

Monterey Peninsula Water Supply Project

Financial Analysis of SPI Cost Comparisons of Alternative Desalination Projects

Prepared by MPWMD for MPRWA Technical Advisory Committee

Financial Measure	Project Proponent					
	Cal-Am		DWD		PML	
	9kAFY	5.5 kAFY	9kAFY	5.5 kAFY	9kAFY	5.5 kAFY
COSTS (in Millions)						
Construction Proceeds	\$207.0	\$175.0	\$160.0	\$134.0	\$190.0	\$161.0
O & M Cost (2012 \$)	\$11.0	\$7.77	\$12.3	\$9.38	\$10.1	\$7.06
First Year of Operations	2017	2017	2018	2018	2019	2019
Total Revenue Requirement over Lifecycle (40 Years)	\$1,331.3	\$965.7	\$1,355.4	\$1,060.0	\$1,254.1	\$942.2
Net Present Value of Revenue Requirements (2012 \$)	\$508.1	\$382.5	\$434.5	\$342.2	\$401.9	\$306.5
Revenue Requirement in Common Year, 2019	\$29.2	\$20.5	\$27.1	\$21.5	\$27.5	\$21.5
Amount of Surcharge 2 Proceeds	\$99.15	\$99.15	\$0	\$0	\$0	\$0

The net present value was calculated using a 5.0% discount rate. Our other assumptions are as follows:

Cal-Am Financing

- 47% debt / 53% equity
- 5.00% debt interest rate
- 9.99% post-tax equity rate of return
- 40.75% Effective Tax Rate
- 35% Federal tax rate
- 8.84% California tax rate
- 1.05% Ad Valorem Tax Rate
- 0.2643% Uncollectibles
- 40 year depreciable life (2.50% factor)
- 25 year tax depreciable life (4.00% factor)
- Use of \$99.15 million from Surcharge 2
- No SRF Loans
- O&M escalation at 2.8% per year
- Project operations begin 2017

Public Debt

- 4.0% interest cost
- 30 year term
- No access to Surcharge 2
- Must borrow all interest during construction
- Debt service reserve fund equal to one annual debt payment
- Issuance costs equal to 1% of proceeds plus reserve
- No SRF Loans
- O&M escalation at 2.8% per year
- Project operations begin 2018 for DWD; 2019 for PML

Monterey Peninsula Water Supply Project
 Financial Analysis of SPI Costs for Cal-Am Project

Scenario 1: 9,000 AF Cal-Am Plant
 With Surcharge 2; No SRF Loans

Construction Schedule and Costs

Project Component	Inflated Dollars					Totals
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Misc Cost	0	0	0	0	0	0
Surcharge 2	0	7,500,000	25,000,000	33,870,000	32,780,000	99,150,000
Other	0	2,938,000	1,225,000	15,070,000	88,617,000	107,850,000
Other	0	0	0	0	0	0
Other	0	0	0	0	0	0
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	10,438,000	26,225,000	48,940,000	121,397,000	207,000,000

Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for Cal-Am Project

Scenario 1: 9,000 AF Cal-Am Plant
With Surcharge 2; No SRF Loans

Revenue Requirements Calculation

	2012	2013	2014	2015	2016	2017
Capital Costs	\$0	\$10,438,000	\$26,225,000	\$48,940,000	\$121,397,000	
Surcharge #1						
AFUDC Amount	0	52,452	237,216	617,313	7,518,185	
AFUDC Excluded from ROR	0	37,688	226,135	427,225	2,030,084	
Plant(Transfer to CWIP)	0	10,490,452	36,952,668	86,509,981	215,425,166	215,425,166
Accumulated AFUDC Excluded from ROR	0	37,688	263,823	691,049	2,721,133	2,721,133
Accumulated Depreciation						2,838,851
Cumulative Surcharge 2	0	7,500,000	32,500,000	66,370,000	99,150,000	99,150,000
Cumulative Outside Contributions	0	0	0	0	0	0
Cumulative Deferred Taxes						738,453
Rate Base & Return	0	2,968,348	4,226,618	19,573,885	114,256,644	111,160,168
Average Rate Base	0	1,484,174	3,597,483	11,900,252	66,915,265	112,708,406
Equity Return Necessary						5,967,572
Debt Return Necessary						2,648,648
Return Necessary, Gross-Up for Taxes						14,503,751
Interest Income Tax Savings, Gross-Up for Taxes						-1,816,835
Total Return Required (Pre-Tax)						12,686,917
Expenses						
O&M Expense						12,628,689
Purchased Water Cost						0
Ad Valorem Taxes	0	15,584	37,774	124,953	702,610	1,183,438
Depreciation & Amortization						2,838,851
Total Expense						16,650,978
Revenues from Expenses, Gross-Up for Uncollectibles						16,695,053
SRF Loan Repayment						0
Public Agency Contribution Repayment						0
Total Revenue Requirement (Lifecycle)	\$1,334,035,346	0	7,500,000	25,000,000	33,870,000	32,780,000
NPV of Revenue Requirement (2012 \$)	\$508,983,124	0	7,142,857	22,675,737	29,258,179	26,968,187
Cost of Water (\$/A-F)						\$3,265
Assumptions:						
Purchase Water Annual Cost	\$0	(per AF and escalation at 1/2 the O&M rate)				
Reduction After Yr 30	\$0	(assumes \$76,288,000 at 3.70% for 30 years)				
Purchased Water in AF	0	(GWR included or not)				
Annual O&M Expense (2012)	\$11,000,000	(from SPI Table ES-2)				
O & M Cost Inflation Index	2.8%	(combination of labor @ 2.0% and non-labor @ 3.23%)				
Annual Surcharge 2 Contribution		\$0	\$7,500,000	\$25,000,000	\$33,870,000	\$32,780,000
Outside Contribution for Debt?	N	Amount --->	\$0	\$0	\$0	\$0
Contribution Principal Due						\$0
Contribution Interest Due						\$0
Contribution Length of Loan	20	years				
Contribution Interest Cost	2.50%	(SRF at 2.5% per Linam testimony A.13; 3.70% for municipal debt)				
Outside Contribution for Equity?	N	Amount --->	\$0	\$0	\$0	\$0
Contribution 2 Principal Due						\$0
Contribution 2 Interest Due						\$0
Contribution 2 Length of Loan	30	years				
Contribution 2 Interest Cost	3.70%	(SRF at 2.5% per Linam testimony A.13; 3.70% for municipal debt)				
AFUDC Rate - 2016	4.98%	(approximation based on Stephenson testimony, Attachment 5)				
AFUDC Rate thru 2015	1.00%	(approximation based on Stephenson testimony, Attachment 5)				
Equity Ratio	53%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Equity Rate of Return	9.99%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Debt Ratio	47%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Debt Interest Cost	5.00%	(Linam testimony A.13; Future capital structure per A.11-05-003 would be 6.63%)				
Effective Tax Rate	40.750%	(Linam testimony A.12)				
Gross-Up Factor	1.683	(based uncollectibles rate and state and federal tax rates as shown)				
Ad Valorem Tax Rate	1.050%	(Stephenson testimony A.57; Linam testimony A.12)				
Gross-Up for Uncollectibles	99.736%	(0.2643% uncollectible revenues)				
Discount Rate for NPV	5.00%					
Total Acre-Feet Production	9,000					
Depreciation Summary:						
Remaining Years of Book Depreciation						40
Composite Depreciation Rate	2.50%	(based on 40 year life; Linam testimony A.12)				
Cumulative Book Depreciation						2,838,851
Remaining Years of Tax Depreciation						25
Tax Depreciation Rate	4.00%	(based on 25 year tax life)				
Cumulative Tax Depreciation						4,651,007
Excess of tax over book						4,651,007
Deferred Taxes						1,812,156
						738,453

Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for Cal-Am Project

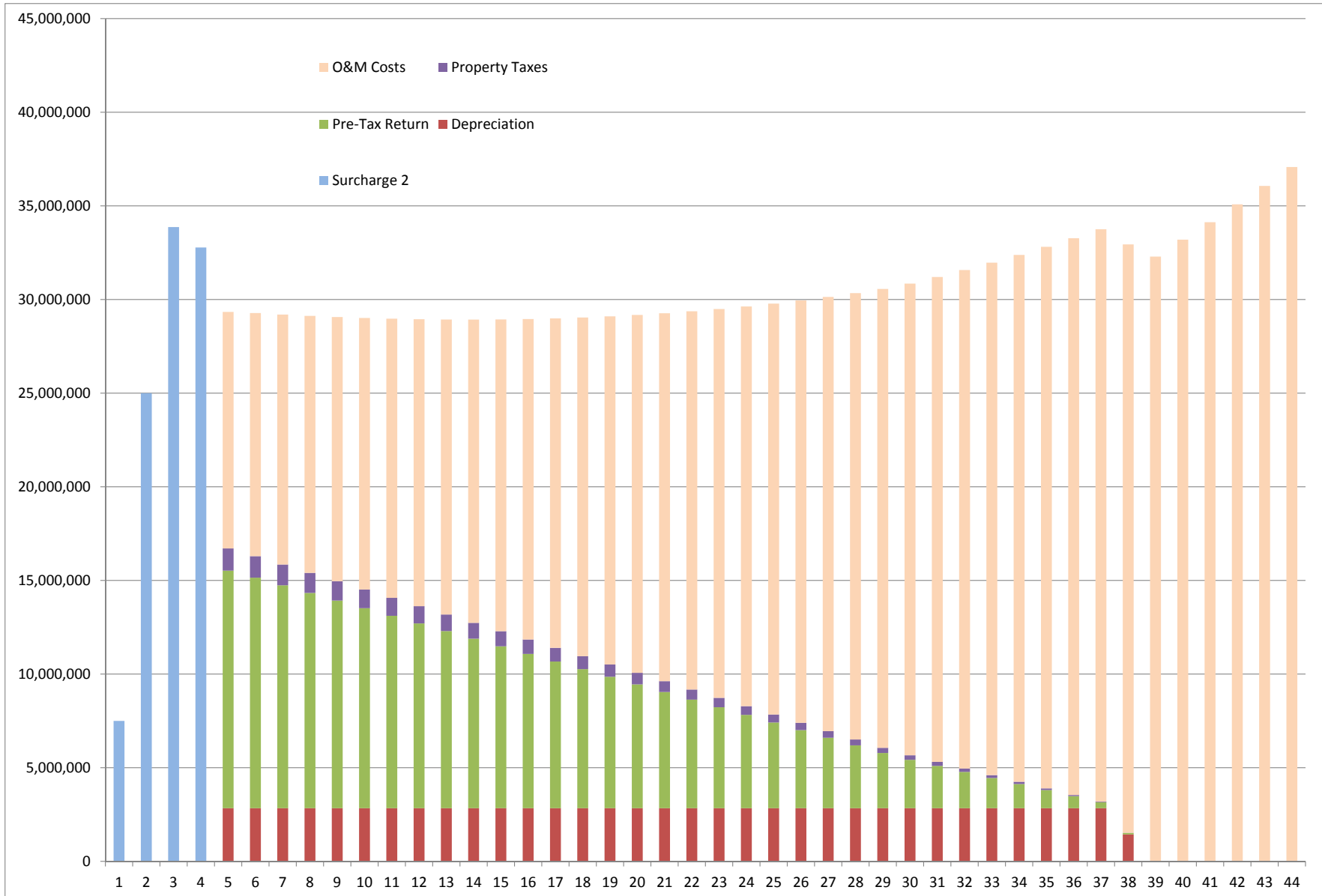
Scenario 1: 9,000 AF Cal-Am Plant
With Surcharge 2; No SRF Loans

Summary of Annual Costs

	<u>Surcharge 2</u>	<u>Depreciation</u>	<u>Pre-Tax Return</u>	<u>Property Taxes</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
2013	7,500,000					7,500,000	7,142,857
2014	25,000,000					25,000,000	22,675,737
2015	33,870,000					33,870,000	29,258,179
2016	32,780,000					32,780,000	26,968,187
2017		2,838,851	12,686,917	1,183,438	12,628,689	29,337,895	22,987,008
2018		2,838,851	12,309,320	1,148,216	12,982,292	29,278,679	21,848,201
2019		2,838,851	11,902,527	1,110,270	13,345,796	29,197,444	20,750,078
2020		2,838,851	11,495,578	1,072,310	13,719,478	29,126,218	19,713,771
2021		2,838,851	11,088,630	1,034,350	14,103,624	29,065,454	18,735,851
2022		2,838,851	10,681,681	996,389	14,498,525	29,015,446	17,812,967
2023		2,838,851	10,274,732	958,429	14,904,484	28,976,496	16,941,957
2024		2,838,851	9,867,783	920,469	15,321,810	28,948,912	16,119,837
2025		2,838,851	9,460,834	882,509	15,750,820	28,933,014	15,343,795
2026		2,838,851	9,053,885	844,548	16,191,843	28,929,127	14,611,175
2027		2,838,851	8,646,936	806,588	16,645,215	28,937,590	13,919,475
2028		2,838,851	8,239,987	768,628	17,111,281	28,958,747	13,266,336
2029		2,838,851	7,833,038	730,667	17,590,397	28,992,953	12,649,530
2030		2,838,851	7,426,089	692,707	18,082,928	29,040,575	12,066,959
2031		2,838,851	7,019,141	654,747	18,589,250	29,101,988	11,516,645
2032		2,838,851	6,612,192	616,787	19,109,749	29,177,578	10,996,722
2033		2,838,851	6,205,243	578,826	19,644,822	29,267,742	10,505,432
2034		2,838,851	5,798,294	540,866	20,194,877	29,372,888	10,041,118
2035		2,838,851	5,391,345	502,906	20,760,333	29,493,435	9,602,216
2036		2,838,851	4,984,396	464,946	21,341,623	29,629,815	9,187,255
2037		2,838,851	4,577,447	426,985	21,939,188	29,782,471	8,794,846
2038		2,838,851	4,170,498	389,025	22,553,485	29,951,859	8,423,683
2039		2,838,851	3,763,549	351,065	23,184,983	30,138,448	8,072,533
2040		2,838,851	3,356,600	313,104	23,834,162	30,342,718	7,740,234
2041		2,838,851	2,949,652	275,144	24,501,519	30,565,166	7,425,695
2042		2,838,851	2,584,484	241,081	25,187,562	30,851,977	7,138,452
2043		2,838,851	2,261,317	210,936	25,892,813	31,203,918	6,876,079
2044		2,838,851	1,938,373	180,812	26,617,812	31,575,847	6,626,702
2045		2,838,851	1,615,429	150,688	27,363,111	31,968,078	6,389,541
2046		2,838,851	1,292,486	120,563	28,129,278	32,381,178	6,163,913
2047		2,838,851	969,542	90,439	28,916,898	32,815,730	5,949,173
2048		2,838,851	646,599	60,315	29,726,571	33,272,335	5,744,715
2049		2,838,851	323,655	30,191	30,558,915	33,751,611	5,549,968
2050		1,440,809	81,092	7,564	31,414,564	32,944,030	5,159,212
2051		0	0	0	32,294,172	32,294,172	4,816,610
2052		0	0	0	33,198,409	33,198,409	4,715,691
2053		0	0	0	34,127,964	34,127,964	4,616,886
2054		0	0	0	35,083,547	35,083,547	4,520,151
2055		0	0	0	36,065,887	36,065,887	4,425,443
2056		0	0	0	37,075,732	37,075,732	4,332,719
	99,150,000	95,122,887	207,509,270	19,356,508	910,184,408	1,331,323,073	508,143,534

Note: No adjustment for uncollectibles for depreciation and Ad Valorem.
Discount rate utilized = 5.00%

Monterey Peninsula Water Supply Project
 Financial Analysis of SPI Costs for Cal-Am Project
 Scenario 1: 9,000 AF Cal-Am Plant
 With Surcharge 2; No SRF Loans



