4
1929	68.0	24.2	5.8	7.4	0.0	8.1	85.8	330.1	287.4
1930	71.1	42.2	0.0	0.0	0.0	0.0	73.4	303.1	390.7
1931	73.7	37.6	19.2	0.0	0.0	31.4	106.0	281.3	302.7
1932	60.5	30.2	0.0	0.9	0.0	9.3	97.5	296.3	373.2
1933	80.9	43.4	8.9	0.0	0.0	17.7	101.2	302.7	333.8
1934	57.9	42.1	0.0	5.1	0.0	4.6	88.7	305.3	323.6
1935	6.2	17.8	9.3	0.0	0.0	0.0	33.2	316.7	394.4
1936	57.6	35.7	10.1	0.0	0.0	1.9	76.4	305.0	339.5
1937	80.7	45.9	10.2	0.0	0.0	0.0	75.5	337.1	358.7
1938	50.0	18.1	2.2	0.0	0.0	0.0	66.8	308.3	349.1
1939	59.4	35.8	15.7	4.3	13.0	42.5	107.4	287.1	353.9
1940	62.1	37.2	12.1	0.0	0.0	0.0	77.4	278.0	354.9
1941	53.5	27.8	0.0	0.0	0.0	0.0	32.3	251.4	351.6
1942	55.4	27.7	0.0	0.0	0.0	0.0	33.4	280.0	355.2
1943	72.3	28.5	2.6	0.0	0.0	0.1	61.9	327.4	339.3
1944	76.4	36.2	10.4	0.0	0.0	6.3	88.9	293.5	375.1
1945	55.8	19.8	8.1	1.5	0.0	0.0	95.5	282.2	359.4
1946	42.2	25.4	0.0	6.5	0.0	4.5	108.7	327.9	379.0
1947	70.4	33.7	1.8	8.7	0.0	1.6	89.5	327.0	350.5
1948	47.3	31.3	13.9	7.9	6.2	11.8	31.9	220.4	347.4
1949	71.7	41.2	2.7	5.0	0.4	0.0	91.9	293.8	385.6
1950	79.6	34.1	14.4	0.0	0.0	4.3	96.3	341.2	381.1
1951	41.0	21.3	0.0	0.0	0.0	3.5	101.9	280.3	357.0
1952	43.8	21.1	0.0	0.0	0.0	0.0	81.5	326.3	314.4
1953	76.4	34.1	0.0	0.0	0.0	10.5	71.6	309.7	329.9
1954	68.4	25.1	18.4	0.0	0.0	0.0	62.7	324.4	346.8
1955	66.9	19.3	3.3	0.0	0.0	23.2	84.8	333.7	384.6
1956	68.3	32.6	0.0	0.0	0.0	16.6	95.6	281.7	333.9
1957	59.0	46.9	20.0	0.0	0.0	11.2	89.0	291.8	366.7
1958	51.9	41.8	7.4	0.0	0.0	0.0	34.4	272.7	329.3
1959	81.4	47.2	14.4	0.0	0.0	7.6	112.7	349.1	378.1
1960	81.8	49.5	12.7	0.0	0.0	0.3	85.3	301.2	387.6

1961	66.3	19.3	10.0	0.0	0.0	0.0	86.2	318.3	372.3
1962	71.0	29.9	6.8	6.0	0.0	0.0	100.5	329.8	371.7
1963	45.9	38.4	6.5	0.0	0.0	0.0	34.2	290.2	352.3
1964	44.4	16.6	17.7	0.0	0.0	26.3	123.7	343.6	362.6
1965	46.5	17.5	3.3	0.0	0.0	15.7	60.3	334.6	345.1
1966	69.4	17.0	9.3	0.3	0.0	6.9	104.1	341.7	374.6
1967	65.7	14.5	4.6	0.0	0.0	0.0	29.1	319.4	296.4
1968	76.6	37.6	13.8	0.0	0.0	0.0	95.5	327.3	357.9
1969	55.2	22.7	0.3	0.0	0.0	0.3	87.3	340.1	333.5
1970	63.5	36.0	0.0	0.0	0.0	0.5	106.5	343.6	319.7
1971	47.1	12.8	2.7	3.3	0.0	10.9	112.6	285.9	335.9
1972	76.7	34.2	3.9	5.7	1.2	43.6	110.2	335.5	371.6
1973	36.9	14.3	8.3	0.0	0.0	0.0	93.4	330.0	353.5
1974	39.1	13.4	5.6	0.0	0.0	0.0	64.2	333.1	344.4
1975	58.7	34.9	1.8	8.2	0.0	0.0	75.6	335.3	347.4
1976	49.8	37.6	17.5	9.0	13.6	58.6	100.5	358.8	360.7
1977	79.8	39.3	15.8	0.0	7.5	38.8	114.2	246.4	336.8
1978	56.9	23.3	2.9	0.0	0.0	0.0	47.0	320.6	357.6
1979	79.2	28.4	17.0	0.0	0.0	0.1	78.5	330.8	387.7
1980	43.7	22.4	0.0	0.0	0.0	0.0	79.2	309.1	337.9
1981	75.9	40.4	4.4	0.0	0.0	0.0	78.5	305.8	395.7
1982	36.7	14.3	2.9	0.0	0.0	0.0	43.9	330.9	322.6
1983	35.0	15.5	8.2	0.0	0.0	0.0	35.1	302.0	340.8
1984	57.7	12.2	0.0	8.2	0.0	8.8	106.3	352.0	335.2
1985	40.8	12.0	11.9	6.0	0.0	0.0	96.1	340.0	384.7
1986	55.1	18.8	8.3	0.0	0.0	0.0	78.6	318.6	346.0
1987	79.5	42.8	14.1	0.0	0.3	0.7	96.9	345.0	383.5
1988	64.1	24.1	0.0	0.0	0.0	29.6	89.2	293.5	341.3
1989	75.0	31.6	6.8	7.8	4.4	1.0	84.4	355.8	380.3
1990	52.9	38.4	20.1	0.0	0.0	12.1	119.8	223.9	369.0
1991	79.0	43.3	15.1	8.2	3.2	0.0	71.1	287.9	323.7
1992	63.5	35.6	6.2	0.0	0.0	0.0	78.2	337.4	334.2
1993	54.1	41.0	0.0	0.0	0.0	0.0	79.0	245.7	316.5
1994	61.1	32.9	12.2	0.0	0.0	9.6	91.7	251.5	336.0
1995	58.2	17.0	4.9	0.0	0.0	0.0	66.8	254.0	318.8
1996	85.9	49.2	0.0	0.0	0.0	0.0	74.6	217.2	351.7
1997	58.3	33.3	0.0	0.0	0.0	17.6	117.7	334.0	325.9
1998	49.7	15.3	9.8	0.0	0.0	0.0	65.9	145.5	337.6
1999	65.0	30.6	15.9	0.7	0.0	0.0	80.5	327.3	322.9
2000	70.6	33.7	19.7	0.0	0.0	0.2	75.4	266.5	341.4
2001	48.7	39.7	18.7	0.0	0.0	0.0	76.1	338.8	373.7
2002	58.4	21.7	0.0	0.0	0.0	9.7	111.6	300.3	384.2
2003	74.6	32.0	0.0	0.0	0.0	0.0	45.3	277.0	364.3

on results tractor )	AVG:	60.5	29.6	7.3	1.4	0.6	7.1	81.0	306.0	352.0
	MIN:	6.2	12.0	0.0	0.0	0.0	0.0	29.1	145.5	287.4
	MAX:	85.9	49.5	20.1	9.0	13.6	58.6	123.7	358.8	398.9



