



Notice of Meeting and Meeting Agenda Juan De Fuca Water Distribution Commission

Tuesday, October 1, 2024

12:00 PM

Goldstream Meeting Room, 479 Island Highway,
Victoria, BC

Members of the public can watch the live meeting via MS Teams link: [Click here](#)
Audio and video participation is disabled.

MEMBERS:

G. Baird (Chair); J. Rogers (Vice Chair); S. Donaldson; D. Grove; C. Harder; K. Pearson;
M. Wagner; A. Wickheim

1. Territorial Acknowledgement

2. Approval of Agenda

3. Adoption of Minutes

3.1. [24-930](#) Adoption of July 2, 2024 Meeting Minutes

Recommendation: That the minutes of the July 2, 2024 Juan de Fuca Water Distribution Commission meeting be adopted.

Attachments: [Draft Minutes July 2, 2024](#)

4. Chair's Remarks

5. Presentations/Delegations

Delegations will have the option to participate electronically. Please complete the application for "Addressing the Board" on our website and staff will respond with details.

Alternatively, you may email your comments on an agenda item to the Juan de Fuca Water Distribution Commission at iwsadministration@crd.bc.ca. Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.

6. General Manager's Report

7. Commission Business

- 7.1. [24-931](#) Juan de Fuca Water Distribution Service 2025 Operating and Capital Budget
- Recommendation:** The Juan de Fuca Water Distribution Commission recommends the Committee of the Whole recommend that the Capital Regional District Board:
1. Approve the 2025 Operating and Capital Budget and the Five Year Capital Plan;
 2. Approve the 2025 Juan de Fuca Water Distribution Service retail water rate of \$2.8395 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
 3. Direct staff to balance the 2024 actual operating deficit or surplus on the 2024 capital fund transfer;
 4. Direct staff to update carry forward balances in the 2025 Capital Budget for changes after year end; and
 5. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.
- Attachments:** [Staff Report: JDF 2025 Operating and Capital Budget](#)
[Presentation: 2025 Capital and Operating Budget Overview](#)
[Appendix A: 2025 JDF Water Distribution Service 2025 Budget](#)
[Appendix B: JDF Debt Outstanding vs Water Capital Fund Balance](#)
[Appendix C: Retail and Wholesale Water Rate History and Projection](#)
[Appendix D: Initiative Business Case Summaries](#)
- 7.2. [24-925](#) Modernizing Capital Regional District Water Billing
- Recommendation:** There is no recommendation. This report is for information only.
- Attachments:** [Staff Report: Modernizing CRD Water Billing](#)
- 7.3. [24-932](#) Summary of Recommendations from Other Water Commissions
- Recommendation:** There is no recommendation, this report is for information only.
- Attachments:** [Summary of Recommendations](#)
- 7.4. [24-933](#) Water Watch Report
- Recommendation:** There is no recommendation, the report is for information only.
- Attachments:** [Water Watch Report](#)

8. Notice(s) of Motion

9. New Business

10. Adjournment

Next Meeting: November 5, 2024



Making a difference...together

MINUTES OF A MEETING OF THE Juan de Fuca Water Distribution Commission, held Tuesday, July 2, 2024 at 12 pm, Goldstream Meeting Room, 479 Island Highway, Victoria, BC

PRESENT: Commissioners: G. Baird (Chair); J. Rogers (Vice Chair); S. Donaldson; D. Grove; C. Harder; M. Wagner; A. Wickheim (EP)
Staff: A. Fraser, General Manager, Integrated Water Services; J. Marr, Senior Manager, Infrastructure Engineering; S. Irg, Senior Manager, Infrastructure Water Operations; J. Kelly, Manager, Capital Projects; P. Nyhuus, Legal Counsel; D. Dionne, Administrative Coordinator (Secretary)

REGRETS: K. Pearson

EP = Electronic Participation

The meeting was called to order at 12 pm.

1. TERRITORIAL ACKNOWLEDGEMENT

The Chair provided the Territorial Acknowledgement.

2. APPROVAL OF AGENDA

Item added under New Business:

9.1 Stipend for Jaun de Fuca Water Distribution Commissioners

MOVED by Commissioner Harder, **SECONDED** by Commissioner Wagner,
That the agenda be amended.

CARRIED

3. ADOPTION OF MINUTES

MOVED by Commissioner Donaldson, **SECONDED** by Commissioner Grove,
That the minutes of the May 7, 2024 meeting be adopted.

CARRIED

4. CHAIR'S REMARKS

The Chair made the following remarks:

- There were none

5. PRESENTATIONS/DELEGATIONS

There were none.

6. GENERAL MANAGER'S REPORT

A. Fraser provided the following updates:

- The reservoir is at 88% full storage in Sooke Lake and is trending close to the 5-year average and last years' levels.

- Media engagement regarding the new Capital Regional District automatic watering times has begun.
- In May, staff provided an update regarding the Juan de Fuca (JDF) Development Cost Charges (DCC) program and received approval to move forward with engagement. She advised that staff are holding off on the JDF DCC engagement until the fall after the Regional Water Supply DCC program public engagement has finished.

She responded to a question regarding whether municipalities were requested to post information on their websites to increase awareness around the CRD's new automatic watering guidelines. She stated that it is not the best practice of the CRD to ask municipalities to post competing information on their websites, however if a municipality wishes to do so, staff could help facilitate that.

Discussion ensued regarding the visual graphics in the public awareness campaign on social media. The Committee found them easy to read, and liked how it communicated the spike in water use.

7. COMMISSION BUSINESS

7.1. Juan de Fuca Water Service 2024 Mid-Year Capital Projects and Operations Update

Staff presented a summary of the report.

Staff responded to questions and provided the following additional information:

- The upstream impact of varying size pipes related to developer connections would be identified in the DCC program as a major upstream upgrade and would have to be discussed with the municipalities.
- Density impact on infrastructure is included in the DCC program.
- The JDF water DCC update has not gone out for public engagement and has not garnered any public interest currently. The JDF water DD is a well-established program and staff would not be going to individual councils with the update.
- Construction for the Coppermine pumpstation upgrade is set to start this summer and is expected to be completed by this time next year, it's a renewal as the pump station is essentially at its end of life.
- Staff confirmed that they do coordinate construction efforts with municipal engineering staff to avoid multiple road construction projects.
- There is roughly 1,300 water meters per year that need to be replaced, as they last about 20 years. In 2024 Team Leads were added to the meter and service line replacements program.
- DCC rates would apply to construction of six plex housing, similar to a townhouse. Staff continue to review the DCC rates every five years. It's hard to estimate what the build rate will be. There is a lot of work coordinating infrastructure improvements with municipalities.
- There is lots of asbestos cement (AC) pipe replacement work being done in Colwood – staff continue to work with municipal staff to coordinate construction and road works efforts.

- In response to a question on the failure of AC pipe staff noted that it has a lifespan of 50 to 70 years, but its resiliency depends on the ground conditions and how the pipe was installed.

This report was received for information.

7.2. Summary of Recommendations from other Water Commissions

Item was received for information.

7.3. Water Watch Report

Item was received for information.

8. NOTICE(S) OF MOTION

There were none.

9. NEW BUSINESS

9.1. Stipend for Juan de Fuca Water Distribution Commission

Commissioner Rogers stated that he would like to revisit a previous notice of motion for consideration of a stipend for this commission. He would like to ask staff to review the details of the previous meeting and bring forward for review any documentation presented at that time.

MOVED by Commissioner Rogers, **SECONDED** by Commissioner Wagner,
That staff review June 2, 2020 meeting discussions related to a Notice of Motion regarding stipends for Juan de Fuca Water Distribution Commissions and bring back the original notice of motion and any related material presented.

CARRIED

10. MOTION TO CLOSE THE MEETING [DELETE IF NOT NEEDED]

The Commission moved into closed session at 12:43 pm.

MOVED by Commissioner Wagner, **SECONDED** by Commissioner Rogers,
That the meeting be closed for Intergovernmental Relations in accordance with the Community Charter, Part 4, Division 3, Section 90(2)(b).

CARRIED

11. RISE AND REPORT

The Commission rose from its closed session at 1:15 pm without report.

12. ADJOURNMENT

MOVED by Commissioner Harder, **SECONDED** by Commissioner Grove,
That the July 2, 2024 Juan de Fuca Water Distribution Commission meeting be adjourned at
1:15 pm.

CARRIED

CHAIR

SECRETARY

DRAFT



**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, OCTOBER 1, 2024**

SUBJECT Juan de Fuca Water Distribution Service 2025 Operating and Capital Budget

ISSUE SUMMARY

To provide an overview of the draft 2025 Juan de Fuca Water Distribution Service budget, highlighting the proposed significant changes from the 2024 budget. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

BACKGROUND

The draft 2025 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 2025 JDF Water Distribution Service budget has been prepared considering the CRD Board’s 2025 service planning and financial expectations, which include identifying opportunities to realign or reallocate resources and seek potential efficiencies between departments and services, reviewing 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.

2024 Year End Financial Projections

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

Budget Item	Projected Variance (\$)	Projected Variance (%)
Distribution System Operating Expenditures	-\$94,300	-1.2%
Bulk Water Purchase Cost	\$809,400	10.5%
Capital Expenditures and Transfers	\$1,706,585	21.2%
Debt Servicing - principal and interest expenditures	\$131,890	5.5%
Revenue	\$2,553,606	9.8%

The revenue for this service is projected to exceed budget by \$1,706,585 due to higher than projected water demand. At the end of 2024 this surplus will be transferred to the Water Capital Fund.

2025 Budget

Rate Base

The rate base for 2025 has increased by \$10,496,396 from 2024. This increase relates to physical additions, including distribution pipes, water meters and services, and pump station upgrades (Pages 3 & 4 of the budget document).

Revenue Requirement

The revenue requirement for 2025 has increased by \$2,331,064 over 2024. This is resulting from an increase in operational expenses of \$967,781, increased depreciation expenses of \$763,983 net of expired depreciation on existing assets, and a net increase in the return on the rate base of \$599,300. The increase in the return on the rate base is a result of the growing asset base (Page 5 of the budget document).

Operating Budget

The 2025 operating budget reflects an increase in non-discretionary expenses such as negotiated wage/salary increases, corporate support service allocation increases and maintenance expenses due to new infrastructure additions.

As reported in recent years, the distribution system has continued to expand. Both the water distribution mains and the total number of water meters added to the system have been increasing at a roughly linear rate in the last 10 years. The growth in the system is related to service requirements for new land developments such as South Skirt Mountain, Bear Mountain and Royal Bay. For context, the table below summarizes the additions in 2023 (over 2022) to the asset units in the major categories:

	JDF System (end of 2022)	Additions in 2023	JDF System (end of 2023)	5 Year Increase	10 Year Increase
Water distribution mains (m)	539,000	6,000	545,000	4.6%	11.5%
Service laterals	26,305	350	26,655	8.5%	22.1%
Fire hydrants	2,480	60	2,540	11.9%	32.7%
Line valves	6,510	140	6,650	12.7%	33.3%
Flush, air and check valves	1,892	43	1,935	6.5%	17.9%
Water meters <50mm	25,240	290	25,530	7.9%	20.8%
Water meters =/>50mm	1,065	60	1,125	25.0%	63.8%

As detailed in the 2025 Water Community Needs Summary and forecasted in the 2024 Water Community Needs Summary there is one approved Initiative Business Case (IBC) for a Utility Operator Team Lead – Water Operations to support the Juan de Fuca Water Distribution Service.

