

**REPORT TO SURFSIDE PARK ESTATES WATER SERVICE COMMITTEE
MEETING OF THURSDAY, JUNE 26, 2025**

SUBJECT **Capital Projects and Operational Update - June 2025**

ISSUE SUMMARY

To provide the Surfside Park Estates Water Service Committee with capital project status reports and operational updates.

BACKGROUND

The Surfside Park Estates Water System is located on the southwest side of Mayne Island in the Southern Gulf Islands Electoral Area and provides drinking water to approximately 70 customers. Capital Regional District (CRD) Infrastructure and Water Services is responsible for the overall operation of the water system with day-to-day operation, maintenance, design, and construction of water system facilities provided by the CRD Infrastructure, Planning and Engineering and Infrastructure Water Operations divisions. The quality of drinking water provided to customers in the Surfside Park Estates Water System is overseen by the CRD Water Quality division.

CAPITAL PROJECT UPDATE

23-01 | Alternative Approval Process (AAP) / Petition

Project Description: Undertake an AAP or petition to borrow funds to carry out water system improvements in future years.

Project Rationale: Capital Reserves are insufficient to carry out needed capital improvements in the water service. In the absence of grant funding, approval to secure debt will be required in order to proceed with capital improvements.

Project Update and Milestones:

- CRD has incorporated preliminary cost estimates into the 2025 Capital Plan and will await Committee review and comment prior to proceeding with the means to secure debt funding.
- Separate staff report proposed outlining staff recommendation for obtaining public approval to secure debt funding.

Milestone	Completion Date
Staff Report for Commission direction on borrowing process	June 2025
Funding approved	March 2024

25-02 | Replacement of UV Equipment

Project Description: Replacement of UV equipment at the Surfside Water Treatment Plant.

Project Rationale: Existing UV equipment is at end of life and is needing repair parts which are no longer supported. Replacement is deemed necessary.

Project Update and Milestones:

- Existing unit failure led to expedited order of replacement unit. Price escalation since budgeting in previous year, as well as new controls requiring additional SCADA integration effort have resulted in cost overruns. Capital Plan Amendment has been provided in a separate June 2025 staff report.

Milestone	Completion Date
Capital Plan Amendment for additional controls upgrades	June 2025
Installation of replacement UV reactor complete	Q2 2025

OPERATIONAL UPDATE

This is an operational update reporting period from February through May 2025.

- On March 4th, 2025, Operations conducted leak detection efforts of the Surfside Water System and identified several leaks at various locations within the water service area. Leak repair planning was initiated, and repairs were prioritized and scheduled based on fixing the largest leak locations first. The following are the leak sites and estimated leak flow rates:
 - Water tank fill line located between Mariners Way and the water tank: 8.5 m3/day
 - 336 Wood Dale Drive service line repair/replacement: 13 m3/day
 - 362/364 Barque Road service line repairs and standpipe isolation valve leak replacement: 9.8 m3/day.
 - Luff Road leaking 50mm diameter isolation gate valve and connection: 4.6 m3/day.
- The water leak repairs completed in March resulted in a significant reduction in daily water production for the service. Prior to the leak repairs, the average daily water production was approximately 68m3/day and after leak repairs approximately 25m3/day.
- Emergency replacement of the failing water tank solar power panels and charging system. The solar charging system recharges the battery bank which provides power to the water tank level monitoring equipment and communications system. Water level monitoring and communications is a critical function of the water system and without water level monitoring, refilling of the water tanks would not function automatically placing the system at significant risk. This equipment replacement was not budgeted for and will have a negative impact on the 2025 operating budget.
- Changeout/replacement of water treatment plant arsenic filtration media for Vessel A and Vessel B in February. It is anticipated that the arsenic filtration media replacement will be less frequent given the water leak repairs completed in March. This will have a positive impact on the operations budget.
- Water treatment plant UV equipment replacement. The replacement is part of an approved capital project 25-02.
- Several emergency callouts due to system communications failures and water tank high level alarms. This was primarily due to the failing water tank solar panels and charging system.
- Continued with weekly metals (arsenic) water quality sampling and testing frequency through the reporting period. Given the significant reduction in daily water production because of leak repairs, the frequency of this testing will be reduced to biweekly through June and July at which time sampling and testing frequency will revert back to monthly.

RECOMMENDATION

There is no recommendation. This report is for information only.

Submitted by:	Dan Robson, A.Sc.T., Manager, Saanich Peninsula and Gulf Islands Operations
Submitted by:	Jared Kelly, P.Eng., Manager, Capital Projects
Concurrence:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Planning and Engineering
Concurrence:	Jason Dales, B.Sc., WD IV., Senior Manager, Infrastructure Wastewater Operations
Concurrence:	Alicia Fraser, P.Eng., General Manager, Infrastructure and Water Services