ROC on LTO PA simulation

CVP Settlement Cont  
Deliveries (TAF)

Avg by WYT	PRV	PRV	PRV	FWD	FWD	FWD	FWD	FWD	FWD
W:	62.3	29.6	8.8	0.8	0.0	3.1	70.0	301.7	335.9
AN:	59.6	29.0	6.2	0.5	0.0	1.6	78.0	300.1	349.9
BN:	60.9	31.5	7.4	2.9	1.9	13.3	90.3	314.4	364.6
D:	59.4	26.8	7.6	1.7	0.9	7.3	83.2	320.3	378.9
C:	58.9	32.9	4.5	1.8	0.9	15.3	95.5	290.1	332.8

Simulation Results - PA

Contractors in TAF

Shasta Storage

=====			Full Year		Fraction of	End-of-April
JUL	AUG	SEP	Oct-Apr	Mar-Feb	Hist Max	(May 1st)
			TOT	TOT	PCT	Volume (TAF)
385.8	298.6	85.3	204.1	1606.6	94%	4552.0
399.1	305.8	53.6	151.8	1693.0	99%	4303.7
322.0	244.7	70.9	253.7	1495.7	87%	2520.9
388.8	283.9	74.5	142.5	1559.6	91%	4271.7
384.2	276.4	86.0	181.1	1582.1	92%	3888.7
394.2	323.3	86.2	150.4	1609.3	94%	4552.0
382.8	296.7	82.8	152.3	1619.5	94%	4536.7
325.7	248.3	72.4	199.3	1471.0	86%	3205.2
383.1	280.6	71.6	186.7	1632.9	95%	3229.9
325.7	248.4	72.1	267.9	1459.1	85%	2072.0
379.3	278.0	82.9	198.3	1649.7	96%	1884.3
324.3	247.3	71.0	252.2	1503.2	88%	1853.1
327.2	249.7	39.9	198.3	1372.1	80%	1667.0
397.1	305.1	84.1	66.4	1633.9	95%	2701.3
393.1	302.7	81.8	181.7	1637.4	95%	4133.1
396.0	304.4	86.7	212.3	1628.7	95%	4078.8
394.8	323.9	72.0	137.1	1643.2	96%	4058.0
345.9	253.8	58.8	278.1	1560.8	91%	3845.6
388.7	301.9	83.8	188.8	1566.0	91%	4211.6
402.3	330.5	89.7	113.6	1541.0	90%	4456.0
397.5	326.3	85.9	116.5	1581.6	92%	4510.0
392.1	322.6	85.8	165.4	1652.2	96%	4552.0
383.4	281.6	85.5	218.1	1599.4	93%	3750.6
397.9	305.2	87.0	180.7	1601.3	93%	4517.6
384.3	299.1	80.3	187.3	1698.4	99%	4552.0
389.2	284.9	88.9	205.8	1638.3	96%	3822.6
407.7	311.8	78.6	150.4	1530.6	89%	4405.4
379.8	277.5	82.4	213.0	1639.1	96%	4431.0
393.8	301.9	78.3	228.7	1659.2	97%	4117.0
388.4	300.8	84.9	167.6	1581.5	92%	4516.5
389.1	322.0	82.9	146.3	1626.7	95%	4290.0
397.6	299.9	88.3	192.6	1619.5	94%	4552.0
388.3	272.5	84.8	174.6	1569.0	91%	4546.0
378.1	277.3	69.7	197.6	1652.1	96%	4107.9
394.2	323.3	76.9	213.0	1648.1	96%	4526.0
394.6	307.3	44.3	226.1	1605.9	94%	4535.8
387.9	325.6	86.5	135.5	1579.6	92%	4173.0
392.5	295.2	36.0	263.4	1715.2	100%	4330.6
381.1	280.5	84.3	229.6	1615.9	94%	4117.5

383.0	277.6	76.2	181.9	1627.4	95%	<b>4512.9</b>
395.2	300.7	81.9	214.3	1670.8	97%	<b>4552.0</b>
398.4	327.1	86.7	125.1	1567.6	91%	<b>4137.0</b>
378.0	274.7	75.0	228.7	1651.3	96%	<b>3964.4</b>
393.7	276.7	86.0	143.3	1608.2	94%	<b>4500.0</b>
386.3	296.1	80.6	207.1	1675.1	98%	<b>4552.0</b>
396.3	325.0	85.6	113.9	1579.7	92%	<b>4479.0</b>
395.9	272.2	85.7	223.4	1612.6	94%	<b>4387.3</b>
389.2	319.6	82.5	165.8	1652.0	96%	<b>4434.0</b>
390.1	319.7	83.1	206.4	1629.0	95%	<b>4291.1</b>
392.6	320.9	79.7	189.4	1660.2	97%	<b>4470.4</b>
395.9	304.1	66.2	275.5	1686.6	98%	<b>4536.6</b>
385.0	298.7	78.3	152.9	1596.8	93%	<b>4459.3</b>
345.3	327.7	89.6	122.3	1607.9	94%	<b>4289.0</b>
383.7	315.5	86.2	179.1	1671.1	97%	<b>4449.7</b>
356.6	241.0	73.5	286.6	1692.2	99%	<b>4083.8</b>
329.6	238.0	45.9	295.4	1432.7	84%	<b>1751.9</b>
388.4	301.0	67.4	130.1	1606.6	94%	<b>4552.0</b>
395.4	299.9	81.0	203.2	1639.5	96%	<b>4441.6</b>
382.5	301.3	83.8	145.3	1614.5	94%	<b>4421.4</b>
387.3	285.7	75.4	199.2	1582.3	92%	<b>4462.4</b>
401.4	329.8	56.9	97.8	1544.2	90%	<b>4094.0</b>
400.5	317.1	70.7	93.8	1544.3	90%	<b>4074.0</b>
392.3	305.1	81.4	193.2	1651.9	96%	<b>4552.0</b>
384.2	279.4	57.1	166.7	1623.7	95%	<b>4041.1</b>
394.6	323.7	59.1	160.8	1657.4	97%	<b>3892.5</b>
376.8	276.4	82.1	234.3	1649.6	96%	<b>4198.4</b>
355.9	272.8	84.7	207.0	1592.7	93%	<b>3757.8</b>
395.8	288.7	23.5	210.9	1640.9	96%	<b>4273.1</b>
358.8	263.2	82.2	243.4	1577.8	92%	<b>3201.3</b>
327.7	249.6	73.1	219.9	1438.3	84%	<b>2424.1</b>
357.1	275.2	86.3	183.4	1563.4	91%	<b>2703.3</b>
391.7	300.9	88.1	174.1	1528.0	89%	<b>4552.0</b>
327.0	249.3	71.4	207.5	1416.5	83%	<b>3750.2</b>
395.3	324.2	85.8	146.9	1580.0	92%	<b>4216.8</b>
398.4	328.0	82.9	209.6	1544.5	90%	<b>4477.1</b>
393.3	301.6	77.5	226.9	1642.4	96%	<b>4278.7</b>
407.1	335.0	85.5	140.8	1488.8	87%	<b>4367.8</b>
390.5	317.9	83.8	192.7	1646.8	96%	<b>4552.1</b>
393.2	308.2	74.4	199.6	1566.4	91%	<b>4550.5</b>
382.1	280.5	75.4	183.2	1606.7	94%	<b>4158.2</b>
378.4	277.3	82.4	201.4	1650.5	96%	<b>4552.1</b>
390.0	271.9	87.9	151.8			<b>4552.1</b>