Monterey Peninsula Water Supply Project
 Financial Analysis of SPI Costs for Cal-Am Project

Scenario 2: 5,500 AF Cal-Am Plant
 With Surcharge 2; No SRF Loans

Construction Schedule and Costs

Project Component	Inflated Dollars					Totals
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	
Misc Cost	0	0	0	0	0	0
Surcharge 2	0	7,500,000	25,000,000	33,870,000	32,780,000	99,150,000
Other	0	2,293,000	2,561,000	5,738,000	65,258,000	75,850,000
Other	0	0	0	0	0	0
Other	0	0	0	0	0	0
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	9,793,000	27,561,000	39,608,000	98,038,000	175,000,000

Monterey Peninsula Water Supply Project
 Financial Analysis of SPI Costs for Cal-Am Project
 Scenario 2: 5,500 AF Cal-Am Plant
 With Surcharge 2; No SRF Loans

Revenue Requirements Calculation

	2012	2013	2014	2015	2016	2017
Capital Costs						
Surcharge #1	\$0	\$9,793,000	\$27,561,000	\$39,608,000	\$98,038,000	
AFUDC Amount	0	49,211	237,414	577,333	4,650,121	
AFUDC Excluded from ROR	0	37,688	215,353	493,695	1,554,815	
Plant(Transfer to CWIP)	0	9,842,211	37,640,625	77,825,958	180,514,079	180,514,079
Accumulated AFUDC Excluded from ROR	0	37,688	253,042	746,737	2,301,552	2,301,552
Accumulated Depreciation						1,976,563
Cumulative Surcharge 2	0	7,500,000	32,500,000	66,370,000	99,150,000	99,150,000
Cumulative Outside Contributions	0	0	0	0	0	0
Cumulative Deferred Taxes						520,785
Rate Base & Return	0	2,316,685	4,925,605	10,791,738	79,536,752	77,389,039
Average Rate Base	0	1,158,343	3,621,145	7,858,671	45,164,245	78,462,896
Equity Return Necessary						4,154,375
Debt Return Necessary						1,843,878
Return Necessary, Gross-Up for Taxes						10,096,907
Interest Income Tax Savings, Gross-Up for Taxes						<u>-1,264,804</u>
Total Return Required (Pre-Tax)						8,832,103
Expenses						
O&M Expense						8,920,446
Purchased Water Cost						0
Ad Valorem Taxes	0	12,163	38,022	82,516	474,225	823,860
Depreciation & Amortization						1,976,563
Total Expense						<u>11,720,870</u>
Revenues from Expenses, Gross-Up for Uncollectibles						11,751,895
SRF Loan Repayment						0
Public Agency Contribution Repayment						0
Total Revenue Requirement (Lifecycle)	\$967,567,999	0	7,500,000	25,000,000	33,870,000	32,780,000
NPV of Revenue Requirement (2012 \$)	\$383,095,350	0	7,142,857	22,675,737	29,258,179	26,968,187
Cost of Water (\$/A-F)						\$2,287
Assumptions:						
Purchase Water Annual Cost	\$0	(per AF and escalation at 1/2 the O&M rate)				
Reduction After Yr 30	\$0	(assumes \$76,288,000 at 3.70% for 30 years)				
Purchased Water in AF	0	(GWR included or not)				
Annual O&M Expense (2012)	\$7,770,000	(from SPI Table ES-2)				
O & M Cost Inflation Index	2.8%	(combination of labor @ 2.0% and non-labor @ 3.23%)				
Annual Surcharge 2 Contribution		\$0	\$7,500,000	\$25,000,000	\$33,870,000	\$32,780,000
Outside Contribution for Debt?	N	Amount --->	\$0	\$0	\$0	\$0
Contribution Principal Due						\$0
Contribution Interest Due						\$0
Contribution Length of Loan	20	years				
Contribution Interest Cost	2.50%	(SRF at 2.5% per Linam testimony A.13; 3.70% for municipal debt)				
Outside Contribution for Equity?	N	Amount --->	\$0	\$0	\$0	\$0
Contribution 2 Principal Due						\$0
Contribution 2 Interest Due						\$0
Contribution 2 Length of Loan	30	years				
Contribution 2 Interest Cost	3.70%	(SRF at 2.5% per Linam testimony A.13; 3.70% for municipal debt)				
AFUDC Rate - 2016	3.60%	(approximation based on Stephenson testimony, Attachment 5)				
AFUDC Rate thru 2015	1.00%	(approximation based on Stephenson testimony, Attachment 5)				
Equity Ratio	53%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Equity Rate of Return	9.99%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Debt Ratio	47%	(Stephenson testimony A.11, A.51; Assumes future capital structure per A.11-05-003)				
Debt Interest Cost	5.00%	(Linam testimony A.13; Future capital structure per A.11-05-003 would be 6.63%)				
Effective Tax Rate	40.750%	(Linam testimony A.12)				
Gross-Up Factor	1.683	(based uncollectibles rate and state and federal tax rates as shown)				
Ad Valorem Tax Rate	1.050%	(Stephenson testimony A.57; Linam testimony A.12)				
Gross-Up for Uncollectibles	99.736%	(0.2643% uncollectible revenues)				
Discount Rate for NPV	5.00%					
Total Acre-Feet Production	9,000					
Depreciation Summary:						
Remaining Years of Book Depreciation						40
Composite Depreciation Rate	2.50%	(based on 40 year life; Linam testimony A.12)				
Cumulative Book Depreciation						1,976,563
Remaining Years of Tax Depreciation						25
Tax Depreciation Rate	4.00%	(based on 25 year tax life)				
Cumulative Tax Depreciation						3,254,563
Excess of tax over book						1,278,000
Deferred Taxes						520,785

Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for Cal-Am Project

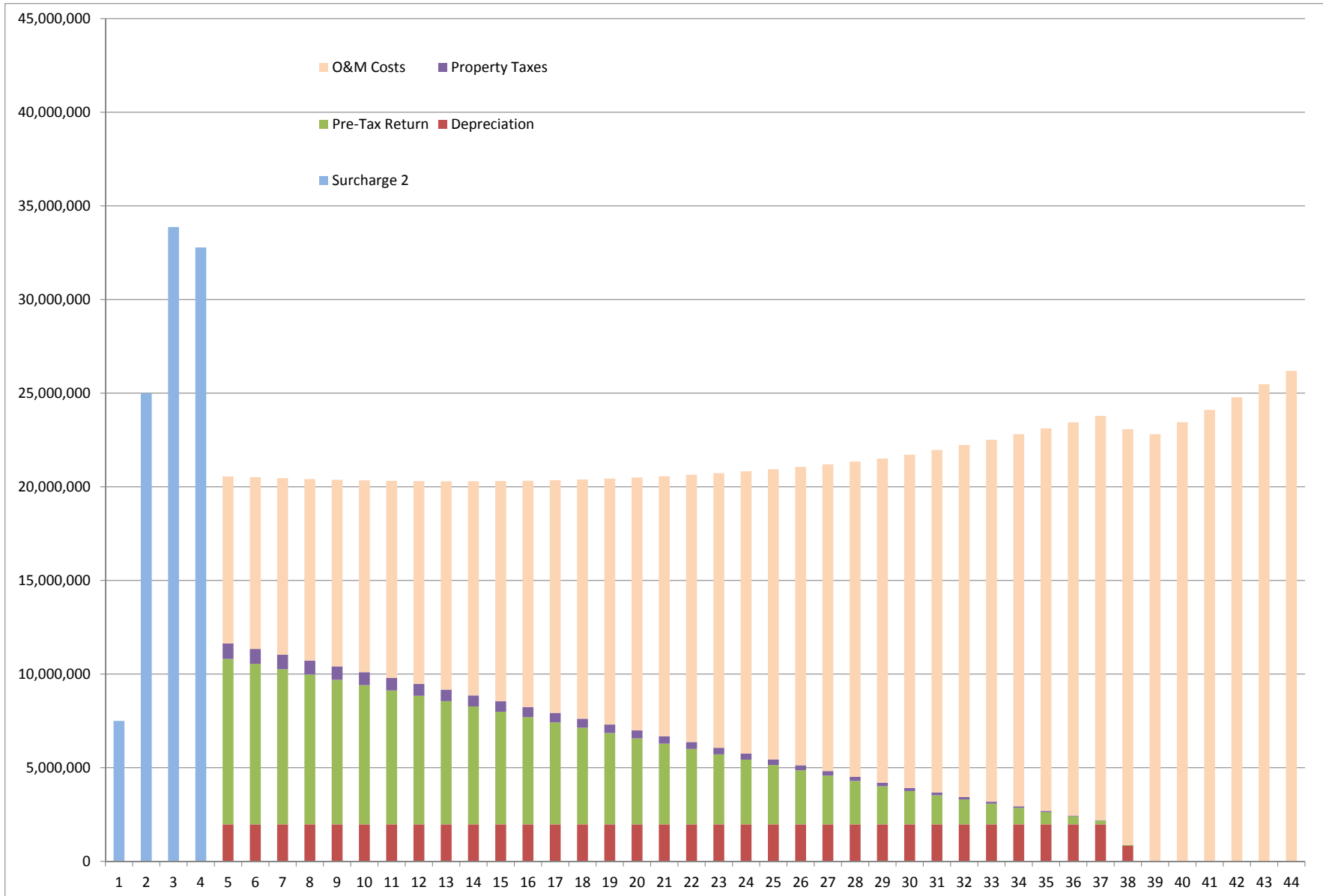
Scenario 2: 5,500 AF Cal-Am Plant
With Surcharge 2; No SRF Loans

