Capital Regional District

625 Fisgard St.,
Victoria, BC V8W 1R7

Notice of Meeting and Meeting Agenda
Beddis Water Service Commission

Tuesday, February 10, 2026 | **1:30 PM** | **SIMS Boardroom, 124 Rainbow Road, Salt Spring Island BC**

Special Meeting

MS Teams Meeting Link

C. Cheeseman, G. Holman, M. McCormick, C. Smid,

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We Pledge to make our meetings a place where all feel welcome and respected.

1. Territorial Acknowledgement

2. Election of Beddis Water Service Commission Chair

3. Approval of Agenda

4. Presentations/Delegations

Delegations will have the option to participate electronically. Please complete the online application for "Addressing the Beddis Water Service Commission" on our website and staff will respond with details. Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

Alternatively, you may email your comments on an agenda item to the Commission at saltspring@crd.bc.ca.

5. Special Meeting Matters

5.1. 26-0150 Capital Projects Funding - Beddis Water Service Voter Approval for Borrowing

Recommendation: That the Beddis Water Service Commission recommends:

1. That the petition process be initiated to borrow up to $320,000 over 15 years debt term to complete the capital improvement projects.
2. If the petition process is successful, that a loan authorization bylaw be advanced to the Electoral Areas Committee and Capital Regional District Board for readings and adoption; and
3. That staff complete the remaining steps required to secure the funds and begin the projects.

Attachments: Staff Report: Capital Projects Funding - Beddis Water Service Voter Approval fo

Presentation: SCADA and Electrical Improvements Overview

6. Adjournment

SUBJECT **Capital Projects Funding - Beddis Water Service Voter Approval for Borrowing**

ISSUE SUMMARY

To provide information to the Beddis Water Service Commission outlining options for Voter Approval for Borrowing to replace the Supervisory Control and Data Acquisition (SCADA) infrastructure and execution of electrical upgrades.

BACKGROUND

SCADA Upgrades – Communications and controls upgrades

This project involves the replacement of obsolete Supervisory Control and Data Acquisition (SCADA) components at the Beddis Water Treatment Plant. The existing SCADA infrastructure has reached end-of-life, resulting in increased risk of complete system failures, lack of vendor support due to components no longer available by manufacturers, and incompatibility with modern equipment. The upgrade will include replacing outdated hardware, software, and communication equipment with current, supported solutions that meet industry standards and regulatory compliance.

Additionally, the upgrade would enhance communication capabilities between the water treatment plant and the main operations hub at Ganges. The improvement would ensure real-time data sharing, centralized monitoring, including alarms, and streamlined operational control across the entire water system. Similar upgrades are planned for at Highland/Fernwood Water Treatment Plant and Fulford Water Treatment Plant and are in progress at Ganges Wastewater Treatment Plant.

The scope of work includes developing and implementing a migration plan, upgrading communication networks, wiring and installation of equipment, testing the new controls hardware and SCADA system and training operations staff.

Electrical Upgrades

The electrical upgrades project will support the installation of the upgraded SCADA equipment. Occupational Health and Safety items have been identified that require panel modifications to be resolved and any Electrical Code requirements will be applied. Efficiency will be gained from scheduling this work in parallel with the SCADA upgrades. An updated, as-built, line drawing will be developed.

The project budgets and funding sources are noted in Table 1 and 2 below.

Table 1: Capital Projects Requiring Debt Funding

Project #	Capital Project Description	Debt Budget	Scope
24-08	Beddis WTP SCADA Upgrades	$220,000	Communication and Control Upgrades at WTP
25-03	WTP Electrical Upgrades	$100,000	Electrical upgrades at WTP

Table 2: Budget Funding Breakdown

Project	Funding Source	Budget (2026)
WTP SCADA Upgrades	Debt	$ 220,000
	Grant (Community Works Fund)	$ 80,000
WTP Electrical Upgrades	Debt	$ 100,000

Capital Reserve Funds (CRF) are used to pay for capital expenditures that are not funded by other sources such as grants, operating budget, or debt, but due to insufficient levels in this reserve, debt funding with a loan authorization bylaw is required to borrow the necessary estimated $320,000 to complete the projects. Under the Local Government Act, participating area approval is required prior to adopting a loan authorization. Approval may be obtained for a service in an electoral area in one of three methods: by petition, by Alternative Approval Process (AAP), or assent voting (referendum).

