Appendix 22B Reporting Metrics Tool
Line items and numbers identified or noted as "No Action Alternative" represent the "Existing Conditions/No Project/No Action Condition" (described in Chapter 2 Alternatives Analysis). Table numbering may not be consecutive for all appendixes."







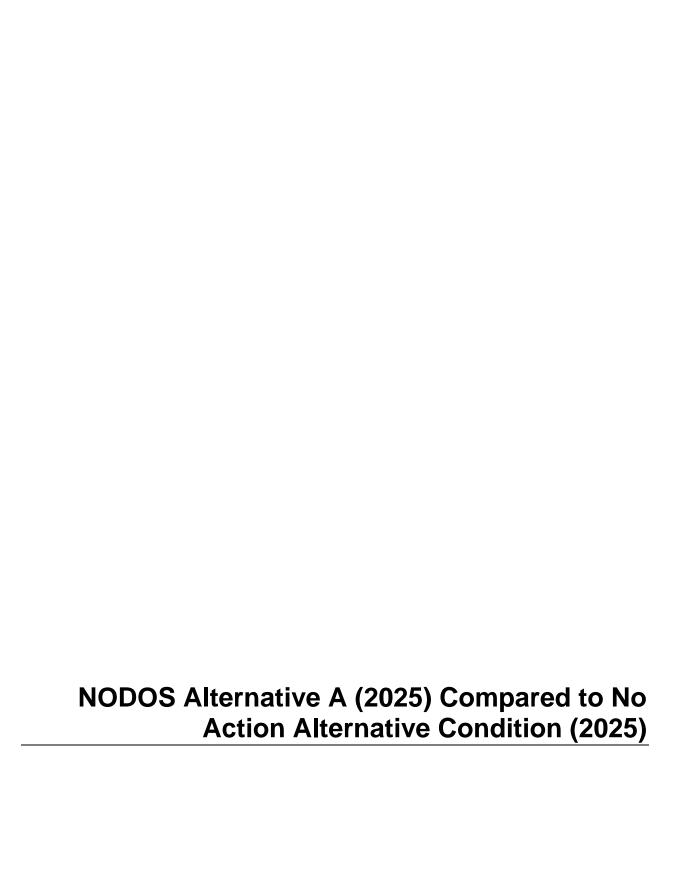




Table RMT-3a-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative A	No Action Alternative	NODOS Alternative minus No Act Alternative
r Supply Reliability						
Sacramento River Hydrologic Region			Long Term	1,941	1,932	9
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	1,932	1,932	14
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	159	155	4
	Contract Delivery (annual average)	(TAI /year)	Dry and Critical	141	137	4
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	213 175	211 174	2
CVP Ag	Contract Delivery (annual average -	(TAF/year)	Long Term	224	214	10
	does not include Settlement contractors)	(17ti 7yodi)	Dry and Critical	103	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	950 901	950 901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	24	23	1
			Dry and Critical	18	16	2
	on (not including Friant-Kern and Mader		Long Term	853	853	0
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	814	814	ő
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
- Tronge Ester 2	Contract Delivery (armual average)	(17ti 7youi)	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	16 13	16 13	0
CVD A~	Contract Delivery (annual average; does	(TAE()	Long Term	296	290	6
CVP Ag	not include Exchange contractors)	(TAF/year)	Dry and Critical	147	137	10
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	4	4	0
San Francisco Bay Hydrologic Regi	(annual average)		Dry and Critical	3	3	0
		(TAE()	Long Term	290	290	1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	37	36	1
	Contract Delivery (including Article 21,		Dry and Critical Long Term	18 208	17 199	9
SWP M&I	includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	160	142	18
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	46	44	2
Tulare Lake Hydrologic Region (not	including Friant-Kern Canal water users	3)	Dry and Critical	36	31	5
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	12 11	12 11	0
CVP Ac	Contract Delivery (annual average -	/TAE(100r)	Long Term	616	601	14
CVP Ag	includes Cross Valley Canal)	(TAF/year)	Dry and Critical	307	283	25
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	88 68	84 60	4 9
CMD A ~	Contract Delivery (including Article 21)	(TAE(1005)	Long Term	687	657	31
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	518	460	58
South Lahontan Hydrologic Region			Lana Tarra	000	207	40
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term Dry and Critical	280 227	267 197	13 30
South Coast Hydrologic Region	(annual avoluge)		Dry and Omious			
	Contract Delivery (including Article 21,		Long Term	1,414	1,353	61
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,132	990	141
	(annual average) Contract Delivery (including Article 21)		Long Term	9	8	0
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	7	6	1
Total For All Regions	Operational Delivery (CVD CVD)		Lang Tarre	0.007	0.450	100
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term Dry and Critical	8,627 7,300	8,458 6,968	169 331
onmental Use	(aaai avorago)		2., and Ontious	.,500	5,500	001
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	1	0	1
		/TAF/	Dry and Critical Long Term	0 35	0	0 35
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Dry and Critical	17	0	17
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	8	0	8
NODOS Ecosystem Enhancement A		,,	Dry and Critical	4	0	4
		/TAF4 \	Long Term	82	0	82
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	91	0	91
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	1	0	1
	(,, , ,	Dry and Critical	0	0	0
r Quality NODOS Water Quality (WQ)						
	Flow (appual average)	/TAE/:	Long Term	128	0	128
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Dry and Critical	117	0	117
Yield						
NODOS Yield Summary			Long Term			425
Total NODOS Supply Incremen	t	(TAF/year)	Dry and Critical			425 561

Notes:
1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.
2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3a-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Condit (in 2011 \$'s)	ions	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley				
Annual Average Benefit (\$1,000,000	l/year)			
	Long Term	\$11,687	\$11,686	\$1.408
	Dry and Critical	\$11,651	\$11,648	\$3.155
Annual Average Costs (\$1,000,000/y	year)			
Groundwater Fallow	Long Term	\$659	\$666	(\$7.098)
	Dry and Critical	\$745	\$753	(\$7.394)
Follow	Long Term	N/A	N/A	\$0.085
allow	Dry and Critical	N/A	N/A	\$0.652
Annual Average Change in Consum	ner Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$1.975
	Dry and Critical	N/A	N/A	\$9.852
Total Benefit (\$1,000,000/year)	_		•	
	Long Term	N/A	N/A	\$10.566
	Dry and Critical	N/A	N/A	\$21.053
Central Valley	·			
GW Pumping (TAF/year)				
	Long Term	6,506	6,557	(50)
	Dry and Critical	7,157	7,216	(59)

Table RMT-3a-3a LCPSIM M&I Economics Reporting Metrics

Evaluated at 2025 Projected Conditions (in 2007 \$'s)		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$3,407	\$5,261	(\$1,855)
Fixed Option Cost	Average	\$4,858	\$1,846	\$3,012
Water Market Option Cost	Average	\$107	\$260	(\$153)
Municipal Water Supply Operations Cost	Average	\$189,698	\$192,303	(\$2,605)
Total Loss/Costs	Average	\$198,070	\$199,670	(\$1,600)
	Dry and Critical	\$193,768	\$198,694	(\$4,926)
South Coast				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$65,729	\$105,016	(\$39,287)
Fixed Option Cost	Average	\$378,605	\$382,046	(\$3,440)
Water Market Option Cost	Average	\$18,758	\$27,111	(\$8,353)
Municipal Water Supply Operations Cost	Average	\$1,172,595	\$1,179,871	(\$7,276)
Total Loss/Costs	Average	\$1,635,688 \$1,830,170	\$1,694,043 \$1,058,312	(\$58,355) (\$119,141)
Total Loss/Costs	Average Dry and Critical	\$1,635,688 \$1,839,170	\$1,694,043 \$1,958,312	1

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3a-3b

Additional information regarding Evaluated at 2025 Projected Conditions in 2007 \$'s)	zor cim camornia Aque	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$10	000/year)			
Energy Cost	Average	\$2,141	\$1,139	\$1,002
Energy Cost		\$1,713	\$844	\$869
South Coast				
Annual Average Energy/Costs (\$10	000/year)			
Energy Cost	Average	\$329,163	\$322,480	\$6,683
Lifetgy Cost		\$273,045	\$247,427	\$25,618

Table RMT-3a-3c

Water Management Actions		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	0 0%	1 0%	(1)
Conservation	Average Fraction of Demand	164 13%	152 12%	12
Water Recycling	Average Fraction of Demand	51 4%	51 4%	0
Desalination	Average Fraction of Demand	0 0%	0 0%	0
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	73 1%	106 2%	(33)
Conservation	Average Fraction of Demand	780 16%	780 16%	0
Water Recycling	Average Fraction of Demand	535 11%	538 11%	(3)
Desalination	Average Fraction of Demand	57 1%	57 1%	0

Table RMT-3a-3d

Shortages				NODOS Alternative A
		NODOS Alternative A	No Action Alternative	minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	2	3	(2)
Net Oser Shortage	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	36	66	(29)
iver oser shortage	Fraction of Demand	1%	1%	·

Table RMT-3a-4 Other Municipal Water Economics Model^a **Evaluated at 2025 Projected Conditions**

07 \$'s)		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
ge Annual Cost (Thousand \$/year)				
Delta				
	Long Term	\$8,969	\$9,357	(\$389)
	Dry and Critical	\$17,764	\$18,656	(\$892)
Bay Area				
	Long Term	\$5,404	\$5,629	(\$225)
	Dry and Critical	\$10,784	\$11,275	(\$492)
Central Coast				
	Long Term	\$1,401	\$2,586	(\$1,185)
	Dry and Critical	\$3,876	\$7,155	(\$3,279)
Sacramento Valley				
	Long Term	\$4,236	\$4,373	(\$137)
	Dry and Critical	\$10,323	\$10,678	(\$355)
San Joaquin				
	Long Term	\$1,530	\$1,557	(\$28)
	Dry and Critical	\$2,693	\$2,806	(\$113)
South Coast				
	Long Term	\$14,075	\$21,608	(\$7,533)
	Dry and Critical	\$25,623	\$45,903	(\$20,280)
Total For All Regions				,
	Long Term	\$35,614	\$45,111	(\$9,496)
	Dry and Critical	\$71,064	\$96,473	(\$25,409)
ge Annual Volume (AF/Year)				
Delta				
	Long Term	55,739	54,332	1,407
	Dry and Critical	43,554	40,672	2,882
Bay Area		·	·	·
	Long Term	54,553	52,450	2,102
	Dry and Critical	39,405	36,340	3,065
Central Coast	,		1 -	- 7
	Long Term	47,229	45,372	1,857
	Dry and Critical	27,623	23,822	3,801
Sacramento Valley		,	,	,
-	Long Term	22,923	22,817	106
	Dry and Critical	20,833	20,697	136
San Joaquin	,		- 1	
	Long Term	103,781	99,699	4,082
	Dry and Critical	81,667	72,847	8,820
South Coast			,•	5,5=5
	Long Term	264,382	251,867	12,514
	Dry and Critical	215,216	186,488	28,728
Total For All Regions	Dig and Ontious	210,210	100, 100	20,120
Total For All Neglons	Long Term	548,606	526,538	22,068
	Dry and Critical	428,297	380,866	47,431

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3a-5
DSM2/CALSIM II Export Loading Reporting Metrics weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternativ	e A minus No
Water Quality	Alternative A	Alternative	Action Alternative	
(Average of All Years ¹)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	421.10	431.21	-10.12	-2.3%
TDS (mg/l)	234.25	239.80	-5.55	-2.3%
Chloride (mg/l)	69.91	72.29	-2.39	-3.3%
Bromide (mg/l)	0.2281	0.2357	-0.01	-3.3%
Jones PP Exports				
EC (umhos/cm)	470.63	482.66	-12.03	-2.5%
TDS (mg/l)	261.42	268.01	-6.59	-2.5%
Chloride (mg/l)	81.46	84.27	-2.82	-3.3%
Bromide (mg/l)	0.2653	0.2745	-0.01	-3.3%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	341.38	345.21	-3.83	-1.1%
TDS (mg/l)	191.28	193.36	-2.08	-1.1%
Chloride (mg/l)	49.82	50.72	-0.89	-1.8%
Bromide (mg/l)	0.1619	0.1648	0.00	-1.8%

Average Export Weighted	NODOS	No Action	NODOS Alternativ	e A minus No	
Water Quality	Alternative A	Alternative	Action Alternative		
(Critical and Dry Years ²)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	543.59	569.00	-25.41	-4.5%	
TDS (mg/l)	299.27	313.01	-13.74	-4.4%	
Chloride (mg/l)	102.32	108.69	-6.36	-5.9%	
Bromide (mg/l)	0.3373	0.3581	-0.02	-5.8%	
Jones PP Exports					
EC (umhos/cm)	596.32	618.54	-22.21	-3.6%	
TDS (mg/l)	328.04	340.12	-12.08	-3.6%	
Chloride (mg/l)	114.99	120.41	-5.42	-4.5%	
Bromide (mg/l)	0.3784	0.3960	-0.02	-4.5%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	404.51	413.55	-9.04	-2.2%	
TDS (mg/l)	224.26	229.26	-5.00	-2.2%	
Chloride (mg/l)	67.11	69.18	-2.08	-3.0%	
Bromide (mg/l)	0.2215	0.2281	-0.01	-2.9%	

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-3a-6 LCRBWQM Reporting Metrics

Evaluated at 2025 Projected Conditions NODOS Alternative A Annual Average Metropolitan Water District Service Area **NODOS Alternative** minus No Action Damages (in 2007 \$'s) Alternative Year Type No Action Alternative Average Annual Damages (\$1000/year) \$36,423 Average \$37,075 (\$652)Agricultural Damages Dry and Critical \$41,826 (\$1,705) \$43,531 Average \$3,184,722 \$3,188,985 (\$4,263) Residential Damages Dry and Critical \$3,217,491 \$3,225,463 (\$7,971)Average \$155,861 \$157,274 (\$1,413)**Commercial Damages** Dry and Critical \$166,608 \$169,238 (\$2,630)Average \$1,171,691 \$1,172,639 (\$949)**Utiliy Damages** Dry and Critical \$1,178,986 \$1,180,729 (\$1,743)Average \$54,609 \$55,117 (\$508)**Industrial Damages** \$59,363 Dry and Critical \$58,419 (\$944) Average \$80,506 \$81,088 (\$582)**Ground Water Damages** Dry and Critical \$89,701 \$90,121 (\$420) Average \$77,781 \$78,106 (\$325)Wastewater Damages Dry and Critical \$80,781 \$81,150 (\$370)Average (\$890) \$86,733 \$87,623 **Recycled Water Damages** Dry and Critical \$93,212 \$94,858 (\$1,646)Average \$4,848,325 \$4,857,906 (\$9,581) Total Dry and Critical \$4,927,023 \$4,944,452 (\$17,429)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-3a-7

South Bay Area Water Quality Economics Reporting Metrics

Annual Average Damages (in 2006 \$'s)		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$953) (\$1,235)		(\$953) (\$1,235)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-3a-8

Power and Pumping Cost Reporting Metrics NODOS Alternative Economics Evaluated at 2025 Projected Conditions NODOS Alternative No Action A minus No Action (in 2007 \$'s) Alternative Alternative Central Valley Project **Power Facilities** Long Term 12 Total of all Facilities at 1,659 1,647 Capacity (MW) Dry and Critical 1,523 1,505 load center 18 Total of all Facilities at Lona Term 4,711 4,701 11 **Energy Generation** (GWh) Dry and Critical 3.500 3 513 -13 Long Term 392.113 391 217 895 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 292,702 293,487 -785**Pumping Facilities** Total of all Facilities at Long Term 1.152 1.116 36 Energy Use (GWh) Dry and Critical 24 load center 902 878 Long Term 86,104 83,377 2,727 Power Costs Total of all Facilities (\$1,000)Dry and Critical 67,702 65,844 1,858 Off-peak pumping Percent of time off-Long Term 0% 0% 0% (%) peak target not met 0% 0% 0% targets Total Long Term 3,560 3,585 -25 (GWh) Net Generation Total of all Facilities Dry and Critical 2,598 2,635 -37 Long Term 306,009 307,840 -1,832 Total of all Facilities (\$1,000) Net Revenue Dry and Critical 225,000 227,643 -2,643 State Water Project Power Facilities Total of all Facilities at Long Term 632 618 15 (MW) Capacity Dry and Critical 439 load center Total of all Facilities at 462 24 Long Term 4,491 4,386 105 **Energy Generation** (GWh) Dry and Critical 3,143 2,909 234 load center Long Term 368,728 360,264 8,464 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 258,843 239,709 19,134 Pumping Facilities Total of all Facilities at Long Term 8 442 8.088 354 (GWh) **Energy Use** Dry and Critical load center 6.768 6.013 755 Long Term 635,800 609,076 26,724 Power Costs Total of all Facilities (\$1,000) Dry and Critical 509,742 452,501 57,240 Off-peak pumping Percent of time off-Long Term 20% (%) targets peak target not met 11% 10% 1% Total Long Term -3.951 -3.702 -249 (GWh) Net Generation Total of all Facilities Dry and Critical -3,625 -3,104 -521 Long Term -267,072 -248,812 -18,260 Net Revenue Total of all Facilities (\$1,000)Dry and Critical 250,898 -212,792 -38,106 **Proposed NODOS Facilities** Power Facilities Long Term Total of all Facilities at 126 0 126 **Energy Generation** (GWh) Dry and Critical load center 129 0 129 Long Term 10.401 0 10.401 Generation Revenue Total of all Facilities (\$1,000) Dry and Critical 10,342 0 10,342 **Pumping Facilities** Total of all Facilities at Long Term 229 13 216 **Energy Use** (GWh) Dry and Critical load center Long Term 16,499 947 15,552 Power Costs Total of all Facilities (\$1,000)Dry and Critical 13,105 840 12,265 Total Long Term -103 -90 -13 Total of all Facilities (GWh) Net Generation Dry and Critical -54 -12 -43 Long Term -6,097 -947 -5,150 Net Revenue Total of all Facilities (\$1,000)Dry and Critical -840 -2,764-1,924 All Facilities Total Long Term -499 -132 -367 Net Generation Total of all Facilities (GWh) Dry and Critical -1,085 -603 -482 Long Term 32,481 -25,434 57,915 Net Revenue Total of all Facilities (\$1.000)Dry and Critical 42.850

- 1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
- 2. Long Term is the average quantity for the calendar years 1922-2002.
- 3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
- 4. Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2025 for Future No Action and Alternatives
- 5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



