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.”

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Reporting Metrics Tool
Results

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NODOS Alternative A (2025) Compared to No Action Alternative Condition (2025)

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Table RMT-3a-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,941	1,932	9
			Dry and Critical		1,932	1,918	14
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		159	155	4
			Dry and Critical		141	137	4
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		213	211	2
			Dry and Critical		175	174	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		224	214	10
			Dry and Critical		103	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		950	950	0
			Dry and Critical		901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		296	290	6
			Dry and Critical		147	137	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	1
			Dry and Critical		319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		37	36	1
			Dry and Critical		18	17	2
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		208	199	9
			Dry and Critical		160	142	18
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		36	31	5
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		616	601	14
			Dry and Critical		307	283	25
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		68	60	9
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		687	657	31
			Dry and Critical		518	460	58
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		280	267	13
			Dry and Critical		227	197	30
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,414	1,353	61
			Dry and Critical		1,132	990	141
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		7	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,627	8,458	169
			Dry and Critical		7,300	6,968	331
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		35	0	35
			Dry and Critical		17	0	17
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		8	0	8
			Dry and Critical		4	0	4
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		82	0	82
			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
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		128	0	128
			Dry and Critical		117	0	117
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**425**
			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-3a-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Conditions

(in 2011 $'s)

		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley				
Annual Average Benefit ($1,000,000/year)				
	Long Term	$11,687	$11,686	$1.408
	Dry and Critical	$11,651	$11,648	$3.155
Annual Average Costs ($1,000,000/year)				
Groundwater	Long Term	$659	$666	($7.098)
	Dry and Critical	$745	$753	($7.394)
Fallow	Long Term	N/A	N/A	$0.085
	Dry and Critical	N/A	N/A	$0.652
Annual Average Change in Consumer 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	$1,694,043	($58,355)
	Dry and Critical	$1,839,170	$1,958,312	($119,141)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
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 Energy/Costs ($1000/year)				
Energy Cost	Average	$2,141	$1,139	$1,002
		$1,713	$844	$869
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$329,163	$322,480	$6,683
		$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	0	1	(1)
	Fraction of Demand	0%	0%	
Conservation	Average	164	152	12
	Fraction of Demand	13%	12%	
Water Recycling	Average	51	51	0
	Fraction of Demand	4%	4%	
Desalination	Average	0	0	0
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	73	106	(33)
	Fraction of Demand	1%	2%	
Conservation	Average	780	780	0
	Fraction of Demand	16%	16%	
Water Recycling	Average	535	538	(3)
	Fraction of Demand	11%	11%	
Desalination	Average	57	57	0
	Fraction of Demand	1%	1%	

Table RMT-3a-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	2	3	(2)
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	36	66	(29)
	Fraction of Demand	1%	1%	

Table RMT-3a-4

Other Municipal Water Economics Model[a]

Evaluated at 2025 Projected Conditions

(in 2007 $'s)

			NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Average 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)
Average 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				
		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				
		Long Term	103,781	99,699	4,082
		Dry and Critical	81,667	72,847	8,820
	South Coast				
		Long Term	264,382	251,867	12,514
		Dry and Critical	215,216	186,488	28,728
	Total For All Regions				
		Long Term	548,606	526,538	22,068
		Dry and Critical	428,297	380,866	47,431

Notes:

[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 Water Quality	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No 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 Water Quality	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No 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%

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. 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

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

Notes:

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

Evaluated at 2025 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	($953)		($953)
	Dry and Critical	($1,235)		($1,235)

Notes:

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
Economics Evaluated at 2025 Projected Conditions
(in 2007 $'s)

					NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,659	1,647	12
			Dry and Critical		1,523	1,505	18
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,711	4,701	11
			Dry and Critical		3,500	3,513	-13
Generation Revenue	Total of all Facilities	($1,000)	Long Term		392,113	391,217	895
			Dry and Critical		292,702	293,487	-785
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,152	1,116	36
			Dry and Critical		902	878	24
Power Costs	Total of all Facilities	($1,000)	Long Term		86,104	83,377	2,727
			Dry and Critical		67,702	65,844	1,858
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		3,560	3,585	-25
			Dry and Critical		2,598	2,635	-37
Net Revenue	Total of all Facilities	($1,000)	Long Term		306,009	307,840	-1,832
			Dry and Critical		225,000	227,643	-2,643
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		632	618	15
			Dry and Critical		462	439	24
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,491	4,386	105
			Dry and Critical		3,143	2,909	234
Generation Revenue	Total of all Facilities	($1,000)	Long Term		368,728	360,264	8,464
			Dry and Critical		258,843	239,709	19,134
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,442	8,088	354
			Dry and Critical		6,768	6,013	755
Power Costs	Total of all Facilities	($1,000)	Long Term		635,800	609,076	26,724
			Dry and Critical		509,742	452,501	57,240
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		19%	20%	-1%
					11%	10%	1%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,951	-3,702	-249
			Dry and Critical		-3,625	-3,104	-521
Net Revenue	Total of all Facilities	($1,000)	Long Term		-267,072	-248,812	-18,260
			Dry and Critical		-250,898	-212,792	-38,106
Proposed NODOS Facilities							
Power Facilities							
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		126	0	126
			Dry and Critical		129	0	129
Generation Revenue	Total of all Facilities	($1,000)	Long Term		10,401	0	10,401
			Dry and Critical		10,342	0	10,342
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		229	13	216
			Dry and Critical		184	12	172
Power Costs	Total of all Facilities	($1,000)	Long Term		16,499	947	15,552
			Dry and Critical		13,105	840	12,265
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-103	-13	-90
			Dry and Critical		-54	-12	-43
Net Revenue	Total of all Facilities	($1,000)	Long Term		-6,097	-947	-5,150
			Dry and Critical		-2,764	-840	-1,924
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-499	-132	-367
			Dry and Critical		-1,085	-482	-603
Net Revenue	Total of all Facilities	($1,000)	Long Term		32,481	57,915	-25,434
			Dry and Critical		-28,929	13,921	-42,850

Notes:

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.