ALTERNATIVES

Alternative 1
That the Beddis Water Service Commission recommends:

1. That the petition process be selected to borrow up to $320,000 over 15 years debt term to complete the capital improvements projects.
2. If the petition process is successful, then a loan authorization bylaw will be advanced to the Electoral Areas Committee and Capital Regional District Board for readings and adoption; and
3. That staff complete the remaining steps required to secure the funds and begin the projects.

Alternative 2
That the Beddis Water Service Commission recommends:

1. That the Alternate Approval Process (AAP) be selected as the method for obtaining participating area approval to borrow up to $320,000 over 15 years debt term to complete the capital improvement projects.
2. That a loan authorization bylaw be advanced to the Electoral Areas Committee and Capital Regional District Board for up to three readings and be referred to the Inspector of Municipalities for approval prior to conducting an AAP process.
3. If the AAP process is successful, that staff complete the remaining steps required to secure the funds and begin the project.

Alternative 3

That the Beddis commission refers this report back to staff for additional information.

IMPLICATIONS

Elector Approval of Loan Authorization Bylaw

Elector approval may be secured through a petition if the landowners, not tenants, representing at least 50% of the parcels in the service area, that in total must represent at least 50% of the assessed value of land and improvements, submit signed forms supporting the proposal to borrow funds.

The petition process is the least costly and most efficient approval process and typically takes up to 6 months to complete the process; however, if less than 50% support it, assent voting (referendum) will be required prior to borrowing the funds.

Elector approval is obtained from an AAP when less than 10% of estimated eligible electors in the participating area oppose the proposed borrowing unless an assent voting (referendum) is held. The estimate of eligible electors will include the count of non-resident property owners and tenants residing in the service area as provided from Elections BC voters list. If less than 10% respond in opposition, then no further assent is required. If 10% or more oppose then an assent vote or referendum is required, which can cost upwards of $70,000 and must be held within 80 days of the AAP deadline date.

Overall, the petition process is the most efficient, cost-effective method to obtain voter approval; it is simple, has the least risk of failure and offers direct engagement between property owners and CRD project staff.

Implementation of Petition Process

The steps required to obtain elector approval via the petition are outlined below:

- Confirm committee approval for a petition process to obtain elector approval.
- Complete and send petition letter addressed to each owner(s) of the parcel/folio within the participating area.
- Advertise the petition within the Beddis Water Service (direct mail, notice boards and website).
- Host a public open house to share information and gather signatures. (not required but recommended).
- Results of the petition will be determined after the petition has been closed, which will be no sooner than 30 days after letters have been issued to each owner.
- If a 50% approval threshold is exceeded, present the loan authorization bylaw to the Electoral Areas Committee and CRD Board with a recommendation to introduce and provide up to three readings.
- Send the loan authorization bylaw to the British Columbia Inspector of Municipalities.
- Following approval by the Inspector, return the loan authorization bylaw to the CRD Board for final approval.
- Following the one-month bylaw challenging period, complete process to draw upon loan and begin projects.

Financial Implications

Long-term debt must be arranged through the Municipal Finance Authority (MFA), which offers a maximum lending term of 30 years. MFA will set a fixed interest rate for an initial term, generally 10 years, and subsequently refinance the loan, typically in five-year increments. The loan authorization bylaw will define the maximum debt term; however, the length of the initial fixed term and the subsequent refinancing terms are at the sole discretion of the MFA.

For analytical purposes only, five different amortization term scenarios are simulated in Table 3. The cost of borrowing is the total of the estimated principal and interest payments over the borrowing term. The information in Table 3 is a high-level estimation only, based on the indicative interest rates published by MFA at the time of this staff report. The actual cost of borrowing will be dependent on the loan amount, actual interest rates at the time of borrowing and refinancing, and the amortization term selected.

Table 3: Debt Servicing Costs - Simulation

Borrowing Amount	**$320,000**				
Borrowing term (years)	10	15	20	25	30
Indicative Interest Rate*	4.02%	4.53%	4.76%	4.76%	4.76%
Cost of Borrowing $	403,309	468,042	529,791	584,830	641,400
Annual Debt Payment $	40,331	31,203	26,490	23,393	21,380
Annual Parcel Tax per taxable folio $ **	297	229	195	172	157

**MFA Indicative Market Rates used for analysis, taken from MFA Website, January 8, 2026.*
*** Calculated parcel tax assuming no change in total folios, set at 2025 level of 136 folios.*

CRD staff consider multiple guidelines with respect to amortization term, including estimated useful life of the infrastructure, the impact of the annual debt payment requirement, the total cost of borrowing over debt term, and the interest rate risk.