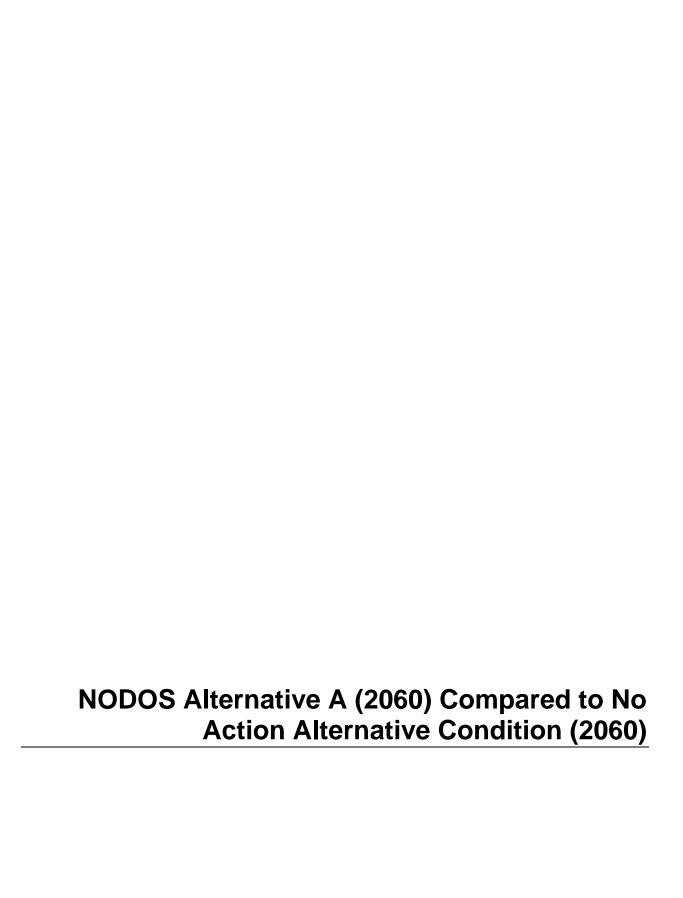




Table RMT-3b-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative A	No Action Alternative	NODOS Alternative minus No Ad Alternativ
r Supply Reliability						
Sacramento River Hydrologic Region	on					
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term	1,941	1,932	9 14
			Dry and Critical Long Term	1,932 159	1,918 155	4
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	141	137	4
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	213	211	2
		(1,111,	Dry and Critical Long Term	175	174	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Dry and Critical	224 103	214 93	10 10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	950	950	0
SWEIROA	Contract Delivery (annual average)	(TAI /year)	Dry and Critical	901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	24	23 16	1
San Joaquin River Hydrologic Regi	on (not including Friant-Kern and Mader	a Canal water		18	10	2
CVP Exchange	•	(TAF/year)	Long Term	853	853	0
	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	814	814	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
			Dry and Critical Long Term	249 16	249 16	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	13	13	ő
CVP Ag	Contract Delivery (annual average; does	(TAF/year)	Long Term	296	290	6
	not include Exchange contractors)	(11 1 / y Gail)	Dry and Critical	147	137	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term Dry and Critical	4 3	4 3	0
San Francisco Bay Hydrologic Regi			Dry and Ontical	,	<u> </u>	U
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	290	290	1
OVI WAI	Contract Delivery (annual average)	(TAI /year)	Dry and Critical	319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	37	36 17	1 2
	Contract Delivery (including Article 21,		Long Term	18 208	199	9
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	160	142	18
	(annual average)					
Central Coast Hydrologic Region			Long Term	40	4.4	
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	46 36	44 31	2 5
Tulare Lake Hydrologic Region (not	including Friant-Kern Canal water users	s)	Dry and Omious	00	01	, i
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
	<u>, , , , , , , , , , , , , , , , ,</u>	(,	Dry and Critical Long Term	11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Dry and Critical	616 307	601 283	14 25
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	88	84	4
SWF MAI		(TAI /year)	Dry and Critical	68	60	9
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term Dry and Critical	687 518	657 460	31 58
South Lahontan Hydrologic Region	(annual average)		Dry and Ontiour	010	400	00
SWP M&I	Contract Delivery (including Article 21)	(TAF/year)	Long Term	280	267	13
	(annual average)	(17ti 7youi)	Dry and Critical	227	197	30
South Coast Hydrologic Region	Contract Delivery (including Article 21,		Long Term	1 /1/	1,353	61
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,414 1,132	990	141
	(annual average)	. , .,				
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	9	8	0
Total For All Regions	(annual average)	,	Dry and Critical	7	6	1
	Contract Delivery (CVP, SWP and other)	/TAF4 \	Long Term	8,627	8,458	169
Total Supplies	(annual average)	(TAF/year)	Dry and Critical	7,300	6,968	331
onmental Use						
Provide Level 4 Refuge Supply			Long Term	1	0	1
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Dry and Critical	0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term	35	0	35
- Count of Delia (Welluota F001)	Donvery (armual average)	(IAI/yeal)	Dry and Critical	17	0	17
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	8	0	8
NODOS Ecosystem Enhancement A	ccount (EEA)	•	Dry and Critical	4	0	4
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term	82	0	82
Opsiteant and Della Illiow	i iow (aiiiuai aveiage, siligie use)	(1711/year)	Dry and Critical	91	0	91
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	1	0	1
r Quality			Dry and Critical	0	0	0
NODOS Water Quality (WQ)						
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term	128	0	128
	(333. 3.5.330)	(, your)	Dry and Critical	117	0	117
Yield NODOS Yield Summary						
		/TAF/ :	Long Term			425
Total NODOS Supply Incremen	Ţ	(TAF/year)	Dry and Critical			561

Notes:

1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3b-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2060 Projected Condition (in 2011 \$'s)	s	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley				
Annual Average Benefit (\$1,000,000/ye	ar)			
	Long Term	\$15,977	\$15,974	\$2.314
	Dry and Critical	\$15,940	\$15,933	\$6.476
Annual Average Costs (\$1,000,000/yea	r)			
Groundwater	Long Term	\$735	\$744	(\$8.936)
	Dry and Critical	\$875	\$883	(\$7.759)
Fallow	Long Term	N/A	N/A	\$0.167
railow	Dry and Critical	N/A	N/A	\$0.539
Annual Average Change in Consumer	Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$1.904
	Dry and Critical	N/A	N/A	\$11.613
Total Benefit (\$1,000,000/year)	-			
	Long Term	N/A	N/A	\$13.321
	Dry and Critical	N/A	N/A	\$26.386
Central Valley				
GW Pumping (TAF/year)				
	Long Term	5,445	5,490	(45)
	Dry and Critical	6,148	6,194	(46)

Table RMT-3b-3a LCPSIM M&I Economics Reporting Metrics

EVALUATED WAI ECONOMICS REPORTING METER Evaluated at 2060 Projected Conditions (in 2007 \$'s)	103	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$122,928	\$134,996	(\$12,068)
Fixed Option Cost	Average	\$237,052	\$240,097	(\$3,045)
Water Market Option Cost	Average	\$1,429	\$1,523	(\$94)
Municipal Water Supply Operations Co	st Average	\$281,023	\$279,639	\$1,383
Total Loss/Costs	Average Dry and Critical	\$642,431 \$648,595	\$656,254 \$680,793	(\$13,824) (\$32,198)
South Coast				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$478,009	\$472,086	\$5,923
Fixed Option Cost	Average	\$3,230,919	\$3,431,286	(\$200,367)
Water Market Option Cost	Average	\$82,011	\$79,650	\$2,361
Municipal Water Supply Operations Co	st Average	\$1,874,178	\$1,837,048	\$37,130
Total Loss/Costs	Average Dry and Critical	\$5,665,117 \$6,245,142	\$5,820,070 \$6,586,666	(\$154,953) (\$341,525)

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3b-3b

Additional information regardin Evaluated at 2060 Projected Condition (in 2007 \$'s)	-	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$	31000/year)			
Energy Cost	Average	\$15,117	\$14,624	\$493
Energy Cost		\$12,112	\$10,873	\$1,239
South Coast				
Annual Average Energy/Costs (\$	61000/year)			
Enorgy Cost	Average	\$544,135	\$520,941	\$23,194
Energy Cost		\$452.052	\$400.382	\$51.670

Table RMT-3b-3c

able RM1-35-36 /ater Management Actions		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
ay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	4 0%	4 0%	(0)
Conservation	Average Fraction of Demand	365 22%	365 22%	0
Water Recycling	Average Fraction of Demand	88 5%	88 5%	0
Desalination	Average Fraction of Demand	18 1%	20 1%	(2)
outh Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	228 4%	223 4%	5
Conservation	Average Fraction of Demand	1,185 20%	1,185 20%	0
Water Recycling	Average Fraction of Demand	1,398 23%	1,458 24%	(60)
Desalination	Average Fraction of Demand	314 5%	329 5%	(15)

Table RMT-3b-3d

Shortages		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	39	41	(2)
Net Oser Shortage	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	220	212	8
Net Oser Shortage	Fraction of Demand	4%	4%	

Table RMT-3b-4 Other Municipal Water Economics Model^a **Evaluated at 2060 Projected Conditions**

107 \$'s)		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
ge Annual Cost (Thousand \$/year)				
Delta				
	Long Term	\$13,807	\$14,391	(\$585)
	Dry and Critical	\$27,299	\$28,633	(\$1,334)
Bay Area				
	Long Term	\$7,712	\$7,989	(\$277)
	Dry and Critical	\$15,726	\$16,317	(\$591)
Central Coast				
	Long Term	\$2,167	\$4,000	(\$1,833)
	Dry and Critical	\$5,996	\$11,067	(\$5,071)
Sacramento Valley				
	Long Term	\$4,793	\$4,960	(\$167)
	Dry and Critical	\$11,275	\$11,701	(\$426)
San Joaquin				
	Long Term	\$2,076	\$2,090	(\$14)
	Dry and Critical	\$3,674	\$3,693	(\$19)
South Coast				
	Long Term	\$19,961	\$29,404	(\$9,443)
	Dry and Critical	\$35,741	\$61,067	(\$25,327)
Total For All Regions				•
	Long Term	\$50,516	\$62,835	(\$12,319)
	Dry and Critical	\$99,711	\$132,479	(\$32,768)
ge Annual Volume (AF/Year)				
Delta				
	Long Term	55,739	54,332	1,407
	Dry and Critical	43,554	40,672	2,882
Bay Area		·	·	·
	Long Term	54,553	52,450	2,102
	Dry and Critical	39,405	36,340	3,065
Central Coast	,		1 -	- 7
	Long Term	47,229	45,372	1,857
	Dry and Critical	27,623	23,822	3,801
Sacramento Valley		,	,	·
	Long Term	22,923	22,817	106
	Dry and Critical	20,833	20,697	136
San Joaquin	,	.,	- 1	
	Long Term	103,781	99,699	4,082
	Dry and Critical	81,667	72,847	8,820
South Coast			,•	5,5=5
	Long Term	264,382	251,867	12,514
	Dry and Critical	215,216	186,488	28,728
Total For All Regions	Dig and Ontious	210,210	100, 100	20,120
Total I of All Neglons	Long Term	548,606	526,538	22,068
	Dry and Critical	428,297	380,866	47,431

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-3b-5
DSM2/CALSIM II Export Loading Reporting Metrics
weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternative A minus No		
Water Quality	Alternative A	Alternative	Action Alte	rnative	
(Average of All Years ¹)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	421.10	431.21	-10.12	-2.3%	
TDS (mg/l)	234.25	239.80	-5.55	-2.3%	
Chloride (mg/l)	69.91	72.29	-2.39	-3.3%	
Bromide (mg/l)	0.2281	0.2357	-0.01	-3.3%	
Jones PP Exports					
EC (umhos/cm)	470.63	482.66	-12.03	-2.5%	
TDS (mg/l)	261.42	268.01	-6.59	-2.5%	
Chloride (mg/l)	81.46	84.27	-2.82	-3.3%	
Bromide (mg/l)	0.2653	0.2745	-0.01	-3.3%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	341.38	345.21	-3.83	-1.1%	
TDS (mg/l)	191.28	193.36	-2.08	-1.1%	
Chloride (mg/l)	49.82	50.72	-0.89	-1.8%	
Bromide (mg/l)	0.1619	0.1648	0.00	-1.8%	

Average Export Weighted	NODOS	No Action	NODOS Alternative A minus No		
Water Quality	Alternative A	Alternative	Action Alternative		
(Critical and Dry Years ²)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	543.59	569.00	-25.41	-4.5%	
TDS (mg/l)	299.27	313.01	-13.74	-4.4%	
Chloride (mg/l)	102.32	108.69	-6.36	-5.9%	
Bromide (mg/l)	0.3373	0.3581	-0.02	-5.8%	
Jones PP Exports					
EC (umhos/cm)	596.32	618.54	-22.21	-3.6%	
TDS (mg/l)	328.04	340.12	-12.08	-3.6%	
Chloride (mg/l)	114.99	120.41	-5.42	-4.5%	
Bromide (mg/l)	0.3784	0.3960	-0.02	-4.5%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	404.51	413.55	-9.04	-2.2%	
TDS (mg/l)	224.26	229.26	-5.00	-2.2%	
Chloride (mg/l)	67.11	69.18	-2.08	-3.0%	
Bromide (mg/l)	0.2215	0.2281	-0.01	-2.9%	

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-3b-6 LCRBWQM Reporting Metrics

Evaluated at 2060 Projected Conditions NODOS Alternative A Annual Average Metropolitan Water District Service Area **NODOS Alternative** minus No Action Damages (in 2007 \$'s) Alternative Year Type No Action Alternative Average Annual Damages (\$1000/year) \$35,035 Average \$35,653 (\$619)Agricultural Damages Dry and Critical \$40,126 \$42,353 (\$2,227)Average \$3,796,726 \$3,801,466 (\$4,739) Residential Damages Dry and Critical \$3,835,882 \$3,845,098 (\$9,216)Average \$207.255 \$209,058 (\$1,803)**Commercial Damages** Dry and Critical \$222,003 \$225,501 (\$3,499) Average \$1,402,458 \$1,403,517 (\$1,059)**Utiliy Damages** Dry and Critical \$1,411,201 \$1,413,222 (\$2,021)Average (\$554) \$60,465 \$61,019 **Industrial Damages** Dry and Critical \$64,977 \$66,052 (\$1,075)Average \$76,475 \$76,909 (\$434)**Ground Water Damages** Dry and Critical \$85,436 \$85,649 (\$213) Average \$85,564 \$85,680 (\$116) Wastewater Damages Dry and Critical \$87,366 \$87,335 \$31 Average (\$2,265)\$232,019 \$234,283 **Recycled Water Damages** (\$4,354) Dry and Critical \$249,870 \$254,225 Average \$5,895,997 \$5,907,585 (\$11,588) Total Dry and Critical \$5,996,861 \$6,019,435 (\$22,574)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-3b-7

South Bay Area Water Quality Economics Reporting Metrics Evaluated at 2060 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$1,230) (\$1,595)		(\$1,230) (\$1,595)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-3b-8

Power and Pumping Cost Reporting Metrics NODOS Alternative Economics Evaluated at 2060 Projected Conditions NODOS Alternative No Action A minus No Action (in 2007 \$'s) Alternative Alternative Α Central Valley Project Power Facilities Total of all Facilities at Long Term 1,659 1,647 12 (MW) Capacity Dry and Critical 1,505 18 1,523 load center Total of all Facilities at Long Term 4,711 4,701 11 **Energy Generation** (GWh) Dry and Critical 3,500 3,513 load center Long Term 598,526 597,217 1,309 Generation Revenue Total of all Facilities (\$1.000) Dry and Critical 446.342 447.726 -1,384 **Pumping Facilities** Total of all Facilities at Long Term 1.143 1.109 34 (GWh) **Energy Use** Dry and Critical 868 892 load center Long Term 132,273 128,325 3,948 Power Costs Total of all Facilities (\$1.000)100,629 Dry and Critical 103,538 2,909 Off-peak pumping Percent of time off-Long Term 0% 0% 0% (%) peak target not met 0% 0% 0% targets Total Long Term 3,568 3,592 -23 Net Generation (GWh) Total of all Facilities Dry and Critical 2,645 -38 2,607 Long Term 468,892 466,253 -2,639 Total of all Facilities (\$1,000) Net Revenue Dry and Critical 342,804 347,097 -4,293 State Water Project **Power Facilities** Long Term Total of all Facilities at 15 632 618 (MW) Capacity Dry and Critical load center Total of all Facilities at 462 439 24 4,386 105 Long Term 4.491 (GWh) **Energy Generation** Dry and Critical load center 3,143 2,909 234 Long Term 564,131 551,057 13,074 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 395,550 366,489 29,061 **Pumping Facilities** Total of all Facilities at Long Term 8 442 8 088 354 **Energy Use** (GWh) Dry and Critical load center 6.768 6.013 755 Long Term 983,949 942,572 41,378 Power Costs (\$1.000)Total of all Facilities Dry and Critical 787,868 699.747 88.122 Long Term Off-peak pumping Percent of time off-19% 20% -1% (%) targets peak target not met 11% 10% 1% Total Long Term -3 951 -3702-249 Net Generation Total of all Facilities (GWh) Dry and Critical -3.625-3.104-521 Long Term -419.818 -391.515 -28.304 (\$1.000)Net Revenue Total of all Facilities Dry and Critical -392,318 -333,258 -59,061 **Proposed NODOS Facilities** Power Facilities Total of all Facilities at Long Term 126 0 126 **Energy Generation** (GWh) Dry and Critical 129 Λ 129 Long Term 15,777 0 15.777 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 15.846 0 15.846 **Pumping Facilities** Total of all Facilities at Long Term 229 13 216 (GWh) **Energy Use** Dry and Critical 184 <u>172</u> load center Long Term 25,939 1,472 24,466 Power Costs Total of all Facilities (\$1,000)Dry and Critical 20,689 1,307 19,382 Total Long Term -103 -90 -13 (GWh) Net Generation Total of all Facilities Dry and Critical -54 -12 -43 Long Term -10,162 -1,472 -8,690 Net Revenue Total of all Facilities (\$1.000)Dry and Critical -4,843 -1,307 -3,536 All Facilities Total Long Term -490 -125 -365 Net Generation Total of all Facilities (GWh) Dry and Critical -1,076 35,716 -472 -604 Long Term 75.648 -39.932 Net Revenue Total of all Facilities (\$1,000)Dry and Critical -54 774 -67.167

- 1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
 - 2. Long Term is the average quantity for the calendar years 1922-2002.
- 3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
- Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2060 for Future No Action and Alternatives
 Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because
- energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