Summary of Annual Costs

	<u>Surcharge 2</u>	<u>Depreciation</u>	<u>Pre-Tax Return</u>	<u>Property Taxes</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
2013	7,500,000					7,500,000	7,142,857
2014	25,000,000					25,000,000	22,675,737
2015	33,870,000					33,870,000	29,258,179
2016	32,780,000					32,780,000	26,968,187
2017		1,976,563	8,832,103	823,860	8,920,446	20,552,973	16,103,792
2018		1,976,563	8,569,290	799,345	9,170,219	20,515,417	15,308,920
2019		1,976,563	8,285,307	772,855	9,426,985	20,461,711	14,541,756
2020		1,976,563	8,001,213	746,355	9,690,941	20,415,072	13,817,724
2021		1,976,563	7,717,119	719,854	9,962,287	20,375,823	13,134,437
2022		1,976,563	7,433,024	693,354	10,241,231	20,344,172	12,489,557
2023		1,976,563	7,148,929	666,854	10,527,986	20,320,332	11,880,877
2024		1,976,563	6,864,835	640,353	10,822,769	20,304,520	11,306,317
2025		1,976,563	6,580,740	613,853	11,125,807	20,296,962	10,763,913
2026		1,976,563	6,296,645	587,352	11,437,329	20,297,890	10,251,814
2027		1,976,563	6,012,551	560,852	11,757,574	20,307,540	9,768,274
2028		1,976,563	5,728,456	534,352	12,086,787	20,326,157	9,311,647
2029		1,976,563	5,444,361	507,851	12,425,217	20,353,992	8,880,379
2030		1,976,563	5,160,267	481,351	12,773,123	20,391,303	8,473,008
2031		1,976,563	4,876,172	454,850	13,130,770	20,438,355	8,088,151
2032		1,976,563	4,592,077	428,350	13,498,432	20,495,422	7,724,509
2033		1,976,563	4,307,983	401,850	13,876,388	20,562,783	7,380,854
2034		1,976,563	4,023,888	375,349	14,264,927	20,640,727	7,056,030
2035		1,976,563	3,739,793	348,849	14,664,345	20,729,550	6,748,947
2036		1,976,563	3,455,699	322,348	15,074,946	20,829,556	6,458,577
2037		1,976,563	3,171,604	295,848	15,497,045	20,941,060	6,183,953
2038		1,976,563	2,887,509	269,347	15,930,962	21,064,382	5,924,162
2039		1,976,563	2,603,415	242,847	16,377,029	21,199,854	5,678,345
2040		1,976,563	2,319,320	216,347	16,835,586	21,347,815	5,445,692
2041		1,976,563	2,035,225	189,846	17,306,982	21,508,617	5,225,439
2042		1,976,563	1,780,596	166,094	17,791,578	21,714,831	5,024,322
2043		1,976,563	1,555,588	145,106	18,289,742	21,966,998	4,840,636
2044		1,976,563	1,330,736	124,131	18,801,855	22,233,285	4,666,014
2045		1,976,563	1,105,885	103,157	19,328,306	22,513,912	4,499,913
2046		1,976,563	881,034	82,183	19,869,499	22,809,280	4,341,856
2047		1,976,563	656,183	61,209	20,425,845	23,119,800	4,191,395
2048		1,976,563	431,332	40,235	20,997,769	23,445,899	4,048,108
2049		1,976,563	206,482	19,261	21,585,706	23,788,012	3,911,597
2050		835,578	47,028	4,387	22,190,106	23,077,099	3,613,997
2051		0	0	0	22,811,429	22,811,429	3,402,278
2052		0	0	0	23,450,149	23,450,149	3,330,992
2053		0	0	0	24,106,753	24,106,753	3,261,200
2054		0	0	0	24,781,742	24,781,742	3,192,870
2055		0	0	0	25,475,631	25,475,631	3,125,972
2056		0	0	0	26,188,949	26,188,949	3,060,475
	99,150,000	66,062,163	144,082,387	13,440,035	642,921,168	965,655,753	382,503,661

Note: No adjustment for uncollectibles for depreciation and Ad Valorem.
Discount rate utilized = 5.00%

Monterey Peninsula Water Supply Project
 Financial Analysis of SPI Costs for Cal-Am Project
 Scenario 2: 5,500 AF Cal-Am Plant
 With Surcharge 2; No SRF Loans



Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for DWD Project

Scenario 3: 9,000 AF DWD Plant

No Surcharge; No SRF Loans

Summary of Annual Costs

	<u>Principal Due</u>	<u>Interest Due</u>	<u>Total Debt Service</u>	<u>Debt Service Reserve Used</u>	<u>Net Debt Service</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	3,895,788	8,739,800	12,635,588	505,424	12,130,164	14,516,563	26,646,727	19,884,198
2019	4,051,619	8,583,968	12,635,588	505,424	12,130,164	14,923,027	27,053,191	19,226,198
2020	4,213,684	8,421,904	12,635,588	505,424	12,130,164	15,340,871	27,471,035	18,593,478
2021	4,382,231	8,253,356	12,635,588	505,424	12,130,164	15,770,416	27,900,580	17,984,962
2022	4,557,520	8,078,067	12,635,588	505,424	12,130,164	16,211,987	28,342,151	17,399,622
2023	4,739,821	7,895,766	12,635,588	505,424	12,130,164	16,665,923	28,796,087	16,836,476
2024	4,929,414	7,706,173	12,635,588	505,424	12,130,164	17,132,569	29,262,733	16,294,585
2025	5,126,591	7,508,997	12,635,588	505,424	12,130,164	17,612,281	29,742,445	15,773,054
2026	5,331,654	7,303,933	12,635,588	505,424	12,130,164	18,105,425	30,235,589	15,271,027
2027	5,544,920	7,090,667	12,635,588	505,424	12,130,164	18,612,377	30,742,541	14,787,688
2028	5,766,717	6,868,870	12,635,588	505,424	12,130,164	19,133,523	31,263,687	14,322,255
2029	5,997,386	6,638,202	12,635,588	505,424	12,130,164	19,669,262	31,799,426	13,873,984
2030	6,237,281	6,398,306	12,635,588	505,424	12,130,164	20,220,001	32,350,165	13,442,162
2031	6,486,773	6,148,815	12,635,588	505,424	12,130,164	20,786,161	32,916,325	13,026,108
2032	6,746,243	5,889,344	12,635,588	505,424	12,130,164	21,368,174	33,498,338	12,625,171
2033	7,016,093	5,619,494	12,635,588	505,424	12,130,164	21,966,483	34,096,647	12,238,731
2034	7,296,737	5,338,851	12,635,588	505,424	12,130,164	22,581,544	34,711,708	11,866,193
2035	7,588,606	5,046,981	12,635,588	505,424	12,130,164	23,213,827	35,343,991	11,506,989
2036	7,892,151	4,743,437	12,635,588	505,424	12,130,164	23,863,814	35,993,978	11,160,578
2037	8,207,837	4,427,751	12,635,588	505,424	12,130,164	24,532,001	36,662,165	10,826,439
2038	8,536,150	4,099,437	12,635,588	505,424	12,130,164	25,218,897	37,349,061	10,504,077
2039	8,877,596	3,757,991	12,635,588	505,424	12,130,164	25,925,026	38,055,190	10,193,019
2040	9,232,700	3,402,887	12,635,588	505,424	12,130,164	26,650,927	38,781,091	9,892,810
2041	9,602,008	3,033,579	12,635,588	505,424	12,130,164	27,397,153	39,527,317	9,603,016
2042	9,986,088	2,649,499	12,635,588	505,424	12,130,164	28,164,273	40,294,437	9,323,224
2043	10,385,532	2,250,056	12,635,588	505,424	12,130,164	28,952,873	41,083,037	9,053,036
2044	10,800,953	1,834,634	12,635,588	505,424	12,130,164	29,763,553	41,893,717	8,792,074
2045	11,232,991	1,402,596	12,635,588	505,424	12,130,164	30,596,933	42,727,097	8,539,973
2046	11,682,311	953,277	12,635,588	505,424	12,130,164	31,453,647	43,583,811	8,296,388
2047	12,149,603	485,984	12,635,588	12,635,588	0	32,334,349	32,334,349	5,861,903
2048	0	0	0	0	0	33,239,711	33,239,711	5,739,083
2049	0	0	0	0	0	34,170,423	34,170,423	5,618,835
2050	0	0	0	0	0	35,127,195	35,127,195	5,501,107
2051	0	0	0	0	0	36,110,756	36,110,756	5,385,846
2052	0	0	0	0	0	37,121,857	37,121,857	5,273,000
2053	0	0	0	0	0	38,161,269	38,161,269	5,162,518
2054	0	0	0	0	0	39,229,785	39,229,785	5,054,351
2055	0	0	0	0	0	40,328,219	40,328,219	4,948,450
2056	0	0	0	0	0	41,457,409	41,457,409	4,844,768
	\$218,495,000	\$160,572,625	\$379,067,625	\$27,292,869	\$351,774,756	\$1,003,630,486	\$1,355,405,242	\$434,527,374

Assumes 4.0% interest rate, issuance costs, and reserve fund

Bond Sizing:

Proceeds	160,000,000
Capitalized Interest	43,699,000
Debt Service Reserve Fund	12,635,588
Debt Issuance Costs	2,163,346
Balancing Amount	<u>-2,933</u>
Issuance Amount	218,495,000

Assumptions:

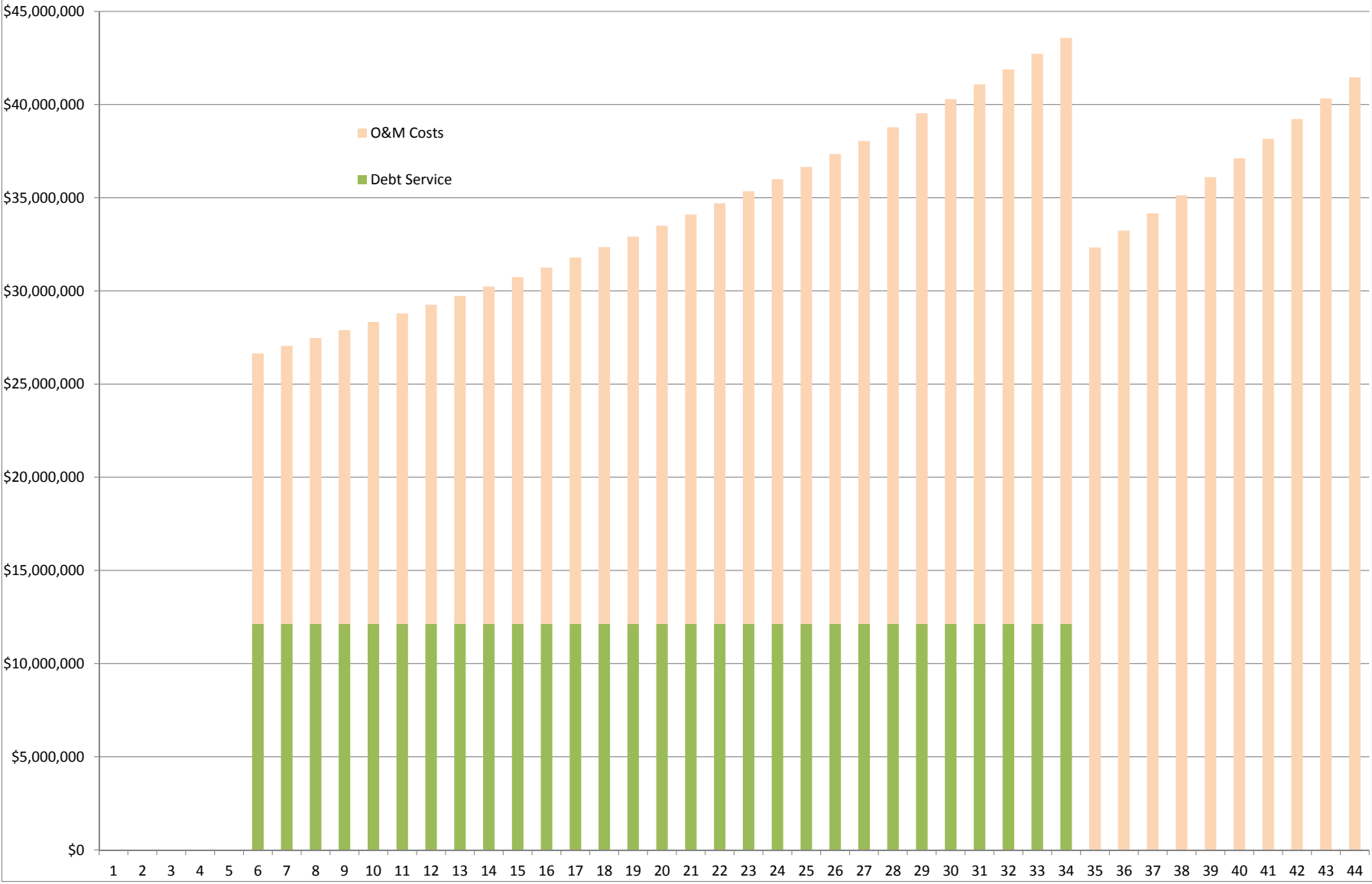
Maturity of Bonds	35 years
Interest-Only Period	5 years
Interest Rate on Bonds	4.00%
Discount Rate for NPV	5.00%

O&M Expense

12,300,000	in 2012 \$
14,516,563	in 2018 \$
2.80%	escalation rate

Monterey Peninsula Water Supply Project
Financial Analysis of SPI Costs for DWD Project

