Capital Project Worksheet

Forest View Acres Water District

ON-GOING WORKSHEET

Forest view A	cres Water District								
Area of Improvement	Facility	Project	Priority Ranking Sheet 2 for Cash Flow Priority 1 Items	Capital Cost Very Rough Costs in 2020 dollars	Description/Project value	Concerns	Other Comments		
	Surface Water Plant								
Surface Water Source	Fix Filters/Media		DONE	\$5,000					
	Short Term	Possibly replace one primary filter	3	\$30,000	Replacing the primary filter is not an immediate need but certain other fixes to the secondarys are immediate need. Vessel cost is approx \$13,500 but installation and removal/diposal of existing vessel would also be required.				
		Backwash to Primary with Raw	2		Consider Replacing Clean Water Backwash with Rawmust be primary filters only				
	Long Term	Full Plant Replacement	2	\$1,500,000	water/power efficient	Plant is aging substantially Borderline vs current standards Getting increasingly unreliable This must be considered a < 5 year need	We have not delved deeply into styles or plant types. There are numerous options but we continue to currently lean to more traditional treatment which lends itself to a wider variety of influent turbidities		
	Intake Equalization		2	\$280,000	Increases Efficiency of SWTP during times of lower flows Important to make this work or convertible to new plant	Helps with operation, does not extend life of basic plant			
	Alluvial Water Well (not really Capital at this time)	Long Term Project First efforts probably soft costs Legal and Engineering	Unranked	Soft Costs \$150,000	Requires significant legal and engineering work to obtain water rights Could produce 80 to 90 % of Arapahoe Input	Outcome a bit uncertain			
	Raw Water Delivery/Pipeline	Replace all or portions of this line, this could be phased	3	\$2,000,000	This is critical to delivering the raw water to surface plant	Freezing problems Compentency problems Size issues Exteremely expensive and difficult to replace			
Denver Basin Source		Priority 1 Arap Plant Upgrades	1	\$30,000.00	Instrumentation and Control Modifications: Water On Floor Monitor, Internet and New Dialer to Allow Remote Access to Set Points	Aging plant			
	Arapahoe Plant			\$5,000	Second Booster Pump added for redundancy	Long Term Radium Issues			
				\$2,000	Seal Existing Building Wall Penetrations				
		Priority 2 Arap Plant Upgrades	2	\$1,000	Paint Building	Water Availability/Reliability is predictable	New Regulatory Requirements: Issues related to TENORM will arise in late 2021		
				\$10,000	Site Drainage Improvements - Grading, Gravel and Culvert				
				\$2,000	Replace/Repair Garage Door				
				\$2,000	Replace Heater in Office Space				
				\$25,000	Switch Filter Backwash to Fresh Water				
	Arapahoe Well Install New Pump	Pump Install	Done		Done				
	Dawson Well/Delivery	Implement Dawson Well	1	\$750,000	Partially overlaps A Plant issues Requires certain improvements in A plant	Water Availability is predictable Long Term Radium Issues Uncertainties in required treatment	New Regulatory Requirements: Issues related to TENORM will arise in late 2021		
Distribution and Other System Elements	Clovenhoof Easement/ Pipeline	Six Inch Line	1	\$70,000 to \$150,000	Does not include any cost for land easements This remains a bit of an unknown until we dig into certain issues. There is a probably a minimum of 450 feet of pipe and easement with another 750 feet of maybe.	This project is generally required to replace a facility that is inadequate and does not have adequate legal authority for placement and operation.	Portions of this effort are hoped to be aided by the adjacent homeowner who needs service. Some horsetrading may benefit		
	System Interconnects	Develop mutual aid Interconnect between FVAWD and Town of Palmer Lake and/or Town of Monument	2	\$150,000	This is not a new source Consider Mutual Aid Connection Agreement Town of Monument on lower side of system. No cost shown	Requires easement ROW ???	A temporary connection can be implemented with Palmer Lake, but lacks good operation characteristics. This would be a fire hydrant above ground fire line coming into Booster Station. We have no hydraulics or other info on Monument		
	Distribution Facilities Shiloh PRV Distribution Replacement/Repair		3	Clovenhoof (\$18,000)	Distribution replacements sometimes are opportunity driven and sometimes are third party conditions driven. One option is to fund these types of replacments is to allocate annual budgets. One common intent is to budget say \$50,000/year		Funding of \$50,000/year (to be accumulated) could finance 250 feet of pipe per year. Even though a short 250 foot run might be too small a project, unless need driven, this also accounts for Valve and PRV work.		
	SCADA ???				We do not have a specific project for SCADA.		SCADA is an ongoing element. Most projects have some SCADA involved if/when there is a mechanical element involved		
	Potable Water Storage	Recoating	2	\$190,000	Interior and exterior recoat	Existing Tank is currently adequate, but coating replacement is in near future maybe +/- 5 years.			
	Six Inch Line Replacement (1500 Feet)		2	\$262,500	This is a non-specific project. Although many lines in FVAWD have been replaced, others are yet in need. This is not associated with any particular segment.				

Capital;

These are generally projects that expand capacity and or meet an expended regulatory need. Replacements when considered capital are generally global or at least regional in nature. Typically replacement of an aging pipeline /pump is considered R/R.

Possible Rough Cash Flow Estimates--

	2021				2022				Check Totals	
Priority One Projects	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Qtr	Line Total	Project Total
	1	2	3	4	1	2	3	4		
Arapahoe Well Pump Relacement									\$ -	\$ -
Palmer Lake Sewer Adjustment Easement ??? Soft Costs Engineering/legal/negotiation	\$ 7,500		\$ 2,500						\$ - \$ 10,000	
Implementation Timeline Very Uncertain	, ,,,,,,,,		\$ 60,000	\$ 60,000	\$ 20,000.0				\$ 140,000	\$ 150,000
Arapahoe Plant Priority 1 Improvements		\$ 37,000							\$ 37,000	\$ 37,000
Dawson Well/Delivery		\$ 12,000	\$ 10,000	\$ 35,000	\$ 7,500	7500	7500		\$ 79,500	\$ 79,500
·				\$ 70,000	\$ 250,000	\$ 300,000	\$ 60,000		\$ 680,000	\$ 680,000
									\$ -	
									\$ - \$ -	
Totals	\$ 7,500	\$ 49,000	\$ 72,500	\$ 165,000	\$ 277,500	\$ 307,500	\$ 67,500	\$ -	\$ 946,500	\$ 946,500

Soft Costs

Hard Costs