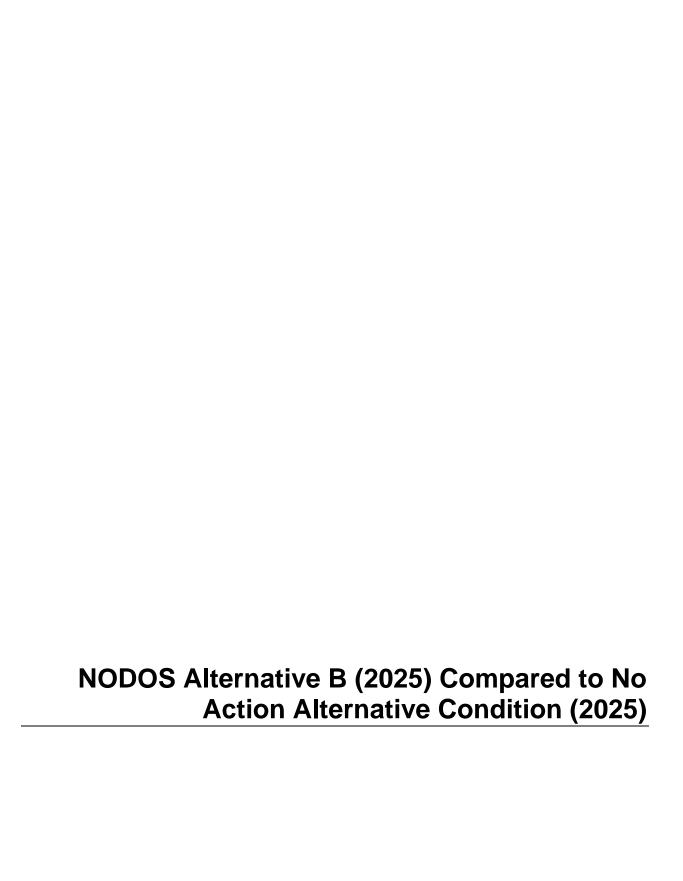




Table RMT-5a-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative B	No Action Alternative	NODOS Alternative minus No Ac Alternativ
Supply Reliability				7.11011111110	7.11.0111.011	7.11.0771.01.17
Sacramento River Hydrologic Region	on		Lana Tarra	4.000	4.000	
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	1,938 1,923	1,932 1,918	6 6
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	158	155	3
CVF Reluge Level 2	Contract Delivery (annual average)	(TAI /yeal)	Dry and Critical	140	137	2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	211 175	211 174	0
CVP Ag	Contract Delivery (annual average -	/TAE(100r)	Long Term	217	214	3
CVF Ag	does not include Settlement contractors)	(TAF/year)	Dry and Critical	98	93	5
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	950 901	950 901	0
			Long Term	24	23	1
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	18	16	2
San Joaquin River Hydrologic Regi	on (not including Friant-Kern and Mader	a Canal water				
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	853	853	0
			Dry and Critical Long Term	814 261	814 261	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	16	16	0
	<u> </u>	(17117)0017	Dry and Critical	13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term Dry and Critical	289 139	290 137	-1 2
SWP Ag	Contract Delivery (including Article 21)	(TAE(year)	Long Term	4	4	0
	(annual average)	(TAF/year)	Dry and Critical	3	3	0
San Francisco Bay Hydrologic Reg	on		Lana Taura	200	200	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	290 318	290 318	0
CVD A~	Ocates t Delivery (seems)	(TAE()	Long Term	36	36	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	17	17	0
CIMP MAIL	Contract Delivery (including Article 21,	(TAE()	Long Term	209	199	10
SWP M&I	includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	159	142	18
Central Coast Hydrologic Region	(annual average)					
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	46	44	2
	• • • • • • • • • • • • • • • • • • • •		Dry and Critical	35	31	4
	t including Friant-Kern Canal water users	•	Long Term	12	12	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	11	11	0
CVP Ag	Contract Delivery (annual average -	(TAF/year)	Long Term	600	601	-1
	includes Cross Valley Canal)	(17117)0017	Dry and Critical	290	283	7
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	88 68	84 60	4 8
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	690	657	33
	(annual average)	(TAI /year)	Dry and Critical	515	460	55
South Lahontan Hydrologic Region	Contract Delivery (including Article 21)		Long Term	281	267	14
SWP M&I	(annual average)	(TAF/year)	Dry and Critical	225	267 197	28
South Coast Hydrologic Region	(amaararorage)					
	Contract Delivery (including Article 21,		Long Term	1,418	1,353	65
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,121	990	131
OM/D A	(annual average) Contract Delivery (including Article 21)	/TAF:	Long Term	9	8	0
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	6	6	1
Total For All Regions						
Total Supplies	Contract Delivery (CVP, SWP and other)	(TAF/year)	Long Term	8,599	8,458	141
onmental Use	(annual average)		Dry and Critical	7,238	6,968	270
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	1	0	1
			Dry and Critical Long Term	1 57	0	1 57
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Dry and Critical	30	0	30
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	14	0	14
· · · · · · · · · · · · · · · · · · ·	* * * * * * * * * * * * * * * * * * * *	(11 1 / y Gail)	Dry and Critical	7	0	7
NODOS Ecosystem Enhancement A			Long Term	78	0	78
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	96	0	96
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	2	0	2
	i ion (aiiiidai average, siligie use)	(1711 /year)	Dry and Critical	3	0	3
Quality NODOS Water Quality (WQ)						
		/TAF/ :	Long Term	136	0	136
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Dry and Critical	119	Ő	119
Yield						
NODOS Yield Summary			Long Town			100
Total NODOS Supply Incremen	t	(TAF/year)	Long Term	1		429 525

Notes:
1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.
2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5a-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Con-	. •			NODOS Alternative B
(in 2011 \$'s)		NODOS	No Action	minus No Action
		Alternative B	Alternative	Alternative
Central Valley				
Annual Average Benefit (\$1,000,0	000/year)			
	Long Term	\$11,687	\$11,686	\$0.896
	Dry and Critical	\$11,650	\$11,648	\$2.279
Annual Average Costs (\$1,000,00	0/year)		•	
Groundwater	Long Term	\$663	\$666	(\$3.345)
	Dry and Critical	\$747	\$753	(\$5.625)
Fallow	Long Term	N/A	N/A	\$0.066
rallow	Dry and Critical	N/A	N/A	\$0.311
Annual Average Change in Cons	umer Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$1.792
	Dry and Critical	N/A	N/A	\$6.504
Total Benefit (\$1,000,000/year)				
	Long Term	N/A	N/A	\$6.099
	Dry and Critical	N/A	N/A	\$14.718
Central Valley	·			
GW Pumping (TAF/year)				
	Long Term	6,529	6,557	(27)
	Dry and Critical	7,177	7,216	(39)

Table RMT-5a-3a LCPSIM M&I Economics Reporting Metrics

ECPSIM M&I ECONOMICS REPORTING METRICS Evaluated at 2025 Projected Conditions (in 2007 \$'s)	•	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$3,441	\$5,261	(\$1,820)
Fixed Option Cost	Average	\$4,858	\$1,846	\$3,012
Water Market Option Cost	Average	\$161	\$260	(\$99)
Municipal Water Supply Operations Cost	Average	\$189,724	\$192,303	(\$2,579)
Total Loss/Costs	Average	\$198,184	\$199,670	(\$1,486)
Total Loss/Costs	Dry and Critical	\$193,644	\$198,694	(\$5,050)
South Coast				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$69,983	\$105,016	(\$35,033)
Fixed Option Cost	Average	\$371,752	\$382,046	(\$10,294)
Water Market Option Cost	Average	\$18,468	\$27,111	(\$8,643)
Municipal Water Supply Operations Cost	Average	\$1,173,679	\$1,179,871	(\$6,192)
Total Lang/Conta	Average	\$1,633,882	\$1,694,043	(\$60,161)
Total Loss/Costs	Dry and Critical	\$1,835,455	\$1,958,312	(\$122,856)

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5a-3b

Additional information regarding Evaluated at 2025 Projected Conditions (in 2007 \$'s)	•	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$*	1000/year)			
Energy Cost	Average	\$2,068	\$1,139	\$929
		\$1,639	\$844	\$795
South Coast				
Annual Average Energy/Costs (\$*	1000/year)			
Energy Cost	Average	\$330,045	\$322,480	\$7,565
		\$270,577	\$247,427	\$23,150

Table RMT-5a-3c

Table RMT-5a-3c Vater Management Actions		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
ay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	1 0%	1 0%	(0)
Conservation	Average Fraction of Demand	164 13%	152 12%	12
Water Recycling	Average Fraction of Demand	51 4%	51 4%	0
Desalination	Average Fraction of Demand	0 0%	0 0%	0
outh Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	72 1%	106 2%	(34)
Conservation	Average Fraction of Demand	780 16%	780 16%	0
Water Recycling	Average Fraction of Demand	530 11%	538 11%	(8)
Desalination	Average Fraction of Demand	57 1%	57 1%	0

Table RMT-5a-3d

Shortages		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	2	3	(1)
Net Oser Shortage	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	40	66	(26)
Net Oser Onortage	Fraction of Demand	1%	1%	

Table RMT-5a-4 Other Municipal Water Economics Model^a **Evaluated at 2025 Projected Conditions**

2007 \$'s)		NODOS Alternative B	No Action Alternative	NODOS Alternative E minus No Action Alternative
erage Annual Cost (Thousand \$/year)				
Delta				
	Long Term	\$8,921	\$9,357	(\$437)
	Dry and Critical	\$17,685	\$18,656	(\$971)
Bay Area				
	Long Term	\$5,563	\$5,629	(\$66)
	Dry and Critical	\$11,045	\$11,275	(\$230)
Central Coast				
	Long Term	\$1,570	\$2,586	(\$1,016)
	Dry and Critical	\$4,343	\$7,155	(\$2,811)
Sacramento Valley				
	Long Term	\$4,326	\$4,373	(\$47)
	Dry and Critical	\$10,553	\$10,678	(\$126)
San Joaquin				
·	Long Term	\$1,550	\$1,557	(\$8)
	Dry and Critical	\$2,724	\$2,806	(\$82)
South Coast				
	Long Term	\$14,190	\$21,608	(\$7,418)
	Dry and Critical	\$26,762	\$45,903	(\$19,141)
Total For All Regions				
	Long Term	\$36,119	\$45,111	(\$8,992)
	Dry and Critical	\$73,112	\$96,473	(\$23,360)
ge Annual Volume (AF/Year)				
Delta				
·	Long Term	55,861	54,332	1,528
	Dry and Critical	43,895	40,672	3,222
Bay Area				
·	Long Term	53,746	52,450	1,296
	Dry and Critical	37,911	36,340	1,571
Central Coast				
	Long Term	47,343	45,372	1,971
	Dry and Critical	27,333	23,822	3,511
Sacramento Valley				
-	Long Term	22,828	22,817	10
	Dry and Critical	20,694	20,697	(3)
San Joaquin				
<u> </u>	Long Term	103,869	99,699	4,170
	Dry and Critical	81,027	72,847	8,180
South Coast				
	Long Term	265,093	251,867	13,226
	Dry and Critical	212,982	186,488	26,494
Total For All Regions		. ,	.,	, -
	Long Term	548,739	526,538	22,201
	Dry and Critical	423,841	380,866	42,976
 S:	1= 17 0.10 01111001	5,5 11	223,000	.2,010

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5a-5
DSM2/CALSIM II Export Loading Reporting Metrics
weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternative B minus No		
Water Quality	Alternative B	Alternative	Action Alte	ative	
(Average of All Years ¹)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	420.43	431.21	-10.79	-2.5%	
TDS (mg/l)	233.92	239.80	-5.88	-2.5%	
Chloride (mg/l)	69.67	72.29	-2.62	-3.6%	
Bromide (mg/l)	0.2272	0.2357	-0.01	-3.6%	
Jones PP Exports					
EC (umhos/cm)	471.04	482.66	-11.62	-2.4%	
TDS (mg/l)	261.66	268.01	-6.35	-2.4%	
Chloride (mg/l)	81.49	84.27	-2.78	-3.3%	
Bromide (mg/l)	0.2655	0.2745	-0.01	-3.3%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	341.35	345.21	-3.86	-1.1%	
TDS (mg/l)	191.26	193.36	-2.10	-1.1%	
Chloride (mg/l)	49.80	50.72	-0.91	-1.8%	
Bromide (mg/l)	0.1618	0.1648	0.00	-1.8%	

Average Export Weighted	NODOS	No Action	NODOS Alternative B minus I		
Water Quality	Alternative B	Alternative	Action Alternative		
(Critical and Dry Years ²)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	541.50	569.00	-27.50	-4.8%	
TDS (mg/l)	298.15	313.01	-14.86	-4.7%	
Chloride (mg/l)	101.78	108.69	-6.91	-6.4%	
Bromide (mg/l)	0.3355	0.3581	-0.02	-6.3%	
Jones PP Exports					
EC (umhos/cm)	597.83	618.54	-20.70	-3.3%	
TDS (mg/l)	328.88	340.12	-11.24	-3.3%	
Chloride (mg/l)	115.32	120.41	-5.09	-4.2%	
Bromide (mg/l)	0.3794	0.3960	-0.02	-4.2%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	403.21	413.55	-10.35	-2.5%	
TDS (mg/l)	223.56	229.26	-5.70	-2.5%	
Chloride (mg/l)	66.77	69.18	-2.42	-3.5%	
Bromide (mg/l)	0.2204	0.2281	-0.01	-3.4%	

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-5a-6 LCRBWQM Reporting Metrics

Evaluated at 2025 Projected Conditions NODOS Alternative B Annual Average Metropolitan Water District Service Area **NODOS Alternative** minus No Action Damages (in 2007 \$'s) **Alternative** Year Type В No Action Alternative Average Annual Damages (\$1000/year) Average \$36,321 \$37,075 (\$754)Agricultural Damages Dry and Critical (\$2,442) \$41,089 \$43,531 \$3,184,308 Average \$3,188,985 (\$4,676) Residential Damages Dry and Critical \$3,225,463 \$3,216,097 (\$9,365)Average \$155,754 \$157,274 (\$1,520)**Commercial Damages** Dry and Critical \$165,738 \$169,238 (\$3,499)Average \$1,171,599 \$1,172,639 (\$1,041)**Utiliy Damages** Dry and Critical \$1,178,690 \$1,180,729 (\$2,039)Average (\$542) \$54,575 \$55,117 **Industrial Damages** \$59,363 Dry and Critical \$58,040 (\$1,323)Average \$80,493 \$81,088 (\$595)**Ground Water Damages** Dry and Critical \$92,209 \$90,121 \$2,088 Average \$77,767 \$78,106 (\$338)Wastewater Damages Dry and Critical \$80,686 \$81,150 (\$465)Average (\$929) \$86,694 \$87,623 **Recycled Water Damages** Dry and Critical \$92,278 \$94,858 (\$2,580)Average \$4,847,511 \$4,857,906 (\$10,395)Total Dry and Critical \$4,924,828 \$4,944,452 (\$19,624)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-5a-7

South Bay Area Water Quality Economics Reporting Metrics

Annual Average Damages (in 2006 \$'s)		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$1,031) (\$1,534)		(\$1,031) (\$1,534)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-5a-8

nomics Evaluated at 2025 Pr 007 \$'s)	Reporting Metrics ojected Conditions			NODOS Alternative	No Action Alternative	NODOS Alternative B minus No Action Alternative
ral Valley Project				_	7.11.01.11.01.10	7.1101110111
Power Facilities						
Capacity	Total of all Facilities at load center	(MW)	Long Term Dry and Critical	1,660 1,525	1,647 1,505	13 20
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	4,718 3,506	4,701 3,513	18 -6
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	392,850 293,280	391,217 293,487	1,632 -207
Pumping Facilities						
Energy Use	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	1,147 902	1,116 878	32 25
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	85,803 67,738	83,377 65,844	2,426 1,894
Off-peak pumping targets	Percent of time off- peak target not met	(%)	Long Term	0% 0%	0% 0%	0% 0%
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	3,571 2,604	3,585 2,635	-14 -31
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	307,046 225,542	307,840 227,643	-794 -2,101
Water Project						
Power Facilities						
Capacity	Total of all Facilities at load center	(MW)	Long Term Dry and Critical	633 462	618 439	16 24
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	4,493 3,128	4,386 2,909	107 220
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	368,917 257,679	360,264 239,709	8,652 17,969
Pumping Facilities						
Energy Use	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	8,464 6,727	8,088 6,013	376 714
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	637,403 506,353	609,076 452,501	28,327 53,851
Off-peak pumping targets	Percent of time off- peak target not met	(%)	Long Term	20% 11%	20% 10%	0% 1%
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	-3,971 -3,599	-3,702 -3,104	-269 -494
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	-268,486 -248,674	-248,812 -212,792	-19,674 -35,882
osed NODOS Facilities						
Power Facilities			· -			
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	104 100	0 0	104 100
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	8,682 8,263	0 0	8,682 8,263
Pumping Facilities						
Energy Use	Total of all Facilities at load center	(GWh)	Long Term Dry and Critical	195 106	13 12	182 95
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	13,472 7,443	947 840	12,525 6,603
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	-91 -6	-13 -12	-78 6
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	-4,790 820	-947 -840	-3,843 1,659
acilities						
Total	<u> </u>					
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	-498 -1,004	-132 -482	-366 -522
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	33,298 -22,601	57,915 13,921	-24,617 -36,522

- 1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
 2. Long Term is the average quantity for the calendar years 1922-2002.
 3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
 4. Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2025 for Future No Action and Alternatives
 5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



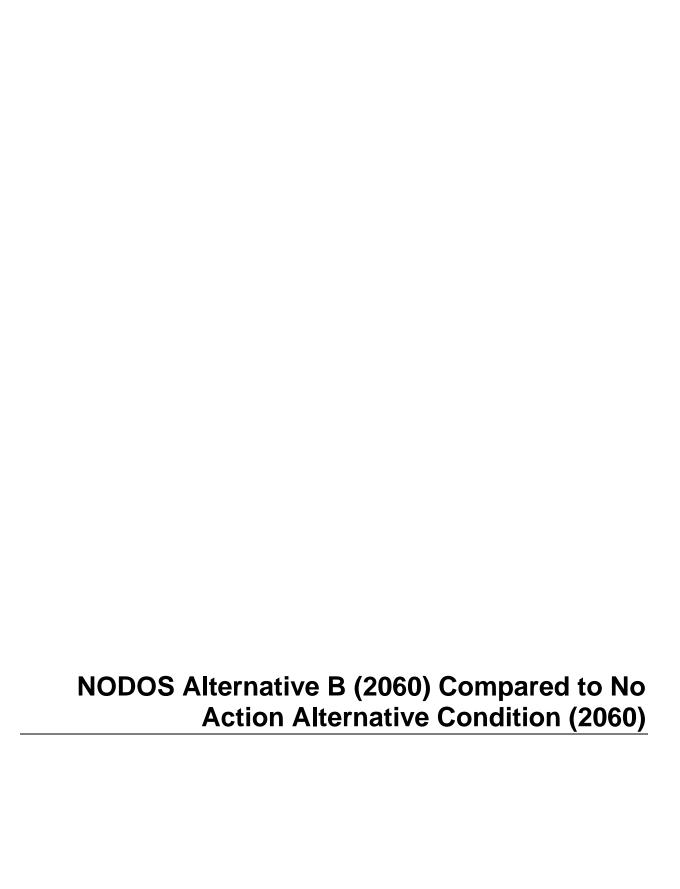




Table RMT-5b-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative B	No Action Alternative	NODOS Alternative minus No Ac Alternativ
Supply Reliability						
Sacramento River Hydrologic Region	on		Long Term	1,938	1,932	6
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	1,923	1,918	6
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	158	155	3
			Dry and Critical Long Term	140 211	137 211	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	175	174	0
CVP Ag	Contract Delivery (annual average -	(TAF/year)	Long Term Dry and Critical	217 98	214 93	3 5
OWD EDGA	does not include Settlement contractors)	/TAF()	Long Term	950	950	0
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	24 18	23 16	1 2
San Joaquin River Hydrologic Regi	on (not including Friant-Kern and Madera	a Canal water		10	10	
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	853	853	0
			Dry and Critical Long Term	814 261	814 261	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	16	16	0
	Contract Delivery (annual average; does		Dry and Critical Long Term	13 289	13 290	-1
CVP Ag	not include Exchange contractors)	(TAF/year)	Dry and Critical	139	137	2
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	4	4	0
San Francisco Bay Hydrologic Regi	(annual average)		Dry and Critical	3	3	0
CVP M&I		/TAE/woor)	Long Term	290	290	0
CVP IVIQI	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	36 17	36 17	0
	Contract Delivery (including Article 21,		Long Term	209	199	10
SWP M&I	includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	159	142	18
Central Coast Hydrologic Region			Long Term	46	44	2
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	35	31	4
Tulare Lake Hydrologic Region (not	including Friant-Kern Canal water users	s)				
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	12 11	12 11	0
CVP Ag	Contract Delivery (annual average -	(TAF/year)	Long Term	600	601	-1
	includes Cross Valley Canal)	(TAI /year)	Dry and Critical Long Term	290	283	7
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	88 68	84 60	4 8
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	690	657	33
South Lahontan Hydrologic Region	(annual average)	(','',	Dry and Critical	515	460	55
SWP M&I	Contract Delivery (including Article 21)	(TAF/year)	Long Term	281	267	14
	(annual average)	(TAF/yeal)	Dry and Critical	225	197	28
South Coast Hydrologic Region	Contract Delivery (including Article 21,		Long Term	1,418	1,353	65
SWP M&I	includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	1,121	990	131
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	9	8	0
Total For All Regions	(annual average)	•	Dry and Critical	6	6	111
Total Supplies	Contract Delivery (CVP, SWP and other)	(TAF/vear)	Long Term	8,599	8,458	141
onmental Use	(annual average)	, , , sui ,	Dry and Critical	7,238	6,968	270
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	1	0	1
or botta (bottada basili)			Dry and Critical	1	0	1 57
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	57 30	0	57 30
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	14	0	14
NODOS Ecosystem Enhancement A	, , , , ,	,,,	Dry and Critical	7	0	7
·	` '	/TAE/:	Long Term	78	0	78
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	96	0	96
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term Dry and Critical	2	0	2
Quality			Dry and Chilical	3	U	3
NODOS Water Quality (WQ)						
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term Dry and Critical	136 119	0	136 119
Yield			Dry and Chilical	119	<u> </u>	119
NODOS Yield Summary						
Total NODOS Supply Incremen	+	(TAF/year)	Long Term Dry and Critical	1		429 525

