



INFORMATION ONLY COUNCIL REPORT

To: Mayor and Council

Date: June 10, 2025

From: Ron Bowles, Chief Administrative Officer

Subject: **Rose Valley Reservoir Aeration Improvements Project Update**

Report Prepared by: Rob Hillis, Acting Director of Engineering & Operations

Report Reviewed by: Brent Magnan, General Manager of Community Development

RECOMMENDATION:

THAT the report titled " Rose Valley Reservoir Aeration Improvements Project Update" from the Acting Director of Engineering & Operations, dated June 10, 2025, be received for information.

STRATEGIC AREA(S) OF FOCUS

Invest in Infrastructure – We will invest in building, improving and maintaining infrastructure to meet the needs of, and to provide a high quality of life for, current and future generations.

BACKGROUND

At the May 27, 2025, Council meeting, staff was directed to investigate whether aeration improvements for the Rose Valley Reservoir could be completed in 2025. To provide aeration improvements as soon as possible, the project team reviewed the critical path items in the schedule that would need to be completed in succession to deliver these improvements. The best-case scenario for aeration improvements is a completion date in November following the critical path.

The first item on the critical path is determining the available power to the aeration system. BC Hydro has been engaged and has confirmed the maximum amount of power that can be provided without improving the service to three-phase power. Providing three-phase power is not included in the scope of the Reservoir improvement project as it is a costly endeavor that exceeds the funding for this project. BC Hydro has confirmed the availability of a one-phase 420-amp service. This allows the aeration procurement documents to be completed for potential vendors to provide quotes for the future aeration system.

The next item that is on the critical path is the procurement of an aeration system that can be installed by local contractors. The City's design consultant, AECOM, has prepared a draft of the specification documents, and the vendor package is expected to be issued in mid-June. The procurement will take approximately six weeks, as the City issues a package for bidding for a minimum of 25 days, which is the industry's best practice. Once the procurement is awarded to a potential vendor, the vendor will be required to submit shop drawings of the aeration system, which will need to be reviewed and approved by the design team. This process typically takes 2-4 weeks, depending on the review and if significant changes need to be made.

Following the approval of the shop drawings, the aeration equipment will need to be manufactured/shipped. The process is expected to take approximately six weeks. Once delivered, the equipment will need to be installed and commissioned. This is expected to take approximately one month.

Table 1 – Critical Path Schedule

Available Power	Develop Specifications	Procurement	Shop Drawings	Manufacturing / Delivery	Install / Commissioning
Completed	Mid-June	Early August	Late-August	October	November

Conditions in the reservoir historically have improved for algae and manganese in mid-October. Last year pre-treatment for oxidation ended on October 18th. Water quality in the reservoir is typically better throughout the winter months, with conditions changing in late spring. Historically aeration is turned off through the winter months due to the risk of lines freezing and breaking.

The critical path shown in this report is considered a best-case scenario. Realistically aeration can confidently be installed prior to May 2026 when the reservoir begins to experience seasonal changes in water quality.

FINANCIAL IMPLICATIONS

Funding for the project is \$2,500,000 from the Rose Valley Water Reserve and was approved at the November 26, 2024, Council Meeting. The project is expected to be completed within the allocated funding.

COUNCIL REPORT / RESOLUTION HISTORY

Date	Report Topic / Resolution	Resolution No.
November 26, 2024	THAT Council direct staff to amend the 2024 Budget to include an \$2,500,000 (two million five hundred thousand dollars) for Rose Valley Reservoir - Source	C289/24

Water Improvements funded from Rose Valley Water Reserves.

PowerPoint: Yes ☐ No ☒