A longer amortization term will minimize the annual debt payments, but results in higher total cost of borrowing and higher interest rate risk exposure. Although a debt term of 10 years has the lowest total borrowing costs, a 15-year term is recommended in balancing the annual debt payment requirement for ratepayers, the interest rate risk and the useful life of the capital assets.

Staff will continue pursuing other funding opportunities and if any become available, debt borrowing will be reduced. Debt funds are only accessed on an as needed basis.

CONCLUSION

SCADA equipment is not supported or available and electrical code requirements in the Beddis Water Service must be corrected to ensure safe, reliable delivery of water service to rate payers. Staff have assessed technical solutions, funding options and electoral approval processes to determine the most efficient and cost-effective path forward. Staff are recommending proceeding with a petition process to authorize borrowing up to $320,000 to complete the SCADA equipment replacement and electrical upgrades. If supported, staff will advance the loan authorization bylaw and complete the steps needed to secure the funding.

RECOMMENDATION

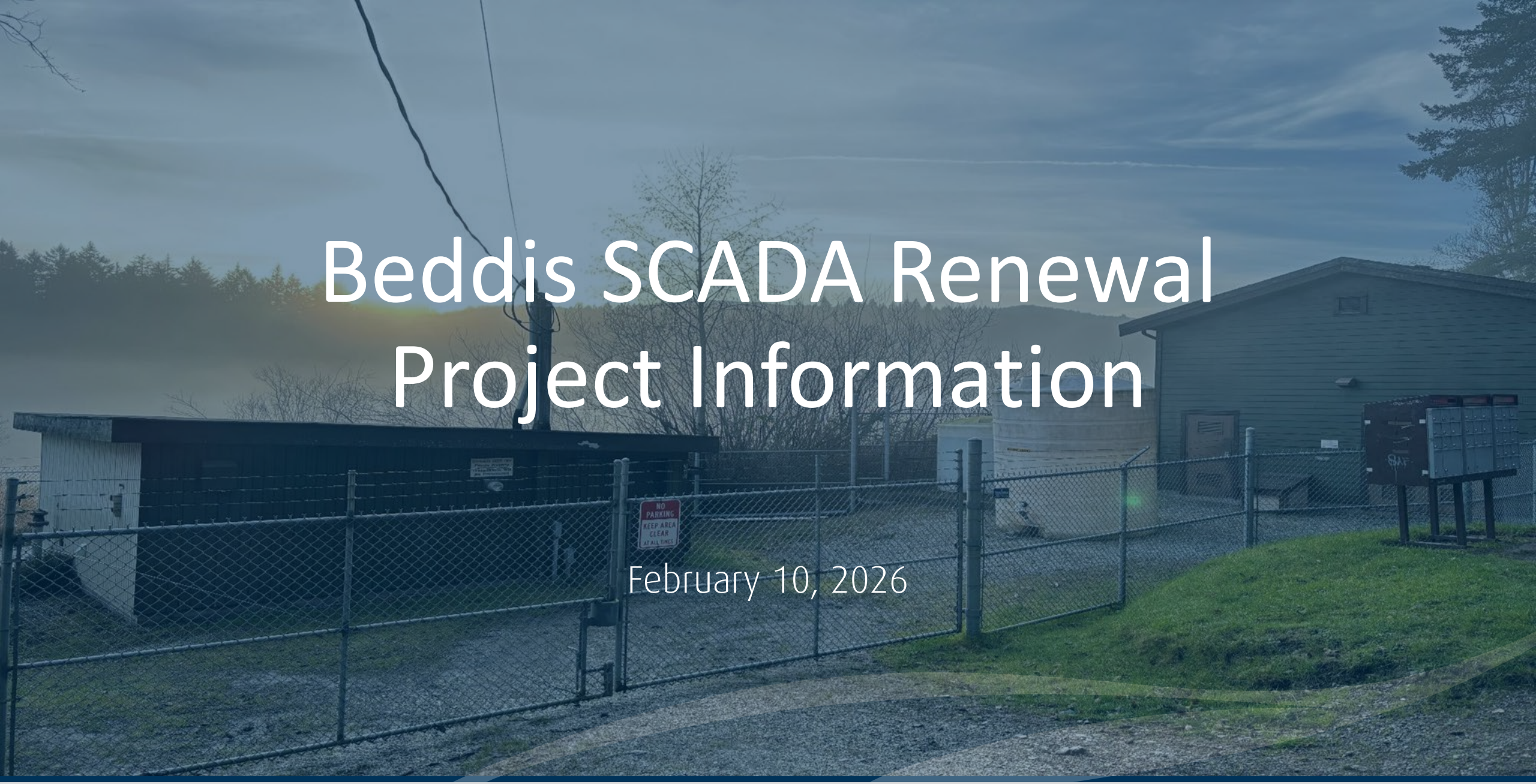
That the Beddis Water Service Commission recommends:

1. That the petition process be initiated to borrow up to $320,000 over 15 years debt term to complete the capital improvement projects.
2. If the petition process is successful, that a loan authorization bylaw be advanced to the Electoral Areas Committee and Capital Regional District Board for readings and adoption; and
3. That staff complete the remaining steps required to secure the funds and begin the projects.

Submitted by:	Carolyn Hopp, P. Eng., Engineering Manager, Salt Spring Island Administration
Concurrence:	Dan Ovington, BBA, Senior Manager, Salt Spring Island Administration
Concurrence:	Stephen Henderson, MBA, P.G.Dip.Eng, BSc, General Manager, Electoral Area Services

ATTACHMENT(S)

Presentation: SCADA and Electrical Improvements Overview



Beddis SCADA Renewal Project Information

February 10, 2026

Territorial Acknowledgement

The CRD conducts its business within the Territories of many First Nations, including but not limited to BOḰEĆEN (Pauquachin), MÁLEXEŁ (Malahat), paaʔčiidʔatx̣ (Pacheedaht), Spune'luxutth (Penelekut), Sc'ianew (Beecher Bay), Songhees, SȾÁUTW (Tsawout), T'Sou-ke, WJOŁEŁP (Tsartlip), WSIKEM (Tseycum), and xʷsepsum (Kosapsum) Nations, all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.

Background

SCADA is Supervisory Control and Data Acquisition and includes hardware components such as a server computer to host data, a PLC, RTU for remote or standalone equipment and an HMI for operator interface

A PLC is a Programmable Logic Controller which is hardware equipment that contains a logic program which accepts inputs and gives outputs (I/O) to control equipment. Inputs can be from sensors and timers, and outputs can be to valves, switches and alarms.

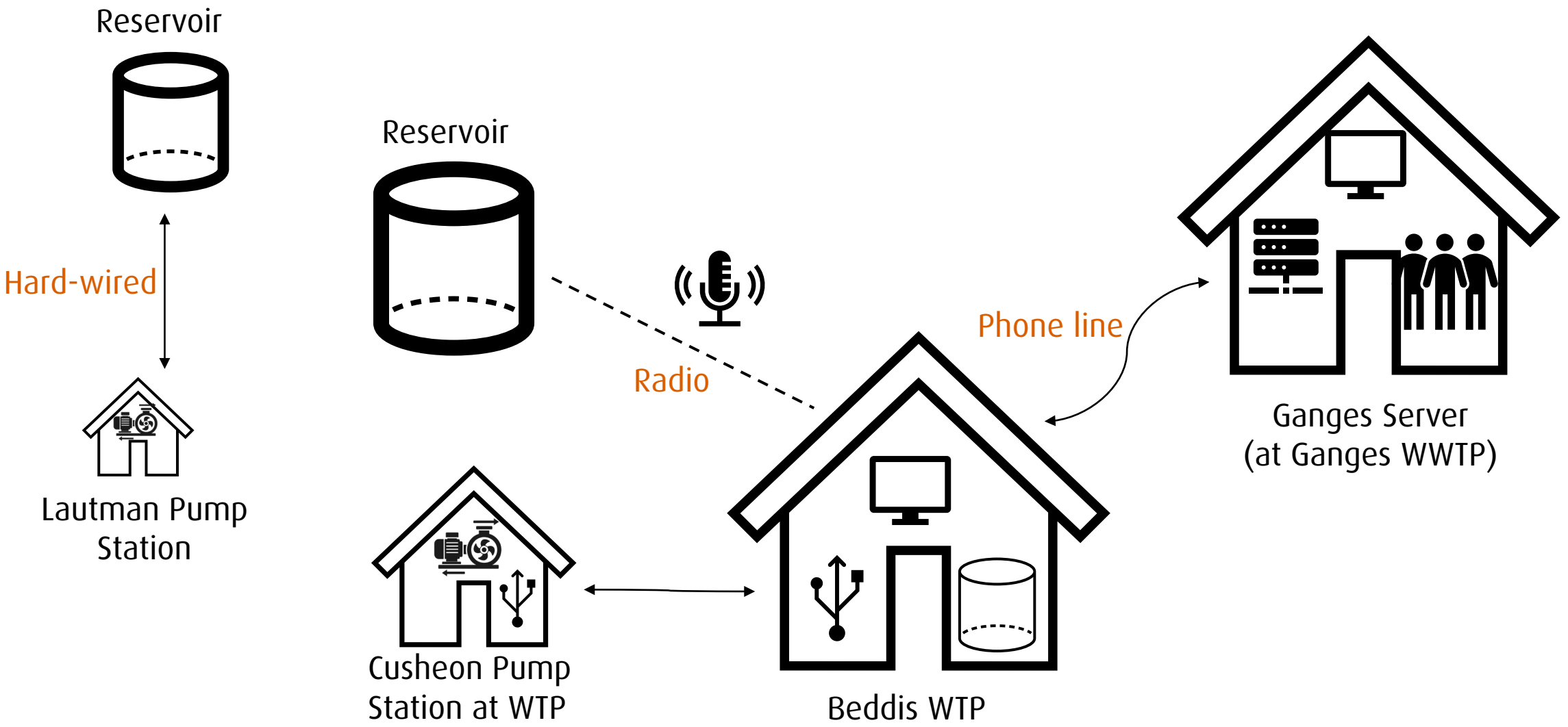
An HMI is a Human Machine Interface that allows the operator to monitor and interact with the process and equipment through the PLC. The HMI can be used for monitoring or can be for resetting or adjusting setpoints and operating parameters.