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NODOS Alternative A (2060) Compared to No Action Alternative Condition (2060)

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Table RMT-3b-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,941	1,932	9
			Dry and Critical		1,932	1,918	14
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		159	155	4
			Dry and Critical		141	137	4
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		213	211	2
			Dry and Critical		175	174	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		224	214	10
			Dry and Critical		103	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		950	950	0
			Dry and Critical		901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		296	290	6
			Dry and Critical		147	137	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	1
			Dry and Critical		319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		37	36	1
			Dry and Critical		18	17	2
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		208	199	9
			Dry and Critical		160	142	18
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		36	31	5
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		616	601	14
			Dry and Critical		307	283	25
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		68	60	9
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		687	657	31
			Dry and Critical		518	460	58
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		280	267	13
			Dry and Critical		227	197	30
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,414	1,353	61
			Dry and Critical		1,132	990	141
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		7	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,627	8,458	169
			Dry and Critical		7,300	6,968	331
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		35	0	35
			Dry and Critical		17	0	17
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		8	0	8
			Dry and Critical		4	0	4
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		82	0	82
			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
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		128	0	128
			Dry and Critical		117	0	117
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**425**
			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 Conditions

(in 2011 $'s)

		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley				
Annual Average Benefit ($1,000,000/year)				
	Long Term	$15,977	$15,974	$2.314
	Dry and Critical	$15,940	$15,933	$6.476
Annual Average Costs ($1,000,000/year)				
Groundwater	Long Term	$735	$744	($8.936)
	Dry and Critical	$875	$883	($7.759)
Fallow	Long Term	N/A	N/A	$0.167
	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 at 2060 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	$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 Cost	Average	$281,023	$279,639	$1,383
Total Loss/Costs	Average	$642,431	$656,254	($13,824)
	Dry and Critical	$648,595	$680,793	($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 Cost	Average	$1,874,178	$1,837,048	$37,130
Total Loss/Costs	Average	$5,665,117	$5,820,070	($154,953)
	Dry and Critical	$6,245,142	$6,586,666	($341,525)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
Evaluated at 2060 Projected Conditions
(in 2007 $'s)

		NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Bay Area - South				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$15,117	$14,624	$493
		$12,112	$10,873	$1,239
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$544,135	$520,941	$23,194
		$452,052	$400,382	$51,670

Table RMT-3b-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	4	4	(0)
	Fraction of Demand	0%	0%	
Conservation	Average	365	365	0
	Fraction of Demand	22%	22%	
Water Recycling	Average	88	88	0
	Fraction of Demand	5%	5%	
Desalination	Average	18	20	(2)
	Fraction of Demand	1%	1%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	228	223	5
	Fraction of Demand	4%	4%	
Conservation	Average	1,185	1,185	0
	Fraction of Demand	20%	20%	
Water Recycling	Average	1,398	1,458	(60)
	Fraction of Demand	23%	24%	
Desalination	Average	314	329	(15)
	Fraction of Demand	5%	5%	

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)
	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	220	212	8
	Fraction of Demand	4%	4%	

Table RMT-3b-4

Other Municipal Water Economics Model[a]

Evaluated at 2060 Projected Conditions

(in 2007 $'s)

			NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Average 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)
Average 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				
		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				
		Long Term	103,781	99,699	4,082
		Dry and Critical	81,667	72,847	8,820
	South Coast				
		Long Term	264,382	251,867	12,514
		Dry and Critical	215,216	186,488	28,728
	Total For All Regions				
		Long Term	548,606	526,538	22,068
		Dry and Critical	428,297	380,866	47,431

Notes:

[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 Water Quality (Average of All Years[1])	NODOS Alternative A Result	No Action Alternative Result	NODOS Alternative A minus No Action Alternative 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 Water Quality (Critical and Dry Years[2])	NODOS Alternative A Result	No Action Alternative Result	NODOS Alternative A minus No Action Alternative 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%

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. 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

Annual Average Metropolitan Water District Service Area Damages (in 2007 $'s)	Year Type	NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Average Annual Damages ($1000/year)				
Agricultural Damages	Average	$35,035	$35,653	($619)
	Dry and Critical	$40,126	$42,353	($2,227)
Residential Damages	Average	$3,796,726	$3,801,466	($4,739)
	Dry and Critical	$3,835,882	$3,845,098	($9,216)
Commercial Damages	Average	$207,255	$209,058	($1,803)
	Dry and Critical	$222,003	$225,501	($3,499)
Utiliy Damages	Average	$1,402,458	$1,403,517	($1,059)
	Dry and Critical	$1,411,201	$1,413,222	($2,021)
Industrial Damages	Average	$60,465	$61,019	($554)
	Dry and Critical	$64,977	$66,052	($1,075)
Ground Water Damages	Average	$76,475	$76,909	($434)
	Dry and Critical	$85,436	$85,649	($213)
Wastewater Damages	Average	$85,564	$85,680	($116)
	Dry and Critical	$87,366	$87,335	$31
Recycled Water Damages	Average	$232,019	$234,283	($2,265)
	Dry and Critical	$249,870	$254,225	($4,354)
Total	Average	$5,895,997	$5,907,585	($11,588)
	Dry and Critical	$5,996,861	$6,019,435	($22,574)

Notes:

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	($1,230)		($1,230)
	Dry and Critical	($1,595)		($1,595)

Notes:

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-8

Power and Pumping Cost Reporting Metrics
Economics Evaluated at 2060 Projected Conditions
(in 2007 $'s)

					NODOS Alternative A	No Action Alternative	NODOS Alternative A minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,659	1,647	12
			Dry and Critical		1,523	1,505	18
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,711	4,701	11
			Dry and Critical		3,500	3,513	-13
Generation Revenue	Total of all Facilities	($1,000)	Long Term		598,526	597,217	1,309
			Dry and Critical		446,342	447,726	-1,384
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,143	1,109	34
			Dry and Critical		892	868	25
Power Costs	Total of all Facilities	($1,000)	Long Term		132,273	128,325	3,948
			Dry and Critical		103,538	100,629	2,909
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		3,568	3,592	-23
			Dry and Critical		2,607	2,645	-38
Net Revenue	Total of all Facilities	($1,000)	Long Term		466,253	468,892	-2,639
			Dry and Critical		342,804	347,097	-4,293
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		632	618	15
			Dry and Critical		462	439	24
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,491	4,386	105
			Dry and Critical		3,143	2,909	234
Generation Revenue	Total of all Facilities	($1,000)	Long Term		564,131	551,057	13,074
			Dry and Critical		395,550	366,489	29,061
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,442	8,088	354
			Dry and Critical		6,768	6,013	755
Power Costs	Total of all Facilities	($1,000)	Long Term		983,949	942,572	41,378
			Dry and Critical		787,868	699,747	88,122
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		19%	20%	-1%
					11%	10%	1%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,951	-3,702	-249
			Dry and Critical		-3,625	-3,104	-521
Net Revenue	Total of all Facilities	($1,000)	Long Term		-419,818	-391,515	-28,304
			Dry and Critical		-392,318	-333,258	-59,061
Proposed NODOS Facilities							
Power Facilities							
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		126	0	126
			Dry and Critical		129	0	129
Generation Revenue	Total of all Facilities	($1,000)	Long Term		15,777	0	15,777
			Dry and Critical		15,846	0	15,846
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		229	13	216
			Dry and Critical		184	12	172
Power Costs	Total of all Facilities	($1,000)	Long Term		25,939	1,472	24,466
			Dry and Critical		20,689	1,307	19,382
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-103	-13	-90
			Dry and Critical		-54	-12	-43
Net Revenue	Total of all Facilities	($1,000)	Long Term		-10,162	-1,472	-8,690
			Dry and Critical		-4,843	-1,307	-3,536
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-490	-125	-365
			Dry and Critical		-1,076	-472	-604
Net Revenue	Total of all Facilities	($1,000)	Long Term		35,716	75,648	-39,932
			Dry and Critical		-54,774	12,394	-67,167