Initiative	Implementation year(s)	Staff impacts (2025)	Estimated Incremental cost (2025)	Funding source
2b-2.1 Utility Operator Team Lead – Water Operations	2025-ongoing	1 New Ongoing Q1 start	\$178,000	Fee-for-service

In addition, there are two new IBCs that were proposed as part of the 2025 Water Community Needs process. These positions provide support to various water and wastewater services and are partially funded through the Juan de Fuca Water Distribution Service and have been incorporated within the 2025 budget. The following new positions have been added to support the preventative maintenance and capital programs within the system. Population growth in the region has increased demand, putting pressure on the water and wastewater systems. Preventative maintenance and new capital projects are crucial for ensuring reliable infrastructure, improving efficiency by reducing after-hours and emergency repairs, and optimizing equipment performance. These efforts also extend the lifespan of assets, decrease unplanned downtime, and build resilience to climate change impacts. With the growth in the system the required hours to support our preventative maintenance program and capital program exceeds our current staffing capacity and has resulted in a growing backlog of maintenance. By adding these resources, we can mitigate an increase in the backlog.

Initiative	Implementation year(s)	Staff impacts (2025)	Estimated Incremental Cost (2025)	Funding Source	Funding Allocation
2b-2.3 Systems Maintenance Electronics Technologist	2025-ongoing	1 New ongoing Q2 start	\$231,000	Requisition, Reserves & Fee-for-service	50% Core Area 25% JdF, 25% RWS
2b-2.4 Systems Maintenance Electrician	2025-ongoing	1 New ongoing Q3 start	\$180,500	Fee-for-service & Reserve	50% JdF and 50% RWS

The new positions result in ongoing additional budget request of \$286,418. Summaries of the new positions are provided in Appendix D.

In 2024 the Corporate Enterprise Asset Management team was transferred from Financial Services to Integrated Water Services (IWS) and merged with the existing IWS Customer and Technical Services to create a new Corporate Asset and Maintenance Management (CAMM) division. As the focus of Corporate Enterprise Asset Management has transitioned from a financial corporate function, these resources under CAMM in 2025 will initially be focusing on supporting water and wastewater infrastructure, as the services with the largest percent of engineered assets. Historically, Corporate Enterprise Asset Management division was funded through requisition. Given the focus on water/wastewater infrastructure in 2025, the funding for this division has been split among the water and wastewater services based on asset value and

criticality. In 2026, asset management standards and programs will be expanded to all services across the CRD with engineered assets and funding will be realigned to reflect this focus.

The net core 2025 operating budget increase is \$904,893. Operating budget forecasts for 2026 through 2029 have been presented for information (page 9 of Appendix A).

Capital Budget

There are several capital projects planned for 2025 with a total value of \$22,053,000 including \$1,304,182 in projects that are in progress or are multi-year projects, and \$1,020,000 in Development Cost Charge (DCC) projects. There are also \$1,480,000 in projects cost-shared with the Regional Water Supply Service (pages 10 to 24 of Appendix A).

A large portion of the work in progress and resulting capital expenditure is related to several major projects summarized below:

1. Project 16-05 Comprehensive Pump Station Upgrades - This project is to upgrade aging pump stations within the JDF Water Distribution system. In 2025 the planned upgrades are to Copper Mine Pumpstation #1, Copper Mine Pumpstation #2, and a Copper Mine Pressure Control Station located in East Sooke (project name: "Coppermine PS Upgrades"). A construction contract was awarded in 2024 for the Coppermine PS Upgrades and construction is anticipated to be completed in 2025. The \$1,601,000 of funding proposed for 2025 includes an estimated \$750,000 of planned carry-forward and is expected to be sufficient to complete the works associated with the Coppermine PS Upgrades and to initiate planning works on subsequent pump station upgrades.
2. Project 20-03 Asbestos Cement (AC) Pipe Replacement Program - The forecasted carry-forward of \$3,000,000 initially relates back to 2023, when the majority of pipe replacement projects for CRD crews were deferred to 2024 while CRD crews focused on completing the Goldstream Avenue Water main upgrade project. With the excess funds, CRD progressed the design of an AC watermain replacement project in the District of Sooke (Sooke Road from Church Road to Belvista Place) but as the design has progressed, it was determined that funding in 2024 would be insufficient to tender and complete these works in 2024. Funding in the amount of \$8,600,000 (including \$3,000,000 carry forward) has been proposed for 2025 to allow CRD to complete the project in Sooke under Contract, while still progressing a similar AC replacement volume with CRD forces in several other locations.
3. Project 24-02 Highway 14 Water Main Relocation – This project includes relocation of CRD watermain in Ministry of Transportation and Infrastructure (MOTI) right of way. This project is planned to be bundled within MOTI's overall project and thus is driven by MOTI's timelines. At the time of preparing the 2025 Capital Plan, MOTI have indicated the project is expected to proceed in 2025 and CRD have proposed funding in the amount of \$2,000,000.
4. Project 21-01 Sooke Henlyn Supply and Distribution Main – The start of this DCC project is dependent on development work. This work will not be complete in 2024, therefore the \$1,000,000 project has been carried-forward to 2025.
5. Project 25-01 Water Meter Strategic Plan – This consultant assignment will include a review our long-term meter replacement strategy and will incorporate a review of technology advancements.

More than 80% of the 2025 capital plan is related to existing water infrastructure asset renewal. A five-year capital plan is presented for information. The total five-year (2025-2029) capital plan budget is currently \$73,585,000 with another \$3,751,000 cost shared with Regional Water Supply.

Capital and Debt Expenditures

JDF has multiple sources of funding for capital expenditures, including operating transfer to the water capital fund, equipment replacement fund reserve, DCC reserves and debt. The water capital fund is applied prior to drawing debt financing. For 2025, the operating transfer to the water capital fund is budgeted at \$8,235,506, with up to a maximum of \$4,700,000 debt funding. Additional projected water sales revenue and corresponding capital reserve fund transfer is expected to reduce the borrowing needs in 2025.

A loan authorization in the amount of \$14,800,000 was approved in 2021 to allow continued partial funding of the five-year capital plan. The upcoming debt retirements on existing borrowings are summarized as follows:

Loan Number	Retirement Date	Loan Amount
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
LA4379-160	October 2038	\$6,000,000
LA4379-16X	April 2039-2041	\$8,800,000

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 8 and 11%, which is less than an annual benchmark rate of 25%, and 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
2025	9.45%	21.31%
2026	10.45%	28.60%
2027	10.69%	35.66%
2028	10.35%	0.0%
2029	8.73%	8.68%

2025 debt expenditures for existing and new debt servicing are budgeted to be \$2,770,341, an increase of \$358,526 from 2024.

For 2025, the transfer to the vehicle/equipment replacement fund was increased to \$661,564 to reflect the growth in cost of future vehicle replacement. The reserve fund balance is estimated at \$704,757 at year end 2024 (See reserve schedule – Page 27 of Appendix A).

The DCC projects will be funded entirely from the DCC reserve fund, which is projected to have a balance of \$16,421,235 at year end 2024 (See reserve schedule – Page 26 of Appendix A).

Water Demand

Total water demand in the service area is generally anticipated to continue to increase year over year, primarily due to growth in the service area. The 2024 year-end demand is projected to be 1,000,000 cubic metres over budget at 10,500,000 cubic metres.

The recommended 2025 water rate was calculated using a budget demand of 10,200,000 cubic metres (Page 7 of the budget document), which is an increase of 700,000 cubic metres from the volume used in the 2024 budget, but in alignment with the 2024 projected actuals.

Proposed 2025 Regional Water Supply Wholesale Water Rate

The proposed 2025 CRD Regional Water supply wholesale water rate is \$0.8631 per cubic metre, a 6.63% increase from the 2024 rate, subject to the Regional Water Supply Commission's approval.

Bulk Water Purchase

Based on the proposed 2025 budgeted water demand and Regional Water Supply wholesale water rate, the bulk water purchase budget has been set at \$8,803,620.

Proposed Agricultural Water Rate

The proposed 2025 agricultural water rate was maintained at the 2024 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 CRD agricultural water rate. As directed by the Regional Water Supply Commission, the agricultural water rate review is postponed to 2025.

Proposed 2025 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 2025. The proposed 2025 JDF Water Distribution Service retail water rate is \$2.8395 per cubic metre, a 5.45% increase from the 2024 rate (Page 8 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.

ALTERNATIVES

Alternative 1

The Juan de Fuca Water Distribution Commission recommends the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2025 Operating and Capital Budget and the Five Year Capital Plan;

2. Approve the 2025 Juan de Fuca Water Distribution Service retail water rate of \$2.8395 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2024 actual operating deficit or surplus on the 2024 capital fund transfer;
4. Direct staff to update carry forward balances in the 2025 Capital Budget for changes after year end; and
5. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

Alternative 2

That the Juan de Fuca Water Distribution Commission directs staff to bring back a revised 2025 Operating and Capital Budget for the Commission's consideration.

IMPLICATIONS

The 2025 operating and capital budget and resulting annual water rate have been prepared to meet the needs of the service. The proposed 2025 water rate generally aligns with the rate previously presented in the five-year rate projections. The proposed 2025 rate would result in a \$35.23 annual increase in the cost of water for an average household.

CONCLUSION

The draft 2025 Juan de Fuca Water Distribution Service budget is presented for the Juan de Fuca Water Distribution Commission's consideration. The Commission will make budget recommendations to the Capital Regional District Board through the Committee of the Whole in October. The draft 2025 Juan de Fuca Water Distribution Service budget was prepared considering the requirement to maintain regulatory compliance, the on-going need to undertake infrastructure renewal to ensure the system operates reliably, and annual operational adjustments, including incremental maintenance requirements associated with new development infrastructure in the expanding service area.