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381.7	294.1	76.8	187.4	1598.7	93%
322.0	238.0	23.5	66.4	1372.1	80%
407.7	335.0	89.7	295.4	1715.2	100%

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FWD	FWD	FWD	FWD	FWD	FWD
392.5	318.7	81.4	158.9	1606.7	94%
388.6	298.7	79.0	169.3	1596.8	93%
390.3	293.4	69.8	208.5	1637.0	95%
384.4	282.8	76.8	200.6	1629.1	95%
338.4	255.4	71.1	227.2	1497.7	87%

5 (C)	5 (C)
4 (D)	4 (D)
3 (BN)	3 (BN)
2 (AN)	2 (AN)
1 (W)	1 (W)

Date	CFS->TAF/MON	WATERYEAR	ELT	ELT	ELT
			40-30-30	60-20-20	Shasta
		1921	2	2	1
9/30/1921		1922	1	1	1
10/31/1921	0.061487603	1923	3	2	3
11/30/1921	0.059504132	1924	5	5	4
12/31/1921	0.061487603	1925	4	3	1
1/31/1922	0.061487603	1926	4	5	3
2/28/1922	0.05553719	1927	2	2	1
3/31/1922	0.061487603	1928	2	4	1
4/30/1922	0.059504132	1929	5	5	4
5/31/1922	0.061487603	1930	4	5	3
6/30/1922	0.059504132	1931	5	5	4
7/31/1922	0.061487603	1932	5	2	3
8/31/1922	0.061487603	1933	5	4	4
9/30/1922	0.059504132	1934	5	5	4
10/31/1922	0.061487603	1935	4	2	1
11/30/1922	0.059504132	1936	3	2	1
12/31/1922	0.061487603	1937	4	2	2
1/31/1923	0.061487603	1938	1	1	1
2/28/1923	0.05553719	1939	3	4	4
3/31/1923	0.061487603	1940	2	2	1
4/30/1923	0.059504132	1941	1	1	1
5/31/1923	0.061487603	1942	1	1	1
6/30/1923	0.059504132	1943	1	2	1
7/31/1923	0.061487603	1944	4	3	3
8/31/1923	0.061487603	1945	3	2	1
9/30/1923	0.059504132	1946	2	2	1
10/31/1923	0.061487603	1947	4	5	3
11/30/1923	0.059504132	1948	3	4	1
12/31/1923	0.061487603	1949	4	4	2
1/31/1924	0.061487603	1950	4	4	2
2/29/1924	0.057520661	1951	2	3	1
3/31/1924	0.061487603	1952	1	1	1
4/30/1924	0.059504132	1953	1	3	1
5/31/1924	0.061487603	1954	2	3	1
6/30/1924	0.059504132	1955	4	5	2
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9/30/1924	0.059504132	1958	1	1	1
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11/30/1924	0.059504132	1960	4	5	1
12/31/1924	0.061487603	1961	4	5	1
1/31/1925	0.061487603	1962	3	3	1
2/28/1925	0.05553719	1963	1	2	1

3/31/1925	0.061487603	1964	4	5	3
4/30/1925	0.059504132	1965	1	2	1
5/31/1925	0.061487603	1966	3	4	1
6/30/1925	0.059504132	1967	1	1	1
7/31/1925	0.061487603	1968	3	4	1
8/31/1925	0.061487603	1969	1	1	1
9/30/1925	0.059504132	1970	1	2	1
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11/30/1925	0.059504132	1972	3	5	1
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1/31/1926	0.061487603	1974	1	2	1
2/28/1926	0.05553719	1975	1	2	1
3/31/1926	0.061487603	1976	4	5	3
4/30/1926	0.059504132	1977	5	5	4
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9/30/1926	0.059504132	1982	1	1	1
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11/30/1926	0.059504132	1984	1	1	1
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1/31/1927	0.061487603	1986	1	1	1
2/28/1927	0.05553719	1987	4	5	3
3/31/1927	0.061487603	1988	5	5	2
4/30/1927	0.059504132	1989	4	5	1
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1/31/1928	0.061487603	1998	1	1	1
2/29/1928	0.057520661	1999	1	2	1
3/31/1928	0.061487603	2000	2	2	1
4/30/1928	0.059504132	2001	4	5	2
5/31/1928	0.061487603	2002	4	4	1
6/30/1928	0.059504132	2003	2	4	1
7/31/1928	0.061487603	2004	3	4	1
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NMI 5 levels

5 (C) 0-1399.9  
4 (D) 1400-1999.9  
3 (BN) 2000-2499.9  
2 (AN) 2500-2999.9  
1 (W) 3000-∞

CALSIM\_01CALSIM\_01LTO-Withcblank4 blank5 blank6 blank7

	Run A	Run B	Run C	Run D	Run E	Run F	Run G
	NMI	NMI	NMI	NMI	NMI	NMI	NMI
3/31/1922	2813.9	2816.0	1108.2	0.0	0.0	0.0	0.0
3/31/1923	2695.1	2697.2	843.1	0.0	0.0	0.0	0.0
3/31/1924	1799.7	1933.4	269.1	0.0	0.0	0.0	0.0
3/31/1925	2053.1	2295.8	888.7	0.0	0.0	0.0	0.0
3/31/1926	1561.3	1798.3	451.3	0.0	0.0	0.0	0.0
3/31/1927	1887.0	2222.3	973.0	0.0	0.0	0.0	0.0
3/31/1928	1750.5	2046.7	721.0	0.0	0.0	0.0	0.0
3/31/1929	1333.4	1623.3	393.6	0.0	0.0	0.0	0.0
3/31/1930	1152.7	1456.3	524.4	0.0	0.0	0.0	0.0
3/31/1931	740.1	1062.8	329.7	0.0	0.0	0.0	0.0
3/31/1932	1243.7	1566.8	1052.9	0.0	0.0	0.0	0.0
3/31/1933	902.9	989.6	472.4	0.0	0.0	0.0	0.0
3/31/1934	605.7	710.3	375.1	0.0	0.0	0.0	0.0
3/31/1935	978.1	1016.0	978.1	0.0	0.0	0.0	0.0
3/31/1936	1625.2	1498.1	1176.4	0.0	0.0	0.0	0.0
3/31/1937	1814.9	1506.5	891.2	0.0	0.0	0.0	0.0
3/31/1938	3035.8	2644.3	1843.4	0.0	0.0	0.0	0.0
3/31/1939	2255.3	1976.8	408.6	0.0	0.0	0.0	0.0
3/31/1940	2450.4	2381.6	1081.2	0.0	0.0	0.0	0.0
3/31/1941	2705.7	2669.7	1116.7	0.0	0.0	0.0	0.0
3/31/1942	3024.3	2989.1	1210.9	0.0	0.0	0.0	0.0
3/31/1943	3018.4	3018.4	1215.8	0.0	0.0	0.0	0.0
3/31/1944	2186.5	2338.3	519.3	0.0	0.0	0.0	0.0
3/31/1945	2321.5	2469.9	981.9	0.0	0.0	0.0	0.0
3/31/1946	2491.3	2661.3	939.5	0.0	0.0	0.0	0.0
3/31/1947	1964.0	2148.6	458.1	0.0	0.0	0.0	0.0
3/31/1948	1684.4	2105.9	730.4	0.0	0.0	0.0	0.0
3/31/1949	1456.3	1877.1	590.2	0.0	0.0	0.0	0.0
3/31/1950	1469.0	1890.3	811.3	0.0	0.0	0.0	0.0
3/31/1951	2399.4	2598.5	708.5	0.0	0.0	0.0	0.0
3/31/1952	3254.6	3426.8	1627.5	0.0	0.0	0.0	0.0
3/31/1953	2612.6	2612.6	722.6	0.0	0.0	0.0	0.0
3/31/1954	2127.8	2266.7	695.1	0.0	0.0	0.0	0.0
3/31/1955	1585.1	1720.7	485.8	0.0	0.0	0.0	0.0
3/31/1956	2638.9	2880.0	1257.9	0.0	0.0	0.0	0.0
3/31/1957	2183.3	2419.2	679.1	0.0	0.0	0.0	0.0
3/31/1958	2634.1	2869.4	1390.0	0.0	0.0	0.0	0.0
3/31/1959	2122.5	2352.9	470.4	0.0	0.0	0.0	0.0
3/31/1960	1559.1	1987.1	461.3	0.0	0.0	0.0	0.0
3/31/1961	1079.8	1599.5	365.5	0.0	0.0	0.0	0.0
3/31/1962	1219.3	1756.4	766.2	0.0	0.0	0.0	0.0
3/31/1963	1588.8	1850.4	988.6	0.0	0.0	0.0	0.0

