DRAFT Countywide Water Reuse Master Plan

Table 6-11. Summary of North County Project Portfolios and South County Reuse Options

Portfolio 1 San José AWPF	Variation		Portfolio 1a Delivers 19,000-24,000 AFY to LGRP for GWR	Portfolio 1b Delivers 19,800-24,000 AFY to the SBA terminal tank upstream of Penitencia WTP for RWA	Portfolio 1c Delivers 24,000 AFY total for TWA, including up to 4 mgd directly to Santa Clara and San José (north of Highway 101) and up to 20 mgd to Valley Water's retailers through Milpitas Pipeline (flowing south) to a blending location near Penitencia WTP	Portfolio 1d Delivers 24,000 AFY total for TWA, including up to 4 mgd directly to Santa Clara and San José (north of Highway 101) and up to 20 mgd to Valley Water's retailers through a dedicated purified water pipeline to a blending location near Penitencia WTP
	ROC Management Strategy		Discharge ROC to a new outfall near existing outfall under a separate NPDES permit	Discharge ROC to a new outfall near existing outfall under a separate NPDES permit	Discharge ROC to a new outfall near existing outfall under a separate NPDES permit	Discharge ROC to a new outfall near existing outfall under a separate NPDES permit
	Estimated Costs	Total Capital Cost Annual O&M Cost Unit Cost, 30-year Life-cycle Unit Cost, 100-year Life-cycle	\$630M (+\$20M assumed for ROC) \$18.4M (+\$1.8M assumed for ROC) \$2,500- \$3,100/AF \$2,000 - \$2,500/AF	\$615M (+\$20M assumed for ROC) \$18.9M (+\$1.8M assumed for ROC) \$2,600- \$3,000/AF \$2,100- \$2,500/AF	\$535M (+\$20M assumed for ROC) \$21.4M (+\$1.8M assumed for ROC) \$2,500/AF \$2,100/AF	\$585M (+\$20M assumed for ROC) \$21.5M (+\$1.8M assumed for ROC) \$2,600/AF \$2,200/AF
			Portfolio 2a	Portfolio 2b		
Portfolio 2 Combined Palo Alto and Sunnyvale Regional AWPF	Variation		Combines source flow at a regional AWPF in Palo Alto and delivers 17,000 -23,000 AFY to LGRP for GWR	Combines source flow at a regional AWPF in Sunnyvale and delivers 17,000 -23,000 AFY to LGRP for GWR		
	ROC Management Strategy		Blend ROC with residual final effluent; discharge at existing outfall	Discharge ROC at a new shallow-water outfall at Guadalupe Slough for enhanced mixing.		
	Estimated Costs	Total Capital Cost Annual O&M Cost Unit Cost, 30-year Life-cycle Unit Cost, 100-year Life-cycle	\$735M (+\$40M assumed for ROC) \$19.4M (+\$1.6M assumed for ROC) \$2,900- \$3,800/AF \$2,300- \$3,000/AF	\$755M (+\$40M assumed for ROC) \$18.6M (+\$1.6M assumed for ROC) \$2,900- \$3,800/AF \$2,300- \$3,000/AF		
			Port	folio 4		
Portfolio 4	Treats source flow at two separate AWPFs and delivers a combined 17,000-23,000 AFY to LGRP for GWR					
Separate Palo Alto and Sunnyvale Regional AWPFs	Separate Facility		Palo Alto AWPF	Sunnyvale AWPF		
	ROC Management Strategy		Blend ROC with residual final effluent; discharge at existing outfall	Discharge ROC at a new shallow water outfall at Guadalupe Slough for enhanced mixing		
	Total Capital Cost Estimated Annual 0&M Cost Costs Unit Cost, 30-year Life-cycle Unit Cost, 100-year Life-cycle		\$775M (+\$40M assumed for ROC) \$20.2M (+\$1.87M assumed for ROC) \$3,000- \$4,000/AF \$2,400- \$3,200/AF			
Morgan Hill Reuse Options	Variation		Option 1 Delivers 2,900 AFY of NPR+ from SBWR to a new Morgan Hill recycled water system	Option 2 Delivers 1,900 AFY from a Morgan Hill satellite WWTP and AWPF to San Pedro Ponds for GWR	Option 3 Delivers 1,900 AFY from a Morgan Hill satellite WWTP and AWPF to Anderson Reservoir for SWA	
	ROC Management Strategy Total Capital Cost		Not applicable \$70M	Lined evaporation ponds \$75M (+\$50M assumed for ROC)	Lined evaporation ponds \$95M (+\$50M assumed for ROC)	
	Estimated Costs	Annual O&M Cost Unit Cost, 30-year Life-cycle Unit Cost, 100-year Life-cycle	\$2.6M \$2,200/AF \$1,700/AF	\$6.8M (+\$0.1M assumed for ROC) \$6,300/AF \$5,500/AF	\$7.3M (+\$0.1M assumed for ROC) \$7,200/AF \$6,100/AF	

