

Operations Cost Estimate (2004 Dollars)  
Replacement CWP Project w/1300 afy ASR

Project Component	Operations Cost Development				\$/Project AF (AF=11730)	11730	2004 Production
	Units	Unit Costs	Quantity	Cost			
CVWTP Output	afy		0			CVWTP Output	0
BIRP Output	afy		3,000	CVW + ASR		BIRP Output	4,676
ASR Well Injection	afy		1,300			ASR Well Injection	1,300
Seaside Wells Output	afy		2,870			Seaside Wells Output	3,000
ASR Well Output	afy		1,300			ASR Well Output	1,300
Desalination Plant Production	afy		10,430			Desal Plant Production	10,430
Total System Production	afy		15,000			Total System Production	18,106

**OPERATIONS COSTS AVOIDED (FIRST YEAR OF OPERATION)**

Segunda Pump Station							
Net Flow Reduction	afy		3,238				
Lift	ft		277				
Annual Power Reduction	kwhrs	\$ 0.120	1,281,532	\$153,784	\$13.11		
Annual Labor Cost Reduction	\$/AF	\$ 5	3,238	\$16,188	\$1.38	324 hrs @ \$50/hr	
Seaside Wells							
Net Flow Reduction	afy		1,000				
Lift	hp		800				
Annual Power Reduction	kwhrs	\$ 0.120	1,143,185	\$137,182	\$11.69		<b>7 Month Shutdown</b>
Annual Labor Cost Reduction	\$/AF	\$ 50	1,000	\$50,000	\$4.26	1000 hrs @ \$50/hr	
NaOCl Dosage (as Cl)	mg/l		3				
Annual NaOCl Requirement	lbs. Cl	\$ 1.00	8,154	\$8,154	\$0.70		
Begonia Iron Removal Plant							
Net Flow Reduction	afy		8,094				
Annual Chem Cost Reduction	\$/AF	\$ 105	8,094	\$849,870	\$72.45		<b>6 Month Shutdown</b>
Annual BIRP Labor Cost Reduction	\$/AF	\$ 80	8,094	\$647,520	\$55.20	12950 hrs @ \$50/hr	
Annual Trtmnt Pwr Reduction	\$/AF	\$ 10	8,094	\$80,940	\$6.90		
Source Well Lift	ft		420				
Annual Well Power Savings	kwhrs	\$ 0.120	4,857,792	\$582,935	\$49.70		<b>6 Month Shutdown</b>
Annual Well Labor Cost Reduction	\$/AF	\$ 20	8,094	\$161,880	\$13.80	3238 hrs @ \$50/hr	

**TOTAL OPERATIONS COSTS AVOIDED** **\$2,688,453 \$ 229.19**