

SCADA System Replacement

Situation Summary

Our SCADA vendor, Remote Control Systems, has notified the District that our current Abbey Systems SCADA platform will no longer be supported after the end of 2027.

SCADA (Supervisory Control and Data Acquisition) is the system that allows District operators to remotely monitor and control pumps and valves across the water system from the main control center. Once vendor support ends:

- No further software patches or security updates will be available.
- Replacement parts and software licensing for the old system will be very difficult.
- Cybersecurity and reliability risk increases the longer an unsupported system stays in service.

Bottom line: Planning for replacement should begin now to allow enough time for design, procurement, phased installation, and testing before the 2027 deadline.

Current System Scope

Location	Function
Main Control Center	Central SCADA computer / operator workstation
Site 1–7 (remote sites)	Pump and/or valve control, communicating to control center via radio (no cellular)

The District currently uses radio-based telemetry rather than cellular communications between the control center and the 7 remote sites, primarily to avoid recurring monthly cellular service costs. Any replacement system should be evaluated for compatibility with our existing radios/frequencies to control new equipment costs.

Rough Order-of-Magnitude Cost Estimate

This is a planning-level estimate only, intended to give the Board a sense of scale before a formal bid process begins..

Cost Component	Rough Range	Notes
Master station (server, SCADA/HMI software, licensing)	\$30,000 – \$60,000	One-time setup at control center
Remote site hardware (PLC/RTU, panel, I/O wiring, enclosure) — 7 sites	\$105,000 – \$210,000	\$15,000–\$30,000 per site
Radio/communications equipment (retain or replace to match new platform)	\$35,000 – \$105,000	\$5,000–\$15,000 per site
Engineering, programming, system integration, project management	\$30,000 – \$60,000	~15–20% of hardware cost
Testing, staff training, documentation	\$5,000 – \$15,000	
Contingency (~15–20%)	\$35,000 – \$70,000	Standard
Estimated Total	\$260,000 – \$475,000	Rough planning range

Key cost variable: Whether our existing radios/frequencies are compatible with the new SCADA platform, or whether new radios are required at each of the 7 sites. This should be confirmed early with prospective vendors.

Proposed Implementation Approach

A phased, site-by-site rollout is the standard industry practice for multi-site SCADA replacement. It allows the old and new systems to run in parallel during transition, minimizing risk of service interruption.

Phase	Activity	Estimated Duration
1	Define requirements & write technical specification for each of the 7 sites + control center	2–3 months
2	Solicit bids from SCADA integrators; select vendor with best fixed-price bid	2–3 months
3	Build/program new master station at control center (parallel to existing system)	2–3 months
4	Pilot trial at one representative remote site; validate performance	1–2 months
5	Roll out to remaining 6 sites in batches, testing each before removing old equipment	6–9 months
6	Full integration and removal of old Abbey Systems platform	By end of 2027

Total estimated timeline: 12–20 months, providing buffer ahead of the December 2027 deadline.