WAG:

3/31/1964	1285.2	1425.6	454.6	0.0	0.0	0.0	0.0
3/31/1965	2200.8	2361.6	1099.2	0.0	0.0	0.0	0.0
3/31/1966	1758.6	1948.6	510.6	0.0	0.0	0.0	0.0
3/31/1967	2606.2	2850.5	1506.9	0.0	0.0	0.0	0.0
3/31/1968	2038.9	2277.8	460.6	0.0	0.0	0.0	0.0
3/31/1969	3275.3	3536.5	1646.5	0.0	0.0	0.0	0.0
3/31/1970	2650.7	2650.7	760.7	0.0	0.0	0.0	0.0
3/31/1971	2433.0	2534.0	778.3	0.0	0.0	0.0	0.0
3/31/1972	2020.6	2139.2	559.4	0.0	0.0	0.0	0.0
3/31/1973	2106.4	2525.3	945.3	0.0	0.0	0.0	0.0
3/31/1974	2467.2	2940.1	1102.7	0.0	0.0	0.0	0.0
3/31/1975	2470.2	2828.4	938.4	0.0	0.0	0.0	0.0
3/31/1976	1840.1	2143.7	320.5	0.0	0.0	0.0	0.0
3/31/1977	1114.9	1631.9	230.6	0.0	0.0	0.0	0.0
3/31/1978	1773.4	2331.4	1140.7	0.0	0.0	0.0	0.0
3/31/1979	2037.0	2246.5	867.3	0.0	0.0	0.0	0.0
3/31/1980	2627.1	2905.0	1144.4	0.0	0.0	0.0	0.0
3/31/1981	1959.1	2230.9	433.2	0.0	0.0	0.0	0.0
3/31/1982	3334.6	3403.8	1908.4	0.0	0.0	0.0	0.0
3/31/1983	3890.8	3890.8	2000.8	0.0	0.0	0.0	0.0
3/31/1984	2703.4	2703.4	813.4	0.0	0.0	0.0	0.0
3/31/1985	2175.5	2175.5	527.9	0.0	0.0	0.0	0.0
3/31/1986	3053.6	3103.5	1720.6	0.0	0.0	0.0	0.0
3/31/1987	2012.0	2108.9	360.9	0.0	0.0	0.0	0.0
3/31/1988	1337.3	1740.1	352.6	0.0	0.0	0.0	0.0
3/31/1989	1199.9	1623.5	605.0	0.0	0.0	0.0	0.0
3/31/1990	858.1	1298.1	343.3	0.0	0.0	0.0	0.0
3/31/1991	547.4	1007.8	447.6	0.0	0.0	0.0	0.0
3/31/1992	417.0	732.7	349.1	0.0	0.0	0.0	0.0
3/31/1993	1314.3	1389.4	1131.0	0.0	0.0	0.0	0.0
3/31/1994	970.7	824.1	316.5	0.0	0.0	0.0	0.0
3/31/1995	2400.5	2300.2	1941.4	0.0	0.0	0.0	0.0
3/31/1996	2819.8	2593.3	1150.8	0.0	0.0	0.0	0.0
3/31/1997	2930.8	2874.7	1571.4	0.0	0.0	0.0	0.0
3/31/1998	3328.0	3328.0	1630.8	0.0	0.0	0.0	0.0
3/31/1999	2755.1	2755.1	957.1	0.0	0.0	0.0	0.0
3/31/2000	2548.4	2658.6	816.5	0.0	0.0	0.0	0.0
3/31/2001	1966.4	2148.5	407.3	0.0	0.0	0.0	0.0
3/31/2002	1682.5	2072.1	528.7	0.0	0.0	0.0	0.0
3/31/2003	1654.7	2172.1	685.7	0.0	0.0	0.0	0.0
3/31/2004	1654.7	2172.1	685.7	0.0	0.0	0.0	0.0









































CALSIM_01		CALSIM_01 LTO-Witho		blank4	blank5	blank6	blank7	Driest Periods		
Run A	Run B	Run C	Run D	Run E	Run F	Run G				
NMI	YRT	NMI	YRT	NMI	YRT	NMI	YRT	NMI	YRT	
									WATERYEAR	
3		3		3		3		3	1921	0
2		2		5		5		5	1922	0
2		2		5		5		5	1923	0
4		4		5		5		5	1924	0
3		3		5		5		5	1925	0
4		4		5		5		5	1926	0
4		3		5		5		5	1927	0
4		3		5		5		5	1928	0
5		4		5		5		5	1929	1
5		4		5		5		5	1930	1
5		5		5		5		5	1931	1
5		4		5		5		5	1932	1
5		5		5		5		5	1933	1
5		5		5		5		5	1934	1
5		5		5		5		5	1935	0
4		4		5		5		5	1936	0
4		4		5		5		5	1937	0
1		2		4		5		5	1938	0
3		4		5		5		5	1939	0
3		3		5		5		5	1940	0
2		2		5		5		5	1941	0
1		2		5		5		5	1942	0
1		1		5		5		5	1943	0
3		3		5		5		5	1944	0
3		3		5		5		5	1945	0
3		2		5		5		5	1946	0
4		3		5		5		5	1947	0
4		3		5		5		5	1948	0
4		4		5		5		5	1949	0
4		4		5		5		5	1950	0
3		2		5		5		5	1951	0
1		1		4		5		5	1952	0
2		2		5		5		5	1953	0
3		3		5		5		5	1954	0
4		4		5		5		5	1955	0
2		2		5		5		5	1956	0
3		3		5		5		5	1957	0
2		2		5		5		5	1958	0
3		3		5		5		5	1959	0
4		4		5		5		5	1960	0
5		4		5		5		5	1961	0
5		4		5		5		5	1962	0
4		4		5		5		5	1963	0