Notes:

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.

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NODOS Alternative B (2025) Compared to No Action Alternative Condition (2025)

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Table RMT-5a-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,938	1,932	6
			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		140	137	2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		211	211	0
			Dry and Critical		175	174	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		217	214	3
			Dry and Critical		98	93	5
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		950	950	0
			Dry and Critical		901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		289	290	-1
			Dry and Critical		139	137	2
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	0
			Dry and Critical		318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	0
			Dry and Critical		17	17	0
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		209	199	10
			Dry and Critical		159	142	18
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		35	31	4
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		600	601	-1
			Dry and Critical		290	283	7
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		68	60	8
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		690	657	33
			Dry and Critical		515	460	55
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		281	267	14
			Dry and Critical		225	197	28
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,418	1,353	65
			Dry and Critical		1,121	990	131
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		6	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,599	8,458	141
			Dry and Critical		7,238	6,968	270
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		1	0	1
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		57	0	57
			Dry and Critical		30	0	30
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		14	0	14
			Dry and Critical		7	0	7
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		78	0	78
			Dry and Critical		96	0	96
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term		2	0	2
			Dry and Critical		3	0	3
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		136	0	136
			Dry and Critical		119	0	119
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**429**
			Dry and Critical				**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 Conditions

(in 2011 $'s)

		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Central Valley				
Annual Average Benefit ($1,000,000/year)				
	Long Term	$11,687	$11,686	$0.896
	Dry and Critical	$11,650	$11,648	$2.279
Annual Average Costs ($1,000,000/year)				
Groundwater	Long Term	$663	$666	($3.345)
	Dry and Critical	$747	$753	($5.625)
Fallow	Long Term	N/A	N/A	$0.066
	Dry and Critical	N/A	N/A	$0.311
Annual Average Change in Consumer 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

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)
	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 Loss/Costs	Average	$1,633,882	$1,694,043	($60,161)
	Dry and Critical	$1,835,455	$1,958,312	($122,856)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
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
Water Management Actions

		NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Bay Area - South				
Annual Average Volume (TAF/year)				
Water Transfers	Average	1	1	(0)
	Fraction of Demand	0%	0%	
Conservation	Average	164	152	12
	Fraction of Demand	13%	12%	
Water Recycling	Average	51	51	0
	Fraction of Demand	4%	4%	
Desalination	Average	0	0	0
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	72	106	(34)
	Fraction of Demand	1%	2%	
Conservation	Average	780	780	0
	Fraction of Demand	16%	16%	
Water Recycling	Average	530	538	(8)
	Fraction of Demand	11%	11%	
Desalination	Average	57	57	0
	Fraction of Demand	1%	1%	

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)
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	40	66	(26)
	Fraction of Demand	1%	1%	

Table RMT-5a-4

Other Municipal Water Economics Model[a]

Evaluated at 2025 Projected Conditions

(in 2007 $'s)

			NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Average 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)
Average 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

Notes:

[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 Water Quality (Average of All Years[1])	NODOS Alternative B Result	No Action Alternative Result	NODOS Alternative B minus No Action Alternative 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 Water Quality (Critical and Dry Years[2])	NODOS Alternative B Result	No Action Alternative Result	NODOS Alternative B minus No Action Alternative 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%

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. 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

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

Notes:

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

Evaluated at 2025 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	($1,031)		($1,031)
	Dry and Critical	($1,534)		($1,534)

Notes:

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-8

Power and Pumping Cost Reporting Metrics
Economics Evaluated at 2025 Projected Conditions
(in 2007 $'s)

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

Notes:

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.

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NODOS Alternative B (2060) Compared to No Action Alternative Condition (2060)

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Table RMT-5b-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,938	1,932	6
			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		140	137	2
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		211	211	0
			Dry and Critical		175	174	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		217	214	3
			Dry and Critical		98	93	5
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		950	950	0
			Dry and Critical		901	901	0
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		289	290	-1
			Dry and Critical		139	137	2
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	0
			Dry and Critical		318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	0
			Dry and Critical		17	17	0
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		209	199	10
			Dry and Critical		159	142	18
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		35	31	4
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		600	601	-1
			Dry and Critical		290	283	7
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		68	60	8
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		690	657	33
			Dry and Critical		515	460	55
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		281	267	14
			Dry and Critical		225	197	28
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,418	1,353	65
			Dry and Critical		1,121	990	131
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		6	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,599	8,458	141
			Dry and Critical		7,238	6,968	270
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		1	0	1
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		57	0	57
			Dry and Critical		30	0	30
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		14	0	14
			Dry and Critical		7	0	7
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		78	0	78
			Dry and Critical		96	0	96
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term		2	0	2
			Dry and Critical		3	0	3
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		136	0	136
			Dry and Critical		119	0	119
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**429**
			Dry and Critical				**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 Conditions

(in 2011 $'s)

		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/year)				
Groundwater	Long Term	$740	$744	($3.678)
	Dry and Critical	$877	$883	($5.633)
Fallow	Long Term	N/A	N/A	$0.143
	Dry and Critical	N/A	N/A	$0.224
Annual Average Change in Consumer 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
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 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
Total Loss/Costs	Average	$643,580	$656,254	($12,674)
	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
Total Loss/Costs	Average	$5,660,947	$5,820,070	($159,123)
	Dry and Critical	$6,320,906	$6,586,666	($265,760)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
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 ($1000/year)				
Energy Cost	Average	$15,120	$14,624	$496
		$11,962	$10,873	$1,090
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$546,190	$520,941	$25,249
		$448,406	$400,382	$48,023

