

Appendix D Alternatives Cost Estimates

Table 1 - Capital Cost Estimates

Description	Alt 0 - Do Nothing	Alt 1 (Bridge & Pettit)	Alt 2A (Bowen & Sunset	Alt 2B (Bowen & Pettit)	Alt 3 (Bowen & Laur)
Work on New Elevated Tank					
Elevated Tank		\$5,000,000	\$5,040,000	\$5,080,000	\$4,860,000
Tank Accessories		\$85,000	\$85,000	\$85,000	\$85,000
Process		\$205,000	\$205,000	\$205,000	\$205,000
Structural		\$747,500	\$747,500	\$747,500	\$747,500
Architectural		\$185,000	\$185,000	\$185,000	\$185,000
Site Works		\$640,000	\$640,000	\$640,000	\$640,000
Pipe Works		\$80,000	\$80,000	\$60,000	\$895,000
Electrical		\$610,000	\$610,000	\$610,000	\$610,000
Overflow Infrastructure		\$90,000	\$95,000	\$95,000	\$95,000
Land Acquisition		\$0	\$600,000	\$2,100,000	Cost appraisal req'd
Subtotal		\$7,600,000	\$8,300,000	\$9,800,000	\$8,300,000
30% Contingency		\$2,280,000	\$2,490,000	\$2,940,000	\$2,490,000
Total for new ET	\$ -	\$9,880,000	\$10,790,000	\$12,740,000	\$10,790,000
Work on Existing Facilities					
Demolition of Stevensville Reservoir and PS		\$300,000	\$300,000	\$300,000	\$300,000
Demolition of Central Ave ET		\$400,000	\$400,000	\$400,000	\$400,000
Upgrade & Rehabilitate Stevensville Reservoir & PS	\$1,151,500				
Replacement of Ex. Central Ave ET	\$4,500,000				
30% Contingency	\$1,695,450	\$210,000	\$210,000	\$210,000	\$210,000
Total for Existing Facilities	\$7,346,950	\$910,000	\$910,000	\$910,000	\$910,000
Total Capital Cost (Rounded)	\$7,300,000	\$10,800,000	\$11,700,000	\$13,700,000	\$11,700,000

Table 2 - Operation and Maintenance (O&M) Cost Estimate

	Alt 0 – Do Nothing				Alt 1				Alt 2A				Alt 2B				Alt 3			
	Qty	Unit	Rate	Amount	Qty	Unit	Rate	Amount	Qty	Unit	Rate	Amount	Qty	Unit	Rate	Amount	Qty	Unit	Rate	Amount
Annual Pump Maintenance																				
(i) Stevensville Reservoir	3	No	\$14,877	\$44,632	0	No	\$14,877	\$0	3	No	\$0	\$0	3	No	\$0	\$0	3	No	\$0	\$0
(ii) Rosehill WTP	5	No	\$14,877	\$74,387	5	No	\$14,877	\$74,387	5	No	\$14,877	\$74,387	5	No	\$14,877	\$74,387	5	No	\$14,877	\$74,387
Annual operation cost																				
(i) Energy (Rosehill WTP only)	1	LS	\$655,390.97	\$655,390.97	1	LS	\$655,390.97	\$655,390.97	1	LS	\$655,390.97	\$655,390.97	1	LS	\$655,390.97	\$655,390.97	1	LS	\$655,390.97	\$655,390.97
(ii) Energy (Stevensville Reservoir/PS only)	1	LS	\$174,770.93	\$174,770.93	0	LS	\$174,770.93	\$0.00	1	LS	\$0.00	\$0.00	1	LS	\$0.00	\$0.00	1	LS	\$0.00	\$0.00
Pump Replacement																				
(i) Stevensville PS	1	LS	\$93,193	\$93,193.08	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00
(ii) Rosehill WTP PS	1	LS	\$272,978	\$272,977.94	1	LS	\$272,978	\$272,977.94	1	LS	\$272,978	\$272,977.94	1	LS	\$272,978	\$272,977.94	1	LS	\$272,978	\$272,977.94
Central Ave. or new ET Recoating (every 15 yrs)	1	LS	\$1,295,793	\$1,295,792.51	1	LS	\$1,295,793	\$1,295,792.51	1	LS	\$1,295,793	\$1,295,792.51	1	LS	\$1,295,793	\$1,295,792.51	1	LS	\$1,295,793	\$1,295,792.51
Inspection (every 5 yrs)																				
Stevensville Reservoir	1	LS	\$22,730	\$22,730.15	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00	1	LS	\$0	\$0.00
Central Avenue ET	1	LS	\$22,730	\$22,730.15	1	LS	\$22,730	\$22,730.15	1	LS	\$22,730	\$22,730.15	1	LS	\$22,730	\$22,730.15	1	LS	\$22,730	\$22,730.15
Sub-Total				\$2,660,000				\$2,320,000				\$2,320,000				\$2,320,000				\$2,320,000
Contingency (30%)				\$798,000				\$696,000				\$696,000				\$696,000				\$696,000
Total (Rounded)				\$3,500,000				\$3,000,000				\$3,000,000				\$3,000,000				\$3,000,000

Table 3 - Summary of Capital and O&M Cost Estimates

Description	Alternatives				
	0	1	2A	2B	3
Capital Cost	\$7,300,000	\$10,800,000	\$11,700,000	\$13,700,000	\$11,700,000
Operation and Maintenance	\$3,500,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Total Life Cycle Cost	\$10,800,000	\$13,800,000	\$14,700,000	\$16,700,000	\$14,700,000
Population (2041)	41,258	59,567	59,567	59,567	59,567
Cost Per Person	\$261.77	\$231.67	\$246.78	\$280.36	\$246.78

Note: Costs rounded up to nearest \$100,000.