5	4	5	5	5	5	5	1964	0
3	3	5	5	5	5	5	1965	0
4	4	5	5	5	5	5	1966	0
2	2	4	5	5	5	5	1967	0
3	3	5	5	5	5	5	1968	0
1	1	4	5	5	5	5	1969	0
2	2	5	5	5	5	5	1970	0
3	2	5	5	5	5	5	1971	0
3	3	5	5	5	5	5	1972	0
3	2	5	5	5	5	5	1973	0
3	2	5	5	5	5	5	1974	0
3	2	5	5	5	5	5	1975	0
4	3	5	5	5	5	5	1976	1
5	4	5	5	5	5	5	1977	1
4	3	5	5	5	5	5	1978	0
3	3	5	5	5	5	5	1979	0
2	2	5	5	5	5	5	1980	0
4	3	5	5	5	5	5	1981	0
1	1	4	5	5	5	5	1982	0
1	1	3	5	5	5	5	1983	0
2	2	5	5	5	5	5	1984	0
3	3	5	5	5	5	5	1985	0
1	1	4	5	5	5	5	1986	0
3	3	5	5	5	5	5	1987	1
5	4	5	5	5	5	5	1988	1
5	4	5	5	5	5	5	1989	1
5	5	5	5	5	5	5	1990	1
5	5	5	5	5	5	5	1991	1
5	5	5	5	5	5	5	1992	1
5	5	5	5	5	5	5	1993	0
5	5	5	5	5	5	5	1994	0
3	3	4	5	5	5	5	1995	0
2	2	5	5	5	5	5	1996	0
2	2	4	5	5	5	5	1997	0
1	1	4	5	5	5	5	1998	0
2	2	5	5	5	5	5	1999	0
2	2	5	5	5	5	5	2000	0
4	3	5	5	5	5	5	2001	0
4	3	5	5	5	5	5	2002	0
4	3	5	5	5	5	5	2003	0
4	3	5	5	5	5	5		











































Paste the yeartype classification (column of numbers) to be used for YRT-based calculated results in THIS column

10

20 12 0.2439

40-30-30 ELT	WATERYEAR	W	AN	BN	D	C
2	1921	0	1	0	0	0
1	1922	1	0	0	0	0
3	1923	0	0	1	0	0
5	1924	0	0	0	0	1
4	1925	0	0	0	1	0
4	1926	0	0	0	1	0
2	1927	0	1	0	0	0
2	1928	0	1	0	0	0
5	1929	0	0	0	0	1
4	1930	0	0	0	1	0
5	1931	0	0	0	0	1
5	1932	0	0	0	0	1
5	1933	0	0	0	0	1
5	1934	0	0	0	0	1
4	1935	0	0	0	1	0
3	1936	0	0	1	0	0
4	1937	0	0	0	1	0
1	1938	1	0	0	0	0
3	1939	0	0	1	0	0
2	1940	0	1	0	0	0
1	1941	1	0	0	0	0
1	1942	1	0	0	0	0
1	1943	1	0	0	0	0
4	1944	0	0	0	1	0
3	1945	0	0	1	0	0
2	1946	0	1	0	0	0
4	1947	0	0	0	1	0
3	1948	0	0	1	0	0
4	1949	0	0	0	1	0
4	1950	0	0	0	1	0
2	1951	0	1	0	0	0
1	1952	1	0	0	0	0
1	1953	1	0	0	0	0
2	1954	0	1	0	0	0
4	1955	0	0	0	1	0
1	1956	1	0	0	0	0
2	1957	0	1	0	0	0
1	1958	1	0	0	0	0
3	1959	0	0	1	0	0
4	1960	0	0	0	1	0
4	1961	0	0	0	1	0
3	1962	0	0	1	0	0
1	1963	1	0	0	0	0

4	1964	0	0	0	1	0
1	1965	1	0	0	0	0
3	1966	0	0	1	0	0
1	1967	1	0	0	0	0
3	1968	0	0	1	0	0
1	1969	1	0	0	0	0
1	1970	1	0	0	0	0
1	1971	1	0	0	0	0
3	1972	0	0	1	0	0
2	1973	0	1	0	0	0
1	1974	1	0	0	0	0
1	1975	1	0	0	0	0
4	1976	0	0	0	1	0
5	1977	0	0	0	0	1
2	1978	0	1	0	0	0
4	1979	0	0	0	1	0
2	1980	0	1	0	0	0
4	1981	0	0	0	1	0
1	1982	1	0	0	0	0
1	1983	1	0	0	0	0
1	1984	1	0	0	0	0
3	1985	0	0	1	0	0
1	1986	1	0	0	0	0
4	1987	0	0	0	1	0
5	1988	0	0	0	0	1
4	1989	0	0	0	1	0
5	1990	0	0	0	0	1
5	1991	0	0	0	0	1
5	1992	0	0	0	0	1
2	1993	0	1	0	0	0
5	1994	0	0	0	0	1
1	1995	1	0	0	0	0
1	1996	1	0	0	0	0
1	1997	1	0	0	0	0
1	1998	1	0	0	0	0
1	1999	1	0	0	0	0
2	2000	0	1	0	0	0
4	2001	0	0	0	1	0
4	2002	0	0	0	1	0
2	2003	0	1	0	0	0
3	2004	0	0	1	0	0

For Jan-Sep n =	26	13	11	20	12
For Following Oct-Dec n =	26	13	11	20	12









































Column below  
for "Control"  
worksheet  
after changing  
variable

list		NOW	NOW	NOW	NOW
		wateryear	40-30-30	60-20-20	Shastaindex
C	a				
D	b				
E	c	1920	2	2	1
F	d	1921	2	2	1
G	e	1922	2	1	1
H	f	1923	3	2	3
I	g	1924	5	5	4
J	h	1925	4	3	1
K	i	1926	4	4	3
L	j	1927	1	2	1
M	k	1928	2	3	1
N	l	1929	5	5	3
O	m	1930	4	5	2
P	n	1931	5	5	4
Q	o	1932	4	2	4
R	p	1933	5	4	4
S	q	1934	5	5	4
T	r	1935	3	2	1
U	s	1936	3	2	1
V	t	1937	3	1	2
W	u	1938	1	1	1
X	v	1939	4	4	3
Y	w	1940	2	2	1
Z	x	1941	1	1	1
AA	y	1942	1	1	1
AB	z	1943	1	1	1
AC	a	1944	4	3	3
AD	b	1945	3	2	1
AE	c	1946	3	2	1
AF	d	1947	4	4	3
AG	e	1948	3	3	1
AH	f	1949	4	3	2
AI	g	1950	3	3	2
AJ	h	1951	2	2	1
AK	i	1952	1	1	1
AL	j	1953	1	3	1
AM	k	1954	2	3	1
AN	l	1955	4	4	2
AO	m	1956	1	1	1
AP	n	1957	2	3	1
AQ	o	1958	1	1	1
AR	p	1959	3	4	1
AS	q	1960	4	5	1
AT	r	1961	4	5	1
AU	s	1962	3	3	1
AV	t	1963	1	2	1