Notes:

1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5b-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2060 Projected Conditi (in 2011 \$'s)	ons	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Central Valley				
Annual Average Benefit (\$1,000,000	/year)			
	Long Term	\$15,976	\$15,974	\$1.448
	Dry and Critical	\$15,937	\$15,933	\$4.382
Annual Average Costs (\$1,000,000/y	rear)		_	
Groundwater	Long Term	\$740	\$744	(\$3.678)
Groundwater	Dry and Critical	\$877	\$883	(\$5.633)
F-II	Long Term	N/A	N/A	\$0.143
Fallow	Dry and Critical	N/A	N/A	\$0.224
Annual Average Change in Consum	er Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$1.984
	Dry and Critical	N/A	N/A	\$7.807
Total Benefit (\$1,000,000/year)				
	Long Term	N/A	N/A	\$7.253
	Dry and Critical	N/A	N/A	\$18.046
Central Valley				
GW Pumping (TAF/year)				
	Long Term	5,468	5,490	(22)
	Dry and Critical	6,166	6,194	(28)

Table RMT-5b-3a LCPSIM M&I Economics Reporting Metrics

EVAILUMENT ECONOMICS REPORTING METRICS EVAILUATED AT 2060 Projected Conditions in 2007 \$'s)		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$122,693	\$134,996	(\$12,302)
Fixed Option Cost	Average	\$238,575	\$240,097	(\$1,522)
Water Market Option Cost	Average	\$1,465	\$1,523	(\$58)
Municipal Water Supply Operations Cost	Average	\$280,847	\$279,639	\$1,208
T	Average	\$643,580	\$656,254	(\$12,674)
Total Loss/Costs	Dry and Critical	\$655,965	\$680,793	(\$24,828)
South Coast	•			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$482,882	\$472,086	\$10,796
Fixed Option Cost	Average	\$3,223,039	\$3,431,286	(\$208,247)
Water Market Option Cost	Average	\$78,460	\$79,650	(\$1,190)
Municipal Water Supply Operations Cost	Average	\$1,876,566	\$1,837,048	\$39,518
T-1-11 /O1-	Average	\$5,660,947	\$5,820,070	(\$159,123)
Total Loss/Costs	Dry and Critical	\$6,320,906	\$6,586,666	(\$265,760)

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5b-3b

Additional information regarding Evaluated at 2060 Projected Conditions (in 2007 \$'s)	·	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$7	1000/year)			
Energy Cost	Average	\$15,120	\$14,624	\$496
Ellergy Cost		\$11,962	\$10,873	\$1,090
South Coast				
Annual Average Energy/Costs (\$	1000/year)			
Energy Cost	Average	\$546,190	\$520,941	\$25,249
Energy Cost		\$448,406	\$400,382	\$48,023

Table RMT-5b-3c

Vater Management Actions		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
ay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	4 0%	4 0%	(0)
Conservation	Average Fraction of Demand	365 22%	365 22%	0
Water Recycling	Average Fraction of Demand	88 5%	88 5%	0
Desalination	Average Fraction of Demand	19 1%	20 1%	(1)
outh Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	218 4%	223 4%	(5)
Conservation	Average Fraction of Demand	1,185 20%	1,185 20%	0
Water Recycling	Average Fraction of Demand	1,395 23%	1,458 24%	(63)
Desalination	Average Fraction of Demand	314 5%	329 5%	(15)

Table RMT-5b-3d

Shortages		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	38	41	(3)
Net Oser Shortage	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	228	212	16
ivet Oser Siloitage	Fraction of Demand	4%	4%	

Table RMT-5b-4 Other Municipal Water Economics Model^a **Evaluated at 2060 Projected Conditions**

07 \$'s)		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
ge Annual Cost (Thousand \$/year)				
Delta				
	Long Term	\$13,727	\$14,391	(\$665)
	Dry and Critical	\$27,168	\$28,633	(\$1,465)
Bay Area				
	Long Term	\$7,933	\$7,989	(\$56)
	Dry and Critical	\$16,098	\$16,317	(\$219)
Central Coast				
	Long Term	\$2,428	\$4,000	(\$1,572)
	Dry and Critical	\$6,718	\$11,067	(\$4,349)
Sacramento Valley				
·	Long Term	\$4,901	\$4,960	(\$59)
	Dry and Critical	\$11,546	\$11,701	(\$155)
San Joaquin				
·	Long Term	\$2,101	\$2,090	\$10
	Dry and Critical	\$3,708	\$3,693	\$15
South Coast				
	Long Term	\$20,296	\$29,404	(\$9,108)
	Dry and Critical	\$37,859	\$61,067	(\$23,208)
Total For All Regions				
	Long Term	\$51,386	\$62,835	(\$11,449)
	Dry and Critical	\$103,098	\$132,479	(\$29,381)
ge Annual Volume (AF/Year)				
Delta				
	Long Term	55,861	54,332	1,528
	Dry and Critical	43,895	40,672	3,222
Bay Area				
	Long Term	53,746	52,450	1,296
	Dry and Critical	37,911	36,340	1,571
Central Coast				
	Long Term	47,343	45,372	1,971
	Dry and Critical	27,333	23,822	3,511
Sacramento Valley				
	Long Term	22,828	22,817	10
	Dry and Critical	20,694	20,697	(3)
San Joaquin				
	Long Term	103,869	99,699	4,170
	Dry and Critical	81,027	72,847	8,180
South Coast				
	Long Term	265,093	251,867	13,226
	Dry and Critical	212,982	186,488	26,494
Total For All Regions			,	•
	Long Term	548,739	526,538	22,201
	Dry and Critical	423,841	380,866	42,976
	, a	0,0	000,000	.=,

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-5b-5
DSM2/CALSIM II Export Loading Reporting Metrics weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternative B minus No	
Water Quality	Alternative B	Alternative	Action Alte	rnative
(Average of All Years ¹)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	420.43	431.21	-10.79	-2.5%
TDS (mg/l)	233.92	239.80	-5.88	-2.5%
Chloride (mg/l)	69.67	72.29	-2.62	-3.6%
Bromide (mg/l)	0.2272	0.2357	-0.01	-3.6%
Jones PP Exports				
EC (umhos/cm)	471.04	482.66	-11.62	-2.4%
TDS (mg/l)	261.66	268.01	-6.35	-2.4%
Chloride (mg/l)	81.49	84.27	-2.78	-3.3%
Bromide (mg/l)	0.2655	0.2745	-0.01	-3.3%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	341.35	345.21	-3.86	-1.1%
TDS (mg/l)	191.26	193.36	-2.10	-1.1%
Chloride (mg/l)	49.80	50.72	-0.91	-1.8%
Bromide (mg/l)	0.1618	0.1648	0.00	-1.8%

Average Export Weighted	NODOS	No Action	NODOS Alternative B minu		
Water Quality	Alternative B	Alternative	Action Alte	ernative	
(Critical and Dry Years ²)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	541.50	569.00	-27.50	-4.8%	
TDS (mg/l)	298.15	313.01	-14.86	-4.7%	
Chloride (mg/l)	101.78	108.69	-6.91	-6.4%	
Bromide (mg/l)	0.3355	0.3581	-0.02	-6.3%	
Jones PP Exports					
EC (umhos/cm)	597.83	618.54	-20.70	-3.3%	
TDS (mg/l)	328.88	340.12	-11.24	-3.3%	
Chloride (mg/l)	115.32	120.41	-5.09	-4.2%	
Bromide (mg/l)	0.3794	0.3960	-0.02	-4.2%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	403.21	413.55	-10.35	-2.5%	
TDS (mg/l)	223.56	229.26	-5.70	-2.5%	
Chloride (mg/l)	66.77	69.18	-2.42	-3.5%	
Bromide (mg/l)	0.2204	0.2281	-0.01	-3.4%	

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-5b-6 LCRBWQM Reporting Metrics

Evaluated at 2060 Projected Conditions NODOS Alternative B Annual Average Metropolitan Water District Service Area **NODOS Alternative** minus No Action Damages (in 2007 \$'s) **Alternative** Year Type В No Action Alternative Average Annual Damages (\$1000/year) \$34,908 Average \$35,653 (\$745)Agricultural Damages Dry and Critical \$40,034 \$42,353 (\$2,320)Average \$3,796,139 \$3,801,466 (\$5,327)Residential Damages Dry and Critical \$3,835,285 \$3,845,098 (\$9,813)Average \$207.066 \$209,058 (\$1,992)**Commercial Damages** Dry and Critical \$221,817 \$225,501 (\$3,684)Average \$1,402,328 \$1,403,517 (\$1,189)**Utiliy Damages** Dry and Critical \$1,411,067 \$1,413,222 (\$2,155)Average \$60,413 \$61,019 (\$606) **Industrial Damages** Dry and Critical \$64,926 \$66,052 (\$1,126)Average \$76,423 \$76,909 (\$486)**Ground Water Damages** Dry and Critical \$85,053 \$85,649 (\$596) Average \$85,567 \$85,680 (\$112)Wastewater Damages Dry and Critical \$87,334 \$87,335 (\$1) Average (\$2,420)\$231,863 \$234,283 **Recycled Water Damages** Dry and Critical \$249,745 \$254,225 (\$4,480)Average \$5,894,707 \$5,907,585 (\$12,878) Total Dry and Critical \$5,995,261 \$6,019,435 (\$24,174)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-5b-7

South Bay Area Water Quality Economics Reporting Metrics Evaluated at 2060 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$1,331) (\$1.981)		(\$1,331) (\$1,981)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-5b-8

Power and Pumping Cost Reporting Metrics NODOS Alternative Economics Evaluated at 2060 Projected Conditions NODOS Alternative No Action **B** minus No Action (in 2007 \$'s) Alternative Alternative В Central Valley Project Power Facilities Total of all Facilities at Long Term 1,660 1,647 13 Capacity (MW) Dry and Critical 1,525 20 load center Total of all Facilities at Long Term 4,718 4,701 18 **Energy Generation** (GWh) Dry and Critical 3,506 3,513 load center Long Term 599.547 597,217 2.330 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 447,150 447,726 -576 **Pumping Facilities** Total of all Facilities at Long Term 1,140 1,109 31 (GWh) Energy Use Dry and Critical 894 868 26 load center Long Term 131,958 128,325 3,632 Power Costs Total of all Facilities (\$1,000)Dry and Critical 103,688 100,629 3,059 Off-peak pumping Percent of time off-Long Term ი% በ% 0% (%) peak target not met 0% 0% 0% targets Total Long Term 3,578 3,592 -14 Net Generation (GWh) Total of all Facilities Dry and Critical 2,645 2,613 -32 Long Term 467,589 468,892 -1,303 Net Revenue Total of all Facilities (\$1,000) Dry and Critical 343,462 347,097 3,635 State Water Project **Power Facilities** Total of all Facilities at Long Term 618 16 633 Capacity (MW) Dry and Critical load center 462 439 24 Total of all Facilities at Long Term 107 4.493 4.386 **Energy Generation** (GWh) Dry and Critical 3,128 2,909 220 oad cente Long Term 564,367 551,057 13.309 Total of all Facilities Generation Revenue (\$1,000)Dry and Critical 393,711 366,489 27,222 **Pumping Facilities** Total of all Facilities at Long Term 376 8 464 8 088 **Energy Use** (GWh) Dry and Critical load center 6,727 6,013 714 Long Term 986,505 942,572 43,933 Power Costs Total of all Facilities (\$1.000) Dry and Critical 782,773 699,747 83,026 Off-peak pumping Percent of time off-Long Term (%) targets peak target not met 11% 10% 1% Total Long Term -3.971 -3702-269 Net Generation Total of all Facilities (GWh) Dry and Critical -3 599 -3,104-494 Long Term -422.139-391.515 -30.624 Net Revenue Total of all Facilities (\$1.000)Dry and Critical -389,062 -333,258 -55,804 Proposed NODOS Facilities Power Facilities Long Term Total of all Facilities at 104 0 104 (GWh) **Energy Generation** Dry and Critical 100 100 load center Long Term 13,181 0 13.181 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 12.661 0 12,661 **Pumping Facilities** Total of all Facilities at Long Term 195 13 182 (GWh) **Energy Use** Dry and Critical 106 95 load center Long Term 21,430 1,472 19,958 Power Costs Total of all Facilities (\$1.000)Dry and Critical 11.837 1.307 10.530 Total Long Term -91 -13 -78 (GWh) Net Generation Total of all Facilities Dry and Critical -12 -6 6 Long Term -8,250 -1,472 -6,778 Net Revenue Total of all Facilities (\$1,000)Dry and Critical 824 -1,307 2,131 **All Facilities** Total Long Term -490 -125 -365 Net Generation Total of all Facilities (GWh) Dry and Critical -996 -472-524Long Term 36,464 75.648 -39.184 Net Revenue Total of all Facilities (\$1,000) Dry and Critical 57.619

- 1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
 - 2. Long Term is the average quantity for the calendar years 1922-2002.
- 3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
- 4. Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2060 for Future No Action and Alternatives
- 5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



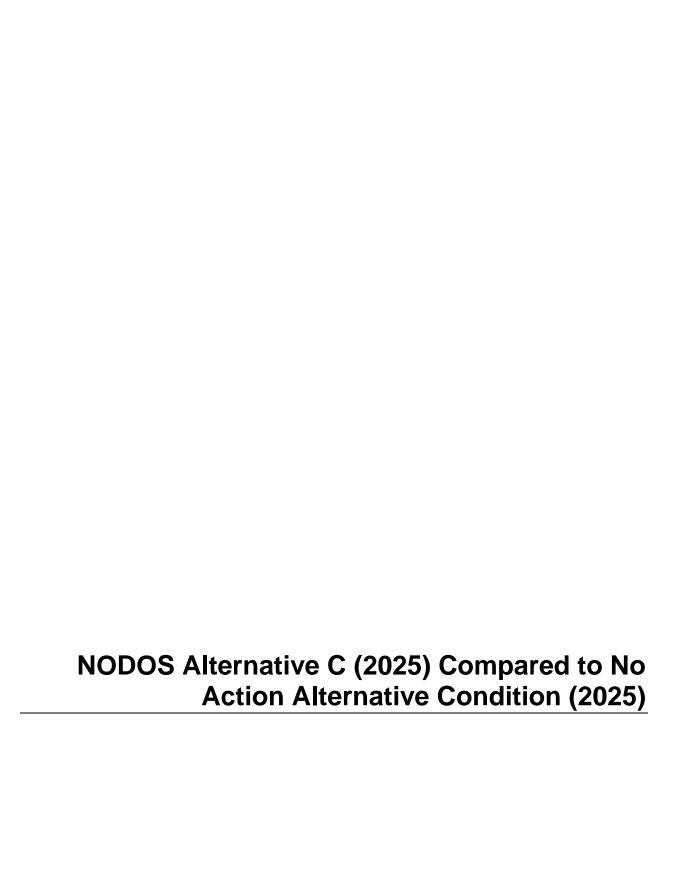




Table RMT-7a-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative C	No Action Alternative	Alternativ
Supply Reliability				7110111011	7.110.1141170	7.1.07.1.01.
Sacramento River Hydrologic Region	on					
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	1,941 1,932	1,932 1,918	9 15
CVP Refuge Level 2	Contract Delivery (enough everenc)	/T^ [/:cox)	Long Term	1,932	155	6
CVP Reluge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	213 176	211 174	2
OVD A	Contract Delivery (annual average -	/TAF()	Long Term	224	214	10
CVP Ag	does not include Settlement contractors)	(TAF/year)	Dry and Critical	102	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	948	950	-2
			Dry and Critical Long Term	895 24	901 23	-5 1
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	19	16	3
San Joaquin River Hydrologic Regi	on (not including Friant-Kern and Mader	a Canal water				
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term	853	853	0
			Dry and Critical Long Term	814 261	814 261	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	16	16	0
		(,,,,,	Dry and Critical Long Term	13 293	13 290	3
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Dry and Critical	143	137	6
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	4	4	0
	(annual average)	(17117)0017	Dry and Critical	3	3	0
San Francisco Bay Hydrologic Regi		/T.F.:	Long Term	290	290	1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	36	36	1
<u> </u>		(,,,	Dry and Critical Long Term	18 209	17 199	10
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	163	142	21
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	46 36	44 31	2 5
Tulare Lake Hydrologic Region (not	including Friant-Kern Canal water users	5)	Dry and Chilcar	30	31	3
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
		(,,,	Dry and Critical Long Term	11 609	11 601	0 8
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Dry and Critical	299	283	16
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	88	84	4
5111 Mai		(17ti 7year)	Dry and Critical	70	60	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term Dry and Critical	691 526	657 460	35 66
South Lahontan Hydrologic Region			,	3-3		
SWP M&I	Contract Delivery (including Article 21)	(TAF/year)	Long Term	281	267	14
South Coast Hydrologic Region	(annual average)		Dry and Critical	230	197	33
Court Court Hydrologic Region	Contract Delivery (including Article 21,		Long Term	1,419	1,353	67
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,145	990	154
	(annual average) Contract Delivery (including Article 21)		Long Term	9	8	0
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	7	6	1
Total For All Regions			·			
Total Supplies	Contract Delivery (CVP, SWP and other)	(TAF/year)	Long Term	8,629	8,458	171
onmental Use	(annual average)	·	Dry and Critical	7,312	6,968	344
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	2	0	2
· , ,			Dry and Critical Long Term	1 58	0	1 58
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Dry and Critical	58 29	0	29
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	14	0	14
<u> </u>		,, , , , , , , , , , , , , , , , ,	Dry and Critical	7	0	7
NODOS Ecosystem Enhancement A		(TAF)	Long Term	76	0	76
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	85	Ő	85
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	2	0	2
Quality	(,,	Dry and Critical	1	0	1
NODOS Water Quality (WQ)						
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term	165	0	165
·	s (dillidal dvorage)	(111179601)	Dry and Critical	169	0	169
Yield NODOS Yield Summary						
	•	/TAE/:	Long Term			487
Total NODOS Supply Incremen	l	(TAF/year)	Dry and Critical			635

Notes:
1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.
2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7a-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Co. (in 2011 \$'s)	nditions	NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Central Valley				
Annual Average Benefit (\$1,000	,000/year)			
	Long Term	\$11,688	\$11,686	\$1.523
	Dry and Critical	\$11,651	\$11,648	\$3.115
Annual Average Costs (\$1,000,0				
Groundwater	Long Term	\$660	\$666	(\$5.841)
	Dry and Critical	\$745	\$753	(\$7.921)
Fallow	Long Term	N/A	N/A	\$0.097
	Dry and Critical	N/A	N/A	\$0.571
Annual Average Change in Con	sumer Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$2.239
	Dry and Critical	N/A	N/A	\$9.519
Total Benefit (\$1,000,000/year)				
	Long Term	N/A	N/A	\$9.700
	Dry and Critical	N/A	N/A	\$21.126
Central Valley				
GW Pumping (TAF/year)				
	Long Term	6,513	6,557	(43)
	Dry and Critical	7,155	7,216	(61)