Table RMT-5b-3c
Water Management Actions

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

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)
	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	228	212	16
	Fraction of Demand	4%	4%	

Table RMT-5b-4

Other Municipal Water Economics Model[a]

Evaluated at 2060 Projected Conditions

(in 2007 $'s)

			NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Average 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)
Average 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

Notes:

[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 Water Quality	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative	
(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 Water Quality	NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No 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%

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. 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

Annual Average Metropolitan Water District Service Area Damages (in 2007 $'s)	**Year Type**	**NODOS Alternative B**	**No Action Alternative**	**NODOS Alternative B minus No Action Alternative**
Average Annual Damages ($1000/year)				
Agricultural Damages	Average	$34,908	$35,653	($745)
	Dry and Critical	$40,034	$42,353	($2,320)
Residential Damages	Average	$3,796,139	$3,801,466	($5,327)
	Dry and Critical	$3,835,285	$3,845,098	($9,813)
Commercial Damages	Average	$207,066	$209,058	($1,992)
	Dry and Critical	$221,817	$225,501	($3,684)
Utiliy Damages	Average	$1,402,328	$1,403,517	($1,189)
	Dry and Critical	$1,411,067	$1,413,222	($2,155)
Industrial Damages	Average	$60,413	$61,019	($606)
	Dry and Critical	$64,926	$66,052	($1,126)
Ground Water Damages	Average	$76,423	$76,909	($486)
	Dry and Critical	$85,053	$85,649	($596)
Wastewater Damages	Average	$85,567	$85,680	($112)
	Dry and Critical	$87,334	$87,335	($1)
Recycled Water Damages	Average	$231,863	$234,283	($2,420)
	Dry and Critical	$249,745	$254,225	($4,480)
Total	Average	$5,894,707	$5,907,585	($12,878)
	Dry and Critical	$5,995,261	$6,019,435	($24,174)

Notes:

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	($1,331)		($1,331)
	Dry and Critical	($1,981)		($1,981)

Notes:

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-8

Power and Pumping Cost Reporting Metrics
Economics Evaluated at 2060 Projected Conditions
(in 2007 $'s)

					NODOS Alternative B	No Action Alternative	NODOS Alternative B minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,660	1,647	13
			Dry and Critical		1,525	1,505	20
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,718	4,701	18
			Dry and Critical		3,506	3,513	-6
Generation Revenue	Total of all Facilities	($1,000)	Long Term		599,547	597,217	2,330
			Dry and Critical		447,150	447,726	-576
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,140	1,109	31
			Dry and Critical		894	868	26
Power Costs	Total of all Facilities	($1,000)	Long Term		131,958	128,325	3,632
			Dry and Critical		103,688	100,629	3,059
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		3,578	3,592	-14
			Dry and Critical		2,613	2,645	-32
Net Revenue	Total of all Facilities	($1,000)	Long Term		467,589	468,892	-1,303
			Dry and Critical		343,462	347,097	-3,635
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		633	618	16
			Dry and Critical		462	439	24
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,493	4,386	107
			Dry and Critical		3,128	2,909	220
Generation Revenue	Total of all Facilities	($1,000)	Long Term		564,367	551,057	13,309
			Dry and Critical		393,711	366,489	27,222
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,464	8,088	376
			Dry and Critical		6,727	6,013	714
Power Costs	Total of all Facilities	($1,000)	Long Term		986,505	942,572	43,933
			Dry and Critical		782,773	699,747	83,026
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		20%	20%	0%
					11%	10%	1%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,971	-3,702	-269
			Dry and Critical		-3,599	-3,104	-494
Net Revenue	Total of all Facilities	($1,000)	Long Term		-422,139	-391,515	-30,624
			Dry and Critical		-389,062	-333,258	-55,804
Proposed NODOS Facilities							
Power Facilities							
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		104	0	104
			Dry and Critical		100	0	100
Generation Revenue	Total of all Facilities	($1,000)	Long Term		13,181	0	13,181
			Dry and Critical		12,661	0	12,661
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		195	13	182
			Dry and Critical		106	12	95
Power Costs	Total of all Facilities	($1,000)	Long Term		21,430	1,472	19,958
			Dry and Critical		11,837	1,307	10,530
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-91	-13	-78
			Dry and Critical		-6	-12	6
Net Revenue	Total of all Facilities	($1,000)	Long Term		-8,250	-1,472	-6,778
			Dry and Critical		824	-1,307	2,131
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-490	-125	-365
			Dry and Critical		-996	-472	-524
Net Revenue	Total of all Facilities	($1,000)	Long Term		36,464	75,648	-39,184
			Dry and Critical		-45,225	12,394	-57,619

Notes:

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.

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NODOS Alternative C (2025) Compared to No Action Alternative Condition (2025)

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Table RMT-7a-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,941	1,932	9
			Dry and Critical		1,932	1,918	15
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		160	155	6
			Dry and Critical		142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		213	211	2
			Dry and Critical		176	174	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		224	214	10
			Dry and Critical		102	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		948	950	-2
			Dry and Critical		895	901	-5
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		19	16	3
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		293	290	3
			Dry and Critical		143	137	6
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	1
			Dry and Critical		319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	1
			Dry and Critical		18	17	1
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		209	199	10
			Dry and Critical		163	142	21
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		36	31	5
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		609	601	8
			Dry and Critical		299	283	16
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		70	60	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		691	657	35
			Dry and Critical		526	460	66
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		281	267	14
			Dry and Critical		230	197	33
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,419	1,353	67
			Dry and Critical		1,145	990	154
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		7	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,629	8,458	171
			Dry and Critical		7,312	6,968	344
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		2	0	2
			Dry and Critical		1	0	1
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		58	0	58
			Dry and Critical		29	0	29
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		14	0	14
			Dry and Critical		7	0	7
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		76	0	76
			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
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		165	0	165
			Dry and Critical		169	0	169
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**487**
			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 Conditions

(in 2011 $'s)

		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 ($1,000,000/year)				
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 Consumer 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 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 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 Cost	Average	$189,737	$192,303	($2,567)
Total Loss/Costs	Average	$197,937	$199,670	($1,733)
	Dry and Critical	$193,332	$198,694	($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 Cost	Average	$1,178,465	$1,179,871	($1,406)
Total Loss/Costs	Average	$1,631,070	$1,694,043	($62,973)
	Dry and Critical	$1,810,582	$1,958,312	($147,730)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
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 ($1000/year)				
Energy Cost	Average	$2,113	$1,139	$974
		$1,715	$844	$871
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$330,921	$322,480	$8,441
		$275,502	$247,427	$28,074

