JWDC 20-04



REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION MEETING OF TUESDAY, OCTOBER 6, 2020

SUBJECT Juan de Fuca Water Distribution Service - 2021 Operating and Capital Budget

ISSUE SUMMARY

To provide an overview of the 2021 Juan de Fuca Water Distribution Service budget, highlighting the proposed significant changes from the 2020 budget. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

BACKGROUND

The draft 2021 Juan de Fuca (JDF) Water Distribution Service budget has been prepared for the JDF Water Distribution Commission's (Commission) consideration. The Commission will make budget recommendations to the Capital Regional District (CRD) Board through the Committee of the Whole in October. As in previous years, the draft 2021 JDF Water Distribution Service budget has been prepared considering the CRD Board's 2021 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential synergies or efficiencies between departments and services, reviewing of service levels and adjustments related to regulatory compliance, and undertaking infrastructure improvements to maintain service levels across the service area, including incremental ongoing operational and maintenance requirements in the expanding service area. The following sets out the key components of the budget.

2020 Year End Financial Projections

Year-end revenue and expenditure projections have been established and estimated variances are summarized as follows:

Budget Item	Variance (\$)	Variance (%)
Distribution System operating expenditures	\$67,502	(1.0%)
Bulk water purchase cost	\$0	(0.0%)
Capital expenditures and transfers	\$17,877	(0.3%)
Debt servicing - principal and interest expenditures	\$0	(0.0%)
Revenue	\$85,379	(0.4%)
Transfers from DCC reserves to fund DCC debt	\$0	(0.0%)

Rate Base

The rate base for 2021 has increased by \$8,427,055 from 2020. This increase relates to physical plant additions, including distribution pipes, water meters and services, and pump station upgrades (Pages 2 & 3 of the budget document).

Revenue Requirement

The revenue requirement for 2021 has increased by \$660,371 over 2020. This is resulting from an increase in operational expenses of \$227,569, increased depreciation expenses of \$301,002 net of expired depreciation on existing assets, and a net increase in the return on the rate base of \$131,800. The increase in the return on the rate base is a result of the growing asset base (Page 4 of the budget document).

Operating Budget

The 2021 operating budget reflects an increase in non-discretionary expenses such as negotiated wage/salary increases, departmental support service allocation increases, maintenance expenses due to new infrastructure additions, and other operating expense increases such as electricity costs.

As reported in recent years, a result of continued growth in new land development in the service area over the last several years, the distribution system has and continues to expand at an accelerated rate. For context, the following summarizes the additions in 2020 (over 2019) to the asset units in the major categories, all of which require regular maintenance to ensure reliable performance:

•	Water distribution mains	4,000 metres
٠	Service laterals	440 (9 metre length average)
٠	Fire hydrants	39
٠	Line valves	110
٠	Flush, air and check valves	18
•	Water meters <50mm	440
٠	Water meters =/>50mm	25

As noted previously, with at least four major developments underway in the service area including South Skirt Mountain, Bear Mountain, Royal Bay and Centre Mountain, it is expected that the water system asset base will continue to grow significantly in the near future as initial water servicing infrastructure is installed which will impact operating and maintenance costs. Given the size of the developments and anticipated phasing and build-out timelines, it is expected that there will be an element of 'revenue lag', possibly over several years, before revenue generated from retail water sales in these and other developments offsets the initial infrastructure operating and maintenance costs. Staff will be examining this issue and possible rate options to mitigate the budget implications further in 2021 through the Water Rate Methodology and Option Study, directed by the Commission earlier this year.

The net core 2021 operating budget increase is \$187,569, plus a one-time budget request of \$40,000 for the water rate study. The core operating budget increase is primarily due to labour budget adjustments and corporate overhead allocation adjustments. Operating budget forecasts for 2022 through 2025 have been presented for information.

Capital Budget

There are a number of capital projects planned for 2021 with a total value of \$25,215,000, including \$4,850,000 that are in progress or are multi-year projects, and \$4,630,000 in Development Cost Charge (DCC) projects. There are also \$1,570,000 in projects cost shared with the Regional Water Supply Service. See pages 10-27 of the budget document for capital plan details. The major projects in 2021 include accelerated asbestos cement water main replacement including the Goldstream Avenue main replacement from Veterans Memorial Parkway to Spencer Road, reservoir upgrades at Rocky Point Reservoir, Sun River Reservoir and Silverspray Reservoir, pumpstation upgrades at Rocky Point Pumpstation and Coppermine Pumpstation, and residential service line and water meter replacements. Under the DCC program, 2021 construction is planned to continue at the McCallum Pumpstation and South Skirt Mountain Tank 4 and Pumpstation 7. A five year capital plan has been presented for information. The total five year (2021-2025) capital plan budget is currently \$63,190,000.