Table RMT-7a-3a LCPSIM M&I Economics Reporting Metrics

EVALUATED WAS ECONOMICS REPORTING METRIC Evaluated at 2025 Projected Conditions (in 2007 \$'s)	us .	NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
ay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$3,209	\$5,261	(\$2,053)
Fixed Option Cost	Average	\$4,858	\$1,846	\$3,012
Water Market Option Cost	Average	\$134	\$260	(\$126)
Municipal Water Supply Operations Cos	st Average	\$189,737	\$192,303	(\$2,567)
Total Loss/Costs	Average Dry and Critical	\$197,937 \$193,332	\$199,670 \$198,694	(\$1,733) (\$5,362)
South Coast				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$65,403	\$105,016	(\$39,614)
Fixed Option Cost	Average	\$369,018	\$382,046	(\$13,027)
Water Market Option Cost	Average	\$18,184	\$27,111	(\$8,927)
Municipal Water Supply Operations Cos	st Average	\$1,178,465	\$1,179,871	(\$1,406)
Total Loss/Costs	Average Dry and Critical	\$1,631,070 \$1.810.582	\$1,694,043 \$1.958.312	(\$62,973) (\$147,730)

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7a-3b

Additional information regarding LCPSIM California Aqueduct Evaluated at 2025 Projected Conditions (in 2007 \$'s)		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$	31000/year)			
Energy Cost	Average	\$2,113	\$1,139	\$974
Lifergy Cost		\$1,715	\$844	\$871
South Coast				
Annual Average Energy/Costs (\$	1000/year)			
Energy Cost	Average	\$330,921	\$322,480	\$8,441
Energy Cost		\$275,502	\$247,427	\$28,074

Table RMT-7a-3c

ible RM I - / a-ਤc ater Management Actions		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	1 0%	1 0%	(0)
Conservation	Average Fraction of Demand	164 13%	152 12%	12
Water Recycling	Average Fraction of Demand	51 4%	51 4%	0
Desalination	Average Fraction of Demand	0 0%	0 0%	0
uth Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average Fraction of Demand	71 1%	106 2%	(35)
Conservation	Average Fraction of Demand	780 16%	780 16%	0
Water Recycling	Average Fraction of Demand	528 11%	538 11%	(10)
Desalination	Average Fraction of Demand	57 1%	57 1%	0

Table RMT-7a-3d

Shortages		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	2	3	(2)
Net Oser Shortage	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	37	66	(29)
iver oser shortage	Fraction of Demand	1%	1%	

Table RMT-7a-4 Other Municipal Water Economics Model^a **Evaluated at 2025 Projected Conditions**

07 \$'s)		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
ge Annual Cost (Thousand \$/year)				
Delta				
•	Long Term	\$8,858	\$9,357	(\$499)
	Dry and Critical	\$17,453	\$18,656	(\$1,203)
Bay Area				
	Long Term	\$5,447	\$5,629	(\$182)
	Dry and Critical	\$10,818	\$11,275	(\$457)
Central Coast				
	Long Term	\$1,305	\$2,586	(\$1,281)
	Dry and Critical	\$3,609	\$7,155	(\$3,545)
Sacramento Valley				
·	Long Term	\$4,241	\$4,373	(\$132)
	Dry and Critical	\$10,337	\$10,678	(\$342)
San Joaquin				
	Long Term	\$1,529	\$1,557	(\$28)
	Dry and Critical	\$2,686	\$2,806	(\$120)
South Coast				
	Long Term	\$13,092	\$21,608	(\$8,516)
	Dry and Critical	\$22,986	\$45,903	(\$22,917)
Total For All Regions				
	Long Term	\$34,472	\$45,111	(\$10,639)
	Dry and Critical	\$67,889	\$96,473	(\$28,584)
ge Annual Volume (AF/Year)				
Delta				
	Long Term	56,119	54,332	1,787
	Dry and Critical	44,711	40,672	4,039
Bay Area				
	Long Term	54,356	52,450	1,906
	Dry and Critical	38,861	36,340	2,521
Central Coast				
	Long Term	47,426	45,372	2,054
	Dry and Critical	28,120	23,822	4,298
Sacramento Valley				
	Long Term	22,919	22,817	102
	Dry and Critical	20,824	20,697	127
San Joaquin				
	Long Term	104,304	99,699	4,605
	Dry and Critical	83,057	72,847	10,210
South Coast				
	Long Term	265,503	251,867	13,635
	Dry and Critical	218,024	186,488	31,536
Total For All Regions	•		,	•
	Long Term	550,627	526,538	24,089
	Dry and Critical	433,597	380,866	52,731
	.,	,	,	,

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7a-5
DSM2/CALSIM II Export Loading Reporting Metrics weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternative C minus No		
Water Quality	Alternative C	Alternative	Action Alternative		
(Average of All Years ¹)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	416.85	431.21	-14.36	-3.3%	
TDS (mg/l)	231.97	239.80	-7.83	-3.3%	
Chloride (mg/l)	68.81	72.29	-3.48	-4.8%	
Bromide (mg/l)	0.2245	0.2357	-0.01	-4.8%	
Jones PP Exports					
EC (umhos/cm)	465.85	482.66	-16.81	-3.5%	
TDS (mg/l)	258.84	268.01	-9.17	-3.4%	
Chloride (mg/l)	80.23	84.27	-4.04	-4.8%	
Bromide (mg/l)	0.2614	0.2745	-0.01	-4.8%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	340.21	345.21	-5.00	-1.4%	
TDS (mg/l)	190.64	193.36	-2.71	-1.4%	
Chloride (mg/l)	49.53	50.72	-1.19	-2.4%	
Bromide (mg/l)	0.1609	0.1648	0.00	-2.4%	

Average Export Weighted	NODOS	No Action	NODOS Alternative C minus No		
Water Quality	Alternative C	Alternative	Action Alte	rnative	
(Critical and Dry Years ²)	Result	Result	Difference	Percent	
Banks PP Exports					
EC (umhos/cm)	535.78	569.00	-33.22	-5.8%	
TDS (mg/l)	295.05	313.01	-17.96	-5.7%	
Chloride (mg/l)	100.35	108.69	-8.33	-7.7%	
Bromide (mg/l)	0.3308	0.3581	-0.03	-7.6%	
Jones PP Exports					
EC (umhos/cm)	586.16	618.54	-32.37	-5.2%	
TDS (mg/l)	322.56	340.12	-17.57	-5.2%	
Chloride (mg/l)	112.43	120.41	-7.97	-6.6%	
Bromide (mg/l)	0.3700	0.3960	-0.03	-6.6%	
CCWD Exports (RS, OR and VC)					
EC (umhos/cm)	402.78	413.55	-10.77	-2.6%	
TDS (mg/l)	223.30	229.26	-5.96	-2.6%	
Chloride (mg/l)	66.71	69.18	-2.47	-3.6%	
Bromide (mg/l)	0.2203	0.2281	-0.01	-3.4%	

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-7a-6 **LCRBWQM Reporting Metrics**

Evaluated at 2025 Projected Conditions

Annual Average Metropolitan Water District Service Area				NODOS Alternative C
Damages (in 2007 \$'s)		NODOS Alternative		minus No Action
Σαπα θο (π. 2007. φ. σ.)	Year Type	С	No Action Alternative	Alternative
Average Annual Damages (\$1000/year)				
Agricultural Damages	Average	\$36,281	\$37,075	(\$794)
Agricultural Damages	Dry and Critical	\$41,015	\$43,531	(\$2,516)
Residential Damages	Average	\$3,183,595	\$3,188,985	(\$5,390)
residential Damages	Dry and Critical	\$3,215,674	\$3,225,463	(\$9,788)
Commercial Damages	Average	\$155,491	\$157,274	(\$1,783)
	Dry and Critical	\$166,007	\$169,238	(\$3,231)
Utiliy Damages	Average	\$1,171,437	\$1,172,639	(\$1,202)
Othly Damages	Dry and Critical	\$1,178,584	\$1,180,729	(\$2,145)
Industrial Damages	Average	\$54,478	\$55,117	(\$639)
industrial Damages	Dry and Critical	\$58,206	\$59,363	(\$1,158)
Ground Water Damages	Average	\$80,081	\$81,088	(\$1,007)
Ground Water Damages	Dry and Critical	\$88,965	\$90,121	(\$1,156)
Wastewater Damages	Average	\$77,657	\$78,106	(\$449)
wasiewalei Damages	Dry and Critical	\$80,609	\$81,150	(\$542)
Recycled Water Damages	Average	\$86,513	\$87,623	(\$1,110)
	Dry and Critical	\$92,845	\$94,858	(\$2,013)
Total	Average	\$4,845,532	\$4,857,906	(\$12,374)
i Otal	Dry and Critical	\$4,921,904	\$4,944,452	(\$22,548)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-7a-7

South Bay Area Water Quality Economics Reporting Metrics Evaluated at 2025 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$1,397) (\$1,744)		(\$1,397) (\$1,744)

- 1. Long Term is the average quantity for the water years 1922-2003.
- 2. Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-7a-8

omics Evaluated at 2025 Pr 07 \$'s)	ojected Conditions			NODOS Alternative	No Action Alternative	NODOS Alternat C minus No Acti Alternative
al Valley Project						
Power Facilities	T. 1 (UE 1991)		Lana Tana			
Capacity	Total of all Facilities at load center	(MW)	Long Term Dry and Critical	1,661 1,526	1,647 1,505	14 21
F	Total of all Facilities at	(O)A(b)	Long Term	4,715	4,701	14
Energy Generation	load center	(GWh)	Dry and Critical	3,479	3,513	-34
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	392,418	391,217	1,200
Pumping Facilities			Dry and Childai	290,997	293,487	-2,490
Energy Use	Total of all Facilities at	(GWh)	Long Term	1,155	1,116	40
Lifelgy Ose	load center	(GVVII)	Dry and Critical	901	878	24
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	86,427 67,724	83,377 65,844	3,049 1,880
Off-peak pumping	Percent of time off-	(0()	Long Term	0%	0%	0%
targets	peak target not met	(%)	3 3	0%	0%	0%
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	3,559 2,578	3,585 2,635	-26 -58
Nath	Tarabara Beranda	(04.000)	Long Term	305,991	307,840	-1,849
Net Revenue	Total of all Facilities	(\$1,000)	Dry and Critical	223,273	227,643	-4,370
Water Project						
Power Facilities	Total of all Facilities at		Long Term	632	618	15
Capacity	load center	(MW)	Dry and Critical	462	439	23
Energy Generation	Total of all Facilities at	(GWh)	Long Term	4,496	4,386	110
Energy deficiation	load center	(OVIII)	Dry and Critical	3,168	2,909	259
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	369,147 260,990	360,264 239,709	8,883 21,281
Pumping Facilities			Dry and Ontion	200,990	239,709	21,201
Energy Use	Total of all Facilities at	(GWh)	Long Term	8,473	8,088	385
	load center	(01111)	Dry and Critical	6,848	6,013	834
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	638,255 515,992	609,076 452,501	29,179 63,491
Off-peak pumping	Percent of time off-	(%)	Long Term	20%	20%	0%
targets	peak target not met	(70)		11%	10%	1%
Total			Long Term	-3,977	-3,702	-275
Net Generation	Total of all Facilities	(GWh)	Dry and Critical	-3,679	-3,104	-575
Net Revenue	Total of all Facilities	(\$1,000)	Long Term	-269,108	-248,812	-20,296
	Total of all Lacilities	(\$1,000)	Dry and Critical	-255,002	-212,792	-42,210
sed NODOS Facilities Power Facilities						
	Total of all Facilities at	(0)4(1)	Long Term	157	0	157
Energy Generation	load center	(GWh)	Dry and Critical	173	0	173
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	12,946	0	12,946
Pumping Facilities			Dry and Childai	13,991	0	13,991
	Total of all Facilities at	(GWh)	Long Term	278	13	265
Energy Use	load center	(GVVII)	Dry and Critical	199	12	188
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	19,970	947	19,023
Total			Dry and Childa	14,267	840	13,427
Net Generation	Total of all Facilities	(GWh)	Long Term	-121	-13	-108
iver Generation	i otal ol all Facilities	(GVVII)	Dry and Critical	-26	-12	-15
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	-7,024 -276	-947 -840	-6,077 564
cilities			Dry and Chilical	-210	-040	504
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term	-543	-132	-412
			Dry and Critical Long Term	-1,131 29.479	-482 57,915	-649 -28.437
Net Revenue	Total of all Facilities	(\$1,000)	Dry and Critical	-32,269	57,915 13,921	-28,437 -46,190

- 1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
 2. Long Term is the average quantity for the calendar years 1922-2002.
 3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
 4. Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2025 for Future No Action and Alternatives
 5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



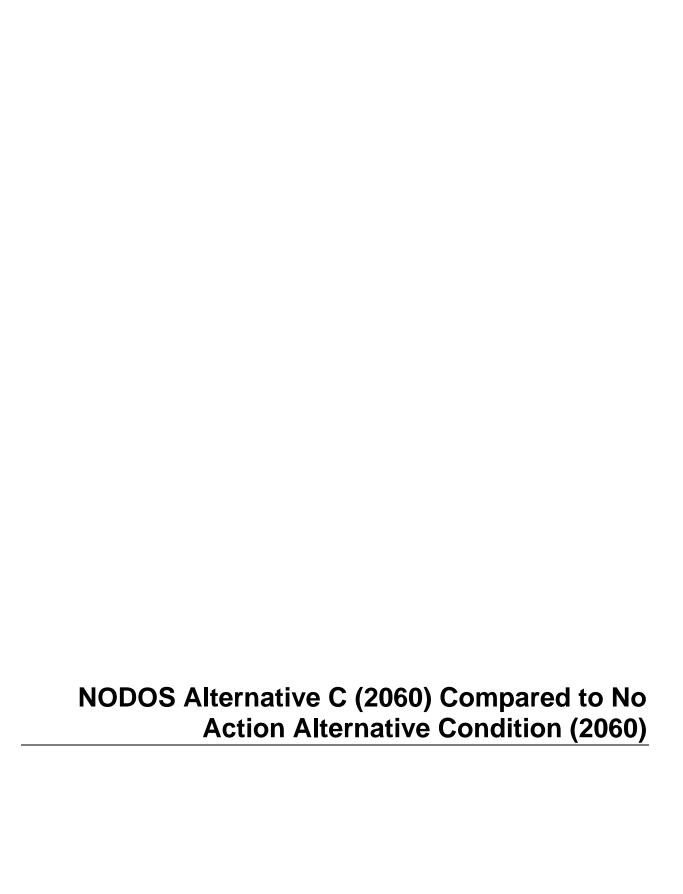




Table RMT-7b-1

SIM II Yield Summary Reportir	ng Metrics			NODOS Alternative C	No Action Alternative	NODOS Alternative minus No Ad Alternativ
Supply Reliability						
Sacramento River Hydrologic Region	on					
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	1,941 1,932	1,932 1,918	9 15
CV/B Refuge Level 2	Contract Delivery (enguel everene)	/T^ [/:cos)	Long Term	160	155	6
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	213 176	211	2
CV/D A =	Contract Delivery (annual average -	/T^ [/:cox)	Long Term	224	174 214	10
CVP Ag	does not include Settlement contractors)	(TAF/year)	Dry and Critical	102	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term	948	950	-2
2002.000			Dry and Critical Long Term	895 24	901 23	-5 1
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	19	16	3
San Joaquin River Hydrologic Regi	on (not including Friant-Kern and Mader	a Canal water				
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	853 814	853 814	0
CV/D Defrace Level 2	Ocation (Delivery (consult over con)	/TAF()	Long Term	261	261	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	16	16	0
	Contract Delivery (annual average; does		Dry and Critical Long Term	13 293	13 290	3
CVP Ag	not include Exchange contractors)	(TAF/year)	Dry and Critical	143	137	6
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	4	4	0
San Francisco Bay Hydrologic Regi	(annual average)	,,	Dry and Critical	3	3	0
, , , , ,		/ΤΛΓ/	Long Term	290	290	1
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term	36	36	1
	Contract Delivery (including Article 21,	(,,,,,	Dry and Critical Long Term	18 209	17 199	1 10
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	163	142	21
	(annual average)					
Central Coast Hydrologic Region			Long Torm	40	44	
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	46 36	44 31	2 5
Tulare Lake Hydrologic Region (not	t including Friant-Kern Canal water users	5)		00	· · · · · · · · · · · · · · · · · · ·	
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
	Contract Delivery (annual average -		Dry and Critical Long Term	11 609	11 601	0
CVP Ag	includes Cross Valley Canal)	(TAF/year)	Dry and Critical	299	283	16
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	88	84	4
	Contract Delivery (including Article 21)	(,,,	Dry and Critical Long Term	70 691	60 657	10 35
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	526	460	66
South Lahontan Hydrologic Region			•			
SWP M&I	Contract Delivery (including Article 21)	(TAF/year)	Long Term	281	267	14
South Coast Hydrologic Region	(annual average)		Dry and Critical	230	197	33
• • •	Contract Delivery (including Article 21,		Long Term	1,419	1,353	67
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,145	990	154
	(annual average) Contract Delivery (including Article 21)		Long Term	9	8	0
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	7	6	1
Total For All Regions					-	
Total Supplies	Contract Delivery (CVP, SWP and other)	(TAF/year)	Long Term	8,629	8,458	171
onmental Use	(annual average)	·	Dry and Critical	7,312	6,968	344
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	2	0	2
			Dry and Critical	1 59	0	1 58
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	58 29	0 0	29
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	14	0	14
, ,	• • • • • • • • • • • • • • • • • • • •	(11111)	Dry and Critical	7	0	7
NODOS Ecosystem Enhancement A			Long Term	76	0	76
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	85	0	85
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	2	0	2
	(, , , , ,	Dry and Critical	1	0	1
Quality NODOS Water Quality (WQ)						
Upstream and Delta Inflow	Flow (appual average)	(TAF/year)	Long Term	165	0	165
<u>'</u>	Flow (annual average)	(TAF/year)	Dry and Critical	169	0	169
NODOS Viold Summary						
NODOS Yield Summary			Long Term			487
Total NODOS Supply Incremen	t	(TAF/year)	Dry and Critical	1		635

Notes:

1. Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7b-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2060 Projected Condition	ons		No Action	NODOS
(in 2011 \$'s)		NODOS		Alternative C minus No Action
2		Alternative C	Alternative	Alternative
Central Valley				
Annual Average Benefit (\$1,000,000/	year)			
	Long Term	\$15,977	\$15,974	\$2.444
	Dry and Critical	\$15,940	\$15,933	\$6.534
Annual Average Costs (\$1,000,000/ye	ear)			
Crawadwatar	Long Term	\$737	\$744	(\$7.116)
Groundwater	Dry and Critical	\$875	77 \$15,974 40 \$15,933 7 \$744 5 \$883 N/A N/A N/A N/A N/A N/A	(\$8.187)
Fallow	Long Term	N/A	N/A	\$0.180
railow	Dry and Critical	N/A	N/A	\$0.461
Annual Average Change in Consume	er Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$2.210
	Dry and Critical	N/A	N/A	\$11.284
Total Benefit (\$1,000,000/year)				
	Long Term	N/A	N/A	\$11.950
	Dry and Critical	N/A	N/A	\$26.466
Central Valley				
GW Pumping (TAF/year)				
	Long Term	5,453	5,490	(38)
	Dry and Critical	6,148	6,194	(46)