Scenario 3: 9,000 AF DWD Plant
No Surcharge; No SRF Loans



Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for DWD Project

Scenario 4: 5,500 AF DWD Plant

No Surcharge; No SRF Loans

Summary of Annual Costs

	<u>Principal Due</u>	<u>Interest Due</u>	<u>Total Debt Service</u>	<u>Debt Service Reserve Used</u>	<u>Net Debt Service</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	3,262,819	7,319,800	10,582,619	423,305	10,159,314	11,070,354	21,229,669	15,841,906
2019	3,393,332	7,189,287	10,582,619	423,305	10,159,314	11,380,324	21,539,639	15,307,819
2020	3,529,065	7,053,554	10,582,619	423,305	10,159,314	11,698,973	21,858,288	14,794,549
2021	3,670,228	6,912,391	10,582,619	423,305	10,159,314	12,026,545	22,185,859	14,301,202
2022	3,817,037	6,765,582	10,582,619	423,305	10,159,314	12,363,288	22,522,602	13,826,924
2023	3,969,718	6,612,901	10,582,619	423,305	10,159,314	12,709,460	22,868,774	13,370,899
2024	4,128,507	6,454,112	10,582,619	423,305	10,159,314	13,065,325	23,224,639	12,932,348
2025	4,293,647	6,288,972	10,582,619	423,305	10,159,314	13,431,154	23,590,468	12,510,529
2026	4,465,393	6,117,226	10,582,619	423,305	10,159,314	13,807,226	23,966,541	12,104,732
2027	4,644,009	5,938,610	10,582,619	423,305	10,159,314	14,193,829	24,353,143	11,714,278
2028	4,829,769	5,752,850	10,582,619	423,305	10,159,314	14,591,256	24,750,570	11,338,521
2029	5,022,960	5,559,659	10,582,619	423,305	10,159,314	14,999,811	25,159,125	10,976,843
2030	5,223,878	5,358,741	10,582,619	423,305	10,159,314	15,419,806	25,579,120	10,628,653
2031	5,432,833	5,149,786	10,582,619	423,305	10,159,314	15,851,560	26,010,875	10,293,386
2032	5,650,147	4,932,472	10,582,619	423,305	10,159,314	16,295,404	26,454,718	9,970,505
2033	5,876,153	4,706,466	10,582,619	423,305	10,159,314	16,751,675	26,910,990	9,659,494
2034	6,111,199	4,471,420	10,582,619	423,305	10,159,314	17,220,722	27,380,036	9,359,862
2035	6,355,647	4,226,972	10,582,619	423,305	10,159,314	17,702,902	27,862,217	9,071,138
2036	6,609,873	3,972,746	10,582,619	423,305	10,159,314	18,198,584	28,357,898	8,792,874
2037	6,874,268	3,708,351	10,582,619	423,305	10,159,314	18,708,144	28,867,458	8,524,640
2038	7,149,238	3,433,381	10,582,619	423,305	10,159,314	19,231,972	29,391,286	8,266,027
2039	7,435,208	3,147,411	10,582,619	423,305	10,159,314	19,770,467	29,929,782	8,016,642
2040	7,732,616	2,850,003	10,582,619	423,305	10,159,314	20,324,040	30,483,355	7,776,110
2041	8,041,921	2,540,698	10,582,619	423,305	10,159,314	20,893,113	31,052,428	7,544,073
2042	8,363,598	2,219,021	10,582,619	423,305	10,159,314	21,478,121	31,637,435	7,320,189
2043	8,698,141	1,884,478	10,582,619	423,305	10,159,314	22,079,508	32,238,822	7,104,130
2044	9,046,067	1,536,552	10,582,619	423,305	10,159,314	22,697,734	32,857,049	6,895,583
2045	9,407,910	1,174,709	10,582,619	423,305	10,159,314	23,333,271	33,492,585	6,694,248
2046	9,784,226	798,393	10,582,619	423,305	10,159,314	23,986,602	34,145,917	6,499,839
2047	10,175,595	407,024	10,582,619	10,582,619	0	24,658,227	24,658,227	4,470,297
2048	0	0	0	0	0	25,348,658	25,348,658	4,376,634
2049	0	0	0	0	0	26,058,420	26,058,420	4,284,933
2050	0	0	0	0	0	26,788,056	26,788,056	4,195,153
2051	0	0	0	0	0	27,538,121	27,538,121	4,107,255
2052	0	0	0	0	0	28,309,189	28,309,189	4,021,198
2053	0	0	0	0	0	29,101,846	29,101,846	3,936,944
2054	0	0	0	0	0	29,916,698	29,916,698	3,854,456
2055	0	0	0	0	0	30,754,365	30,754,365	3,773,696
2056	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>31,615,488</u>	<u>31,615,488</u>	<u>3,694,628</u>
	\$182,995,000	\$134,483,570	\$317,478,570	\$22,858,457	\$294,620,113	\$765,370,241	\$1,059,990,353	\$342,153,138

Assumes 4.0% interest rate, issuance costs, and reserve fund

Bond Sizing:

Proceeds	134,000,000
Capitalized Interest	36,599,000
Debt Service Reserve Fund	10,582,619
Debt Issuance Costs	1,811,816
Balancing Amount	<u>1,565</u>
Issuance Amount	182,995,000

Assumptions:

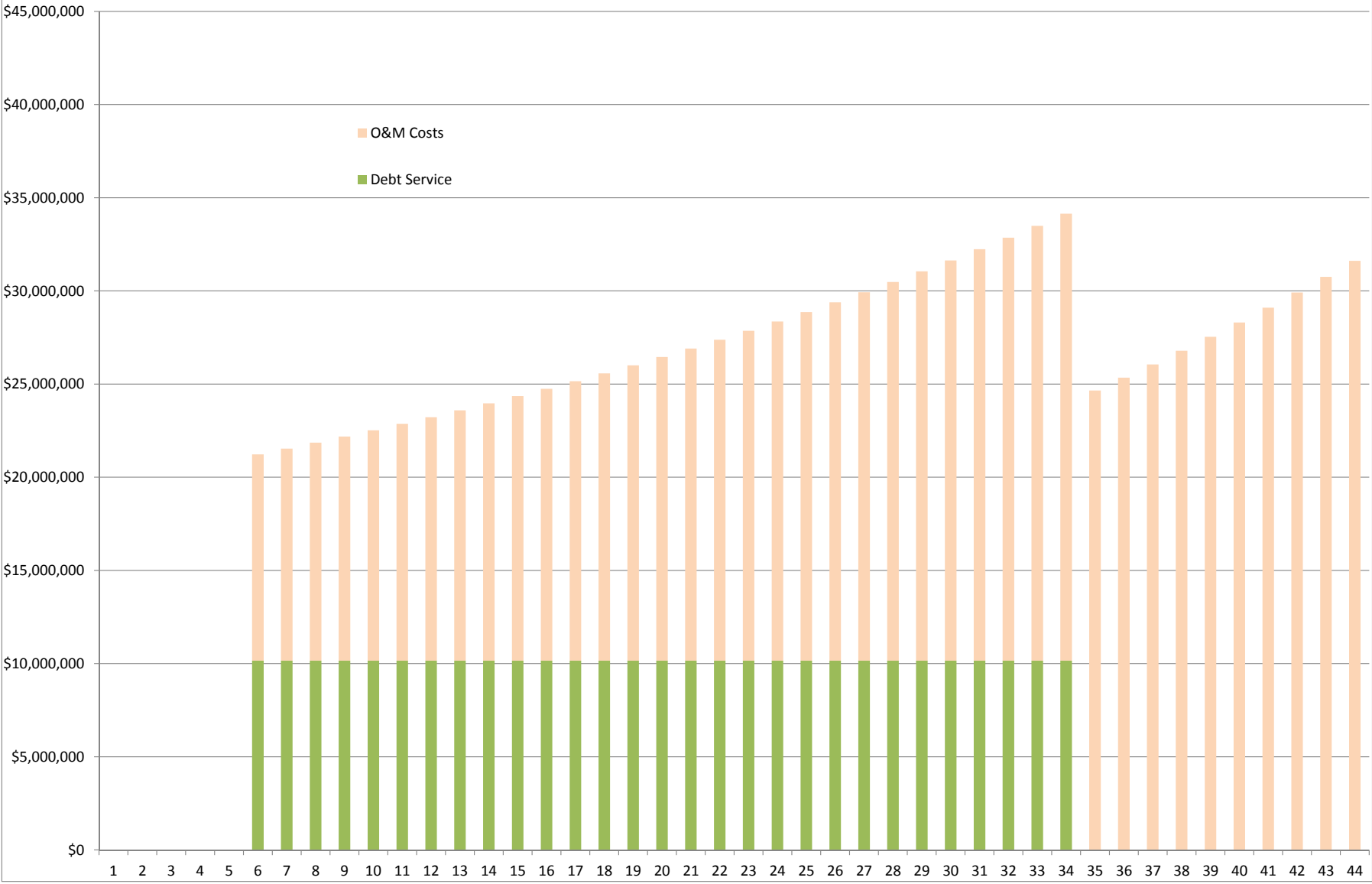
Maturity of Bonds	35 years
Interest-Only Period	5 years
Interest Rate on Bonds	4.00%
Discount Rate for NPV	5.00%