Table RMT-7a-3c
Water Management Actions

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

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)
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	37	66	(29)
	Fraction of Demand	1%	1%	

Table RMT-7a-4

Other Municipal Water Economics Model[a]

Evaluated at 2025 Projected Conditions

(in 2007 $'s)

			NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Average 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)
Average 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

Notes:

[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 Water Quality	NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No 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 Water Quality	NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No 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%

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. 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 Damages (in 2007 $'s)	**Year Type**	**NODOS Alternative C**	**No Action Alternative**	**NODOS Alternative C minus No Action Alternative**
Average Annual Damages ($1000/year)				
Agricultural Damages	Average	$36,281	$37,075	($794)
	Dry and Critical	$41,015	$43,531	($2,516)
Residential Damages	Average	$3,183,595	$3,188,985	($5,390)
	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)
	Dry and Critical	$1,178,584	$1,180,729	($2,145)
Industrial Damages	Average	$54,478	$55,117	($639)
	Dry and Critical	$58,206	$59,363	($1,158)
Ground Water Damages	Average	$80,081	$81,088	($1,007)
	Dry and Critical	$88,965	$90,121	($1,156)
Wastewater Damages	Average	$77,657	$78,106	($449)
	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)
	Dry and Critical	$4,921,904	$4,944,452	($22,548)

Notes:

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-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	($1,397)		($1,397)
	Dry and Critical	($1,744)		($1,744)

Notes:

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

Power and Pumping Cost Reporting Metrics
Economics Evaluated at 2025 Projected Conditions
(in 2007 $'s)

					NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,661	1,647	14
			Dry and Critical		1,526	1,505	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,715	4,701	14
			Dry and Critical		3,479	3,513	-34
Generation Revenue	Total of all Facilities	($1,000)	Long Term		392,418	391,217	1,200
			Dry and Critical		290,997	293,487	-2,490
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,155	1,116	40
			Dry and Critical		901	878	24
Power Costs	Total of all Facilities	($1,000)	Long Term		86,427	83,377	3,049
			Dry and Critical		67,724	65,844	1,880
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		3,559	3,585	-26
			Dry and Critical		2,578	2,635	-58
Net Revenue	Total of all Facilities	($1,000)	Long Term		305,991	307,840	-1,849
			Dry and Critical		223,273	227,643	-4,370
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		632	618	15
			Dry and Critical		462	439	23
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,496	4,386	110
			Dry and Critical		3,168	2,909	259
Generation Revenue	Total of all Facilities	($1,000)	Long Term		369,147	360,264	8,883
			Dry and Critical		260,990	239,709	21,281
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,473	8,088	385
			Dry and Critical		6,848	6,013	834
Power Costs	Total of all Facilities	($1,000)	Long Term		638,255	609,076	29,179
			Dry and Critical		515,992	452,501	63,491
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		20%	20%	0%
					11%	10%	1%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,977	-3,702	-275
			Dry and Critical		-3,679	-3,104	-575
Net Revenue	Total of all Facilities	($1,000)	Long Term		-269,108	-248,812	-20,296
			Dry and Critical		-255,002	-212,792	-42,210
Proposed NODOS Facilities							
Power Facilities							
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		157	0	157
			Dry and Critical		173	0	173
Generation Revenue	Total of all Facilities	($1,000)	Long Term		12,946	0	12,946
			Dry and Critical		13,991	0	13,991
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		278	13	265
			Dry and Critical		199	12	188
Power Costs	Total of all Facilities	($1,000)	Long Term		19,970	947	19,023
			Dry and Critical		14,267	840	13,427
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-121	-13	-108
			Dry and Critical		-26	-12	-15
Net Revenue	Total of all Facilities	($1,000)	Long Term		-7,024	-947	-6,077
			Dry and Critical		-276	-840	564
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-543	-132	-412
			Dry and Critical		-1,131	-482	-649
Net Revenue	Total of all Facilities	($1,000)	Long Term		29,479	57,915	-28,437
			Dry and Critical		-32,269	13,921	-46,190

Notes:

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.

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NODOS Alternative C (2060) Compared to No Action Alternative Condition (2060)

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Table RMT-7b-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,941	1,932	9
			Dry and Critical		1,932	1,918	15
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		160	155	6
			Dry and Critical		142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		213	211	2
			Dry and Critical		176	174	1
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		224	214	10
			Dry and Critical		102	93	10
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		948	950	-2
			Dry and Critical		895	901	-5
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		19	16	3
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		293	290	3
			Dry and Critical		143	137	6
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	1
			Dry and Critical		319	318	1
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	1
			Dry and Critical		18	17	1
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		209	199	10
			Dry and Critical		163	142	21
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		36	31	5
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		609	601	8
			Dry and Critical		299	283	16
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		70	60	10
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		691	657	35
			Dry and Critical		526	460	66
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		281	267	14
			Dry and Critical		230	197	33
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,419	1,353	67
			Dry and Critical		1,145	990	154
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		7	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,629	8,458	171
			Dry and Critical		7,312	6,968	344
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		2	0	2
			Dry and Critical		1	0	1
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		58	0	58
			Dry and Critical		29	0	29
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		14	0	14
			Dry and Critical		7	0	7
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		76	0	76
			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
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		165	0	165
			Dry and Critical		169	0	169
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**487**
			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-7b-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2060 Projected Conditions

(in 2011 $'s)

		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action 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/year)				
Groundwater	Long Term	$737	$744	($7.116)
	Dry and Critical	$875	$883	($8.187)
Fallow	Long Term	N/A	N/A	$0.180
	Dry and Critical	N/A	N/A	$0.461
Annual Average Change in Consumer 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
Evaluated at 2060 Projected Conditions
(in 2007 $'s)

		NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Bay Area - South				
Annual Average Loss/Costs ($1000/year)				
Shortage Cost	Average	$123,943	$134,996	($11,052)
Fixed Option Cost	Average	$235,527	$240,097	($4,570)
Water Market Option Cost	Average	$1,424	$1,523	($98)
Municipal Water Supply Operations Cost	Average	$281,202	$279,639	$1,563
Total Loss/Costs	Average	$642,096	$656,254	($14,158)
	Dry and Critical	$643,448	$680,793	($37,345)
South Coast				
Annual Average Loss/Costs ($1000/year)				
Shortage Cost	Average	$475,887	$472,086	$3,801
Fixed Option Cost	Average	$3,233,548	$3,431,286	($197,738)
Water Market Option Cost	Average	$79,072	$79,650	($578)
Municipal Water Supply Operations Cost	Average	$1,868,705	$1,837,048	$31,657
Total Loss/Costs	Average	$5,657,211	$5,820,070	($162,859)
	Dry and Critical	$6,208,503	$6,586,666	($378,164)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b
Additional information regarding LCPSIM California Aqueduct energy costs:
Evaluated at 2060 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 ($1000/year)				
Energy Cost	Average	$15,254	$14,624	$630
		$12,367	$10,873	$1,494
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$544,003	$520,941	$23,062
		$453,639	$400,382	$53,257