Table RMT-7b-3a **LCPSIM M&I Economics Reporting Metrics**

5	NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Average	\$123,943	\$134,996	(\$11,052)
Average	\$235,527	\$240,097	(\$4,570)
Average	\$1,424	\$1,523	(\$98)
Average	\$281,202	\$279,639	\$1,563
Average	\$642,096	\$656,254	(\$14,158)
Dry and Critical	\$643,448	\$680,793	(\$37,345)
Average	\$475,887	\$472,086	\$3,801
Average	\$3,233,548	\$3,431,286	(\$197,738)
Average	\$79,072	\$79,650	(\$578)
Average	\$1,868,705	\$1,837,048	\$31,657
Average Dry and Critical	\$5,657,211 \$6,208,503	\$5,820,070 \$6,586,666	(\$162,859) (\$378,164)
	Average Average Average Average Average Dry and Critical Average Average Average Average Average	NODOS Alternative C Average \$123,943 Average \$235,527 Average \$1,424 Average \$281,202 Average \$642,096 Dry and Critical \$643,448 Average \$3,233,548 Average \$79,072 Average \$1,868,705 Average \$5,657,211	NODOS Alternative C No Action Alternative Average \$123,943 \$134,996 Average \$235,527 \$240,097 Average \$1,424 \$1,523 Average \$281,202 \$279,639 Average \$642,096 \$656,254 Dry and Critical \$643,448 \$680,793 Average \$3,233,548 \$3,431,286 Average \$79,072 \$79,650 Average \$1,868,705 \$1,837,048 Average \$5,657,211 \$5,820,070

Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7b-3b

Additional information regarding Evaluated at 2060 Projected Condition (in 2007 \$'s)	•	duct energy costs: NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs (\$	1000/year)			
Energy Cost	Average	\$15,254	\$14,624	\$630
Ellergy Cost		\$12,367	\$10,873	\$1,494
South Coast				
Annual Average Energy/Costs (\$	1000/year)			
Enorgy Coot	Average	\$544,003	\$520,941	\$23,062
Energy Cost	•	\$453.639	\$400.382	\$53.257

Table RMT-7b-3c

ater Management Actions		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
/ Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average	4	4	(0)
Water Hanslers	Fraction of Demand	0%	0%	
Conservation	Average	365	365	0
Conservation	Fraction of Demand	22%	22%	
Water Recycling	Average	88	88	0
Water Recycling	Fraction of Demand	5%	5%	
Desalination	Average	17	20	(3)
Desamation	Fraction of Demand	1%	1%	
ıth Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	220	223	(2)
Water Haristers	Fraction of Demand	4%	Alternative 4 0% 365 22% 88 5% 20 1% 223 4% 1,185 20% 1,458 24%	
Conservation	Average	1,185	1,185	0
Conservation	Fraction of Demand	20%	20%	
Water Reguling	Average	1,398	1,458	(60)
Water Recycling	Fraction of Demand	23%	24%	
Desalination	Average	314	329	(15)
Desamiation	Fraction of Demand	5%	5%	

Table RMT-7b-3d

Shortages		NODOS	No Action	NODOS Alternative C minus No Action
		Alternative C	Alternative	Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	39	41	(2)
Net Oser Shortage	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	209	212	(3)
iver oser onortage	Fraction of Demand	3%	4%	

Table RMT-7b-4 Other Municipal Water Economics Model^a **Evaluated at 2060 Projected Conditions**

uated at 2060 Projected Conditions 007 \$'s)	•	NODOS Alternative C	No Action Alternative	NODOS Alternative minus No Action Alternative
age Annual Cost (Thousand \$/yea	r)			
Delta				
·	Long Term	\$13,636	\$14,391	(\$755)
	Dry and Critical	\$26,823	\$28,633	(\$1,811)
Bay Area				
	Long Term	\$7,769	\$7,989	(\$220)
	Dry and Critical	\$15,770	\$16,317	(\$547)
Central Coast				
	Long Term	\$2,018	\$4,000	(\$1,982)
	Dry and Critical	\$5,583	\$11,067	(\$5,484)
Sacramento Valley				
	Long Term	\$4,807	\$4,960	(\$153)
	Dry and Critical	\$11,313	\$11,701	(\$388)
San Joaquin				
·	Long Term	\$2,074	\$2,090	(\$16)
	Dry and Critical	\$3,660	\$3,693	(\$33)
South Coast				
·	Long Term	\$18,620	\$29,404	(\$10,784)
	Dry and Critical	\$32,150	\$61,067	(\$28,918)
Total For All Regions				
	Long Term	\$48,925	\$62,835	(\$13,910)
	Dry and Critical	\$95,298	\$132,479	(\$37,181)
age Annual Volume (AF/Year)				
Delta				
	Long Term	56,119	54,332	1,787
	Dry and Critical	44,711	40,672	4,039
Bay Area				
·	Long Term	54,356	52,450	1,906
	Dry and Critical	38,861	36,340	2,521
Central Coast				
	Long Term	47,426	45,372	2,054
	Dry and Critical	28,120	23,822	4,298
Sacramento Valley				
·	Long Term	22,919	22,817	102
	Dry and Critical	20,824	20,697	127
San Joaquin				
·	Long Term	104,304	99,699	4,605
	Dry and Critical	83,057	72,847	10,210
South Coast				
	Long Term	265,503	251,867	13,635
	Dry and Critical	218,024	186,488	31,536
				-
Total For All Regions				
Total For All Regions	Long Term	550,627	526,538	24,089

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-7b-5
DSM2/CALSIM II Export Loading Reporting Metrics
weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternativ	
Water Quality	Alternative C	Alternative	Action Alte	rnative
(Average of All Years ¹)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	416.85	431.21	-14.36	-3.3%
TDS (mg/l)	231.97	239.80	-7.83	-3.3%
Chloride (mg/l)	68.81	72.29	-3.48	-4.8%
Bromide (mg/l)	0.2245	0.2357	-0.01	-4.8%
Jones PP Exports				
EC (umhos/cm)	465.85	482.66	-16.81	-3.5%
TDS (mg/l)	258.84	268.01	-9.17	-3.4%
Chloride (mg/l)	80.23	84.27	-4.04	-4.8%
Bromide (mg/l)	0.2614	0.2745	-0.01	-4.8%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	340.21	345.21	-5.00	-1.4%
TDS (mg/l)	190.64	193.36	-2.71	-1.4%
Chloride (mg/l)	49.53	50.72	-1.19	-2.4%
Bromide (mg/l)	0.1609	0.1648	0.00	-2.4%

Average Export Weighted	NODOS	No Action	NODOS Alternative C minu	
Water Quality	Alternative C	Alternative	Action Alternative	
(Critical and Dry Years ²)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	535.78	569.00	-33.22	-5.8%
TDS (mg/l)	295.05	313.01	-17.96	-5.7%
Chloride (mg/l)	100.35	108.69	-8.33	-7.7%
Bromide (mg/l)	0.3308	0.3581	-0.03	-7.6%
Jones PP Exports				
EC (umhos/cm)	586.16	618.54	-32.37	-5.2%
TDS (mg/l)	322.56	340.12	-17.57	-5.2%
Chloride (mg/l)	112.43	120.41	-7.97	-6.6%
Bromide (mg/l)	0.3700	0.3960	-0.03	-6.6%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	402.78	413.55	-10.77	-2.6%
TDS (mg/l)	223.30	229.26	-5.96	-2.6%
Chloride (mg/l)	66.71	69.18	-2.47	-3.6%
Bromide (mg/l)	0.2203	0.2281	-0.01	-3.4%

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-7b-6 **LCRBWQM Reporting Metrics** Evaluated at 2060 Projected Conditions

Annual Average Metropolitan Water Dis Damages (in 2007 \$'s)	trict Service Area Year Type	NODOS Alternative	No Action Alternative	NODOS Alternative C minus No Action Alternative
Average Annual Damages (\$1000/year)	rear rype	J	NO ACTION ATTENDATIVE	Atternative
	Average	\$34,851	\$35,653	(\$802)
Agricultural Damages	Dry and Critical	\$39,775	\$42,353	(\$2,578)
Desidential Demages	Average	\$3,795,230	\$3,801,466	(\$6,236)
Residential Damages	Dry and Critical	\$3,833,570	\$3,845,098	(\$11,527)
Commercial Damages	Average	\$206,697	\$209,058	(\$2,361)
	Dry and Critical	\$221,129	\$225,501	(\$4,373)
Litiliu Domogoo	Average	\$1,402,122	\$1,403,517	(\$1,395)
Utiliy Damages	Dry and Critical	\$1,410,688	\$1,413,222	(\$2,534)
Industrial Damages	Average	\$60,294	\$61,019	(\$724)
industrial Damages	Dry and Critical	\$64,708	\$66,052	(\$1,344)
Ground Water Damages	Average	\$75,984	\$76,909	(\$924)
Ground Water Damages	Dry and Critical	\$84,834	\$85,649	(\$815)
Wastewater Damages	Average	\$85,459	\$85,680	(\$220)
wastewater Damages	Dry and Critical	\$87,239	\$87,335	(\$96)
Provided Water Demages	Average	\$231,336	\$234,283	(\$2,947)
Recycled Water Damages	Dry and Critical	\$248,774	\$254,225	(\$5,450)
Total	Average	\$5,891,974	\$5,907,585	(\$15,611)
i Ulai	Dry and Critical	\$5,990,717	\$6,019,435	(\$28,718)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-7b-7

South Bay Area Water Quality Economics Reporting Metrics Evaluated at 2060 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Drv and Critical	(\$1,803) (\$2,252)		(\$1,803) (\$2,252)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-7b-8

Power and Pumping Cost Reporting Metrics NODOS Alternative Economics Evaluated at 2060 Projected Conditions NODOS Alternative No Action C minus No Action (in 2007 \$'s) C Alternative Alternative Central Valley Project **Power Facilities** Long Term Total of all Facilities at 1.661 1.647 14 (MW) Capacity Dry and Critical 1.505 21 load center 1,526 Total of all Facilities at 4,701 14 4,715 (GWh) **Energy Generation** Dry and Critical 3,479 -34 load center Long Term 598,973 597,217 1,755 Generation Revenue Total of all Facilities (\$1,000) Dry and Critical 443,751 447,726 -3,975 **Pumping Facilities** Total of all Facilities at Long Term 1.146 1.109 37 **Energy Use** (GWh) Dry and Critical load center 892 868 24 Long Term 132,690 128,325 4.365 Power Costs Total of all Facilities (\$1,000)Dry and Critical 103,566 100,629 2,937 Long Term Off-peak pumping Percent of time off-0% 0% 0% (%) peak target not met 0% 0% 0% targets Total Long Term 3.569 3.592 -23 Net Generation Total of all Facilities (GWh) Dry and Critical 2,587 2,645 -58 Long Term 466 283 468 892 -2 609 Net Revenue Total of all Facilities (\$1,000)Dry and Critical 340.185 347.097 -6.912 State Water Project **Power Facilities** Total of all Facilities at Long Term 632 618 15 (MW) Capacity load center Dry and Critical 462 439 23 Total of all Facilities at Long Term 4,496 4.386 110 **Energy Generation** (GWh) Dry and Critical load center 3,168 2,909 259 Long Term 551.057 13.680 564.738 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 398,718 366,489 32,228 **Pumping Facilities** Total of all Facilities at Long Term 8,473 8,088 385 **Energy Use** (GWh) Dry and Critical 6,848 6,013 834 load cente Long Term 987.659 942 572 45 088 Power Costs Total of all Facilities (\$1,000)Dry and Critical 797 322 699.747 97.575 Percent of time off-Off-peak pumping Long Term 20% 20% 0% (%) 11% 10% 1% targets peak target not met Total Long Term -275 -3,977 -3,702 Net Generation Total of all Facilities (GWh) Dry and Critical -3,679 -3,104 -575 Long Term -422,922 -391,515 -31,407 Net Revenue Total of all Facilities (\$1,000)Dry and Critical -398,604 -333,258 -65,347 **Proposed NODOS Facilities** Power Facilities Total of all Facilities at Long Term 157 157 0 (GWh) **Energy Generation** Dry and Critical 0 173 173 load center Long Term 19,612 19,612 0 Generation Revenue Total of all Facilities (\$1,000)Dry and Critical 21,383 Λ 21,383 **Pumping Facilities** Total of all Facilities at Long Term 278 13 265 Energy Use (GWh) Dry and Critical load center 199 12 188 Long Term 31,417 1,472 29,944 Power Costs Total of all Facilities (\$1.000)Dry and Critical 22,537 1,307 21,230 Total Long Term -121 -13 -108 Net Generation Total of all Facilities (GWh) Dry and Critical -26 -12 -15 Long Term -11,805 -1.472-10.333Net Revenue Total of all Facilities (\$1.000) Dry and Critical -1.154 -1.307153 All Facilities Total -409 Long Term -534 -125

Notes:

Net Generation

Net Revenue

1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model

(GWh)

(\$1,000)

2. Long Term is the average quantity for the calendar years 1922-2002.

Total of all Facilities

Total of all Facilities

- Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
- Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2060 for Future No Action and Alternatives

Dry and Critical

Dry and Critical

Long Term

-1,122

30,964

-472

75,648

-650

-44,684

-72,378

5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



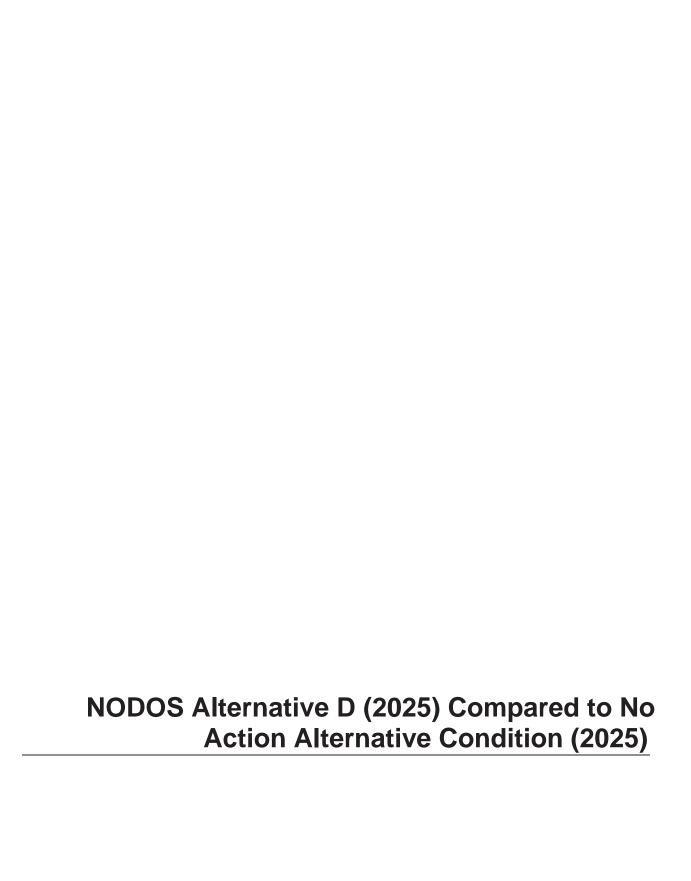




Table RMT-9a-1

SIM II Yield Summary Reportii	ng Metrics			NODOS Alternative D	No Action Alternative	NODOS Alternative minus No Ad Alternativ
Supply Reliability						
Sacramento River Hydrologic Region	On Contract Delivery (annual average) does	•	Long Term	1,939	1,932	7
CVP Settlement	not include NODOS	(TAF/year)	Dry and Critical	1,939	1,932	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	159	155	4
OVI Reluge Level 2	Contract Delivery (annual average)	(TALTYCAL)	Dry and Critical	142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	212 174	211 174	0
CVP Ag	Contract Delivery (annual average -	(TAE/year)	Long Term	220	214	6
CVP Ag	does not include Settlement contractors	(TAF/year)	Dry and Critical	99	93	6
NODOS Local Delivery	Contract Delivery (NODOS to TCCA, GCID, RD 108)	(TAF/year)	Long Term Dry and Critical	78 450	0 0	78 150
	,		Long Term	150 951	950	150 1
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	905	901	4
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	24	23	1
	on (not including Friant-Kern and Made		Dry and Critical	18	16	2
			Long Term	853	853	0
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	814	814	Ö
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
		(, , , ,	Dry and Critical	249	249	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	16 13	16 13	0
CVP Ag	Contract Delivery (annual average; does	(TAF/year)	Long Term	293	290	3
OVI Ay	not include Exchange contractors)	(Ini/yeai)	Dry and Critical	142	137	5
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term	4 3	4	0
San Francisco Bay Hydrologic Reg			Dry and Critical	3	3	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	290	290	0
OVI WAI	Contract Delivery (arrival average)	(TALTYCAL)	Dry and Critical	318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	36 18	36 17	1
	Contract Delivery (including Article 21,		Long Term	207	199	9
SWP M&I	includes transfers to SWP contractors) (annual average)	(TAF/year)	Dry and Critical	157	142	16
Central Coast Hydrologic Region						
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	46 35	44	2 4
Tulare Lake Hydrologic Region (no	t including Friant-Kern Canal water user	rs)	Dry and Childai	35	31	4
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	12	12	0
OVI Reluge Level 2		(TAITyeal)	Dry and Critical	11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term Dry and Critical	609	601	7
			Long Term	297 88	283 84	15 4
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	67	60	7
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	684	657	28
South Lahontan Hydrologic Region	(annual average)	(, , , ,	Dry and Critical	510	460	50
	Contract Delivery (including Article 21)		Long Term	279	267	13
SWP M&I	(annual average)	(TAF/year)	Dry and Critical	222	197	26
South Coast Hydrologic Region						
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors)	(TAF/year)	Long Term Dry and Critical	1,411	1,353 990	59 119
OVVI IVIQI	(annual average)	(IAI/yeai)	Diy and Cittical	1,109	990	119
SWP Ag	Contract Delivery (including Article 21)	(TAF/year)	Long Term	9	8	0
<u> </u>	(annual average)	(17417yodi)	Dry and Critical	6	6	1
Total For All Regions	Contract Delivery (CVP, SWP and other	1	Long Term	8,683	8,458	225
Total Supplies	(annual average)	(TAF/year)	Dry and Critical	7,387	8,458 6,968	419
onmental Use	· ,		,	.,501	2,300	
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term Drv and Critical	1 0	0 0	1 0
Courth of Dolta (Mandata DII)	Delivery (enguel exercis)	/TAF/:	Long Term	38	0	38
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Dry and Critical	19	0	19
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term	9	0	9
NODOS Ecosystem Enhancement A	• • • • • • • • • • • • • • • • • • • •	. , , ,	Dry and Critical	4	0	4
		/TAF/	Long Term	76	0	76
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	93	0	93
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term	1	0	1
Quality	(**************************************	, ,,,	Dry and Critical	1	0	1
NODOS Water Quality (WQ)						
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term	97	0	97
<u> </u>	i iow (aiiiiuai aveiage)	(IAI/yeai)	Dry and Critical	68	0	68
Yield NODOS Viold Summary						
NODOS Yield Summary			Long Term			447
Total NODOS Supply Incremen		(TAF/year)				

- Notes:
 1. Long Term is the average quantity for the period of Oct 1921 Sep 2003.
 2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 Sep 2003.