AW	w	1964	4	4	3
AX	x	1965	1	1	1
AY	y	1966	3	3	1
AZ	z	1967	1	1	1
BA	a	1968	3	4	1
BB	b	1969	1	1	1
BC	c	1970	1	2	1
BD	d	1971	1	3	1
BE	e	1972	3	4	1
BF	f	1973	2	2	1
BG	g	1974	1	1	1
BH	h	1975	1	1	1
BI	i	1976	5	5	3
BJ	j	1977	5	5	4
BK	k	1978	2	1	1
BL	l	1979	3	2	2
BM	m	1980	2	1	1
BN	n	1981	4	4	2
BO	o	1982	1	1	1
BP	p	1983	1	1	1
BQ	q	1984	1	2	1
BR	r	1985	4	4	3
BS	s	1986	1	1	1
BT	t	1987	4	5	3
BU	u	1988	5	5	3
BV	v	1989	4	5	1
BW	w	1990	5	5	3
BX	x	1991	5	5	4
BY	y	1992	5	5	4
BZ	z	1993	2	1	1
CA	a	1994	5	5	4
CB	b	1995	1	1	1
CC	c	1996	1	1	1
CD	d	1997	1	1	1
CE	e	1998	1	1	1
CF	f	1999	1	2	1
CG	g	2000	2	2	1
CH	h	2001	4	4	1
CI	i	2002	4	4	1
CJ	j	2003	2	3	1
CK	k				
CL	l				
CM	m				
CN	n				
CO	o				
CP	p				
CQ	q				
CR	r				
CS	s				
CT	t				
CU	u				
CV	v				

CW	w
CX	x
CY	y
CZ	z
DA	a
DB	b
DC	c
DD	d
DE	e
DF	f
DG	g
DH	h
DI	i
DJ	j
DK	k
DL	l
DM	m
DN	n
DO	o
DP	p
DQ	q
DR	r
DS	s
DT	t
DU	u
DV	v
DW	w
DX	x
DY	y
DZ	z









































NOW	NOW	NOW	NOW	ELT	ELT	ELT
AmerD893	Featherindex	Trinityindex	Amer403030	wateryear	40-30-30	60-20-20
1	0	3	2	1920	2	2
1	0	3	2	1921	2	2
1	0	4	2	1922	1	1
1	0	4	3	1923	3	2
2	1	5	6	1924	5	5
1	0	2	5	1925	4	3
1	0	4	5	1926	4	5
1	0	2	1	1927	2	2
1	0	3	2	1928	2	4
1	0	5	6	1929	5	5
1	0	4	5	1930	4	5
2	1	5	6	1931	5	5
1	0	4	5	1932	5	2
1	0	4	6	1933	5	4
2	1	5	6	1934	5	5
1	0	4	3	1935	4	2
1	0	3	3	1936	3	2
1	0	4	3	1937	4	2
1	0	1	1	1938	1	1
2	0	5	5	1939	3	4
1	0	2	2	1940	2	2
1	0	1	1	1941	1	1
1	0	2	1	1942	1	1
1	0	3	1	1943	1	2
1	0	5	5	1944	4	3
1	0	3	3	1945	3	2
1	0	2	3	1946	2	2
1	0	4	5	1947	4	5
1	0	3	3	1948	3	4
1	0	3	5	1949	4	4
1	0	4	3	1950	4	4
1	0	2	2	1951	2	3
1	0	2	1	1952	1	1
1	0	2	1	1953	1	3
1	0	2	2	1954	2	3
1	0	4	5	1955	4	5
1	0	1	1	1956	1	1
1	0	3	2	1957	2	3
1	0	1	1	1958	1	1
1	0	3	3	1959	3	4
1	0	3	5	1960	4	5
1	0	3	5	1961	4	5
1	0	3	3	1962	3	3
1	0	2	1	1963	1	2

1	0	4	5
1	0	2	1
1	0	3	3
1	0	2	1
1	0	3	3
1	0	1	1
1	0	2	1
1	0	2	1
1	0	3	3
1	0	2	2
1	0	1	1
1	0	2	1
2	0	4	6
2	1	5	7
1	0	1	2
1	0	4	3
1	0	2	2
2	0	4	5
1	0	1	1
1	0	1	1
1	0	2	1
1	0	4	5
1	0	2	1
2	0	4	5
2	1	4	6
1	0	3	5
2	0	4	6
1	1	5	6
2	0	4	6
1	0	2	2
2	0	5	6
1	0	1	0
1	0	2	0
1	0	2	0
1	0	1	0
1	0	2	0
1	0	2	0
2	0	4	0
1	0	3	0
1	0	2	0

1964	4	5
1965	1	2
1966	3	4
1967	1	1
1968	3	4
1969	1	1
1970	1	2
1971	1	3
1972	3	5
1973	2	2
1974	1	2
1975	1	2
1976	4	5
1977	5	5
1978	2	1
1979	4	2
1980	2	1
1981	4	4
1982	1	1
1983	1	1
1984	1	1
1985	3	4
1986	1	1
1987	4	5
1988	5	5
1989	4	5
1990	5	5
1991	5	5
1992	5	5
1993	2	2
1994	5	5
1995	1	1
1996	1	1
1997	1	1
1998	1	1
1999	1	2
2000	2	2
2001	4	5
2002	4	4
2003	2	4









































ELT Shastaindex	ELT AmerD893	ELT Featherindex	ELT Trinityindex	ELT Amer403030	LLT wateryear	LLT 40-30-30
1	1	0	3	2	1920	2
1	1	0	3	2	1921	2
1	1	0	4	2	1922	1
3	1	0	5	3	1923	3
4	2	1	5	6	1924	5
1	1	0	2	5	1925	4
3	1	0	4	5	1926	5
1	1	0	1	1	1927	2
1	1	0	3	2	1928	3
4	2	0	5	6	1929	5
3	1	0	4	5	1930	4
4	2	1	5	6	1931	5
3	1	0	4	5	1932	5
4	1	0	4	6	1933	5
4	2	1	5	6	1934	5
1	1	0	4	3	1935	4
1	1	0	3	3	1936	3
2	1	0	3	3	1937	4
1	1	0	1	1	1938	1
4	2	0	5	5	1939	3
1	1	0	2	2	1940	2
1	1	0	1	1	1941	1
1	1	0	1	1	1942	1
1	1	0	3	1	1943	1
3	1	0	5	5	1944	4
1	1	0	3	3	1945	4
1	1	0	2	3	1946	3
3	2	0	4	5	1947	4
1	1	0	3	3	1948	3
2	1	0	3	5	1949	4
2	1	0	4	3	1950	4
1	1	0	2	2	1951	2
1	1	0	1	1	1952	1
1	1	0	2	1	1953	1
1	1	0	2	2	1954	2
2	1	0	4	5	1955	4
1	1	0	1	1	1956	1
1	1	0	3	2	1957	2
1	1	0	1	1	1958	1
1	2	0	3	3	1959	3
1	1	0	3	5	1960	4
1	2	0	3	5	1961	4
1	1	0	3	3	1962	4
1	1	0	2	1	1963	2

3	1	0	4	5	1964	4
1	1	0	2	1	1965	1
1	2	0	3	3	1966	3
1	1	0	2	1	1967	1
1	2	0	3	3	1968	3
1	1	0	1	1	1969	1
1	1	0	2	1	1970	1
1	1	0	2	1	1971	1
1	1	0	3	3	1972	3
1	1	0	2	2	1973	2
1	1	0	1	1	1974	1
1	1	0	2	1	1975	1
3	2	1	5	6	1976	4
4	2	1	5	7	1977	5
1	1	0	1	2	1978	2
3	1	0	4	3	1979	4
1	1	0	2	2	1980	2
3	2	0	4	5	1981	4
1	1	0	1	1	1982	1
1	1	0	1	1	1983	1
1	1	0	2	1	1984	1
3	1	0	4	5	1985	3
1	1	0	2	1	1986	1
3	2	1	4	5	1987	4
2	2	1	4	6	1988	5
1	1	0	3	5	1989	4
3	2	0	4	6	1990	5
4	1	1	5	6	1991	5
3	2	1	4	6	1992	5
1	1	0	2	2	1993	2
4	2	0	5	6	1994	5
1	1	0	1	0	1995	1
1	1	0	2	0	1996	1
1	1	0	2	0	1997	1
1	1	0	1	0	1998	1
1	1	0	2	0	1999	1
1	1	0	2	0	2000	2
2	2	0	4	0	2001	4
1	1	0	3	0	2002	4
1	1	0	1	0	2003	3











