Table RMT-7b-3c
Water Management Actions

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

Table RMT-7b-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	39	41	(2)
	Fraction of Demand	2%	3%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	209	212	(3)
	Fraction of Demand	3%	4%	

Table RMT-7b-4

Other Municipal Water Economics Model[a]

Evaluated at 2060 Projected Conditions

(in 2007 $'s)

			NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Average Annual Cost (Thousand $/year)					
	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)
Average 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

Notes:

[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 Water Quality (Average of All Years[1])	NODOS Alternative C Result	No Action Alternative Result	NODOS Alternative C minus No Action Alternative 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 Water Quality (Critical and Dry Years[2])	NODOS Alternative C Result	No Action Alternative Result	NODOS Alternative C minus No Action Alternative 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%

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. 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 District Service Area Damages (in 2007 $'s)	**Year Type**	**NODOS Alternative C**	**No Action Alternative**	**NODOS Alternative C minus No Action Alternative**
Average Annual Damages ($1000/year)				
Agricultural Damages	Average	$34,851	$35,653	($802)
	Dry and Critical	$39,775	$42,353	($2,578)
Residential Damages	Average	$3,795,230	$3,801,466	($6,236)
	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)
Utiliy Damages	Average	$1,402,122	$1,403,517	($1,395)
	Dry and Critical	$1,410,688	$1,413,222	($2,534)
Industrial Damages	Average	$60,294	$61,019	($724)
	Dry and Critical	$64,708	$66,052	($1,344)
Ground Water Damages	Average	$75,984	$76,909	($924)
	Dry and Critical	$84,834	$85,649	($815)
Wastewater Damages	Average	$85,459	$85,680	($220)
	Dry and Critical	$87,239	$87,335	($96)
Recycled Water Damages	Average	$231,336	$234,283	($2,947)
	Dry and Critical	$248,774	$254,225	($5,450)
Total	Average	$5,891,974	$5,907,585	($15,611)
	Dry and Critical	$5,990,717	$6,019,435	($28,718)

Notes:

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-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	($1,803)		($1,803)
	Dry and Critical	($2,252)		($2,252)

Notes:

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-7b-8

Power and Pumping Cost Reporting Metrics

Economics Evaluated at 2060 Projected Conditions

(in 2007 $'s)

					NODOS Alternative C	No Action Alternative	NODOS Alternative C minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,661	1,647	14
			Dry and Critical		1,526	1,505	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,715	4,701	14
			Dry and Critical		3,479	3,513	-34
Generation Revenue	Total of all Facilities	($1,000)	Long Term		598,973	597,217	1,755
			Dry and Critical		443,751	447,726	-3,975
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,146	1,109	37
			Dry and Critical		892	868	24
Power Costs	Total of all Facilities	($1,000)	Long Term		132,690	128,325	4,365
			Dry and Critical		103,566	100,629	2,937
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		3,569	3,592	-23
			Dry and Critical		2,587	2,645	-58
Net Revenue	Total of all Facilities	($1,000)	Long Term		466,283	468,892	-2,609
			Dry and Critical		340,185	347,097	-6,912
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		632	618	15
			Dry and Critical		462	439	23
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,496	4,386	110
			Dry and Critical		3,168	2,909	259
Generation Revenue	Total of all Facilities	($1,000)	Long Term		564,738	551,057	13,680
			Dry and Critical		398,718	366,489	32,228
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,473	8,088	385
			Dry and Critical		6,848	6,013	834
Power Costs	Total of all Facilities	($1,000)	Long Term		987,659	942,572	45,088
			Dry and Critical		797,322	699,747	97,575
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		20%	20%	0%
					11%	10%	1%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,977	-3,702	-275
			Dry and Critical		-3,679	-3,104	-575
Net Revenue	Total of all Facilities	($1,000)	Long Term		-422,922	-391,515	-31,407
			Dry and Critical		-398,604	-333,258	-65,347
Proposed NODOS Facilities							
Power Facilities							
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		157	0	157
			Dry and Critical		173	0	173
Generation Revenue	Total of all Facilities	($1,000)	Long Term		19,612	0	19,612
			Dry and Critical		21,383	0	21,383
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		278	13	265
			Dry and Critical		199	12	188
Power Costs	Total of all Facilities	($1,000)	Long Term		31,417	1,472	29,944
			Dry and Critical		22,537	1,307	21,230
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-121	-13	-108
			Dry and Critical		-26	-12	-15
Net Revenue	Total of all Facilities	($1,000)	Long Term		-11,805	-1,472	-10,333
			Dry and Critical		-1,154	-1,307	153
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-534	-125	-409
			Dry and Critical		-1,122	-472	-650
Net Revenue	Total of all Facilities	($1,000)	Long Term		30,964	75,648	-44,684
			Dry and Critical		-59,984	12,394	-72,378

Notes:

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.

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NODOS Alternative D (2025) Compared to No Action Alternative Condition (2025)

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Table RMT-9a-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative D	No Action Alternative	NODOS Alternative D minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average) does not include NODOS	(TAF/year)	Long Term		1,939	1,932	7
			Dry and Critical		1,926	1,918	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		159	155	4
			Dry and Critical		142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		212	211	1
			Dry and Critical		174	174	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors	(TAF/year)	Long Term		220	214	6
			Dry and Critical		99	93	6
NODOS Local Delivery	Contract Delivery (NODOS to TCCA, GCID, RD 108)	(TAF/year)	Long Term		78	0	78
			Dry and Critical		150	0	150
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		951	950	1
			Dry and Critical		905	901	4
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		293	290	3
			Dry and Critical		142	137	5
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	0
			Dry and Critical		318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	1
			Dry and Critical		18	17	1
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		207	199	9
			Dry and Critical		157	142	16
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		35	31	4
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		609	601	7
			Dry and Critical		297	283	15
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		67	60	7
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		684	657	28
			Dry and Critical		510	460	50
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		279	267	13
			Dry and Critical		222	197	26
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,411	1,353	59
			Dry and Critical		1,109	990	119
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		6	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,683	8,458	225
			Dry and Critical		7,387	6,968	419
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		38	0	38
			Dry and Critical		19	0	19
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		9	0	9
			Dry and Critical		4	0	4
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		76	0	76
			Dry and Critical		93	0	93
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		1	0	1
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		97	0	97
			Dry and Critical		68	0	68
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**447**
			Dry and Critical				**606**