RECOMMENDATION

The Juan de Fuca Water Distribution Commission recommends the Committee of the Whole recommend that the Capital Regional District Board:

1. Approve the 2025 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2025 Juan de Fuca Water Distribution Service retail water rate of \$2.8395 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2024 actual operating deficit or surplus on the 2024 capital fund transfer;
4. Direct staff to update carry forward balances in the 2025 Capital Budget for changes after year end; and
5. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

Submitted by:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

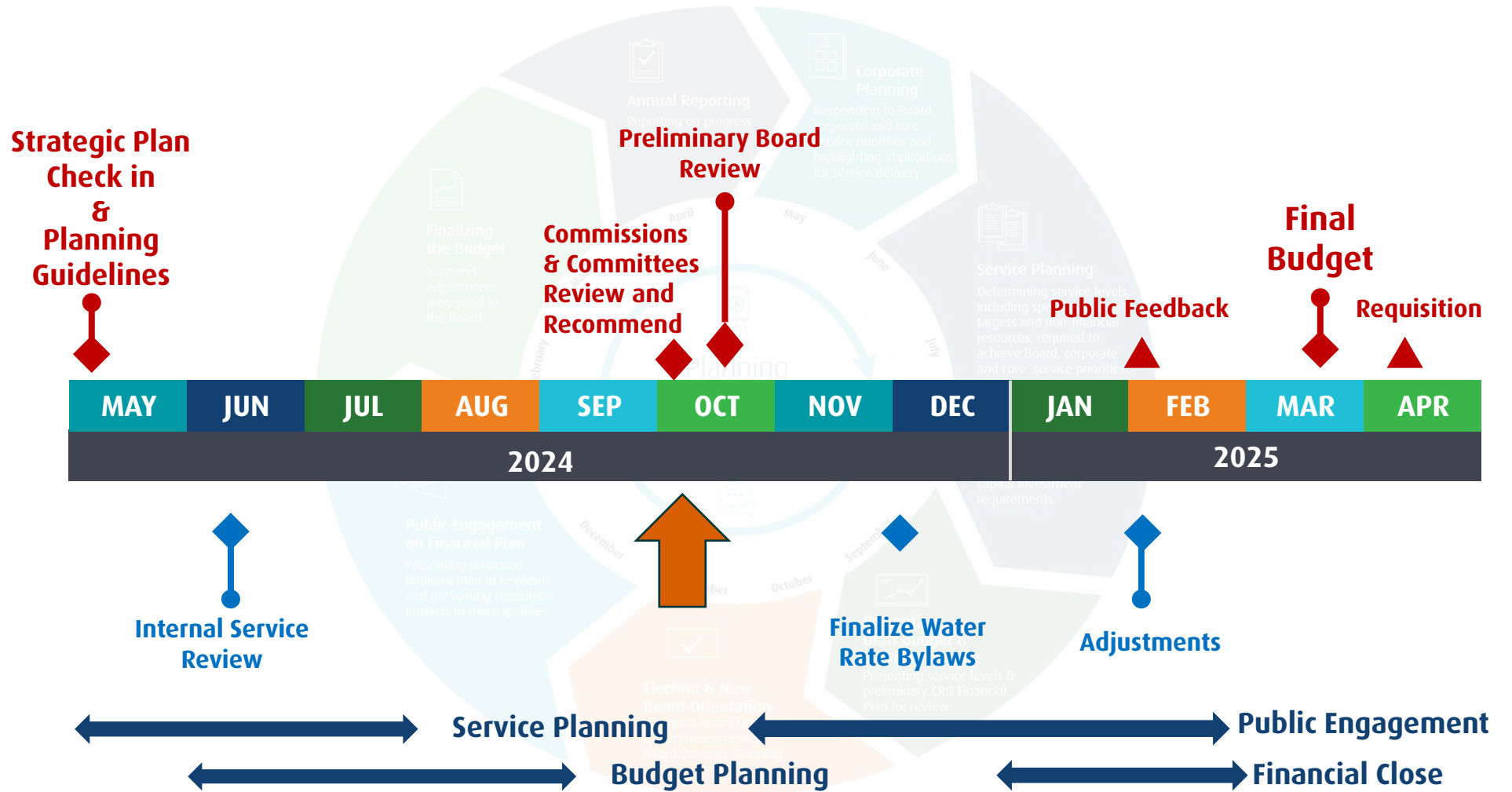
ATTACHMENT(S)

Presentation: Juan de Fuca Water Distribution Service 2025 Budget Review
Appendix A: Draft 2025 Juan de Fuca Water Distribution Service Budget
Appendix B: Long Term Debt Obligations Summary
Appendix C: Retail and Wholesale Water Rate History and Projection
Appendix D: IBC Summaries

Juan de Fuca Water Distribution Service 2025 Budget Review

Juan de Fuca Water Distribution Commission
October 1, 2024

Budget Process Overview





2025 Budget Considerations

- 2024 Budget – year end budget projections
- Community Needs Summary
- Existing Asset Condition, Infrastructure Growth and Resiliency Needs
- Operating budget adjustments
- Capital funding & debt servicing
- Water demand projection and trends

Current System Overview

26,650 Service Connections



545 kilometers of Distribution Main



22 Operational Staff



2024 Year End Projections

Budget Item	Projected Variance (\$)	Projected Variance (%)
Distribution System operating expenditures	-\$94,300	-1.2%
Bulk water purchase cost	\$809,400	10.5%
Capital expenditures and transfers	\$1,706,585	21.2%
Debt servicing - principal and interest expenditures	\$131,890	5.5%
Revenue	\$2,553,606	9.8%

Projected to exceed budget by \$1,706,585 due to higher than projected water demand. Surplus will be transferred to the Water Capital Fund.

2025 Rate Base & Revenue Requirement

2025 Rate Base: \$10,496,396 Increase

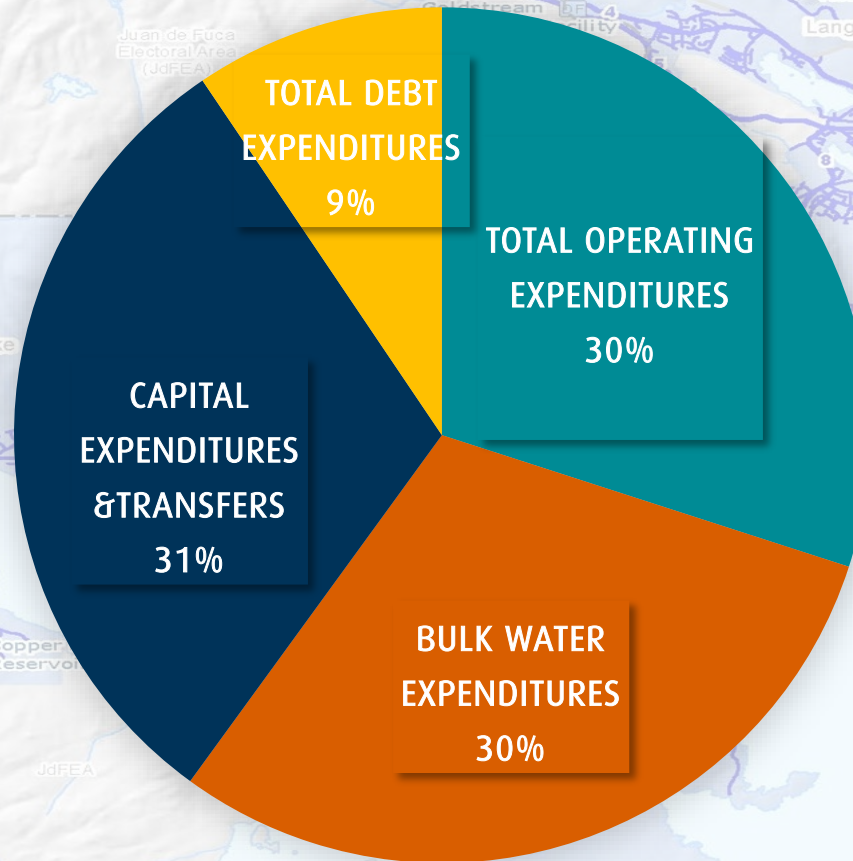
2025 Cash Working Capital	\$111,562
Resulting 2024 change in physical plant	\$9,061,970
2025 construction work in progress (projected)	\$1,322,864

2025 Revenue Requirement: \$2,331,064 Increase

2025 - 2026 O&M expense (change)	\$967,781
2025 - 2026 depreciation (change)	\$763,983
Return on rate base (change)	\$599,300

2025 Budget Overview Breakdown of Expenditures

Total 2025 Budget: \$29,313,997 (12.63% increase)

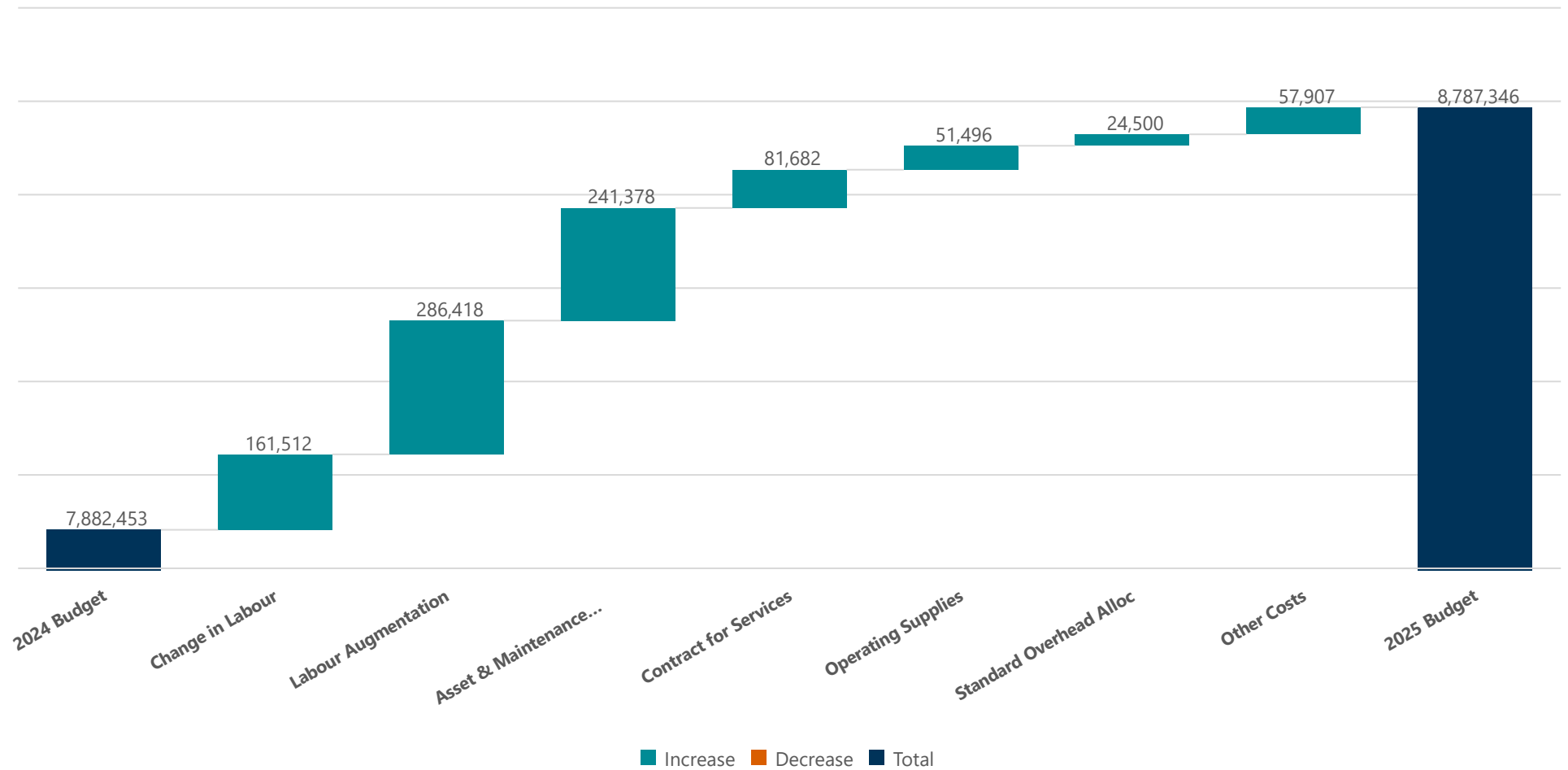


2025 Budget Overview Operating Expenditures

Overview:
Core Operations: \$8,787,346 (+11.48%)

Highlights:

- Continued Growth within Service resulting in addition O&M requirements
- Increases associated with inflationary pressures



2025 Budget Overview

Water Community Need Initiatives

Overview:

