

Water Recycling Facility Comparison

		American Water
	PERC	
WRF Design Overview		
Projected Capacity in MGD (Maximum Month Day) - Phase 1	1.8 MGD	
Projected Capacity in MGD (Maximum Month Day) - Phase 2	0.6 MGD	
Process Design / Technology	MBR	
Effluent Quality (CA Title 22)	CA Title 22	
Sludge Processing (Class A or B)	Class B	
Maximum Land Use in Acres (with 40' Setback) - Phase 1 and Phase 2	2.0	
WRF Capital Cost		
Facility Components and Construction	\$ 27,000,000	\$ 32,775,000
Sespe Creek Levee and Bike Path	Not Required	\$ 4,300,000
Engineering and Project Management	Included	\$ 4,225,000
Contingency	Included	\$ 1,965,000
Commissioning and Startup	Included	\$ 2,120,000
Construction Management (City = 4% of DBO)	Included	\$ 1,800,000
Total WRF Capital Cost	\$ 27,000,000	\$ 47,185,000
Stage when GMP is Converted to Fixed Price	CDR	
Fixed Price for CDR	\$ 75,000	
Schedule (Months)		
Construction Documents (Plans, Specifications and Engineering Report)	9	
Permitting / City Review / Approval	3	
Construction Phase (NTP to Substantial Completion)	14	
Startup & Testing Phase	2	
Total Design/Permit/Build & Start-up Facility	28	
Start Construction Documents	9/1/2007	
Complete Commissioning	12/19/2009	
State, City, County, RWQCB Plan & Permit Review (Not Critical Path)	12	
Summary / Key Points		
Guaranteed Schedule to Meet RWQCB Deadline	Yes	
Guaranteed Permit Compliance (Based on Standard Influent)	Yes	
Guaranteed Capital Cost (Effluent and Sludge Processing)	Yes	
Guaranteed O&M Cost (Effluent and Sludge Processing)	Yes	
Financing Option Available / Privatization per CA 5956.0	Yes	
Guaranteed Monthly Sewer Fee (Competitive Sewer Fees)	Yes	
Covered Treatment Process	Yes	
Covered and Enclosed Sludge Process	Yes	
Noise and Odor Controls	Yes	
Land Acquisition Cost Included in GMP	No	
Permits / Bonds / Procurement Costs Included in GMP	No	
Effluent Reuse / Percolation Ponds / Storage Included in GMP	No	
Design/Build Work Breakdown		
Engineering		
Civil Engineering	Yes	
Mechanical Engineering	Yes	
Structural Engineering	Yes	
Electrical Engineering	Yes	
Architectural	Yes	
Landscaping	Yes	
Engineering Services During Construction	Yes	
Permit Preparation & Facilitation	Yes	
Construction		
Construction Management / General Conditions	Yes	
Sitework / Excavation / Backfill / Paving	Yes	

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Site Dewatering	Yes	
Concrete Structures / Tanks	Yes	
Operations Buildings / Labs / Offices / Workshops	Yes	
Mechanical Piping and Equipment Installation	Yes	
Electrical (Buildings and Process Equipment)	Yes	
Controls / Instrumentation / SCADA	Yes	
Operations and Maintenance		
Testing / Start-up / Commissioning	Yes	
Number of O&M Staff (Phase 1)	3 FTE	
Total Power Consumption in kWh - Phase 1	XX kWh	
Total Power Consumption in kWh - Phase 1 and Phase 2	XX kWh	
WRF Process Components included in Design/Build GMP		
Lift Station	Yes	
Emergency Capacity Storage	Yes	
Headworks / Fine Screening	Yes	
Grit Removal	Yes	
Pre-treatment / Anoxic Reactor	Yes	
Secondary Process / MBR	Yes	
Fine Bubble Aeration	Yes	
Equalization Basin	Yes	
Tertiary Filtration (if SBR)	Yes	
UV Disinfection	Yes	
Effluent Storage	Yes	
Effluent Pumpstation	Yes	
Sludge Process	Yes	
Sludge Thickening	Yes	
Centrifuge	Yes	
Sludge Hauling Truck	Yes	
Sludge Dumpsters	Yes	
Odor Control System	Yes	
Installed Redundant Equipment	Yes	
Reuse Water System	Yes	
Emergency Power Generator	Yes	
Instruments/SCADA/ Control System	Yes	
Fully Automated Process Monitoring Alarm System	Yes	
Fully Equipped Lab with Resin Counter top	Yes	
Control Room	Yes	
Telephone/Internet Installed	Yes	
Electrical Room with MCC	Yes	
Offices/Restrooms/Showers	Yes	
Work/Storage Room	Yes	
Maintenance Software	Yes	
Operation & Maintenance Manuals	Yes	
Sensitive Equipment in Controlled Environment	Yes	
Internal Process Piping Stainless Steel	Yes	
Concrete Tanks	Yes	
Split Face Block	Yes	
Standing Seem Metal Roof	Yes	
High Energy Efficient Water Source HVAC System	Yes	
Parking	Yes	
Landscaping	Yes	
Site Fencing	Yes	
Entry Gates	Yes	
Equipment Crane System	Yes	
Fire Sprinklers	Yes	
2 Year Equipment Warranty	Yes	