An RTU is a Remote Terminal Unit that has minor control logic and I/O terminals to feed into a PLC.

Background

- The Beddis Water Service was created in 1969 as the Beddis Waterworks District and became a CRD service in 2004. The service provides drinking water for 128 of the 137 properties in the Beddis Service area. The Water Treatment Plant (WTP) was built in 2010.
- The WTP is controlled locally at the WTP by a Programmable Logic Controller (PLC). The PLC uses inputs from the equipment and sends outputs to run the plant automatically.
  - Alarms and some limited operating conditions are visible to the operators at Ganges through the Ganges server.
  - Communications for alarms and data are via the SCADA equipment which is currently operating on a non-secure dial-up modem which is scanned every half hour.
- The SSI operations team operates and maintains the system for it to run 24/7 year-round.
  - Regular site visits to Beddis are three times per week for approximately 2 hours each.

Background


Reservoir
Hard-wired
Lautman Pump Station
Reservoir
Radio
Phone line
Ganges Server (at Ganges WWTP)
Cusheon Pump Station at WTP
Beddis WTP

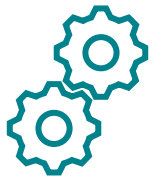
Upgrade Project

- A PLC upgrade is required to expand communications. The current PLC, Pump station RTU and I/O cards are obsolete with no available replacement. There is also no expansion capacity for communications.
- The SCADA upgrades required at Beddis are the upgrade to cell modem communications at the WTP to allow stable and secure communications to the Ganges server.
- Design of the PLC/SCADA system is underway, funded by reserves. CRD experts in house are assisting in the design.