- Community Need Summary includes three Initiative Business Cases that relate to the JdF Water Distribution Service
- In 2025, the combined impact on the JdF budget is \$286,416 on going cost

Initiative Reference	Program Area	Business Driver - Rational	Staff impacts (2024)	Funding source
2b-2.1	Utility Operator (Water Operations)	Increase resilience, community and adaptation planning to address climate related risks and disasters	1 New Ongoing	Fee-for-service
2b-2.3	Systems Maintenance Electronics Technologist	To support the growing preventative maintenance and capital programs within the system, as well as support cyber security improvements	1 New Ongoing	Requisition, Reserves & Fee- for-service 50% Core Area 25% JdF, 25% RWS
2b-2.4	Systems Maintenance Electrician	To support the growing preventative maintenance and capital programs within the system.	1 New Ongoing	Fee-for-service & Reserve 50% JdF and 50% RWS

2025 Budget Overview

Capital Budget

Overview	JDF (millions)	50% of JDF/RWS Combo (millions)	Total (millions)
Projects in Progress	\$ 8.010	\$ 0.380	\$ 8.390
2025 JDF Capital Budget	\$22.053	\$ 1.480	\$23.533
5-Year JDF Capital Budget	\$73.585	\$3.751	\$77.336

+80% capital budget related to existing water infrastructure asset renewal



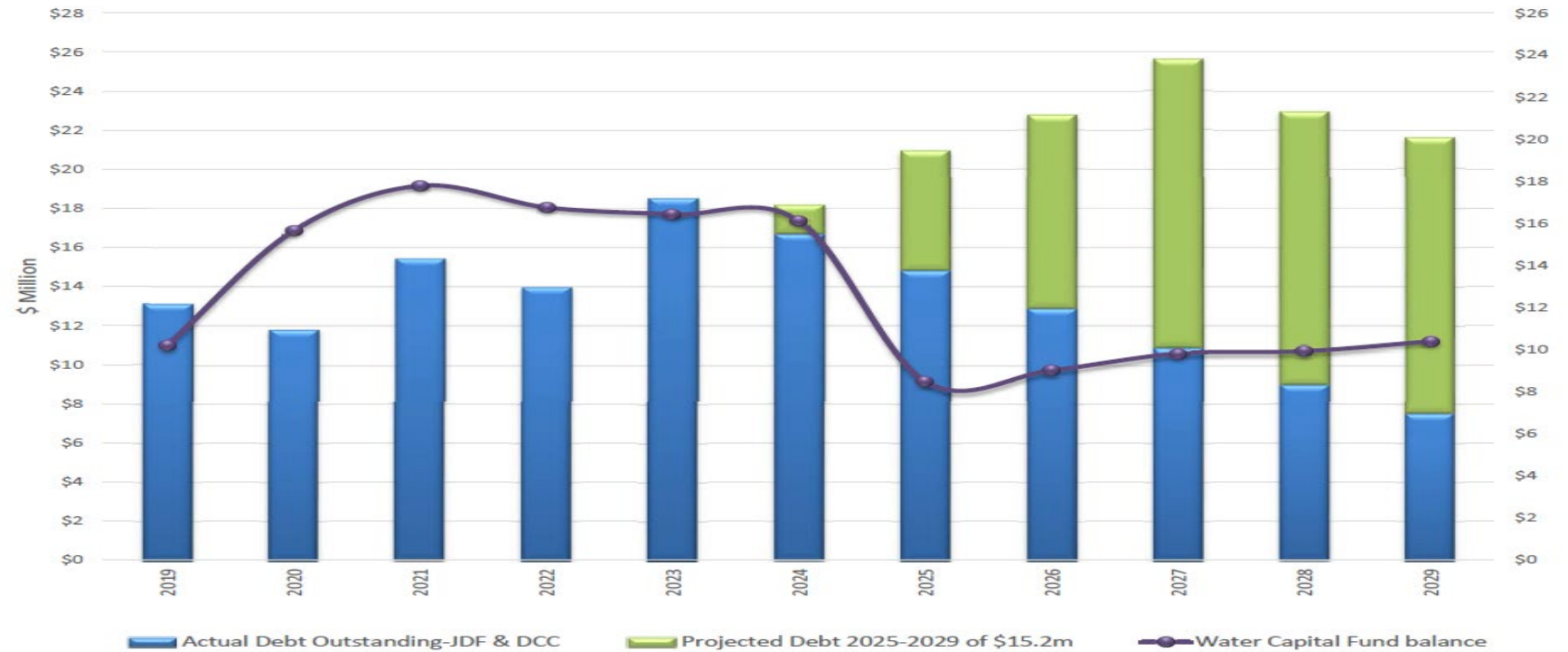
Key Projects:

- Comprehensive Pump Station Upgrades
- Asbestos Cement (AC) Pipe Replacement Program
- Highway 14 Water Main Relocation
- Sooke Henlyn Supply and Distribution Main (DCC)
- Water Meter Strategic Plan

Outstanding Debt & Capital Funding

2025 Transfer	2025 Budget	Budget change (over 2024)
Water Capital Fund	\$8,235,506	\$889,337
Debt Reserve Fund	\$55,620	\$6,340
Equipment Replacement Fund	\$661,564	\$14,057

JDF Water Distribution & DCC
Debt Outstanding vs Water Capital Fund Balance



2025 Budget Overview

Bulk Water Expenditure

Overview:

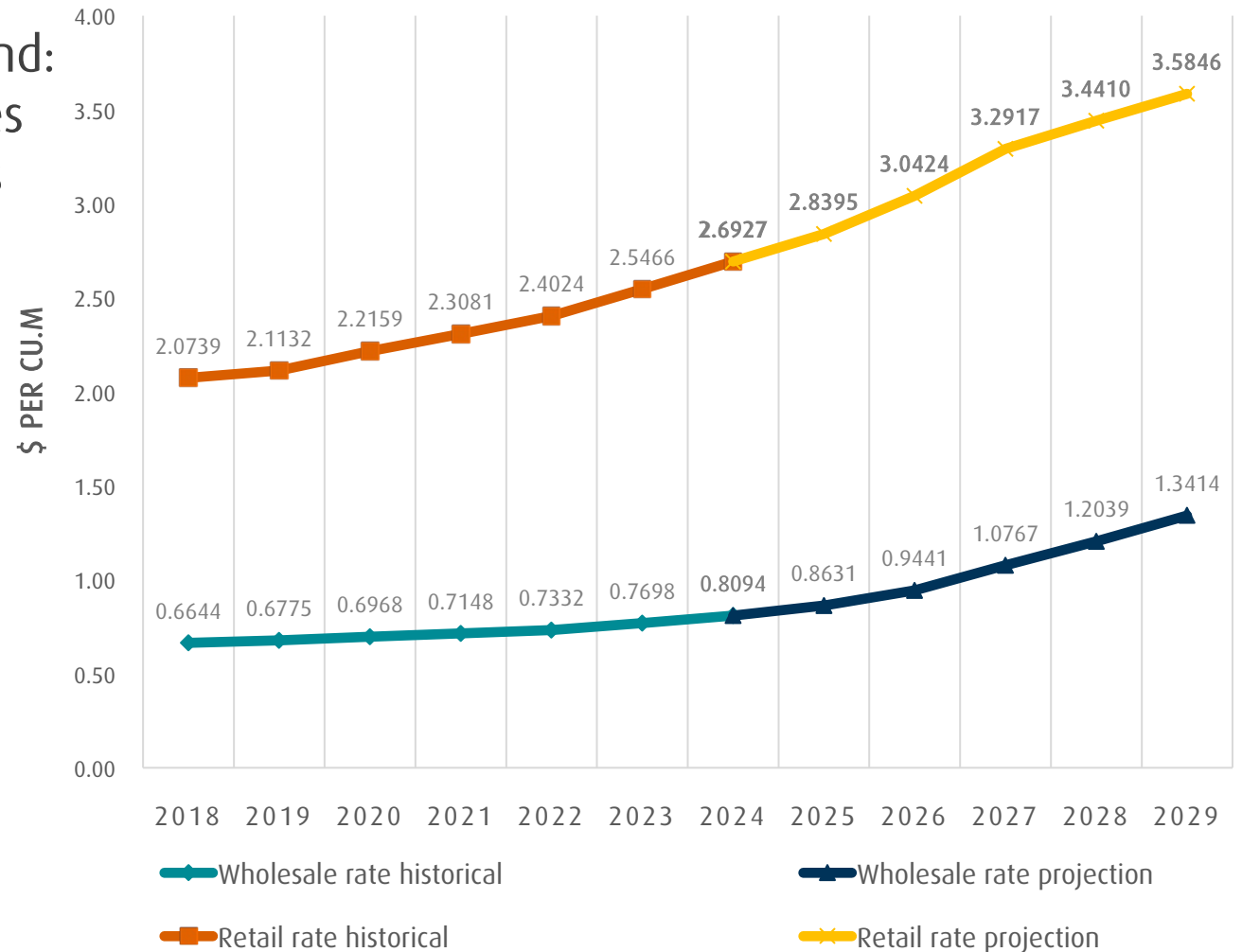
2025 Projected Water Demand:
10,200,000 cubic metres
(+700,000 cubic metres
over 2024 budget)

2024 Wholesale Rate:
\$0.8094

2025 Wholesale Rate:
\$0.8631 (+6.63%)

2025 rate is below rate
indicated for 2025 in 2024
budget (\$0.8711)

CRD WATER WHOLESALE & RETAIL RATE



2025 Budget Overview Water Demand and Rates

- 2025 Budget Water Demand:
10,200,000 cubic metres (+700,000 cubic metres)
- 2025 Regional Water Supply Wholesale Rate:
\$0.8631 / cubic metre (+6.63%)
- 2025 Agricultural Rate:
\$0.2105 / cubic metre (0%)
- 2025 JDF Water Distribution Rate:
\$2.8395 / cubic metre (+5.45%)
- Annual cost increase to average household:
\$35.23 /per household



