

# APPENDIX B

## Cost Analysis



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Cost Comparison of CAW Water Supply Alternatives

Table 1 (1)

Cost Categories	CAW Alternative 1	CAW Alternative 2	CAW Alternative 11
Project Production (AFY)	11,800	(2)	11,800
CAW Capital Cost	\$ 362,000,000	\$ 316,000,000	\$ 277,000,000
Other CAW Costs not included	\$ -	\$ -	\$ -
Other Capital Cost	\$ -	\$ -	\$ -
Other Annualized Capital Cost (3%)	\$ -	\$ -	\$ -
CAW O&M Annual Costs	\$ 13,200,000	\$ 17,600,000	\$ 16,000,000
Other O&M Annual Costs	\$ -	\$ -	\$ -
Total O&M & Other Annual Costs	\$ 13,200,000	\$ 17,600,000	\$ 16,000,000
CAW Annualized Capital Cost (8.5%)	\$ 33,680,000	\$ 29,400,000	\$ 25,780,000
Total Annualized Cost	\$ 46,880,000	\$ 47,000,000	\$ 41,780,000
Unit/ll Cost (\$/AFY)	\$ 3,970	\$ 4,160	\$ 4,860
CAW Annualized Capital (3%)	\$ 18,470,000	\$ 16,120,000	\$ 14,130,000
Total Annualized Cost	\$ 31,670,000	\$ 33,120,000	\$ 30,130,000
Unit Cost (\$/AFY)	\$ 2,680	\$ 2,980	\$ 3,500

Line not included in original RBF TM Changes made to RBF TM numbers

% Difference from Regional Desal Project

Regional Desal Project	CAW Alternative 1	CAW Alternative 2	CAW Alternative 11
11,800	10,100	10,100	7,740
\$ 107,000,000	\$ 362,000,000	\$ 316,000,000	\$ 277,000,000
\$ -	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000
\$ 297,000,000	\$ -	\$ 106,500,000	\$ 106,500,000
\$ 15,150,000	\$ -	\$ 5,430,000	\$ 5,430,000
\$ 13,200,000	\$ 13,200,000	\$ 2,900,000	\$ 2,900,000
\$ 9,960,000	\$ 34,150,000	\$ 13,700,000	\$ 12,100,000
\$ 38,310,000	\$ 47,350,000	\$ 49,000,000	\$ 43,770,000
\$ 3,250	\$ 4,690	\$ 4,850	\$ 5,660

Numbers are for comparative purposes only and do not indicate the actual final cost of water

Notes - Table 1

1 Table 1 is based on the information found in the October 5, 2011 RBF TM to CAW (RBF-TM)

2 Production numbers found in Table 5 of the RBF-TM, pg. 20

Table 2 (an updated version of table 1 using different assumptions)

Regional/Description Project

3 The Regional Desal Project is based on the Capital Costs documented in the October 5, 2011 RBF TM and found in Appendix C of the WPA (Other Capital Costs) and Settlement Agreement (CAW Capital Cost)

4 Project Production: Desal (8,800 AFY to CAW, 1,700 to MCWD) + 1,300 AFY from ASR

5 The Regional Desal Project O&M costs are assumed to be the same and CAW Alternative 1.

6 The Regional Desal Project Assumes a 8.5% Interest Rate for CAW facilities and 3% (SFR) for the Other Capital Costs. Actual interest rate for SFR may be lower, but 3% was used to be consistent with the RBF TM.

CAW Alternative 1

7 Project Production: 11,800 AFY - 1,700 AFY (RBF-TM, pg. 4) to reflect the water that will be given at no cost to the Salinas Groundwater Basin

8 An additional \$5 million was added to the capital cost to reflect the additional litigation associated with CAW only facility (water rights, eminent domain of MCWD property for Desal and Intake wells, etc.) as previously documented at the CPUC Cost Workshops.

9 Assumes an 8.5% interest rate for CAW facilities. The 3% (SFR) interest rate option was not calculated because a CAW owned facility would not be eligible for California SWRCB SRF Funding. Actual interest rate for SFR may be lower, but 3% was used to be consistent with analyses completed by CAW/RBF.

CAW Alternative 2

10 Project Production: 11,300 AFY - 1,200 AFY (RBF-TM, pg. 4) to reflect the water that will be given at no cost to the Salinas Groundwater Basin

11 An additional \$5 million was added to the capital cost to reflect the additional litigation associated with CAW only facility (water rights, eminent domain of MCWD property for Desal and Intake wells, etc.) as presented at the CPUC Cost Workshops.

12 CAW Alternative 2 assumes the use of 2,700 AFY of Groundwater Recharge from MRWPCA. The capital cost of those facilities were not included in Table 1

13 The MRWPCA Groundwater Recharge Project cost assumed \$70 million for the AWRT and Pump station (based on January 27, 2012 MRWPCA presentation) and \$36.5 million for the pipeline to deliver the water to CAW (based on the RUWAP pipeline cost estimate, assuming a new dedicated parallel pipeline will be required). It should be noted the cost provided are only based on the referenced documents, further facility design definition is required.

14 The O&M Costs were reduced by removing the \$6.8 million for "Recharge Water Purchases" (RBF-TM Table 4, pg. 19) and then adding \$2.9 million for the operation of the MRWPCA facilities (MRWPCA Presentation) to more accurately reflect the cost of the ground water recharge project.

CAW Alternative 11

15 The CAW facilities assume a 8.5% interest rate and the "Other Capital Costs" assumes a 3% (SFR) rate because MRWPCA would be eligible for SWRCB SRF Funding. Actual interest rate for SFR may be lower, but 3% was used to be consistent with analyses completed by CAW/RBF.

CAW Alternative 11

16 Project Production: 8,600 AFY - 900 AFY (RBF-TM, pg. 17) to reflect the water that will be given at no cost to the Salinas Groundwater Basin

17 An additional \$5 million was added to the capital cost to reflect the additional litigation associated with CAW only facility (water rights, eminent domain of MCWD property for Desal and Intake wells, etc.) as presented at the CPUC Cost Workshops.

18 CAW Alternative 11 assumes the use of 2,700 AFY of Groundwater Recharge from MRWPCA. The cost of those facilities was not included in Table 1

19 The MRWPCA Groundwater Recharge Project cost assumed \$70 million for the AWRT and Pump station (based on January 27, 2012 MRWPCA presentation) and \$36.5 million for the pipeline to deliver the water to CAW (based on the RUWAP pipeline cost estimate, assuming a new dedicated parallel pipeline will be required). It should be noted the cost provided are only based on the referenced documents, further facility design definition is required.

20 The O&M Costs were reduced by removing the \$6.8 million for "Recharge Water Purchases" (RBF-TM Table 4) and then adding \$2.9 million for the operation of the MRWPCA facilities (MRWPCA Presentation) to more accurately reflect the cost of the ground water recharge project.

21 The CAW facilities assume a 8.5% interest rate and the "Other Capital Costs" assumes a 3% (SFR) rate because MRWPCA would be eligible for SWRCB SRF Funding. Actual interest rate for SFR may be lower, but 3% was used to be consistent with analyses completed by CAW/RBF.

Table 2

CAW Capital Recovery Factor	
Interest Rate	8.5%
Time (Years)	30
AP Factor	0.093

Other Capital Recovery Factor	
Interest Rate	3.0%
Time (Years)	30
AP Factor	0.051