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-9a-2

SWAP Agricultural Economics Reporting Metrics

Evaluated at 2025 Projected Conditions (in 2011 $'s)		**NODOS Alternative D**	**No Action Alternative**	**Alternative D minus No Action**
Central Valley				
Annual Average Benefit ($1,000,000/year)				
	Long Term	$11,689	$11,686	$2.697
	Dry and Critical	$11,663	$11,648	$14.776
Annual Average Costs ($1,000,000/year)				
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 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

Evaluated at 2025 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	$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	$198,973	$199,670	($697)
	Dry and Critical	$194,990	$198,694	($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	$1,662,199	$1,694,043	($31,844)
	Dry and Critical	$1,884,048	$1,958,312	($74,264)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b

Additional information regarding LCPSIM California Aqueduct energy costs:

Evaluated at 2025 Projected Conditions

(in 2007 $'s)

		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Energy/Costs ($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)
	Fraction of Demand	0%	0%	
Conservation	Average	164	152	12
	Fraction of Demand	13%	12%	
Water Recycling	Average	51	51	0
	Fraction of Demand	4%	4%	
Desalination	Average	0	0	0
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	87	106	(19)
	Fraction of Demand	2%	2%	
Conservation	Average	780	780	0
	Fraction of Demand	16%	16%	
Water Recycling	Average	525	538	(13)
	Fraction of Demand	11%	11%	
Desalination	Average	57	57	0
	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)
	Fraction of Demand	0%	0%	
South Coast				
Annual Average Volume (TAF/year)				
Net User Shortage	Average	53	66	(13)
	Fraction of Demand	1%	1%	

Table RMT-9a-4

Other Municipal Water Economics Model[a]

Evaluated at 2025 Projected Conditions

(in 2007 $'s)

			NODOS Alternative D	No Action Alternative	NODOS Alternative D minus No Action Alternative
Average Annual Cost (Thousand $/year)					
	Delta				
		Long Term	$9,025	$9,357	($332)
		Dry and Critical	$17,928	$18,656	($728)
	Bay Area				
		Long Term	$5,455	$5,629	($174)
		Dry and Critical	$10,858	$11,275	($417)
	Central Coast				
		Long Term	$1,668	$2,586	($918)
		Dry and Critical	$4,616	$7,155	($2,539)
	Sacramento Valley				
		Long Term	$4,292	$4,373	($81)
		Dry and Critical	$10,470	$10,678	($208)
	San Joaquin				
		Long Term	$1,542	$1,557	($16)
		Dry and Critical	$2,709	$2,806	($97)
	South Coast				
		Long Term	$14,803	$21,608	($6,806)
		Dry and Critical	$28,204	$45,903	($17,699)
	Total For All Regions				
		Long Term	$36,785	$45,111	($8,326)
		Dry and Critical	$74,785	$96,473	($21,688)
Average 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				
		Long Term	546,747	526,538	20,209
		Dry and Critical	420,386	380,866	39,521

Notes:

[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 Water Quality (Average of All Years[1])	NODOS Alternative D Result	No Action Alternative Result	NODOS Alternative D minus No Action Alternative 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 (Critical and Dry Years[2])	NODOS Alternative D Result	No Action Alternative Result	NODOS Alternative D minus No Action Alternative 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%

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

Notes:

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-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	($354)		($354)
	Dry and Critical	($59)		($59)

Notes:

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-9a-8

Power and Pumping Cost Reporting Metrics

Economics Evaluated at 2025 Projected Conditions

(in 2007 $'s)

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

Notes:

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.

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NODOS Alternative D (2060) Compared to No Action Alternative Condition (2060)

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Table RMT-9b-1
CALSIM II Yield Summary Reporting Metrics

					NODOS Alternative D	No Action Alternative	NODOS Alternative D minus No Action Alternative
Water Supply Reliability							
Sacramento River Hydrologic Region							
CVP Settlement	Contract Delivery (annual average)	(TAF/year)	Long Term		1,939	1,932	7
			Dry and Critical		1,926	1,918	8
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		159	155	4
			Dry and Critical		142	137	5
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		212	211	1
			Dry and Critical		174	174	0
CVP Ag	Contract Delivery (annual average - does not include Settlement contractors)	(TAF/year)	Long Term		220	214	6
			Dry and Critical		99	93	6
NODOS Local Delivery	Contract Delivery (NODOS to TCCA, GCID, RD 108)	(TAF/year)	Long Term		78	0	78
			Dry and Critical		150	0	150
SWP FRSA	Contract Delivery (annual average)	(TAF/year)	Long Term		951	950	1
			Dry and Critical		905	901	4
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		24	23	1
			Dry and Critical		18	16	2
San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users)							
CVP Exchange	Contract Delivery (annual average)	(TAF/year)	Long Term		853	853	0
			Dry and Critical		814	814	0
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		16	16	0
			Dry and Critical		13	13	0
CVP Ag	Contract Delivery (annual average; does not include Exchange contractors)	(TAF/year)	Long Term		293	290	3
			Dry and Critical		142	137	5
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		4	4	0
			Dry and Critical		3	3	0
San Francisco Bay Hydrologic Region							
CVP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		290	290	0
			Dry and Critical		318	318	0
CVP Ag	Contract Delivery (annual average)	(TAF/year)	Long Term		36	36	1
			Dry and Critical		18	17	1
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		207	199	9
			Dry and Critical		157	142	16
Central Coast Hydrologic Region							
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		46	44	2
			Dry and Critical		35	31	4
Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users)							
CVP Refuge Level 2	Contract Delivery (annual average)	(TAF/year)	Long Term		12	12	0
			Dry and Critical		11	11	0
CVP Ag	Contract Delivery (annual average - includes Cross Valley Canal)	(TAF/year)	Long Term		609	601	7
			Dry and Critical		297	283	15
SWP M&I	Contract Delivery (annual average)	(TAF/year)	Long Term		88	84	4
			Dry and Critical		67	60	7
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		684	657	28
			Dry and Critical		510	460	50
South Lahontan Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		279	267	13
			Dry and Critical		222	197	26
South Coast Hydrologic Region							
SWP M&I	Contract Delivery (including Article 21, includes transfers to SWP contractors) (annual average)	(TAF/year)	Long Term		1,411	1,353	59
			Dry and Critical		1,109	990	119
SWP Ag	Contract Delivery (including Article 21) (annual average)	(TAF/year)	Long Term		9	8	0
			Dry and Critical		6	6	1
Total For All Regions							
Total Supplies	Contract Delivery (CVP, SWP and other) (annual average)	(TAF/year)	Long Term		8,683	8,458	225
			Dry and Critical		7,387	6,968	419
Environmental Use							
Provide Level 4 Refuge Supply							
North of Delta (Colusa Basin)	Delivery (annual average)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		0	0	0
South of Delta (Mendota Pool)	Delivery (annual average)	(TAF/year)	Long Term		38	0	38
			Dry and Critical		19	0	19
South of Delta (Tulare Basin)	Delivery (annual average)	(TAF/year)	Long Term		9	0	9
			Dry and Critical		4	0	4
NODOS Ecosystem Enhancement Account (EEA)							
Upstream and Delta Inflow	Flow (annual average, single use)	(TAF/year)	Long Term		76	0	76
			Dry and Critical		93	0	93
Delta Outflow	Flow (annual average, single use)	(TAF/year)	Long Term		1	0	1
			Dry and Critical		1	0	1
Water Quality							
NODOS Water Quality (WQ)							
Upstream and Delta Inflow	Flow (annual average)	(TAF/year)	Long Term		97	0	97
			Dry and Critical		68	0	68
Total Yield							
NODOS Yield Summary							
Total NODOS Supply Increment		(TAF/year)	Long Term				**447**
			Dry and Critical				**606**