Budget Overview

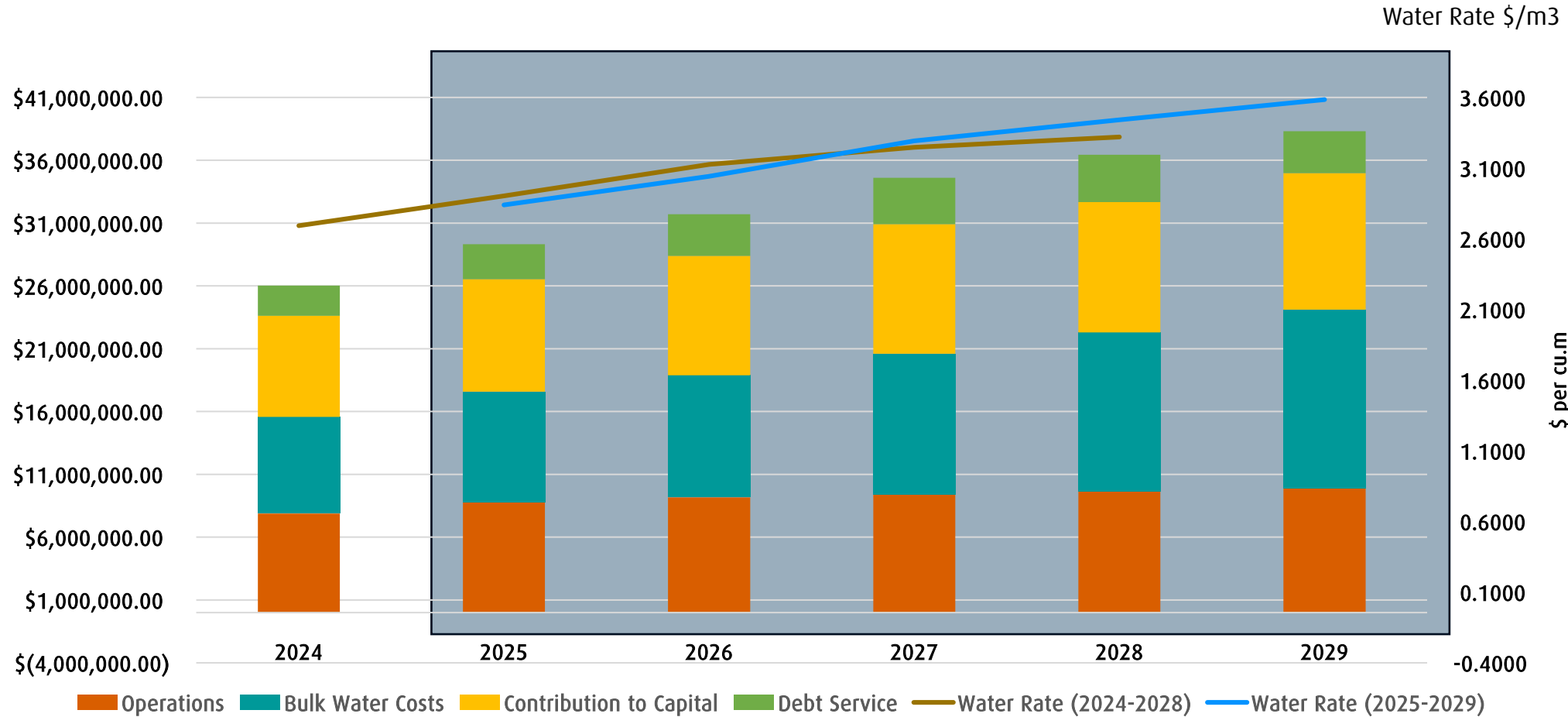
Multi-Year Projection

Overview:

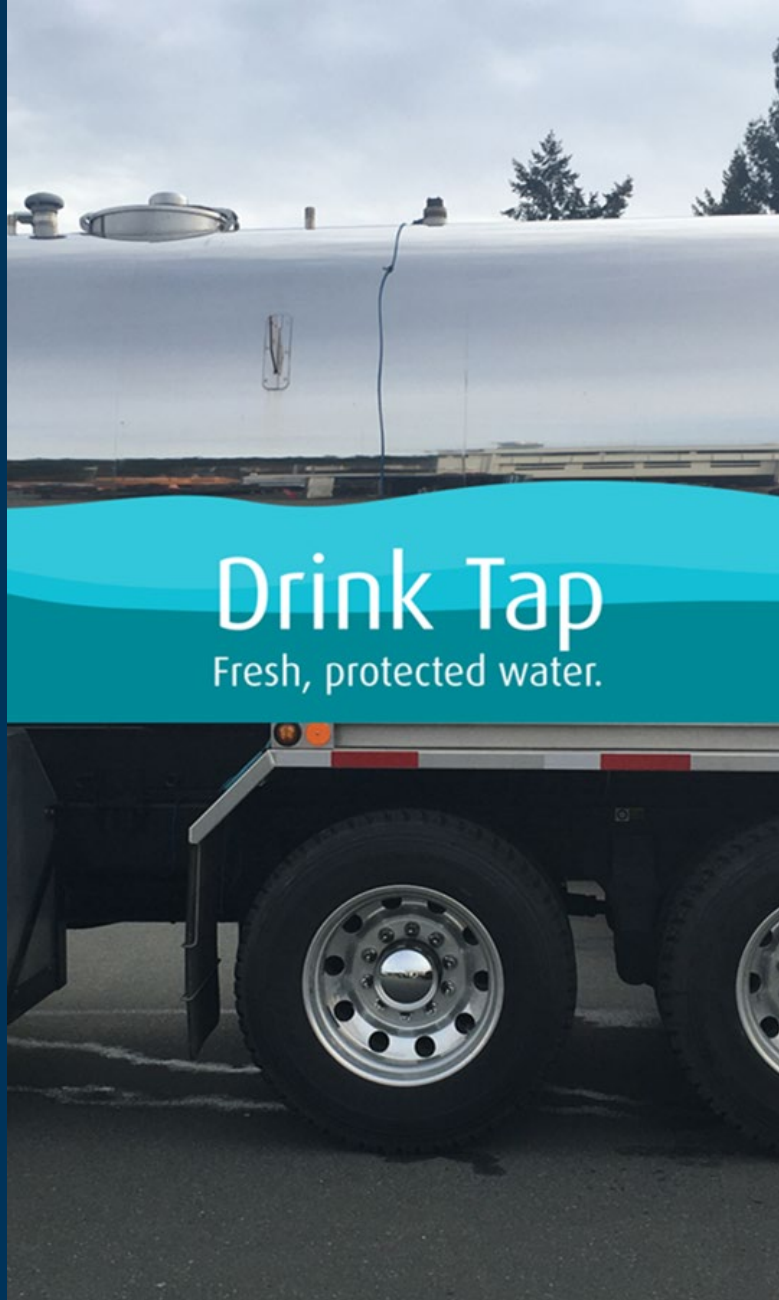
- 2024 JDF budget: \$26,026,524
- 2025 JDF budget: \$29,313,997 (+12.63%)

Drivers:

- Growing Capital Program linked to development and aging infrastructure
- Bulk Water Rate



Budget Recommendations



1. Approve the 2025 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2025 Juan de Fuca Water Distribution Service retail water rate of \$2.8395 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2024 actual operating deficit or surplus on the 2024 capital fund transfer
4. Direct staff to update carry forward balances in the 2025 Capital Budget for changes after year end; and
5. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.



Thank you

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 Capital Regional District

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CAPITAL REGIONAL DISTRICT

2025 BUDGET

JDF Water Distribution

COMMISSION REVIEW

Service: 2.680

JDF Water Distribution

Commission: Juan De Fuca Water Distribution

DEFINITION:

To finance the administration, development, maintenance, and operational expenses, of the Juan de Fuca Water Distribution local service in the Western Communities of the Capital Regional District, as per the Water Distribution Local Service Area Establishment Bylaw No. 2538.

The establishment and operation of a Juan de Fuca water Distribution Commission is done by Bylaw No. 2540.

SERVICE DESCRIPTION:

Juan de Fuca Water Distribution Service provides retail water distribution system to participants within the Western Communities. The service administration and operation is provided by the Integrated Water Services Department.

PARTICIPATION:

City of Colwood	District of Metchosin
City of Langford	District of Sooke
Town of View Royal	District of Highlands
Juan de Fuca Electoral Area	

MAXIMUM LEVY:

The maximum amount that may be requisitioned is NIL.

MAXIMUM CAPITAL DEBT:

Authorized: Pre Consolidated MFA Loan Authorizations - Juan de Fuca Water Distribution Facilities		\$19,000,000
Borrowed:		\$17,500,000
Remaining: Expired		<u>\$1,500,000</u>
Authorized: MFA Bylaw No. 3981 - Juan de Fuca Water Distribution Facilities		\$14,800,000
Borrowed:		\$10,100,000
Remaining: Expired		<u>\$4,700,000</u>
Authorized: MFA Bylaw No. 3164 - Juan de Fuca Water Distribution Facilities Development-DCC		\$10,000,000
Borrowed:		\$3,500,000
Remaining: Expired		<u>\$6,500,000</u>
Authorized: MFA Bylaw No. 4379 - Juan de Fuca Water Distribution Facilities	2021	\$14,800,000
Borrowed:		\$7,500,000
Remaining: Active		<u>\$7,300,000</u>

FUNDING:

Costs are recovered from Water Sales, and transfer from DCC reserves to service DCC debt.

Change in Budget 2024 to 2025			
Service:	2.680 Juan de Fuca Water Distribution	Total Expenditure	Comments
2024 Budget		26,026,524	
Change in Labour:			
Labour charges		257,630	Labour charges: inclusive of collective agreement changes
Utility Operator Team Lead		190,300	IBC 2b-2.1 Utility Operator Team Lead
Total Change in Labour		447,930	
Other Changes:			
Bulk Water Purchase		1,114,320	Increased bulk water rate and increased budgeted demand
Transfers to Capital Fund		889,337	Increase as directed by the 5 year Capital Plan
Principal & Interest Payments		358,530	New Debt Issue \$1.5m Fall 2024
Asset and Maintenance Management		145,260	Asset Management transferred from Corporate to IWS
		96,118	Additional maintenance trade support
Contract for Services		81,682	
Supplies-Operating		51,496	
Standard Overhead		24,500	Increase in 2024 operating costs
Other Costs		78,300	
Total Other Changes		2,839,543	
2025 Budget		29,313,997	
Summary of % Expense Increase			
Transfer to Capital		3.4%	
Increased cost due to bulk water rate		2.0%	
Increased bulk water consumption		2.3%	
Labour costs		1.7%	
Principal and Interest Costs		1.4%	
Asset and Maintenance Management		0.9%	
Balance of increase		0.9%	
<i>% expense increase from 2024:</i>		12.6%	

Overall 2024 Budget Performance
(expected variance to budget and surplus treatment)

Favourable revenue and water sales variance of \$2.6m due to higher than budgeted water demand largely a result of dry summer weather. The additional revenue will be partially offset by bulk water purchase overages (\$800k). The net surplus of \$1.7m will be transferred to the Service's Water Capital Fund.

Rate Base for 2025 Revenue Year

	<u>2023 Applic</u>	<u>2024 Applic.</u>	<u>End of 2024 for '25 Applic.</u>	<u>Change</u>	
Retail System					
Physical Plant	\$ 182,123,781	\$ 203,789,803	\$ 212,851,773	\$ 9,061,970	Note 1
Construction Work In Progress	14,101,175	3,226,207	4,549,071	1,322,864	Note 1
Cash Working Capital	970,390	971,809	1,083,371	111,562	
Inventory	<u>525,000</u>	<u>525,000</u>	<u>525,000</u>	<u>-</u>	
Total Retail Rate Base	\$ 197,720,346	\$ 208,512,819	\$ 219,009,215	\$ 10,496,396	

Note 1: Refer to the Schedule of Change in Physical Plant & Work in Progress for details.