Capital and Debt Expenditures

The 2021 capital expenditures will be partially funded through a transfer to the water capital fund budgeted at \$5,278,916, with the balance funded through debt. 2021 debt expenditures for existing and new debt servicing are budgeted to be \$1,888,336. Debt servicing expenditures have increased by \$138,468 over 2020. This increase is primarily due to a \$5,100,000 borrowing undertaken in 2020, under the 2015 loan authorization intended to allow borrowing to partially fund the capital plan. This was the last loan that could be borrowed under this authorization which is now expired. The loan authorization was for \$14,800,000, but only \$10,100,000 was borrowed as the balance was funded through budgeted capital contributions and water sales revenue surpluses over the past five years. The upcoming debt retirements on existing borrowings are summarized as follows:

Loan Number	Retirement Date	Loan Amount
LA3164-096	October 2020	\$1,000,000
LA3164-099	October 2021	\$500,000
LA3164-101	April 2022	\$500,000
LA3782-118	April 2027	\$2,500,000
LA3782-124	April 2028	\$4,500,000
LA3782-127	April 2029	\$5,000,000
LA3981-137	April 2031	\$2,000,000
LA3981-145	April 2033	\$3,000,000
LA3981-150	April 2035	\$5,100,000

A new loan authorization in the amount of \$14,800,000 is proposed to allow continued partial funding of the five year capital plan. The loan authorization bylaw and approval process is addressed under a separate staff report.

The recently incurred debt and proposed future debt will change the funding make-up of the capital plan. When assessing key financial health indicators, the service maintains an affordable level of debt over the next five years. The percentage of revenue dedicated to debt costs is forecast to be between 9-12%, which is less than an annual benchmark rate of 25%. Additionally, the debt funding for capital investment in each of the next five years does not exceed 40%.

A summary indicator table is provided below:

Year	% Revenue for Debt	Capital Funded by Debt
2021	9.1%	25.8%
2022	10.9%	37.1%
2023	11.8%	25.9%
2024	11.8%	4.1%
2025	11.4%	0.0%

A \$71,730 transfer to the vehicle/equipment replacement fund is planned in 2021. The reserve fund balance is estimated at \$196,009 at year end 2020 (See reserve schedule – Page 30 of the budget document).

The DCC projects will be funded entirely from the DCC reserve fund, which is projected to have a balance of \$6,458,821 at year end 2020 (See reserve schedule – Page 29 of the budget document).

Bulk Water Purchase

Based on the proposed 2021 budgeted water demand and Regional Water Supply wholesale water rate, the bulk water purchase budget has been set at \$6,361,720.

Water Demand

Total water demand in the service area is anticipated to continue to increase year over year, primarily as a result of growth in the service area. Although this trend has resulted in actual demand exceeding budgeted demand in recent years, the 2020 year end demand is projected to be on budget at 8,900,000 cubic metres. The cooler than normal temperatures and above average precipitation in June (140% of the monthly average precipitation), did significantly affect total daily demand in June which can often be a high demand month. In addition, staff have analyzed the impact of the COVID-19 pandemic on local water demand, particularly across the residential and business sectors. Overall, the Regional Water Supply System experienced a net reduction of 6% in total water demand over the March – August 2020 period compared to the previous three year average over the same period. This equates to a reduction in consumption of 624 million litres of water. At the regional level, May demand was down 12.9% and June demand was down 17.7% compared to 2019 demand. These reductions are primarily tied to school, office, restaurant and hotel closures, and virtually no tourism. In summary, the pandemic health directives and public response have had a negative impact on water demand across all water service areas.

The recommended 2021 water rate has been calculated using a budget demand of 8,900,000 cubic metres (Page 6 of the budget document), which is the same volume used in the 2020 budget.

Proposed 2021 Wholesale Water Rate

The proposed 2021 wholesale water rate is \$0.7148 per cubic metre, a 2.58% increase from the 2020 rate, subject to the Regional Water Supply Commission's approval.

Proposed Agricultural Water Rate

The proposed 2021 agricultural water rate has been maintained at the 2020 rate of \$0.2105 per cubic metre, subject to the Regional Water Supply Commission's approval. The Regional Water Supply agricultural water rate budget funds the difference between the municipal retail water rate and the agricultural water rate.

Proposed 2021 Juan de Fuca Water Distribution Service Retail Water Rate

The recommended retail water rate has taken into consideration the revenue required to meet operating and capital expenditures, debt obligations, the bulk water purchase expense, and the budget demand volume established for 2021. The proposed 2021 Juan de Fuca Water Distribution Service retail water rate is \$2.3081 per cubic metre, a 4.16% increase from the 2020 rate (Page 7 of the budget document).

Retail and Wholesale Water Rate History and Projection

The retail and wholesale water rate history and projection is attached (Appendix C). The rates may be adjusted in the future to reflect actual revenue and expenditure circumstances and water demand volumes.

RECOMMENDATIONS

That the Juan de Fuca Water Distribution Commission recommends that the Capital Regional District Board:

- 1. Approve the 2021 Operating and Capital Budget and the Five Year Capital Plan;
- 2. Approve the 2021 Juan de Fuca Water Distribution Service retail water rate of \$2.3081 per cubic metre, adjusted if necessary by any change in the Regional Water Supply wholesale water rate; and
- 3. Amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

Submitted by: Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services		
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer	
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer	

ATTACHMENTS

Appendix A: 2021 Juan de Fuca Water Distribution Service Budget Appendix B: Long Term Debt Obligations Summary Appendix C: Retail and Wholesale Water Rate History and Projection