O&M Expense

9,380,000	in 2012 \$
11,070,354	in 2018 \$
2.80%	escalation rate

Monterey Peninsula Water Supply Project
Financial Analysis of SPI Costs for DWD Project

Scenario 4: 5,500 AF DWD Plant
No Surcharge; No SRF Loans



Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for PML Project

Scenario 5: 9,000 AF PML Plant

No Surcharge; No SRF Loans

Summary of Annual Costs

	<u>Principal Due</u>	<u>Interest Due</u>	<u>Total Debt Service</u>	<u>Debt Service Reserve Used</u>	<u>Net Debt Service</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	4,893,738	10,978,600	15,872,338	634,894	15,237,445	12,253,867	27,491,312	19,537,562
2020	5,089,488	10,782,850	15,872,338	634,894	15,237,445	12,596,976	27,834,420	18,839,431
2021	5,293,067	10,579,271	15,872,338	634,894	15,237,445	12,949,691	28,187,136	18,169,679
2022	5,504,790	10,367,548	15,872,338	634,894	15,237,445	13,312,282	28,549,727	17,527,056
2023	5,724,981	10,147,357	15,872,338	634,894	15,237,445	13,685,026	28,922,471	16,910,370
2024	5,953,981	9,918,357	15,872,338	634,894	15,237,445	14,068,207	29,305,652	16,318,483
2025	6,192,140	9,680,198	15,872,338	634,894	15,237,445	14,462,117	29,699,561	15,750,312
2026	6,439,826	9,432,513	15,872,338	634,894	15,237,445	14,867,056	30,104,501	15,204,819
2027	6,697,419	9,174,920	15,872,338	634,894	15,237,445	15,283,334	30,520,778	14,681,016
2028	6,965,315	8,907,023	15,872,338	634,894	15,237,445	15,711,267	30,948,712	14,177,961
2029	7,243,928	8,628,410	15,872,338	634,894	15,237,445	16,151,182	31,388,627	13,694,754
2030	7,533,685	8,338,653	15,872,338	634,894	15,237,445	16,603,416	31,840,860	13,230,535
2031	7,835,032	8,037,306	15,872,338	634,894	15,237,445	17,068,311	32,305,756	12,784,485
2032	8,148,434	7,723,904	15,872,338	634,894	15,237,445	17,546,224	32,783,669	12,355,820
2033	8,474,371	7,397,967	15,872,338	634,894	15,237,445	18,037,518	33,274,963	11,943,794
2034	8,813,346	7,058,992	15,872,338	634,894	15,237,445	18,542,569	33,780,013	11,547,693
2035	9,165,880	6,706,458	15,872,338	634,894	15,237,445	19,061,761	34,299,205	11,166,837
2036	9,532,515	6,339,823	15,872,338	634,894	15,237,445	19,595,490	34,832,935	10,800,575
2037	9,913,816	5,958,523	15,872,338	634,894	15,237,445	20,144,164	35,381,608	10,448,287
2038	10,310,368	5,561,970	15,872,338	634,894	15,237,445	20,708,200	35,945,645	10,109,380
2039	10,722,783	5,149,555	15,872,338	634,894	15,237,445	21,288,030	36,525,474	9,783,287
2040	11,151,694	4,720,644	15,872,338	634,894	15,237,445	21,884,095	37,121,539	9,469,468
2041	11,597,762	4,274,576	15,872,338	634,894	15,237,445	22,496,849	37,734,294	9,167,408
2042	12,061,673	3,810,666	15,872,338	634,894	15,237,445	23,126,761	38,364,206	8,876,612
2043	12,544,139	3,328,199	15,872,338	634,894	15,237,445	23,774,310	39,011,755	8,596,610
2044	13,045,905	2,826,433	15,872,338	634,894	15,237,445	24,439,991	39,677,436	8,326,951
2045	13,567,741	2,304,597	15,872,338	634,894	15,237,445	25,124,311	40,361,755	8,067,207
2046	14,110,451	1,761,887	15,872,338	634,894	15,237,445	25,827,792	41,065,236	7,816,965
2047	14,674,869	1,197,469	15,872,338	634,894	15,237,445	26,550,970	41,788,414	7,575,834
2048	15,261,864	610,475	15,872,338	15,872,338	0	27,294,397	27,294,397	4,712,580
2049	0	0	0	0	0	28,058,640	28,058,640	4,613,840
2050	0	0	0	0	0	28,844,282	28,844,282	4,517,169
2051	0	0	0	0	0	29,651,922	29,651,922	4,422,524
2052	0	0	0	0	0	30,482,176	30,482,176	4,329,861
2053	0	0	0	0	0	31,335,676	31,335,676	4,239,141
2054	0	0	0	0	0	32,213,075	32,213,075	4,150,320
2055	0	0	0	0	0	33,115,042	33,115,042	4,063,361
2056	0	0	0	0	0	34,042,263	34,042,263	3,978,224
	\$274,465,000	\$201,705,145	\$476,170,145	\$34,284,250	\$441,885,894	\$812,199,238	\$1,254,085,132	\$401,906,211

Assumes 4.0% interest rate, issuance costs, and reserve fund

Bond Sizing:

Proceeds	190,000,000
Capitalized Interest	65,871,600
Debt Service Reserve Fund	15,872,338
Debt Issuance Costs	2,717,439
Balancing Amount	<u>3,622</u>
Issuance Amount	274,465,000

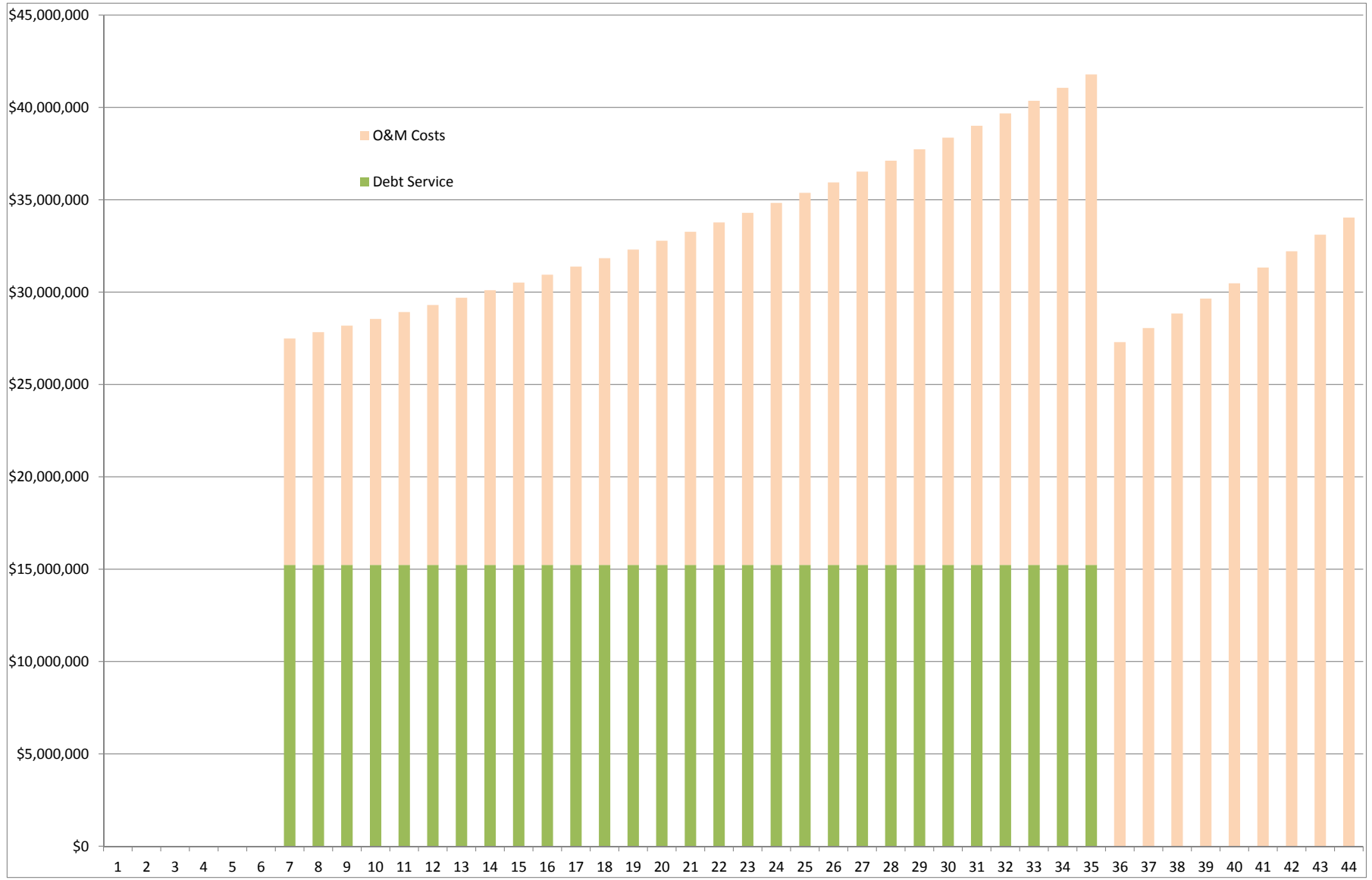
Assumptions:

Maturity of Bonds	36 years
Interest-Only Period	6 years
Interest Rate on Bonds	4.00%
Discount Rate for NPV	5.00%

O&M Expense

10,100,000	in 2012 \$
12,253,867	in 2019 \$
2.80%	escalation rate

Monterey Peninsula Water Supply Project
Financial Analysis of SPI Costs for PML Project
Scenario 5: 9,000 AF PML Plant
No Surcharge; No SRF Loans



Monterey Peninsula Water Supply Project

Financial Analysis of SPI Costs for PML Project

Scenario 6: 5,500 AF PML Plant

No Surcharge; No SRF Loans

Summary of Annual Costs

	<u>Principal Due</u>	<u>Interest Due</u>	<u>Total Debt Service</u>	<u>Debt Service Reserve Used</u>	<u>Net Debt Service</u>	<u>O&M Costs</u>	<u>Total Revenue Requirement</u>	<u>Net Present Value of Requirement</u>
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2013	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	4,146,835	9,303,000	13,449,835	537,993	12,911,842	8,565,575	21,477,417	15,263,599
2020	4,312,709	9,137,127	13,449,835	537,993	12,911,842	8,805,411	21,717,253	14,699,091
2021	4,485,217	8,964,618	13,449,835	537,993	12,911,842	9,051,962	21,963,804	14,158,064
2022	4,664,626	8,785,210	13,449,835	537,993	12,911,842	9,305,417	22,217,259	13,639,470
2023	4,851,211	8,598,625	13,449,835	537,993	12,911,842	9,565,969	22,477,811	13,142,310
2024	5,045,259	8,404,576	13,449,835	537,993	12,911,842	9,833,816	22,745,658	12,665,633
2025	5,247,070	8,202,766	13,449,835	537,993	12,911,842	10,109,163	23,021,005	12,208,530
2026	5,456,952	7,992,883	13,449,835	537,993	12,911,842	10,392,219	23,304,061	11,770,135
2027	5,675,230	7,774,605	13,449,835	537,993	12,911,842	10,683,202	23,595,043	11,349,619
2028	5,902,240	7,547,596	13,449,835	537,993	12,911,842	10,982,331	23,894,173	10,946,196
2029	6,138,329	7,311,506	13,449,835	537,993	12,911,842	11,289,836	24,201,678	10,559,112
2030	6,383,862	7,065,973	13,449,835	537,993	12,911,842	11,605,952	24,517,794	10,187,650
2031	6,639,217	6,810,618	13,449,835	537,993	12,911,842	11,930,919	24,842,760	9,831,124
2032	6,904,786	6,545,050	13,449,835	537,993	12,911,842	12,264,984	25,176,826	9,488,881
2033	7,180,977	6,268,858	13,449,835	537,993	12,911,842	12,608,404	25,520,246	9,160,297
2034	7,468,216	5,981,619	13,449,835	537,993	12,911,842	12,961,439	25,873,281	8,844,778
2035	7,766,945	5,682,891	13,449,835	537,993	12,911,842	13,324,359	26,236,201	8,541,754
2036	8,077,623	5,372,213	13,449,835	537,993	12,911,842	13,697,441	26,609,283	8,250,685
2037	8,400,727	5,049,108	13,449,835	537,993	12,911,842	14,080,970	26,992,812	7,971,052
2038	8,736,757	4,713,079	13,449,835	537,993	12,911,842	14,475,237	27,387,079	7,702,362
2039	9,086,227	4,363,608	13,449,835	537,993	12,911,842	14,880,544	27,792,385	7,444,144
2040	9,449,676	4,000,159	13,449,835	537,993	12,911,842	15,297,199	28,209,041	7,195,947
2041	9,827,663	3,622,172	13,449,835	537,993	12,911,842	15,725,520	28,637,362	6,957,342
2042	10,220,769	3,229,066	13,449,835	537,993	12,911,842	16,165,835	29,077,677	6,727,919
2043	10,629,600	2,820,235	13,449,835	537,993	12,911,842	16,618,478	29,530,320	6,507,286
2044	11,054,784	2,395,051	13,449,835	537,993	12,911,842	17,083,796	29,995,638	6,295,069
2045	11,496,976	1,952,860	13,449,835	537,993	12,911,842	17,562,142	30,473,984	6,090,913
2046	11,956,855	1,492,981	13,449,835	537,993	12,911,842	18,053,882	30,965,724	5,894,474
2047	12,435,129	1,014,707	13,449,835	537,993	12,911,842	18,559,391	31,471,233	5,705,429
2048	12,932,534	517,301	13,449,835	13,449,835	0	19,079,054	19,079,054	3,294,140
2049	0	0	0	0	0	19,613,267	19,613,267	3,225,120
2050	0	0	0	0	0	20,162,439	20,162,439	3,157,546
2051	0	0	0	0	0	20,726,987	20,726,987	3,091,388
2052	0	0	0	0	0	21,307,343	21,307,343	3,026,616
2053	0	0	0	0	0	21,903,948	21,903,948	2,963,201
2054	0	0	0	0	0	22,517,259	22,517,259	2,901,115
2055	0	0	0	0	0	23,147,742	23,147,742	2,840,330
2056	0	0	0	0	0	<u>23,795,879</u>	<u>23,795,879</u>	<u>2,780,818</u>
	\$232,575,000	\$170,920,059	\$403,495,059	\$29,051,644	\$374,443,415	\$567,735,309	\$942,178,724	\$306,479,139

Assumes 4.0% interest rate, issuance costs, and reserve fund

Bond Sizing:

Proceeds	161,000,000
Capitalized Interest	55,818,000
Debt Service Reserve Fund	13,449,835
Debt Issuance Costs	2,302,678
Balancing Amount	<u>4,486</u>
Issuance Amount	232,575,000

Assumptions:

Maturity of Bonds	36 years
Interest-Only Period	6 years
Interest Rate on Bonds	4.00%
Discount Rate for NPV	5.00%

O&M Expense

7,060,000	in 2012 \$
8,565,575	in 2019 \$
2.80%	escalation rate

Monterey Peninsula Water Supply Project
Financial Analysis of SPI Costs for PML Project
Scenario 6: 5,500 AF PML Plant
No Surcharge; No SRF Loans