Schedule of Change in Physical Plant & Work In Progress

Retail

Projected Asset Additions	<u>Projected Assets Capitalized</u>
Pipes	\$ 7,907,717
Major Main Replacements	3,924,855
Meters	2,465,054
Pump Stations	1,872,588
Reservoir Rehabilitation and Upgrades	515,874
Hydrants	225,000
Valve Replacement	200,000
SCADA	100,000
Computer Equipment	97,500
Other Projects (13 minor projects under \$50k)	178,286
Total projected assets capitalized	\$ 17,486,874
Less: current year's depreciation	(5,588,938)
Add (Less): change in prior year forecast addition estimates, & disposals.	<u>(2,835,966)</u>
Change in Physical Plant	<u><u>\$ 9,061,970</u></u>

Projected Construction Work In Progress (CWIP)

Pump Stations	\$ 1,544,771.00
PIPE Replacements	\$ 924,714.00
SCADA	\$ 620,015.00
Radio Upgrades	\$ 578,406.00
DCC Program Update	\$ 371,182.00
JDF Hydraulic Model	\$ 109,631.00
JDF Site Decommissioning Program	\$ 96,553.00
Small Diameter Program Update	\$ 89,235.00
Office Upgrades	\$ 80,000.00
Strategic Asset Management	\$ 67,350.00
Other Projects (5 minor projects under \$50k)	\$ 67,214.00
Projected CWIP	<u>\$ 4,549,071</u>
Less Prior year's projected CWIP	<u>(3,226,207)</u>
Change in CWIP	<u><u>\$ 1,322,864</u></u>

Schedule of Change in Physical Plant & Work In Progress

Revenue Requirements for 2025 Year

	2023 Application	2024 Application	2025 Application	Change	
Retail					
Operations & maintenance	\$ 7,590,306	\$ 7,882,453	\$ 8,850,234	\$ 967,781	
Depreciation	5,222,481	5,505,087	6,269,069	763,983	
Return on rate base	<u>3,974,900</u>	<u>4,678,200</u>	<u>5,277,500</u>	<u>599,300</u>	Note 1
Subtotal of above	\$ 16,787,687	\$ 18,065,740	\$ 20,396,803	\$ 2,331,064	
Non-rate revenue	(174,500)	(174,500)	(174,500)	-	
DCC Repayment	<u>(30,596)</u>	<u>-</u>	<u>-</u>	<u>-</u>	
Total retail	\$ 16,582,591	\$ 17,891,240	\$ 20,222,303	\$ 2,331,064	

Note 1: Return on rate base is calculated with reference to the long term Canada bond rate & the average debt rate.

Schedule A
Asset Useful Life Assignments - PSAB

<u>Classes:</u>	<u>Code</u>	<u>Asset Categories</u>	<u>Useful Life, Years</u>
Land	LAND	Land & Rights of Way * (Note 1)	N/A
Building	BLDG	Building, Permanent	50
	BLOT	Building, Temporary/ Portable	20
	BLFX	Building fixture (<i>sprinklers</i>)	20
Equipment	BOAT	Boats & Marine Equipment	10
	COMP	Computer Equipment (<i>includes software</i>)	5
	ELEC	Electronic Equipment(<i>hydromet, weather stn eqpt</i>)	5
	FIRE	Fire & Safety Equipment	10
	GENT	Generator	20
	HYDR	Hydrants and Standpipes	20
	HYDY	Hydrology	10
	MTRS	Meters	20
	OFFE	Office Equipment	5
	OFFF	Office Furniture	10
	SCDA	SCADA Equipment	10
	SCRN	Intake Screens/Membranes (<i>stop logs</i>)	20
	SHOP	Shop Equipment	10
	TELE	Telecommunication Eqpt (<i>radios, phone systems</i>)	10
	WEQP	Water Works Eqpt(<i>W.Quality lab, Wshed eqpt</i>)	10
	NEW GRP	Weather stn & communication tower	15
Vehicle	VEHC	Vehicles	8
Engineering	BRDG	Bridge	50
Structure	CANL	Canal	50
	DAMS	Dam Structures	100
	PIPE	Pipelines, includes Vaults, Kiosks, Valve chambers	75
	PIPF	Pipelines, fittings	20
	PLPV	Parking lot paved	40
	PSEQ	Pump Station Equipment	20
	PSHS	Pump Station Housing	50
	PRVS	Valves, Flushes & PRV's	20
	RDGR	Roads gravel	20
	RDPV	Roads paved	40
	RESS	Reservoirs (steel & concrete)	50
	REST	Reservoirs (tower/tank)	35
	TANK	Storage tank	40
	TELP	Telephone and Power Lines	50
	TUNN	Tunnel, Culvert and Diversions	50
	WATP	Water Treatment Plant	25
	WELL	Wet well/ Well	50
Other Assets	CSTU	Capital Management Studies	5
	FENC	Fences	15
	LIMP	Land & Yard Improvements	20

Note 1: Land is not depreciated so a useful life assignment is not applicable.

2025 Demand Estimate**Retail Demand**

Years	Actual Demand cu.metre	Budgeted Demand cu.metre	
2019	8,911,315	8,600,000	
2020	9,345,130	8,900,000	
2021	10,270,472	8,900,000	
2022	9,990,739	9,300,000	
2023	10,670,432	9,210,000	**
2024	10,500,000 *	9,500,000	
2025 Demand Estimate	<u>10,200,000</u>		

* *Projected consumption for 2024*

** 2023 Demand estimate reduction reflects First Nations becoming wholesale customers of Regional Water Supply

Summary of Retail Water Rates

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>Change</u>	
Retail (direct) water rate							
Unit cost per cu.m.	\$2.3081	\$2.4024	\$2.5466	\$2.6927	\$2.8395	\$0.1468	5.45%

**Retail Water Rate Increase
Impact on Residential Water Bill**

Average consumption per 2 month billing cycle: * 40.0 cubic meters (annual = 239.0 cu.m)

<u>Charge for Two Months Consumption</u>	<u>Year</u>	<u>Bi monthly Charge</u>	<u>Annual Charge</u>	<u>2025 Annual Change \$</u>
Average Consumption	2024	\$ 107.71	\$ 646.25	
	2025	\$ 113.58	\$ 681.48	\$ 35.23
Half Average Consumption	2024	\$ 53.85	\$ 323.12	
	2025	\$ 56.79	\$ 340.74	\$ 17.62
Twice Average Consumption	2024	\$ 215.42	\$ 1,292.50	
	2025	\$ 227.16	\$ 1,362.96	\$ 70.46

* Average Annual Consumption based on 2.303 people per household, per BC Stats 2024 projection

CAPITAL REGIONAL DISTRICT

Program Group: CRD-JDF Water Distribution SUMMARY	2025						FUTURE PROJECTIONS			
	2024 BOARD BUDGET 2	2024 ESTIMATED ACTUAL 3	2025 CORE BUDGET 4	2025 ONGOING 5	2025 ONE-TIME 6	TOTAL (COL 4, 5 & 6) 7	2026 8	2027 9	2028 10	2029 11
OPERATING EXPENDITURES										
ALLOCATION - OPERATIONS	5,335,968	5,333,436	5,908,795	286,418	-	6,195,213	6,534,051	6,711,894	6,893,466	7,080,083
OPERATING - OTHER COSTS	789,205	743,096	823,799	-	-	823,799	819,323	825,472	860,734	859,637
SALARIES AND WAGES	590,220	539,460	495,089	-	-	495,089	510,248	524,820	539,687	555,088
CONTRACT FOR SERVICES	398,390	403,520	480,072	-	-	480,072	490,348	501,247	512,380	523,819
ALLOCATION - STANDARD OVERHEAD	768,670	768,670	793,173	-	-	793,173	816,968	833,308	849,974	866,974
TOTAL OPERATING EXPENDITURES	7,882,453	7,788,182	8,500,928	286,418	-	8,787,346	9,170,938	9,396,740	9,656,241	9,885,601
Percentage increase over prior year's board budget			7.85%			11.48%	4.37%	2.46%	2.76%	2.38%
BULK WATER PURCHASE	7,689,300	8,498,700	8,803,620	-	-	8,803,620	9,724,230	11,197,680	12,640,950	14,218,840
BULK WATER EXPENDITURES	7,689,300	8,498,700	8,803,620	-	-	8,803,620	9,724,230	11,197,680	12,640,950	14,218,840
			14.49%			14.49%				
CAPITAL EXPENDITURES & TRANSFERS										
TRANSFER TO WATER CAPITAL FUND	7,346,169	9,082,754	8,235,506	-	-	8,235,506	8,820,200	9,620,200	9,730,200	10,200,200
TRANSFER TO DEBT RESERVE FUND	49,280	19,280	55,620	-	-	55,620	49,620	62,620	8,620	18,620
TRANSFER TO EQUIPMENT REPLACEMENT FUND	647,507	647,507	661,564	-	-	661,564	619,796	628,192	636,755	645,490
TOTAL CAPITAL EXPENDITURES & TRANSFERS	8,042,956	9,749,541	8,952,690	-	-	8,952,690	9,489,616	10,311,012	10,375,575	10,864,310
DEBT SERVICING										
DEBT - INTEREST & PRINCIPAL	2,411,815	2,543,707	2,770,341	-	-	2,770,341	3,312,394	3,701,035	3,772,441	3,345,507
TOTAL DEBT EXPENDITURES	2,411,815	2,543,707	2,770,341	-	-	2,770,341	3,312,394	3,701,035	3,772,441	3,345,507
TOTAL EXPENDITURES	26,026,524	28,580,130	29,027,579	286,418	-	29,313,997	31,697,178	34,606,467	36,445,207	38,314,258
SOURCES OF FUNDING										
REVENUE - SALES	(25,580,244)	(28,273,350)	(28,676,549)	(286,418)	-	(28,962,967)	(31,336,730)	(34,233,557)	(36,130,777)	(37,997,026)
REVENUE - OTHER	(223,780)	(306,780)	(351,030)	-	-	(351,030)	(360,448)	(372,910)	(314,430)	(317,232)
TOTAL SOURCE OF FUNDING FROM OPERATIONS	(26,026,524)	(28,580,130)	(29,027,579)	(286,418)	-	(29,313,997)	(31,697,178)	(34,606,467)	(36,445,207)	(38,314,258)
SOURCES OF OTHER FUNDING										
TRANSFER FROM DCC RESERVES TO FUND DCC DEBT	-	-	-	-	-	-	-	-	-	-
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR	-	-	-	-	-	-	-	-	-	-
TOTAL SOURCES OF ALL FUNDING	(26,026,524)	(28,580,130)	(29,027,579)	(286,418)	-	(29,313,997)	(31,697,178)	(34,606,467)	(36,445,207)	(38,314,258)
Percentage increase over prior year's board budget			11.53%			12.63%	8.13%	9.18%	5.31%	5.13%
Water Rate \$ per cu. m.	\$ 2.6927					\$ 2.8395				
Percentage increase	5.74%					5.45%				

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2025 to 2029**

Service No.	2.680	Carry Forward from 2024	2025	2026	2027	2028	2029	TOTAL
	JDF Water Distribution							

EXPENDITURE

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$7,485,000	\$20,538,000	\$13,561,000	\$14,431,000	\$9,790,000	\$11,266,000	\$69,586,000	
Vehicles	\$525,000	\$1,515,000	\$774,000	\$710,000	\$750,000	\$250,000	\$3,999,000	
	\$8,010,000	\$22,053,000	\$14,335,000	\$15,141,000	\$10,540,000	\$11,516,000	\$73,585,000	

SOURCE OF FUNDS

Capital Funds on Hand	\$6,485,000	\$14,331,000	\$8,504,000	\$8,924,000	\$9,513,000	\$10,159,000	\$51,431,000	
Debenture Debt (New Debt Only)	\$0	\$4,700,000	\$4,100,000	\$5,400,000	\$0	\$1,000,000	\$15,200,000	
Equipment Replacement Fund	\$525,000	\$1,430,000	\$774,000	\$710,000	\$750,000	\$250,000	\$3,914,000	
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Reserve Fund	\$1,000,000	\$1,592,000	\$957,000	\$107,000	\$277,000	\$107,000	\$3,040,000	
	\$8,010,000	\$22,053,000	\$14,335,000	\$15,141,000	\$10,540,000	\$11,516,000	\$73,585,000	