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 Conditions (in 2011 $'s)		**NODOS Alternative D**	**No Action Alternative**	**Alternative D minus No Action**
Central Valley				
Annual Average Benefit ($1,000,000/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)
	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 Consumer 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)

Notes:

1. Long Term is the average quantity for the water years 1922-2003.
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-3b

Additional information regarding LCPSIM California Aqueduct energy costs:

Evaluated at 2060 Projected Conditions

(in 2007 $'s)

		NODOS Alternative D	No Action Alternative	Alternative D minus No Action
Bay Area - South				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$13,495	$14,624	($1,129)
		$10,664	$10,873	($209)
South Coast				
Annual Average Energy/Costs ($1000/year)				
Energy Cost	Average	$508,945	$520,941	($11,996)
		$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
	Fraction of Demand	22%	22%	
Water Recycling	Average	88	88	0
	Fraction of Demand	5%	5%	
Desalination	Average	37	20	17
	Fraction of Demand	2%	1%	
South Coast				
Annual Average Volume (TAF/year)				
Water Transfers	Average	215	223	(8)
	Fraction of Demand	4%	4%	
Conservation	Average	1,185	1,185	0
	Fraction of Demand	20%	20%	
Water Recycling	Average	1,422	1,458	(36)
	Fraction of Demand	24%	24%	
Desalination	Average	320	329	(9)
	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)
	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

(in 2007 $'s)

			NODOS Alternative D	No Action Alternative	NODOS Alternative D minus No Action Alternative
Average 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)
Average 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				
		Long Term	546,747	526,538	20,209
		Dry and Critical	420,386	380,866	39,521

Notes:

[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 Alternative D minus No Action Alternative	
(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 No 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%

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. 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

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

Notes:

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-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	($1,803)		($1,803)
	Dry and Critical	($2,252)		($2,252)

Notes:

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-9b-8

Power and Pumping Cost Reporting Metrics

Economics Evaluated at 2060 Projected Conditions

(in 2007 $'s)

					NODOS Alternative D	No Action Alternative	NODOS Alternative D minus No Action Alternative
Central Valley Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		1,661	1,647	14
			Dry and Critical		1,525	1,505	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,718	4,701	18
			Dry and Critical		3,485	3,513	-28
Generation Revenue	Total of all Facilities	($1,000)	Long Term		599,463	597,217	2,246
			Dry and Critical		444,316	447,726	-3,410
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		1,136	1,109	27
			Dry and Critical		884	868	16
Power Costs	Total of all Facilities	($1,000)	Long Term		131,452	128,325	3,127
			Dry and Critical		102,589	100,629	1,960
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		3,583	3,592	-9
			Dry and Critical		2,601	2,645	-44
Net Revenue	Total of all Facilities	($1,000)	Long Term		468,010	468,892	-882
			Dry and Critical		341,727	347,097	-5,370
State Water Project							
Power Facilities							
Capacity	Total of all Facilities at load center	(MW)	Long Term		632	618	15
			Dry and Critical		460	439	21
Energy Generation	Total of all Facilities at load center	(GWh)	Long Term		4,486	4,386	100
			Dry and Critical		3,108	2,909	199
Generation Revenue	Total of all Facilities	($1,000)	Long Term		563,533	551,057	12,476
			Dry and Critical		391,233	366,489	24,744
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		8,424	8,088	336
			Dry and Critical		6,659	6,013	645
Power Costs	Total of all Facilities	($1,000)	Long Term		981,783	942,572	39,211
			Dry and Critical		775,037	699,747	75,290
Off-peak pumping targets	Percent of time off-peak target not met	(%)	Long Term		20%	20%	0%
					10%	10%	0%
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-3,937	-3,702	-236
			Dry and Critical		-3,551	-3,104	-446
Net Revenue	Total of all Facilities	($1,000)	Long Term		-418,250	-391,515	-26,735
			Dry and Critical		-383,804	-333,258	-50,546
Proposed NODOS Facilities							
Power Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		149	0	149
			Dry and Critical		163	0	163
Power Costs	Total of all Facilities	($1,000)	Long Term		18,814	0	18,814
			Dry and Critical		20,338	0	20,338
Pumping Facilities							
Energy Use	Total of all Facilities at load center	(GWh)	Long Term		258	13	245
			Dry and Critical		172	12	160
Power Costs	Total of all Facilities	($1,000)	Long Term		29,243	1,472	27,771
			Dry and Critical		19,598	1,307	18,291
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-108	-13	-95
			Dry and Critical		-9	-12	2
Net Revenue	Total of all Facilities	($1,000)	Long Term		-10,429	-1,472	-8,956
			Dry and Critical		740	-1,307	2,047
All Facilities							
Total							
Net Generation	Total of all Facilities	(GWh)	Long Term		-468	-125	-343
			Dry and Critical		-963	-472	-491
Net Revenue	Total of all Facilities	($1,000)	Long Term		38,689	75,648	-36,959
			Dry and Critical		-41,783	12,394	-54,177

Notes:

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.

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