LLT 60-20-20	LLT Shastaindex	LLT AmerD893	LLT Featherindex	LLT Trinityindex	LLT Amer403030
2	1	1	0	3	2
2	1	1	0	3	2
1	1	1	0	4	2
2	3	1	0	4	3
5	4	2	1	5	6
4	1	1	0	2	5
5	3	2	0	4	5
3	1	1	0	1	1
4	1	1	0	3	2
5	4	2	0	5	6
5	2	2	0	4	5
5	4	2	1	5	6
3	3	1	0	4	5
5	4	1	0	4	6
5	4	2	1	5	6
3	1	1	0	4	3
2	1	1	0	3	3
2	2	1	0	3	3
1	1	1	0	1	1
4	4	2	0	5	5
2	1	1	0	1	2
1	1	1	0	1	1
2	1	1	0	1	1
2	1	1	0	3	1
4	3	1	0	5	5
3	1	1	0	3	3
3	1	1	0	2	3
5	3	2	0	4	5
5	1	1	0	3	3
5	2	1	0	3	5
4	2	1	0	4	3
3	1	1	0	2	2
1	1	1	0	1	1
3	1	1	0	2	1
4	1	1	0	2	2
5	2	1	0	4	5
2	1	1	0	1	1
3	1	1	0	3	2
1	1	1	0	1	1
5	1	2	0	3	3
5	1	2	0	3	5
5	1	2	0	3	5
3	1	1	0	3	3
3	1	1	0	3	3
3	1	1	0	2	1

5	3	1	0	4	5
2	1	1	0	2	1
5	1	2	0	3	3
1	1	1	0	2	1
5	1	2	0	3	3
1	1	1	0	1	1
2	1	2	0	2	1
3	1	1	0	2	1
5	1	1	0	3	3
3	1	1	0	2	2
2	1	1	0	1	1
2	3	2	1	5	6
5	4	2	1	5	7
1	1	1	0	1	2
2	3	1	0	4	3
1	1	1	0	2	2
4	2	2	0	4	5
1	1	1	0	1	1
1	1	1	0	1	1
2	1	1	0	2	1
4	3	2	0	4	5
2	1	1	0	2	1
5	3	2	1	4	5
5	3	2	1	4	6
5	1	1	0	3	5
5	3	2	0	4	6
5	4	1	1	5	6
5	3	2	1	4	6
2	1	1	0	1	2
5	4	2	0	5	6
1	1	1	0	1	0
2	1	1	0	2	0
1	1	2	0	2	0
1	1	1	0	1	0
2	1	1	0	2	0
3	1	1	0	1	0
5	2	2	0	4	0
5	1	1	0	3	0
5	1	1	0	1	0

**COS: North-of-Delta Deliveries to CVP Ag**

<===== Allocation/Contract Yr

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
AVG:	4.7	0.2	0.0	0.0	0.1	1.2	18.5	36.9
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX:	14.9	1.9	0.0	0.0	4.4	17.2	44.3	63.8
Avg by WYT	PRV	PRV	PRV					
W:	6.9	0.3	0.0	0.0	0.0	0.8	21.5	50.2
AN:	5.2	0.1	0.0	0.0	0.0	0.5	23.7	50.0
BN:	4.5	0.4	0.0	0.0	0.5	3.2	22.8	38.4
D:	3.0	0.0	0.0	0.0	0.2	0.9	13.2	24.9
C:	2.1	0.1	0.0	0.0	0.0	1.5	11.1	12.8

**PA: North-of-Delta Deliveries to CVP Ag**

<===== Allocation/Contract Yr

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
AVG:	5.2	0.2	0.0	0.0	0.1	1.4	20.8	40.6
MIN:	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9
MAX:	14.9	1.9	0.0	0.0	4.4	19.9	51.5	63.8
Avg by WYT	PRV	PRV	PRV					
W:	7.2	0.3	0.0	0.0	0.0	0.8	22.6	51.0
AN:	5.5	0.1	0.0	0.0	0.0	0.6	25.5	51.2
BN:	5.7	0.5	0.0	0.0	0.5	4.3	28.8	50.0
D:	3.7	0.0	0.0	0.0	0.2	1.1	16.0	30.4
C:	2.4	0.1	0.0	0.0	0.0	1.7	12.7	14.9

**Service Contractors in TAF**

Year	=====	=====	Full Year				
	JUN	JUL	AUG	SEP	Oct-Apr TOT	Mar-Feb TOT	Allocation PCT
	47.6	56.9	45.4	20.2	24.6	230.3	65%
	0.0	0.0	0.0	0.0	0.5	0.0	0%
	81.5	95.8	77.5	37.5	65.5	357.1	100%
	68.0	81.4	65.4	30.0	27.0	324.7	91%
	65.3	77.3	61.1	27.5	28.1	308.4	86%
	43.1	52.7	41.8	16.8	32.3	223.7	63%
	30.6	35.9	28.7	12.2	20.3	149.4	42%
	17.0	20.3	16.3	7.5	15.6	88.6	25%

**Service Contractors in TAF**

Year	=====	=====	Full Year				
	JUN	JUL	AUG	SEP	Oct-Apr TOT	Mar-Feb TOT	Allocation PCT
	52.5	62.7	50.1	22.1	27.7	254.8	71%
	1.2	1.4	1.1	0.5	0.6	6.2	2%
	81.5	95.1	75.8	37.5	72.7	357.1	100%
	70.0	83.7	67.1	30.8	28.5	333.8	93%
	69.7	82.2	65.1	29.2	30.2	328.3	92%
	54.9	67.2	53.3	21.1	40.0	285.8	80%
	37.4	44.0	35.2	15.0	24.2	182.8	51%
	19.3	23.3	18.8	8.1	18.1	101.4	28%

COS :

	OCT	NOV	DEC	JAN	FEB
AVG:	75.7	24.0	7.3	1.4	0.6
MIN:	6.2	3.5	0.0	0.0	0.0
MAX:	95.9	43.7	20.1	9.0	13.6
Avg by WY	PRV	PRV	PRV		
W:	78.5	24.1	8.8	0.8	0.0
AN:	75.4	23.7	6.2	0.5	0.0
BN:	75.3	26.6	7.4	2.9	1.9
D:	76.9	20.8	7.6	1.7	0.9
C:	68.3	27.3	4.5	1.8	0.9

PA: 1

	OCT	NOV	DEC	JAN	FEB
AVG:	60	30	7	1	1
MIN:	6	12	0	0	0
MAX:	86	49	20	9	14
Avg by WY	PRV	PRV	PRV		
W:	62	30	9	1	0
AN:	60	29	6	0	0
BN:	61	32	7	3	2
D:	59	27	8	2	1
C:	59	33	5	2	1

**North-of-Delta Deliveries to CVP Settlement Contractors in TAF**

Allocation/Contract Year							Oct-Apr
MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
7.1	81.0	305.9	352.0	381.6	294.3	77.1	197.1
0.0	29.1	145.5	287.4	322.0	241.0	23.5	60.2
58.6	123.7	358.8	398.9	407.7	331.1	89.7	302.1
3.1	70.0	301.7	335.8	392.3	318.6	81.3	170.6
1.6	78.0	300.2	350.0	388.8	298.8	79.0	179.8
13.3	90.3	314.4	364.6	390.3	293.4	69.8	219.5
7.3	83.2	320.3	378.9	384.4	282.8	76.8	208.6
15.3	95.5	289.8	332.8	338.4	256.6	72.9	233.4