CAPITAL REGIONAL DISTRICT

5 YEAR CAPITAL PLAN

2025 - 2029

Service #: 2.680

Service Name: JDF Water Distribution

PROJECT DESCRIPTION				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2024	2025	2026	2027	2028	2029	5 - Year Total
INFRASTRUCTURE ENGINEERING AND OPERATIONS													
Planning													
16-03	Renewal	Asset Management Plan	Combine past studies to plan out future capital expenditures.	\$ 400,000	S	WU	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
21-14	Renewal	Fire Storage Analysis	Assess and update the fire flow upgrade program to inform future capital works.	\$ 120,000	S	WU	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 15,000
25-01	Study	Water Meter Strategic Plan	Review of the existing meter program and strategic planning including replacement vs repair cost benefit analysis, review of meter technologies, implementation phasing and short term and long term planning.	\$ 250,000	S	WU	\$ -	\$ 200,000	\$ 50,000.00	\$ -	\$ -	\$ -	\$ 250,000.00
Capital													
16-05	Renewal	Comprehensive Pump Station Upgrades	Continue pump station condition assessments, plan and carry out upgrades.	\$ 11,300,000	S	WU	\$ 750,000	\$ 1,601,000	\$ 450,000	\$ 2,000,000	\$ 750,000	\$ 2,000,000	\$ 6,801,000
18-03	Renewal	JDF Site Decommissioning Program	Decommissioning of facilities that are no longer in use based on preliminary work from Annual Provisional	\$ 1,000,000	S	WU	\$ 500,000	\$ 500,000	\$ 80,000	\$ 90,000	\$ 100,000	\$ 100,000	\$ 870,000
18-06	New	Post Disaster Emergency Water Distribution	Determine and supply response equipment for disaster response.	\$ 600,000	S	WU	\$ 70,000	\$ 120,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 320,000
20-03	Replacement	AC Pipe Replacement Program	Replacement of aging asbestos cement pipe year over year as outlined in the May 2023 staff report. Replacement is expected to be phased until 2055 to replace all AC pipe in the distribution network.	\$ 140,000,000	S	WU	\$ 3,000,000	\$ 8,600,000	\$ 3,600,000	\$ 3,800,000	\$ 4,000,000	\$ 4,200,000	\$ 24,200,000
21-02	Replacement	Sooke Road W/M Replacement - VMP to Jacklin	Replacement of aged, large diameter water main and smaller diameter AC from Jacklin Rd to VMP. 1,100m of 600mm Pipe - VMP to Jacklin as well as the asbestos cement distribution main along the same alignment.	\$ 8,500,000	S	WU	\$ 150,000	\$ 400,000	\$ 4,000,000	\$ 4,050,000	\$ -	\$ -	\$ 8,450,000
21-13	Replacement	SCADA Master Plan Update & Upgrades	Update the SCADA Master Plan in conjunction with the RWS, Saanich Peninsula and Core Area infrastructure.	\$ 1,900,000	S	WU	\$ 900,000	\$ 1,500,000	\$ 300,000	\$ -	\$ -	\$ -	\$ 1,800,000
22-02	New	Microwave Radio Upgrades	Installation of high-bandwidth microwave radio infrastructure to accommodate CRD infrastructure	\$ 750,000	S	WU	\$ 230,000	\$ 330,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ 630,000
24-02	New	Hwy 14 Watermain Relocation	Relocation of CRD watermain in MOTI right of way. Project work to be bundled within MOTI's project.	\$ 2,000,000	S	WU	\$ 820,000	\$ 2,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,000,000
25-06	Replacement	Large Meters & Pressure Control Stations Replacement Program	Ongoing program to upgrade billing meters and pressure control stations, including chambers as required.	\$ 5,000,000	S	WU	\$ -	\$ 400,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 2,400,000
Sub-Total System Infrastructure Engineering and Operations				\$ 171,820,000			\$ 6,485,000	\$ 15,716,000	\$ 9,130,000	\$ 10,590,000	\$ 5,500,000	\$ 6,850,000	\$ 47,786,000
CORPORATE ASSET AND MAINTENANCE MANAGEMENT (CMM)													
16-06	Replacement	Vehicle & equipment replacement (funding from replacement fund)	Vehicle and equipment replacement.	\$ 3,914,000	V	ERF	\$ 525,000	\$ 1,430,000	\$ 774,000	\$ 710,000	\$ 750,000	\$ 250,000.00	\$ 3,914,000
25-05	New	New Vehicle - Water System Ops	New EV Truck for Team Lead and expanding operational needs	\$ 85,000	V	WU	\$ -	\$ 85,000	\$ -	\$ -	\$ -	\$ -	\$ 85,000
Sub-Total CMM				\$ 3,999,000			\$ 525,000	\$ 1,515,000	\$ 774,000	\$ 710,000	\$ 750,000	\$ 250,000	\$ 3,999,000
ANNUAL PROVISIONAL ITEMS													
17-09	Replacement	Emergency Main Replacement	Major main replacement under emergencies.	\$ 613,000	S	WU	\$ -	\$ 100,000	\$ 110,000	\$ 121,000	\$ 134,000	\$ 148,000	\$ 613,000
17-13	New	Site Security Upgrades	Upgrading and replacement of security systems for sites as required.	\$ 247,000	S	WU	\$ -	\$ 40,000	\$ 44,000	\$ 49,000	\$ 54,000	\$ 60,000	\$ 247,000
17-15	Renewal	Distribution System Improvements	Unplanned distribution system improvements or decommissioning.	\$ 2,750,000	S	WU	\$ -	\$ 450,000	\$ 495,000	\$ 545,000	\$ 600,000	\$ 660,000	\$ 2,750,000
17-16	New	Hydraulic Model Yearly Update	Annual hydraulic model update and uni-directional flushing support.	\$ 402,000	S	WU	\$ -	\$ 65,000	\$ 72,000	\$ 80,000	\$ 88,000	\$ 97,000	\$ 402,000
21-03	Replacement	Hydrant & Flush Replacement, Upgrades and Additions	Upgrade, replacement or installation of flushes and fire hydrants, and fire flow testing.	\$ 1,379,000	S	WU	\$ -	\$ 225,000	\$ 248,000	\$ 273,000	\$ 301,000	\$ 332,000	\$ 1,379,000
21-04	Replacement	Residential Service & Meter Replacement	Replacement of residential water meters as highlighted by the 2017 KWL Water Audit report.	\$ 10,000,000	S	WU	\$ -	\$ 1,800,000	\$ 1,900,000	\$ 2,000,000	\$ 2,100,000	\$ 2,200,000	\$ 10,000,000
21-05	Replacement	Pump Station Equipment Replacements	Unplanned pump station repairs and equipment replacement	\$ 920,000	S	WU	\$ -	\$ 150,000	\$ 165,000	\$ 182,000	\$ 201,000	\$ 222,000	\$ 920,000
21-06	Replacement	SCADA Equipment Replacement	Unplanned replacement of SCADA and electrical equipment.	\$ 613,000	S	WU	\$ -	\$ 100,000	\$ 110,000	\$ 121,000	\$ 134,000	\$ 148,000	\$ 613,000
21-07	Renewal	Reservoir Equipment Replacement	Replacement or repairs to components at reservoir sites.	\$ 613,000	S	WU	\$ -	\$ 100,000	\$ 110,000	\$ 121,000	\$ 134,000	\$ 148,000	\$ 613,000
21-09	Replacement	Valve Replacement	Unplanned replacement and repair of isolation and line valves, air valves, and pressure control valves.	\$ 1,223,000	S	WU	\$ -	\$ 200,000	\$ 220,000	\$ 242,000	\$ 267,000	\$ 294,000	\$ 1,223,000
Sub-Total for Annual Provisional Items				\$ 18,760,000			\$ -	\$ 3,230,000	\$ 3,474,000	\$ 3,734,000	\$ 4,013,000	\$ 4,309,000	\$ 18,760,000

Service #: 2.680
 Service Name: JDF Water Distribution

PROJECT DESCRIPTION				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2024	2025	2026	2027	2028	2029	5 - Year Total
DEVELOPMENT COST CHARGE (DCC)													
16-07	New	Update DCC Bylaw (Comprehensive Update in 2028)	Planned update of the DCC Bylaw.	\$ 320,000	S	Res	\$ -	\$ 30,000	\$ 30,000	\$ 30,000	\$ 200,000	\$ 30,000	\$ 320,000
21-01	New	Sooke Henlyn Supply & Distribution Mains	Construction of water mains based upon development predictions from the Helgesen Pump Station westwards.	\$ 1,000,000	S	Res	\$ 1,000,000	\$ 1,000,000	\$ -	\$ -	\$ -	\$ -	\$ 1,000,000
25-02	New	Throup Road Watermain Installation	Future budget to install new watermain along Throup Road when District of Sooke completes connector road.	\$ 900,000	S	Res	\$ -	\$ 50,000	\$ 850,000	\$ -	\$ -	\$ -	\$ 900,000
25-03	New	VMP Pump Upgrades	The increased required capacity at the VMP pump station is driven by the high growth demands expected in the HGL 172 m zone.	\$ 435,000	S	Res	\$ -	\$ 435,000	\$ -	\$ -	\$ -	\$ -	\$ 435,000
25-04	New	Center Mountain	CRD project administration fee as calculated in the 2024 DCC program update	\$ 385,000	S	Res	\$ -	\$ 77,000	\$ 77,000	\$ 77,000	\$ 77,000	\$ 77,000	\$ 385,000
Sub-Total for Development Cost Charges (DCC)				\$ 3,040,000			\$ 1,000,000	\$ 1,592,000	\$ 957,000	\$ 107,000	\$ 277,000	\$ 107,000	\$ 3,040,000
GRAND TOTAL				\$ 197,619,000			\$ 8,010,000	\$ 22,053,000	\$ 14,335,000	\$ 15,141,000	\$ 10,540,000	\$ 11,516,000	\$ 73,585,000

Service: 2.680 JDF Water Distribution

Project Number 16-03 **Capital Project Title** Asset Management Plan **Capital Project Description** Combine past studies to plan out future capital expenditures.
Project Rationale Asset Management Planning necessary to effectively manage asset life cycles and plan for future improvement works.

Project Number 21-14 **Capital Project Title** Fire Storage Analysis **Capital Project Description** Assess and update the fire flow upgrade program to inform future capital works.
Project Rationale Assessing fire storage in the JDF system to inform future capital improvements.

Project Number 25-01 **Capital Project Title** Water Meter Strategic Plan **Capital Project Description** Review of the existing meter program and strategic planning including replacement vs repair cost benefit analysis, review of meter technologies, implementation phasing and short term and long term planning.
Project Rationale Review of the existing meter program and strategic planning including replacement vs repair cost benefit analysis, review of meter technologies, implementation phasing and short term and long term planning.