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Table RMT-9a-2 SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Conditions	5	NODOS	No Action	Alternative D
(in 2011 \$'s)		Alternative D	Alternative	minus No Action
Central Valley				
Annual Average Benefit (\$1,000,000/yea	ar)			
	Long Term	\$11,689	\$11,686	\$2.697
	Dry and Critical	\$11,663	\$11,648	\$14.776
Annual Average Costs (\$1,000,000/year	r)			
Groundwater	Long Term	\$655	\$666	(\$10.930)
	Dry and Critical	\$744	\$753	(\$9.138)
Fallow	Long Term	N/A	N/A	\$0.164
	Dry and Critical	N/A	N/A	\$1.432
Annual Average Change in Consumer S	Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$2.254
	Dry and Critical	N/A	N/A	\$22.061
Total Benefit (\$1,000,000/year)				
	Long Term	N/A	N/A	\$16.045
	Dry and Critical	N/A	N/A	\$47.407
Central Valley				
GW Pumping (TAF/year)				
	Long Term	6,458	6,557	(99)
	Dry and Critical	7,137	7,216	(79)

Table RMT-9a-3a **LCPSIM M&I Economics Reporting Metrics**

raluated at 2025 Projected Conditions		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South		Alternative D	Alternative	minus No Action
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$3,423	\$5,261	(\$1,839)
Fixed Option Cost	Average	\$5,454	\$1,846	\$3,608
Water Market Option Cost	Average	\$173	\$260	(\$87)
Municipal Water Supply Operations Cost	Average	\$189,924	\$192,303	(\$2,379)
Total Loss/Costs	Average Dry and Critical	\$198,973 \$194,990	\$199,670 \$198,694	(\$697) (\$3,704)
South Coast	·			
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$91,882	\$105,016	(\$13,135)
Fixed Option Cost	Average	\$365,057	\$382,046	(\$16,989)
Water Market Option Cost	Average	\$22,259	\$27,111	(\$4,852)
Municipal Water Supply Operations Cost	Average	\$1,183,002	\$1,179,871	\$3,131
Total Loss/Costs	Average Dry and Critical	\$1,662,199 \$1,884,048	\$1,694,043 \$1,958,312	(\$31,844) (\$74,264)

- Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 Sep 2003.

Table RMT-9a-3b

Additional information regarding LCPSIM California Aqueduct energy costs:

Evaluated at 2025 Projected Conditions

(in 2007 \$'s)		NODOS	No Action	Alternative D
		Alternative D	Alternative	minus No Action
Bay Area - South				
Annual Average Energy/Costs (\$7	1000/year)			
Energy Cost	Average	\$2,111	\$1,139	\$972
		\$1,668	\$844	\$824
South Coast				
Annual Average Energy/Costs (\$*	1000/year)			
Energy Cost	Average	\$328,134	\$322,480	\$5,654
		\$269,093	\$247,427	\$21,666

Table RMT-9a-3c

Water Management Actions		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average	1	1	(0)
water transfers	Fraction of Demand	0%	0%	
Conservation	Average	164	152	12
Conservation	Fraction of Demand	13%	12%	
Water Recycling	Average	51	51	0
Water Recycling	Fraction of Demand	4%	4%	
Desalination	Average	0	0	0
Desamation	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	87	106	(19)
Water Hanslers	Fraction of Demand	2%	2%	
Conservation	Average	780	780	0
Conservation	Fraction of Demand	16%	16%	
Water Reguling	Average	525	538	(13)
Water Recycling	Fraction of Demand	11%	11%	
Desalination	Average	57	57	0
Desaimation	Fraction of Demand	1%	1%	

Table RMT-9a-3d

Shortages		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	2	3	(1)
Net Oser Shortage	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	53	66	(13)
Net Oser Shortage	Fraction of Demand	1%	1%	

Table RMT-9a-4 Other Municipal Water Economics Model^a **Evaluated at 2025 Projected Conditions**

Delta Bay Area Central Coast Sacramento Valley San Joaquin	Long Term Dry and Critical Long Term Dry and Critical	\$9,025 \$17,928 \$5,455 \$10,858 \$1,668 \$4,616 \$4,292 \$10,470	\$9,357 \$18,656 \$5,629 \$11,275 \$2,586 \$7,155 \$4,373 \$10,678	(\$332) (\$728) (\$174) (\$417) (\$918) (\$2,539) (\$81) (\$208)
Bay Area Central Coast Sacramento Valley	Dry and Critical Long Term Dry and Critical	\$17,928 \$5,455 \$10,858 \$1,668 \$4,616	\$18,656 \$5,629 \$11,275 \$2,586 \$7,155	(\$728) (\$174) (\$417) (\$918) (\$2,539) (\$81)
Central Coast Sacramento Valley	Dry and Critical Long Term Dry and Critical	\$17,928 \$5,455 \$10,858 \$1,668 \$4,616	\$18,656 \$5,629 \$11,275 \$2,586 \$7,155	(\$728) (\$174) (\$417) (\$918) (\$2,539) (\$81)
Central Coast Sacramento Valley	Long Term Dry and Critical	\$5,455 \$10,858 \$1,668 \$4,616	\$5,629 \$11,275 \$2,586 \$7,155	(\$174) (\$417) (\$918) (\$2,539) (\$81)
Central Coast Sacramento Valley	Dry and Critical Long Term Dry and Critical Long Term Dry and Critical Long Term Dry and Critical	\$10,858 \$1,668 \$4,616 \$4,292	\$11,275 \$2,586 \$7,155 \$4,373	(\$417) (\$918) (\$2,539) (\$81)
Sacramento Valley	Dry and Critical Long Term Dry and Critical Long Term Dry and Critical Long Term Dry and Critical	\$10,858 \$1,668 \$4,616 \$4,292	\$11,275 \$2,586 \$7,155 \$4,373	(\$417) (\$918) (\$2,539) (\$81)
Sacramento Valley	Long Term Dry and Critical Long Term Dry and Critical Long Term Dry and Critical	\$1,668 \$4,616 \$4,292	\$2,586 \$7,155 \$4,373	(\$918) (\$2,539) (\$81)
Sacramento Valley	Dry and Critical Long Term Dry and Critical Long Term	\$4,616 \$4,292	\$7,155 \$4,373	(\$2,539) (\$81)
	Dry and Critical Long Term Dry and Critical Long Term	\$4,616 \$4,292	\$7,155 \$4,373	(\$2,539) (\$81)
	Long Term Dry and Critical Long Term	\$4,292	\$4,373	(\$81)
	Dry and Critical Long Term			. ,
San Joaquin	Dry and Critical Long Term			. ,
San Joaquin	Long Term	\$10,470	\$10,678	(\$208)
San Joaquin				(Ψ200)
-				
	Dry and Critical	\$1,542	\$1,557	(\$16)
	Dry and Critical	\$2,709	\$2,806	(\$97)
South Coast				X ·
	Long Term	\$14,803	\$21,608	(\$6,806)
	Dry and Critical	\$28,204	\$45,903	(\$17,699)
Total For All Regions		+	+ 10,000	(+11,000)
Total For All Regions	Long Term	\$36,785	\$45,111	(\$8,326)
	Dry and Critical	\$74,785	\$96,473	(\$21,688)
je Annual Volume (AF/Year)	Dry and Chilcai	ψ7 4 ,703	ψ90,473	(ψ21,000)
Delta	Long Term	FF F22	E4 222	1,201
	Dry and Critical	55,533 42,985	54,332	2,312
D A	Dry and Childai	42,985	40,672	2,312
Bay Area	I T	F 4 007	50.450	4 707
	Long Term	54,237	52,450	1,787
	Dry and Critical	38,625	36,340	2,285
Central Coast				
	Long Term	47,059	45,372	1,687
	Dry and Critical	26,930	23,822	3,108
Sacramento Valley				
	Long Term	22,891	22,817	74
	Dry and Critical	20,793	20,697	97
San Joaquin				
	Long Term	103,387	99,699	3,688
	Dry and Critical	80,311	72,847	7,464
South Coast				
	Long Term	263,640	251,867	11,772
	Dry and Critical	210,741	186,488	24,254
Total For All Regions	1 /	,	,	
. otar i or Air Negiona	Long Term	546,747	526,538	20,209
	Dry and Critical	420,386	380,866	39,521
	pry and Chilical	420,300	300,000	J3,J∠ I

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-9a-5
DSM2/CALSIM II Export Loading Reporting Metrics
weighted average of all values of monthly simulation

Average Export Weighted	NODOS	No Action	NODOS Alternative D minus No	
Water Quality	Alternative D	Alternative	Action Alte	rnative
(Average of All Years ¹)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	426.41	431.21	-4.80	-1.1%
TDS (mg/l)	237.11	239.80	-2.69	-1.1%
Chloride (mg/l)	71.26	72.29	-1.04	-1.4%
Bromide (mg/l)	0.2325	0.2357	0.00	-1.4%
Jones PP Exports				
EC (umhos/cm)	475.77	482.66	-6.89	-1.4%
TDS (mg/l)	264.17	268.01	-3.85	-1.4%
Chloride (mg/l)	82.83	84.27	-1.45	-1.7%
Bromide (mg/l)	0.2699	0.2745	0.00	-1.7%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	343.57	345.21	-1.64	-0.5%
TDS (mg/l)	192.45	193.36	-0.91	-0.5%
Chloride (mg/l)	50.39	50.72	-0.33	-0.7%
Bromide (mg/l)	0.1637	0.1648	0.00	-0.7%

Average Export Weighted Water Quality	NODOS Alternative D	No Action Alternative	NODOS Alternative D minus Action Alternative	
(Critical and Dry Years ²)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	556.97	569.00	-12.03	-2.1%
TDS (mg/l)	306.49	313.01	-6.52	-2.1%
Chloride (mg/l)	105.69	108.69	-2.99	-2.8%
Bromide (mg/l)	0.3484	0.3581	-0.01	-2.7%
Jones PP Exports				
EC (umhos/cm)	607.06	618.54	-11.48	-1.9%
TDS (mg/l)	333.83	340.12	-6.29	-1.9%
Chloride (mg/l)	117.72	120.41	-2.68	-2.2%
Bromide (mg/l)	0.3874	0.3960	-0.01	-2.2%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	409.58	413.55	-3.97	-1.0%
TDS (mg/l)	227.00	229.26	-2.26	-1.0%
Chloride (mg/l)	68.39	69.18	-0.80	-1.2%
Bromide (mg/l)	0.2257	0.2281	0.00	-1.0%

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-9a-6 **LCRBWQM Reporting Metrics**

Evaluated at 2025 Projected Conditions

Annual Average Metropolitan Water Dis Damages (in 2007 \$'s)	strict Service Area	NODOS Alternative	No Action	NODOS Alternative D minus No Action
	Year Type	D	Alternative	Alternative
Average Annual Damages (\$1000/year)				
Agricultural Damages	Average	\$36,506	\$37,075	(\$569)
Agricultural Damages	Dry and Critical	\$42,297	\$43,531	(\$1,233)
Residential Damages	Average	\$3,185,819	\$3,188,985	(\$3,166)
Residential Damages	Dry and Critical	\$3,220,258	\$3,225,463	(\$5,204)
Commercial Damages	Average	\$156,251	\$157,274	(\$1,023)
Commercial Damages	Dry and Critical	\$167,562	\$169,238	(\$1,675)
Utiliy Damages	Average	\$1,171,939	\$1,172,639	(\$700)
Othly Damages	Dry and Critical	\$1,179,600	\$1,180,729	(\$1,129)
Industrial Damages	Average	\$54,750	\$55,117	(\$367)
muusmai Damages	Dry and Critical	\$58,763	\$59,363	(\$601)
Ground Water Damages	Average	\$81,103	\$81,088	\$16
Ground Water Damages	Dry and Critical	\$90,979	\$90,121	\$858
Westewater Damages	Average	\$77,941	\$78,106	(\$165)
Wastewater Damages	Dry and Critical	\$81,099	\$81,150	(\$51)
Decycled Water Demages	Average	\$86,989	\$87,623	(\$634)
Recycled Water Damages	Dry and Critical	\$93,829	\$94,858	(\$1,029)
Total	Average	\$4,851,297	\$4,857,906	(\$6,609)
Total	Dry and Critical	\$4,934,388	\$4,944,452	(\$10,064)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-9a-7

South Bay Area Water Quality Economics Reporting Metrics

Evaluated at 2025 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
	TDS			
South Bay Area				
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$354) (\$59)		(\$354) (\$59)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-9a-8 **Power and Pumping Cost Reporting Metrics**

·				NODOS Alternative	No Action Alternative	NODOS Alternativ D minus No Action Alternative
al Valley Project						
Power Facilities	Total of all Facilities at		Long Term	1,661	1,647	14
Capacity	load center	(MW)	Dry and Critical	1,525	1,505	21
F	Total of all Facilities at	(O)A/I-)	Long Term	4,718	4,701	18
Energy Generation	load center	(GWh)	Dry and Critical	3,485	3,513	-28
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term	392,728	391,217	1,511
Pumping Facilities			Dry and Critical	291,261	293,487	-2,226
	Total of all Facilities at	(0)4(1)	Long Term	1,145	1,116	29
Energy Use	load center	(GWh)	Dry and Critical	895	878	17
Power Costs	Total of all Facilities	(\$1,000)	Long Term	85,593	83,377	2,216
Off-peak pumping	Percent of time off-	. , ,	Dry and Critical Long Term	67,175 0%	65,844 0%	1,330
targets	peak target not met	(%)	Long Term	0%	0%	0%
Total	1					
Net Generation	Total of all Facilities	(GWh)	Long Term	3,574	3,585	-11
1101 001101441011	Total of all I dollated	(011)	Dry and Critical	2,590	2,635	-45
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	307,135 224,086	307,840 227,643	-705 -3,556
Water Project			Dij ana onaoa	22 1,000	227,010	3,000
Power Facilities						
Capacity	Total of all Facilities at load center	(MW)	Long Term	632	618	15
	Total of all Facilities at		Dry and Critical Long Term	460 4,486	439 4,386	21 100
Energy Generation	load center	(GWh)	Dry and Critical	3,108	2,909	199
Generation Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	368,377 256,066	360,264 239,709	8,113 16,356
Pumping Facilities			Dry and Ontion	250,000	255,705	10,550
Energy Use	Total of all Facilities at	(GWh)	Long Term	8,424	8,088	336
Energy 030	load center	(OVVII)	Dry and Critical	6,659	6,013	645
Power Costs	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	634,346 501,344	609,076 452,501	25,270 48,843
Off-peak pumping	Percent of time off-	(0()	Long Term	20%	20%	0%
targets	peak target not met	(%)	ŭ	10%	10%	0%
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term Dry and Critical	-3,937 -3,551	-3,702 -3,104	-236 -446
			Long Term	-265,969	-248,812	-17,157
Net Revenue	Total of all Facilities	(\$1,000)	Dry and Critical	-245,278	-212,792	-32,486
sed NODOS Facilities						
Power Facilities	Total of all Facilities at		Long Term	149	0	149
Energy Use	load center	(GWh)	Dry and Critical	163	0	163
Power Costs	Total of all Facilities	(\$1,000)	Long Term	12,388	0	12,388
	Total of all Lacilities	(ψ1,000)	Dry and Critical	13,286	0	13,286
Pumping Facilities	Total of all Facilities at		Long Term	258	13	245
Energy Use	load center	(GWh)	Dry and Critical	172	12	160
Power Costs	Total of all Facilities	(\$1,000)	Long Term	18,605	947	17,659
Total	Total of all Labilities	(ψ1,000)	Dry and Critical	12,421	840	11,581
	T . I	(0)4#)	Long Term	-108	-13	-95
Net Generation	Total of all Facilities	(GWh)	Dry and Critical	-9	-12	2
Net Revenue	Total of all Facilities	(\$1,000)	Long Term	-6,217	-947	-5,270 4,705
cilities			Dry and Critical	865	-840	1,705
Total						
Net Generation	Total of all Facilities	(GWh)	Long Term	-477	-132	-346
		, ,	Dry and Critical	-973	-482 F7.01F	-491
Net Revenue	Total of all Facilities	(\$1,000)	Long Term Dry and Critical	34,537 -20,613	57,915 13,921	-23,379 -34,535

1

1. Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
2. Long Term is the average quantity for the calendar years 1922-2002.
3. Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
4. Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2025 for Future No Action and Alternatives
5. Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.



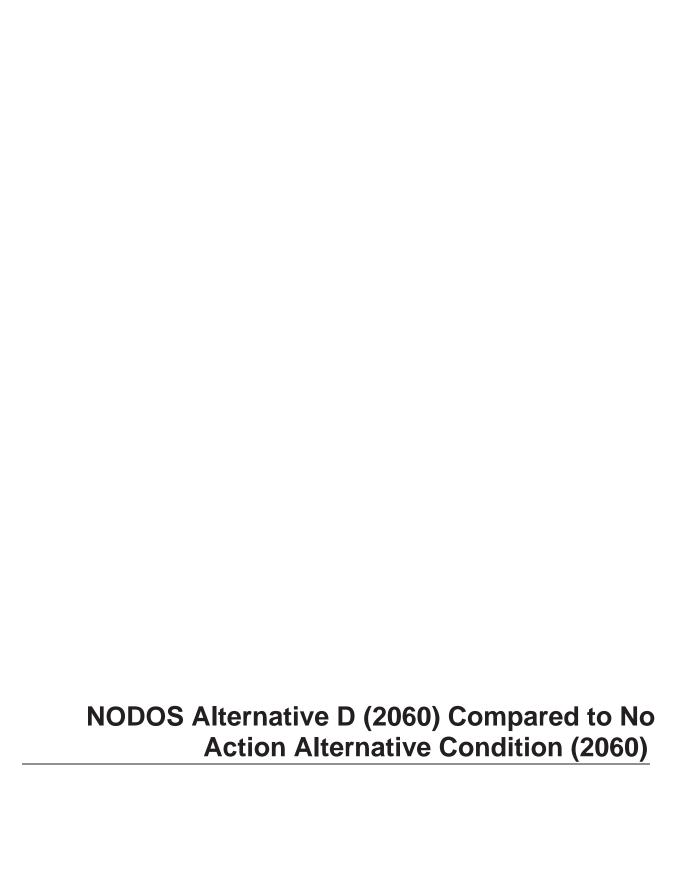




Table RMT-9b-1

SIM II Yield Summary Reportir	ig Metrics			NODOS Alternative D	No Action Alternative	Alternative minus No Ad Alternative
Supply Reliability						
Sacramento River Hydrologic Region			Long Term	1,939	1,932	7
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	1,926	1,918	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	159	155	4
	Community (annual average)	(17117)041)	Dry and Critical	142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	212 174	211 174	1 0
CVP Ag	Contract Delivery (annual average -	(TAF/year)	Long Term	220	214	6
OVI Ag	does not include Settlement contractors) (TAITyeal)	Dry and Critical	99	93	6
NODOS Local Delivery	Contract Delivery (NODOS to TCCA, GCID, RD 108)	(TAF/year)	Long Term Dry and Critical	78 150	0 0	78 150
OWD EDGA	,	(TAF()	Long Term	951	950	130
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	905	901	4
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	24	23	1
San Joaquin River Hydrologic Region	on (not including Friant-Kern and Made	ra Canal water	Dry and Critical	18	16	2
			Long Term	853	853	0
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	814	814	0
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term	261	261	0
0.75.444			Dry and Critical Long Term	249 16	249 16	0
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	13	13	0
CVP Ag	Contract Delivery (annual average; doe	S (TAF/year)	Long Term	293	290	3
-	not include Exchange contractors) Contract Delivery (including Article 21)	, ,,=,	Dry and Critical	142 4	137 4	5
SWP Ag	(annual average)	(TAF/year)	Long Term Dry and Critical	3	3	0
San Francisco Bay Hydrologic Regi				<u> </u>		
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	290	290	0
			Dry and Critical Long Term	318 36	318 36	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	18	36 17	1
	Contract Delivery (including Article 21,		Long Term	207	199	9
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	157	142	16
Central Coast Hydrologic Region	(annual average)					
	Ott D-1:()	(TAF()	Long Term	46	44	2
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Dry and Critical	35	31	4
Tulare Lake Hydrologic Region (not	including Friant-Kern Canal water use	rs)	1 T	40		
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	12 11	12 11	0
CV/D A ~	Contract Delivery (annual average -	/T \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Long Term	609	601	7
CVP Ag	includes Cross Valley Canal)	(TAF/year)	Dry and Critical	297	283	15
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term	88	84	4
	Contract Delivery (including Article 21)		Dry and Critical Long Term	67 684	60 657	7 28
SWP Ag	(annual average)	(TAF/year)	Dry and Critical	510	460	50
South Lahontan Hydrologic Region			•			
SWP M&I	Contract Delivery (including Article 21)	(TAF/year)	Long Term	279	267	13
South Coast Hydrologic Region	(annual average)		Dry and Critical	222	197	26
South South Hard Signer Hogier	Contract Delivery (including Article 21,		Long Term	1,411	1,353	59
SWP M&I	includes transfers to SWP contractors)	(TAF/year)	Dry and Critical	1,109	990	119
	(annual average)		Long Torm	9	0	0
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term Dry and Critical	6	8 6	1
Total For All Regions			,			
Total Supplies	Contract Delivery (CVP, SWP and other	(TAF/year)	Long Term	8,683	8,458	225
onmental Use	(annual average)	, , , oa. ,	Dry and Critical	7,387	6,968	419
Provide Level 4 Refuge Supply						
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term	1	0	1
NOTH OF Delta (COIUSA DASIN)	Delivery (aririual average)	(IAI/yeai)	Dry and Critical	0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term Dry and Critical	38 19	0 0	38 19
Oneth of Dally (T. L. D. 11)	Delivery (converter	(TAF()	Long Term	9	0	9
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Dry and Critical	4	0	4
NODOS Ecosystem Enhancement A	ccount (EEA)		1	70		
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term Dry and Critical	76 93	0 0	76 93
Dolto Outflou	Floor (constant to the constant to the constan	(TAF()	Long Term	93	0	1
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Dry and Critical	1	0	1
Quality						
NODOS Water Quality (WQ)			Long Term	97	0	97
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Dry and Critical	68	0	68
Yield						
NODOS Yield Summary			Long Term			1.1-
Total NODOS Supply Incremen		(TAF/year)				447

- Notes:
 1. Long Term is the average quantity for the period of Oct 1921 Sep 2003.
 2. Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 Sep 2003.

