

**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, DECEMBER 7, 2021**

SUBJECT **2022 Juan de Fuca Water Distribution Service Capital Plan Amendment**

ISSUE SUMMARY

It is proposed to amend the 2022 Capital Plan and adjust the budget for the following projects:

1. Project 20-06 – Sun River Reservoir Replacement
2. Project 20-07 – Goldstream AC Replacement
3. Project 23-01 – Tank 4 and McCallum Pump Station and Pump Station 7 and remaining Supply Main to Skirt Mountain Reservoir

BACKGROUND

On October 5, 2021, the Juan de Fuca (JDF) Water Distribution Commission (Commission) recommended to the Capital Regional District Board, approval of the 2022 Operating and Capital Budget and the Five Year Capital Plan. Since that time, tenders have closed on the Sun River Reservoir Replacement project with the lowest tender received being approximately 29% over budget despite the fact there were 8 bidders. Six bids were within 6% of the lowest tender. Given the competitive nature of the bids, staff feel that the budgets for the above referenced projects need to be increased to ensure adequate approved funding is available to award and complete the projects.

To better understand the volatility of the construction market, staff asked the two consultants delivering the three projects referenced above, Parsons and Stantec, to provide some bid analysis to determine construction market cost drivers in relation to the types of infrastructure projects the Capital Regional District (CRD) is delivering. They were also asked to query contractors and suppliers for their input. A summary of their responses follows:

- Construction inflation has far exceeded the general inflation reported for the region. While general inflation has been reported in the 4-5% range, construction inflation has increased in the 25-30% range for the type of projects the CRD is undertaking in the JDF service.
- The increase in construction inflation is split approximately 80% for materials and 20% for labour. Labour increases are mostly based on upward pressure on compensation due to competition in attracting staff, and the overall shortage of skilled labour. Some specific increases by component are:
 - Labour – 20%
 - Tank materials – 15%
 - Pipe - 40-50% (dependant on pipe material)
 - Fittings – 40%
 - Concrete – 15%
 - Electrical – 40%

Some of the drivers behind these increases include supply chain issues, shortage of materials due to high demand and lack of raw materials available for manufacturing. While the supply chain

issues may resolve in the near future, it is expected material availability will continue to be an issue for some time. Senior levels of Government in both the United States and Canada have contributed to high demands with increased infrastructure spending. Volatility in pricing is expected to continue.

Given the preceding, the request for budget increases, by project, are as follows. A summary of proposed budget increases are included in Appendix A.

1. Project 20-06 – Sun River Reservoir Replacement (Sun River)
 - Original budget approved for 2022 was \$1.3 million, which included design and construction.
 - Funding is provided by \$1.1 million from JDF capital reserves, and \$200,000 from the Sun River developer.
 - Cost of construction was budgeted at \$1.1 million, however the tenders received a low bid of \$1,424,070 + GST.
 - As a result, the project is short by \$324,070 and requires additional funding.
 - To allow for contingency, staff are requesting to increase the budget by \$375,000 to \$1.675 million, which will be funded by \$1.475 million from JDF capital reserves and \$200,000 from the Sun River developer.
 - Tenders closed on November 2, 2021 and are awaiting award subject to funding approval.
2. Project 20-07 – Goldstream Asbestos Cement (AC) Replacement (Goldstream AC)
 - Original budget approved for 2022 was \$5.0 million which included design and construction.
 - Funding is provided entirely from JDF capital reserves.
 - Cost of construction was budgeted at \$4.2 million with the remaining budget of \$800,000 being engineering costs and staff time.
 - Cost escalation is expected to increase construction costs to \$5.0 million with an overall budget request of \$5.8 million for design and construction. This includes a contingency of 10%.
 - Tendering is expected to take place in December 2021.
3. Project 23-01 – Tank 4 and McCallum Pump Station, Pump Station 7 and remaining Supply Main to Skirt Mountain Reservoir (Skirt Mountain Improvements)
 - Original budget approved for 2022 was \$7.11 million which included design and construction.
 - Funding is provided entirely by the JDF Development Cost Charge (DCC) program.
 - Cost of construction was budgeted at \$6.54 million with the remaining budget of \$570,000 being engineering costs and staff time.
 - Cost escalation is expected to increase construction costs to \$8.54 million with an overall budget request of \$9.11 million for design and construction. This includes a contingency of 10%.
 - The Supply Main to Skirt Mountain Reservoir portion of the project was completed on budget in early 2021 by internal CRD staff. Tendering for the remainder of the project is expected to take place in December 2021.

ALTERNATIVES

Alternative 1

That the Juan de Fuca Water Distribution Commission recommends to the Capital Regional District Board, that the 2022 Juan de Fuca Water Distribution Service Capital Budget and Five Year Capital Plan be amended as shown in Appendix A.

Alternative 2

That this report be referred back to staff for additional information.

IMPLICATIONS

Financial Implications

Both the Sun River and the Goldstream AC projects are funded by capital reserves which are able to fund the increased budget requests. In addition, Sun River is also funded with a developer contribution.

The Skirt Mountain Improvements project is funded entirely with DCC program reserves which are available.

Should all three budget requests be approved, there is no expected impact to the 2022 approved water rates.

Service Delivery Implications

All three of the identified projects are instrumental with regards to system hydraulic performance, system resiliency, and the continued provision of potable water to the JDF service.

Project completion in the near future is critical to maintaining overall system performance.

Staff considered deferring the projects to a time in the future when construction costs are lower but given the information available, that is not expected soon.

CONCLUSION

Due to significant increases in the cost of labour and materials, capital budget increases are being requested to deliver the Sun River, Goldstream and Skirt Mountain projects in 2022. Adequate funding is available for the proposed budget amendments associated with all three projects and there is no expected impact to the 2022 approved water rates.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission recommends to the Capital Regional District Board, that the 2022 Juan de Fuca Water Distribution Service Capital Budget and Five Year Capital Plan be amended as shown in Appendix A.

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ATTACHMENT

Appendix A: Proposed Amendment to the 2022 Juan de Fuca Water Distribution Service Capital Plan