**North-of-Delta Deliveries to CVP Settlement Contractors in TAF**

Allocation/Contract Year							Oct-Apr
MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
7	81	306	352	382	294	77	187
0	29	146	287	322	238	24	66
59	124	359	399	408	335	90	295
3	70	302	336	392	319	81	159
2	78	300	350	389	299	79	169
13	90	314	365	390	293	70	208
7	83	320	379	384	283	77	201
15	96	290	333	338	255	71	227



Full Year	Fraction of
Mar-Feb	Hist Max
TOT	PCT
1608.7	94%
1388.2	81%
1719.1	100%

1617.0	94%
1607.9	94%
1646.4	96%
1640.5	95%
1504.2	88%



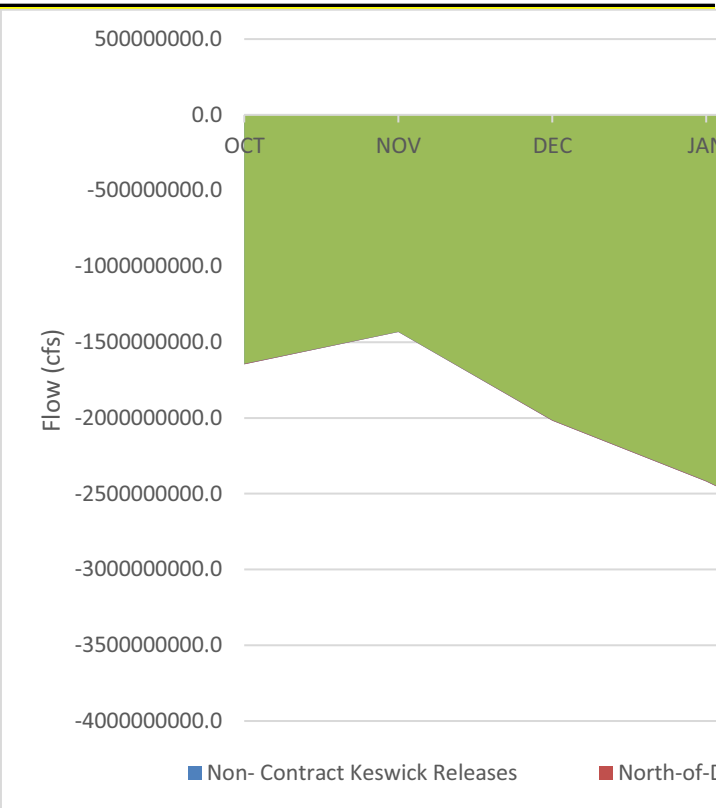
Full Year	Fraction of
Mar-Feb	Hist Max
TOT	PCT
1599	93%
1372	80%
1715	100%

1607	94%
1597	93%
1637	95%
1629	95%
1498	87%

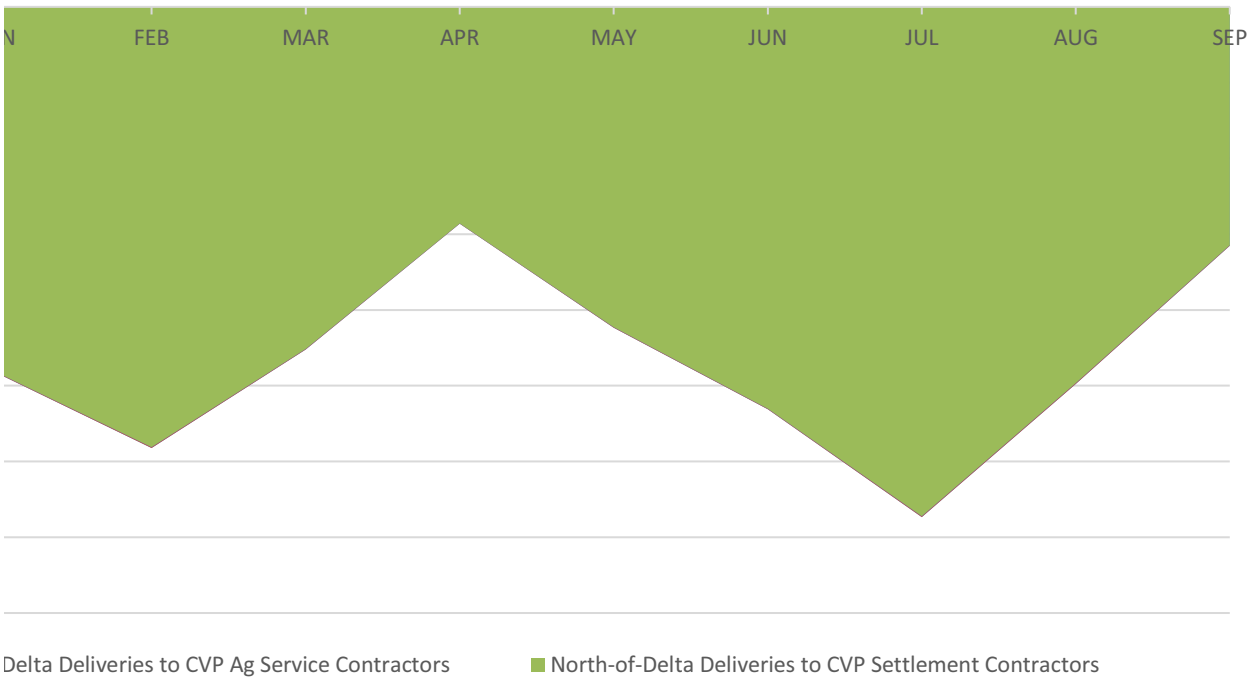
	OCT	NOV
AVG:	4.7	0
	0.2	0
	75.7	2

	OCT	NOV
AVG:	5.2	0
	0.2	0
	83.9	3

Keswick releases	6461.0	5627
Non- Contract Keswick	#####	#####
North-of-Delta Deliveri	3257423.0	2836947
North-of-Delta Deliveri	#####	#####







Delta Deliveries to CVP Ag Service Contractors

North-of-Delta Deliveries to CVP Settlement Contractors

	OCT	NOV	DEC	JAN
AVG:	75.7	24.0	7.3	1.4
	2.4	0.8	0.2	0.0
	1231.5	403.6	118.4	23.0

	OCT	NOV	DEC	JAN
AVG:	60	30	7	1
	2.0	1.0	0.2	0.0
	983.5	496.8	118.4	23.0

**COS: North-of-Delta Deliveries to CVP Settlement Contractors in TAF**

FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
0.6	7.1	81.0	305.9	352.0	381.6	294.3	77.1
0.0	0.2	2.7	9.9	11.7	12.3	9.5	2.6
11.0	115.0	1360.5	4975.7	5915.1	6206.9	4785.9	1295.1

**PA: North-of-Delta Deliveries to CVP Settlement Contractors in TAF**

1	7	81	306	352	382	294	77
0.0	0.2	2.7	9.9	11.7	12.3	9.5	2.6
11.0	115.0	1360.5	4976.4	5915.3	6207.5	4783.5	1291.1



TOT	TOT	PCT
197.1	1608.7	94%



187	1599	93%
-----	------	-----