Table RMT-9b-2 SWAP Agricultural Economics Reporting Metrics

Evaluated at 2060 Projected Condit	tions	NODOS	No Action	Alternative D
(in 2011 \$'s)		Alternative D	Alternative	minus No Action
Central Valley				
Annual Average Benefit (\$1,000,000	0/year)			
	Long Term	\$15,977	\$15,974	\$2.421
	Dry and Critical	\$15,952	\$15,933	\$18.638
Annual Average Costs (\$1,000,000/	/year)			
Groundwater	Long Term	\$728	\$744	(\$15.761)
Groundwater	Dry and Critical	\$871	\$883	(\$12.297)
Fallow	Long Term	N/A	N/A	\$0.162
	Dry and Critical	N/A	N/A	\$1.383
Annual Average Change in Consur	ner Surplus (\$1,000,000/year)			
	Long Term	N/A	N/A	\$1.612
	Dry and Critical	N/A	N/A	\$23.481
Total Benefit (\$1,000,000/year)	·			
	Long Term	N/A	N/A	\$19.956
	Dry and Critical	N/A	N/A	\$55.799
Central Valley				
GW Pumping (TAF/year)				
-	Long Term	5,384	5,490	(107)
	Dry and Critical	6,113	6,194	(81)

Table RMT-9b-3a **LCPSIM M&I Economics Reporting Metrics**

Evaluated at 2060 Projected Conditions (in 2007 \$'s)		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$97,568	\$134,996	(\$37,427)
Fixed Option Cost	Average	\$267,515	\$240,097	\$27,418
Water Market Option Cost	Average	\$1,146	\$1,523	(\$377)
Municipal Water Supply Operations Cost	Average	\$279,233	\$279,639	(\$407)
Total Loss/Costs	Average Dry and Critical	\$645,462 \$654,904	\$656,254 \$680,793	(\$10,792) (\$25,889)
South Coast				
Annual Average Loss/Costs (\$1000/year)				
Shortage Cost	Average	\$450,064	\$472,086	(\$22,023)
Fixed Option Cost	Average	\$3,310,368	\$3,431,286	(\$120,918)
Water Market Option Cost	Average	\$66,571	\$79,650	(\$13,079)
Municipal Water Supply Operations Cost	Average	\$1,854,609	\$1,837,048	\$17,561
Total Loss/Costs	Average Dry and Critical	\$5,681,612 \$6,266,232	\$5,820,070 \$6,586,666	(\$138,458) (\$320,434)

- Long Term is the average quantity for the water years 1922-2003.
 Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 Sep 2003.

Table RMT-9b-3b

Additional information regarding LCPSIM California Aqueduct energy costs:

Evaluated at 2060 Projected Conditions

(in 2007 \$'s)		NODOS	No Action	Alternative D
		Alternative D	Alternative	minus No Action
Bay Area - South				
Annual Average Energy/Costs (\$1	1000/year)			
Energy Cost	Average	\$13,495	\$14,624	(\$1,129)
Lifelgy Cost		\$10,664	\$10,873	(\$209)
South Coast				
Annual Average Energy/Costs (\$1	1000/year)			
Energy Cost	Average	\$508,945	\$520,941	(\$11,996)
Lifelgy Cost		\$417,371	\$400,382	\$16,989

Table RMT-9b-3c

Water Management Actions		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average	3	4	(1)
	Fraction of Demand	0%	0%	
Conservation	Average	365	365	0
Conservation	Fraction of Demand	22%	22%	
Water Recycling	Average	88	88	0
water Recycling	Fraction of Demand	5%	5%	
Desalination	Average	37	20	17
Desamation	Fraction of Demand	2%	1%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	215	223	(8)
Water Hansiers	Fraction of Demand	4%	4%	
Conservation	Average	1,185	1,185	0
Conservation	Fraction of Demand	20%	20%	
Water Decycling	Average	1,422	1,458	(36)
Water Recycling	Fraction of Demand	24%	24%	. ,
Desalination	Average	320	329	(9)
Desamation	Fraction of Demand	5%	5%	, ,

Table RMT-9b-3d

Shortages		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	32	41	(9)
Net Oser Shortage	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	205	212	(7)
	Fraction of Demand	3%	4%	

Table RMT-9b-4
Other Municipal Water Economics Model^a
Evaluated at 2060 Projected Conditions

\$'s)		NODOS Alternative D	No Action Alternative	NODOS Alternative minus No Action Alternative
Annual Cost (Thousand \$/year)				
Delta				
	Long Term	\$13,890	\$14,391	(\$501)
	Dry and Critical	\$27,547	\$28,633	(\$1,087)
Bay Area				
	Long Term	\$7,779	\$7,989	(\$210)
	Dry and Critical	\$15,822	\$16,317	(\$495)
Central Coast				
	Long Term	\$2,581	\$4,000	(\$1,419)
	Dry and Critical	\$7,140	\$11,067	(\$3,927)
Sacramento Valley				
	Long Term	\$4,858	\$4,960	(\$102)
	Dry and Critical	\$11,445	\$11,701	(\$257)
San Joaquin				
	Long Term	\$2,091	\$2,090	\$0
	Dry and Critical	\$3,691	\$3,693	(\$2)
South Coast				
	Long Term	\$20,913	\$29,404	(\$8,491)
	Dry and Critical	\$39,196	\$61,067	(\$21,871)
Total For All Regions				
	Long Term	\$52,112	\$62,835	(\$10,723)
	Dry and Critical	\$104,840	\$132,479	(\$27,639)
Annual Volume (AF/Year)				\
Delta				
	Long Term	55,533	54,332	1,201
	Dry and Critical	42,985	40,672	2,312
Bay Area				
	Long Term	54,237	52,450	1,787
	Dry and Critical	38,625	36,340	2,285
Central Coast		·	·	·
	Long Term	47,059	45,372	1,687
	Dry and Critical	26,930	23,822	3,108
Sacramento Valley			·	· ·
	Long Term	22,891	22,817	74
	Dry and Critical	20,793	20,697	97
San Joaquin		,	•	
	Long Term	103,387	99,699	3,688
	Dry and Critical	80,311	72,847	7,464
South Coast	,		,-	, -
	Long Term	263,640	251,867	11,772
	Dry and Critical	210,741	186,488	24,254
Total For All Regions	2. j and ontiou	210,111	100, 100	2 1,20 7
. J.di i Oi Ali Regions	Long Term	546,747	526,538	20,209
	Dry and Critical	420,386	380,866	39,521
	וטוץ and Chilical	720,300	300,000	J3,JZ I

^a OMWEM includes regions in close proximity to the South Bay and South Coast regions modeled in LCPSIM. However, the model does not double count metrics.

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

^{2.} Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003.

Table RMT-9b-5
DSM2/CALSIM II Export Loading Reporting Metrics weighted average of all values of monthly simulation

Average Export Weighted Water Quality	NODOS Alternative D	No Action Alternative	NODOS Alternativ	
water Quality	Alternative D	Alternative	ACTION AILE	IIIalive
(Average of All Years ¹)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	426.41	431.21	-4.80	-1.1%
TDS (mg/l)	237.11	239.80	-2.69	-1.1%
Chloride (mg/l)	71.26	72.29	-1.04	-1.4%
Bromide (mg/l)	0.2325	0.2357	0.00	-1.4%
Jones PP Exports				
EC (umhos/cm)	475.77	482.66	-6.89	-1.4%
TDS (mg/l)	264.17	268.01	-3.85	-1.4%
Chloride (mg/l)	82.83	84.27	-1.45	-1.7%
Bromide (mg/l)	0.2699	0.2745	0.00	-1.7%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	343.57	345.21	-1.64	-0.5%
TDS (mg/l)	192.45	193.36	-0.91	-0.5%
Chloride (mg/l)	50.39	50.72	-0.33	-0.7%
Bromide (mg/l)	0.1637	0.1648	0.00	-0.7%

Average Export Weighted Water Quality	NODOS Alternative D	No Action Alternative	NODOS Alternativ Action Alte	
(Critical and Dry Years ²)	Result	Result	Difference	Percent
Banks PP Exports				
EC (umhos/cm)	556.97	569.00	-12.03	-2.1%
TDS (mg/l)	306.49	313.01	-6.52	-2.1%
Chloride (mg/l)	105.69	108.69	-2.99	-2.8%
Bromide (mg/l)	0.3484	0.3581	-0.01	-2.7%
Jones PP Exports				
EC (umhos/cm)	607.06	618.54	-11.48	-1.9%
TDS (mg/l)	333.83	340.12	-6.29	-1.9%
Chloride (mg/l)	117.72	120.41	-2.68	-2.2%
Bromide (mg/l)	0.3874	0.3960	-0.01	-2.2%
CCWD Exports (RS, OR and VC)				
EC (umhos/cm)	409.58	413.55	-3.97	-1.0%
TDS (mg/l)	227.00	229.26	-2.26	-1.0%
Chloride (mg/l)	68.39	69.18	-0.80	-1.2%
Bromide (mg/l)	0.2257	0.2281	0.00	-1.0%

^{1.} Long Term is the average quantity for the period of Oct 1921 - Sep 2003.

² Dry and Critical Years Average is the average quantity for the combination of the SWRCB D-1641 40-30-30 Dry and Critical years for the period of Oct 1921 - Sep 2003. Average annual increases are based on average quantities for October 1921 through September 2003.

Table RMT-9b-6 **LCRBWQM Reporting Metrics Evaluated at 2060 Projected Conditions**

nnual Average Metropolitan Water Dis Jamages (in 2007 \$'s)	strict Service Area	NODOS Alternative	No Action	NODOS Alternative D minus No Action
	Year Type	D	Alternative	Alternative
verage Annual Damages (\$1000/year)				
Agricultural Damages	Average	\$35,092	\$35,653	(\$562)
Agricultural Damages	Dry and Critical	\$41,080	\$42,353	(\$1,274)
Residential Damages	Average	\$3,797,893	\$3,801,466	(\$3,573)
Residential Damages	Dry and Critical	\$3,839,052	\$3,845,098	(\$6,046)
Commercial Damages	Average	\$207,731	\$209,058	(\$1,327)
Commercial Damages	Dry and Critical	\$223,249	\$225,501	(\$2,252)
Utiliy Damages	Average	\$1,402,725	\$1,403,517	(\$792)
Othly Darriages	Dry and Critical	\$1,411,907	\$1,413,222	(\$1,315)
Industrial Damages	Average	\$60,616	\$61,019	(\$403)
muusmai Damages	Dry and Critical	\$65,367	\$66,052	(\$685)
Ground Water Damages	Average	\$77,007	\$76,909	\$98
Ground Water Damages	Dry and Critical	\$86,549	\$85,649	\$900
Wastowater Damages	Average	\$85,686	\$85,680	\$6
Wastewater Damages	Dry and Critical	\$87,585	\$87,335	\$250
Decycled Water Demogra	Average	\$232,650	\$234,283	(\$1,633)
Recycled Water Damages	Dry and Critical	\$251,485	\$254,225	(\$2,740)
Tatal	Average	\$5,899,399	\$5,907,585	(\$8,186)
Total	Dry and Critical	\$6,006,273	\$6,019,435	(\$13,162)

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-9b-7

South Bay Area Water Quality Economics Reporting Metrics

Evaluated at 2060 Projected Conditions

Annual Average Damages (in 2006 \$'s)		NODOS Alternative D	No Action Alternative	Alternative D minus No Action							
TDS											
South Bay Area											
Annual Average Damages (\$1000/year)	Average Dry and Critical	(\$1,803) (\$2,252)		(\$1,803) (\$2,252)							

- Long Term is the average quantity for the water years 1922-2003.
 Driest Periods is the average quantity for the water years 1929-1934, 1976-1977, and 1987-1992.

Table RMT-9b-8

onomics Evalu	. •	Reporting Metrics rojected Conditions					NODOS Alternativ
2007 \$'s)					NODOS Alternative D	No Action Alternative	D minus No Actio
ntral Valley Pro Power Faci							
Power Faci	lities	Total of all Facilities at		Long Term	1,661	1,647	14
Capa	city	load center	(MW)	Dry and Critical	1,525	1,505	21
		Total of all Facilities at		Long Term	4,718	4,701	18
Energ	gy Generation	load center	(GWh)	Dry and Critical	3,485	3,513	-28
				Long Term	599,463	597,217	2,246
Gene	ration Revenue	Total of all Facilities	(\$1,000)	Dry and Critical	444,316	447,726	-3,410
Pumping F	acilities			Dry and Omioa	444,010	111,120	0,410
		Total of all Facilities at		Long Term	1,136	1,109	27
Energ	gy Use	load center	(GWh)	Dry and Critical	884	868	16
	0	T. (-1 - (- 1) E 200	(04.000)	Long Term	131,452	128,325	3,127
Powe	r Costs	Total of all Facilities	(\$1,000)	Dry and Critical	102,589	100,629	1,960
Off-pe	eak pumping	Percent of time off-	(0()	Long Term	0%	0%	0%
target		peak target not met	(%)	Ŭ	0%	0%	0%
Total		,					
	`anaratic=	Total of all Carillian	(C\\/\-\	Long Term	3,583	3,592	-9
net G	Generation	Total of all Facilities	(GWh)	Dry and Critical	2,601	2,645	-44
Not D	lavanua.	Total of all Capilities	(£1 000)	Long Term	468,010	468,892	-882
Net K	levenue	Total of all Facilities	(\$1,000)	Dry and Critical	341,727	347,097	-5,370
ite Water Proje	ect			•			
Power Faci	lities						
Cono	oitu	Total of all Facilities at	(MW)	Long Term	632	618	15
Capa	City	load center	(IVIVV)	Dry and Critical	460	439	21
Fnore	. Concretion	Total of all Facilities at	(C)(/b)	Long Term	4,486	4,386	100
Ellei	gy Generation	load center	(GWh)	Dry and Critical	3,108	2,909	199
0	antina Davis	Tatal of all Casilities	(ft4 000)	Long Term	563,533	551,057	12,476
Gene	ration Revenue	Total of all Facilities	(\$1,000)	Dry and Critical	391,233	366,489	24,744
Pumping F	acilities			•			
Enorg	gy Use	Total of all Facilities at	(GWh)	Long Term	8,424	8,088	336
Ellei	gy USE	load center	(GWII)	Dry and Critical	6,659	6,013	645
Powe	r Costs	Total of all Facilities	(\$1,000)	Long Term	981,783	942,572	39,211
Fowe	1 00515	Total of all Facilities	(φ1,000)	Dry and Critical	775,037	699,747	75,290
Off-pe	eak pumping	Percent of time off-	(%)	Long Term	20%	20%	0%
target	ts	peak target not met	(70)		10%	10%	0%
Total							
Net G	Seneration	Total of all Facilities	(GWh)	Long Term	-3,937	-3,702	-236
1101 0	criciation	Total of all Facilities	(OWII)	Dry and Critical	-3,551	-3,104	-446
Not R	levenue	Total of all Facilities	(\$1,000)	Long Term	-418,250	-391,515	-26,735
		Total of all Lacilities	(ψ1,000)	Dry and Critical	-383,804	-333,258	-50,546
posed NODO							
Power Faci	lities						
Fnero	gy Use	Total of all Facilities at	(GWh)	Long Term	149	0	149
	gy 000	load center	(01111)	Dry and Critical	163	0	163
Powe	r Costs	Total of all Facilities	(\$1,000)	Long Term	18,814	0	18,814
	1 00010	Total of all Labilities	(ψ1,000)	Dry and Critical	20,338	0	20,338
Pumping F	acilities						1
Enero	gy Use	Total of all Facilities at	(GWh)	Long Term	258	13	245
	gy 000	load center	(01111)	Dry and Critical	172	12	160
Powe	r Costs	Total of all Facilities	(\$1,000)	Long Term	29,243	1,472	27,771
	. 000.0	Total of all Facilities	(ψ.,σσσ)	Dry and Critical	19,598	1,307	18,291
Total							
Net G	Seneration	Total of all Facilities	(GWh)	Long Term	-108	-13	-95
			, ,	Dry and Critical	-9	-12	2
Net R	levenue	Total of all Facilities	(\$1,000)	Long Term	-10,429	-1,472	-8,956
		. Star of all I dollinos	(ψ1,000)	Dry and Critical	740	-1,307	2,047
Facilities							
Total							<u> </u>
Net C	Seneration	Total of all Facilities	(GWh)	Long Term	-468	-125	-343
		. Star of all I dollinos	(3,,,,)	Dry and Critical	-963	-472	-491
Net R	levenue	Total of all Facilities	(\$1,000)	Long Term	38,689	75,648	-36,959
INCLE	io volido	i orai oi aii i aciiiles	(Ψ1,000)	Dry and Critical	-41,783	12,394	-54,177

- Results are estimated using LTGEN, SWP_Power and NODOS_Power utilizing data from the CALSIM II model
 Long Term is the average quantity for the calendar years 1922-2002.

- Dry and Critical is the average quantity for the calendar years 1922-2002.
 Dry and Critical is the average quantity for dry and critical years according to the Sacramento River 40-30-30 index
 Revenue is based on forecast energy costs (in 2007 \$) for year 2009 for Existing and year 2060 for Future No Action and Alternatives
 Net Generation for all facities does not equal sum of Net Generation for CVP, SWP and proposed NODOS facilities because energy use at Red Bluff pumping plant is included in both CVP and proposed NODOS facilities. Results for Red Bluff pumping from LTGEN are subtracted from Net Generation for all facilities to avoid double-counting.