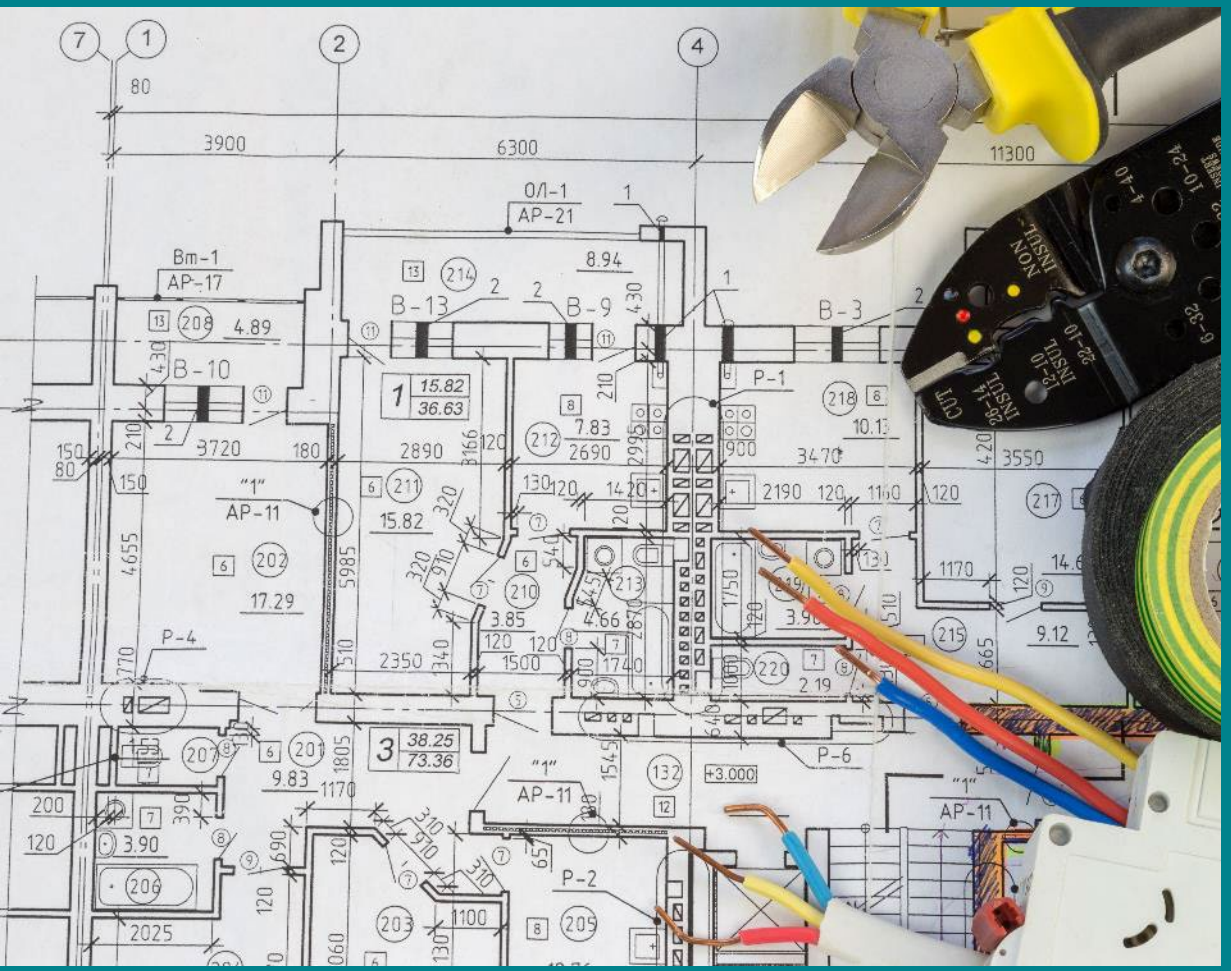
Benefits

The improved real-time communications will allow for remote assessment and reset, potentially less site visits, including following power outages.

The improved hardware will provide reliability and prevent system failure due to I/O card and communications failure. This is a current risk for operations.



Improved operation modes and real-time data collection will be possible with an upgraded PLC and I/O.



Electrical Upgrade Project

- The electrical upgrades are necessary to support the new SCADA equipment, maintain Electrical Code compliance and for identified Occupational Health and Safety issues.
- Efficiency will be gained from scheduling this work in parallel with the SCADA upgrades.
- An updated line drawing will be developed for an as-built record.

Funding Sources

Project	Funding Source	Budget (2026)
WTP SCADA Upgrades	Debt	$ 220,000
	Grant (CWF)	$ 80,000
Electrical Upgrades	Debt	$ 100,000

- The two urgent projects that are included for the borrowing are the WTP SCADA Upgrades and the WTP Electrical Upgrades
- Community Works Funds (CWF) are available to supplement the SCADA Upgrades project ($80,000).

Borrowing options

Borrowing Amount	$320,000				
Borrowing term (years)	10	15	20	25	30
Indicative Interest Rate*	4.02%	4.53%	4.76%	4.76%	4.76%
Cost of Borrowing $	403,309	468,042	529,791	584,830	641,400
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- The Parcel Tax associated with the new borrowing will be added to each rate-payers annual property tax.
- The borrowing amount will be up to **$320,000**. If less is required to complete the project, less will be borrowed.
- CRD Finance team recommend the 15-year term.

Next Steps

Open House → Petition → Bylaw → Project kickoff

For additional information please check back at the Beddis Water Service webpage: www.crd.ca/beddis-ws

For questions, please contact saltspring@crd.bc.ca or 250-537-4448