Project Number 16-05 **Capital Project Title** Comprehensive Pump Station Upgrades **Capital Project Description** Continue pump station condition assessments, plan and carry out upgrades.
Project Rationale A previous capital project was completed by Delcan Corp. in 2012 which assessed each existing pump station and identified building deficiencies. Funds in 2024/2025 are for design of and construction of the Coppermine PS. Subsequently, Bear Mountain PS #1 will be assessed or the prioritization changed based on finalization of the Asset Management Plan (Capital Project # 16-03).

Service: 2.680 JDF Water Distribution

Project Number 18-03 **Capital Project Title** JDF Site Decommissioning Program **Capital Project Description** Decommissioning of facilities that are no longer in use based on preliminary work from Annual Provisional

Project Rationale Numerous pump station and PRV facilities have been made redundant or have been decommissioned within the JDF system. Sites have been identified as part of the annual provisional project and funds are required to decommission of the sites and then demolish them. In 2021 the Treanor pump station demolition was carried out. The Townsview PS and Tank are under review for further decommissioning.

Project Number 18-06 **Capital Project Title** Post Disaster Emergency Water Distribution **Capital Project Description** Determine and supply response equipment for disaster response.

Project Rationale Proposed work includes developing a response plan to disasters to the Juan de Fuca water supply or distribution system. Funds are required to procure equipment and carry out works developed the in 2018 plan in conjunction with the Regional Water Supply disaster response Plan.

Project Number 20-03 **Capital Project Title** AC Pipe Replacement Program **Capital Project Description** Replacement of aging asbestos cement pipe year over year as outlined in the May 2023 staff report. Replacement is expected to be phased until 2055 to replace all AC pipe in the distribution network.

Project Rationale Asbestos Watermains within the JDF Water Distribution network are approaching end of life and becoming more prone to failure. Asset replacement prioritization is based on a number of factors, such as age, criticality, leak history, coordination with other municipal projects and synergies with development activities. As identified most recently in the May 2023 Staff Report, this AC Replacement Program is anticipated to continue until all AC pipe in the distribution system has been replaced. Current target deadline for complete replacement is 2055.

Service: 2.680 JDF Water Distribution			
Project Number	21-02	Capital Project Title	Sooke Road W/M Replacement - VMP to Jacklin
Capital Project Description	Replacement of aged, large diameter water main and smaller diameter AC from Jacklin Rd to VMP. 1,100m of 600mm Pipe - VMP to Jacklin as well as the asbestos cement distribution main along the same alignment.		
Project Rationale	According to corrosion assessment, a 2.2 kilometre section of an existing steel pipe along Sooke Road and Allendale Road (between Wishart to Jacklin) was unprotected and in need of replacement. In 2014, the design of both phases of the water main was completed by a consultant and construction of the main from Wishart to VMP was completed by CRD resources. The remaining 1.1km of 600mm steel pipe from Jacklin to Veterans Memorial Parkway still requires replacement and upgrades should also include replacement of the Asbestos Cement Pipe along this alignment.		
Project Number	21-13	Capital Project Title	SCADA Master Plan Update & Upgrades
Capital Project Description	Update the SCADA Master Plan in conjunction with the RWS, Saanich Peninsula and Core Area infrastructure.		
Project Rationale	The SCADA and radio system utilized by JDF Water System comprises of components ranging from 2-25 years in age. A planned replacement of assets, to be coordinated with the Regional Water Supply and Saanich Peninsula Water & Wastewater Systems is required to create a more resilient and cohesive communications system		
Project Number	22-02	Capital Project Title	Microwave Radio Upgrades
Capital Project Description	Installation of high-bandwidth microwave radio infrastructure to accommodate CRD infrastructure		
Project Rationale	Installation of high-bandwidth microwave radio infrastructure to accommodate CRD infrastructure		
Project Number	24-02	Capital Project Title	Hwy 14 Watermain Relocation
Capital Project Description	Relocation of CRD watermain in MOTI right of way. Project work to be bundled within MOTI's project.		
Project Rationale	Schedule of project delivery is dictated by Ministry of Transportation project delivery.		

Service: 2.680 JDF Water Distribution

Project Number 25-06 **Capital Project Title** Large Meters & Pressure Control Stations Replacement Program **Capital Project Description** Ongoing program to upgrade billing meters and pressure control stations, including chambers as required.

Project Rationale This is an ongoing term program for the continued replacement of obsolete and worn out large (typically greater than 2" diameter) meters, adding new meters and upgrading meter vaults as well as for the ongoing replacement of Pressure Control Stations.

Project Number 16-06 **Capital Project Title** Vehicle & equipment replacement (funding from replacement fund) **Capital Project Description** Vehicle and equipment replacement.

Project Rationale This is for the replacement of vehicles and equipment used by CRD Integrated Water Services for the day-to-day operation and maintenance of the Juan De Fuca distribution system. These replacements are funded from the Juan De Fuca Vehicle and Equipment Replacement Fund.

Project Number 23-02 **Capital Project Title** Vehicle to support the meter replacement program **Capital Project Description** Purchase of a Transit Van equipped with tools and equipment to support the meter replacement program

Project Rationale Purchase of a Transit Van equipped with tools and equipment to support the meter replacement program

Project Number 25-05 **Capital Project Title** New Vehicle - Water System Ops **Capital Project Description** New EV Truck for Team Lead and expanding operational needs

Project Rationale New EV Trucks for Team Lead and expanding operational needs.

Project Number 17-09 **Capital Project Title** Emergency Main Replacement **Capital Project Description** Major main replacement under emergencies.

Project Rationale This item is to fund the costs of responding to emergency major main breaks and conducting replacements.

Service: 2.680 JDF Water Distribution					
Project Number	17-13	Capital Project Title	Site Security Upgrades	Capital Project Description	Upgrading and replacement of security systems for sites as required.
Project Rationale	This is an annual allowance for upgrading and maintaining equipment, security and control systems at distribution facilities such as pump stations, PRV chambers and reservoirs. Items such as access hatches, fencing, etc., will be modified to provide a larger degree of security.				
Project Number	17-15	Capital Project Title	Distribution System Improvements	Capital Project Description	Unplanned distribution system improvements or decommissioning.
Project Rationale	Historically, opportunities to complete work arise during the year which were not specifically identified and budgeted. This item typically relates to coordinating work programs (i.e. JDF water main replacements and municipal paving programs) with the municipalities or development and taking advantage of opportunities during the year that were not specifically identified.				
Project Number	17-16	Capital Project Title	Hydraulic Model Yearly Update	Capital Project Description	Annual hydraulic model update and uni-directional flushing support.
Project Rationale	This item is required to input the pipes installed that year into the hydraulic computer model, followed by calibration and testing in order to keep the model up to date for design and planning purposes.				
Project Number	21-03	Capital Project Title	Hydrant & Flush Replacement, Upgrades and Additions	Capital Project Description	Upgrade, replacement or installation of flushes and fire hydrants, and fire flow testing.
Project Rationale	This is an annual provision for replacing old and outdated hydrants, flushes and associated works and access, as well as adding new hydrants to the system where requested by the municipalities or fire departments.				
Project Number	21-04	Capital Project Title	Residential Service & Meter Replacement	Capital Project Description	Replacement of residential water meters as highlighted by the 2017 KWL Water Audit report.
Project Rationale	This is an annual provision for replacing failed residential services and meters, as well as proactively replacing services and meters in areas with historically large number of breaks.				
Project Number	21-05	Capital Project Title	Pump Station Equipment Replacements	Capital Project Description	Unplanned pump station repairs and equipment replacement
Project Rationale	This is an annual provision for unplanned pump station repairs and equipment replacement.				
Project Number	21-06	Capital Project Title	SCADA Equipment Replacement	Capital Project Description	Unplanned replacement of SCADA and electrical equipment.
Project Rationale	This is an annual provision for unplanned SCADA and electrical equipment replacement.				

Service: 2.680 JDF Water Distribution					
Project Number	21-07	Capital Project Title	Reservoir Equipment Replacement	Capital Project Description	Replacement or repairs to components at reservoir sites.
Project Rationale	This is an annual provisional for unplanned replacement of equipment, such as safety devices and mechanical fittings, at reservoir sites.				
Project Number	21-09	Capital Project Title	Valve Replacement	Capital Project Description	Unplanned replacement and repair of isolation and line valves, air valves, and pressure control valves.
Project Rationale	This is an annual provisional for unplanned replacement of valves, including air valves and check valves.				
Project Number	16-07	Capital Project Title	Update DCC Bylaw (Comprehensive Update in 2028)	Capital Project Description	Planned update of the DCC Bylaw.
Project Rationale	This is a provisional item to cover questions that arise and referred to our consultants for advice. Every 5 years a comprehensive update is required and the previous DCC update.				
Project Number	21-01	Capital Project Title	Sooke Henlyn Supply & Distribution Mains	Capital Project Description	Construction of water mains based upon development predictions from the Helgesen Pump Station westwards.
Project Rationale	Construction of water mains based upon development predictions from the Helgesen Pump Station westwards.				
Project Number	25-02	Capital Project Title	Throup Road Watermain Installation	Capital Project Description	Future budget to install new watermain along Throup Road when District of Sooke completes connector road.
Project Rationale	Budget allocated for future collaboration works to align with Sooke's Throup Road connector project. Schedule to be driven by District of Sooke project.				

Service: 2.680 JDF Water Distribution

Project Number	25-03	Capital Project Title	VMP Pump Upgrades	Capital Project Description	The increased required capacity at the VMP pump station is driven by the high growth demands expected in the HGL 172 m zone.
Project Rationale	This project is to supply the 4th required pump to maximum the existing VMP station's capacity. The VMP pump station pumps out of zone HGL 116m to the Fulton Reservoir and services zone HGL 172m. The current firm capacity of the VMP pump station is 85 L/s, and the future firm capacity is 140 L/s (with proposed additional pump upgrade). An additional, separate, project for a new pump station (Pump Station 10) will still be required even with the pump upgrade at VMP to support the modeled required future pumped capacity of 243L/s (140L/s at full build out VMP and another 143L/s at new Pump Station 10). Overall, the increased required capacity at the VMP pump station and a future "new" Pump Station 10 is driven by the high growth demands expected in the HGL 172 m zone.				

Project Number	25-04	Capital Project Title	Center Mountain	Capital Project Description	CRD project administration fee as calculated in the 2024 DCC program update
Project Rationale	CRD project management for construction of watermains, pump stations and reservoir being delivered by development community.				

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2025 to 2029**

Service No.	2.670/2.680 Regional Water Supply & JDF Wate	Carry Forward from 2024	2025	2026	2027	2028	2029	TOTAL
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EXPENDITURE

Buildings	\$0	\$250,000	\$80,000	\$200,000	\$80,000	\$80,000	\$690,000
Equipment	\$380,000	\$1,180,000	\$435,000	\$450,000	\$431,000	\$425,000	\$2,921,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$0	\$50,000	\$30,000	\$20,000	\$20,000	\$20,000	\$140,000
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$380,000	\$1,480,000	\$545,000	\$670,000	\$531,000	\$525,000	\$3,751,000

SOURCE OF FUNDS

Capital Funds on Hand	\$380,000	\$1,480,000	\$545,000	\$670,000	\$531,000	\$525,000	\$3,751,000
Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$380,000	\$1,480,000	\$545,000	\$670,000	\$531,000	\$525,000	\$3,751,000

CAPITAL REGIONAL DISTRICT

5 YEAR CAPITAL PLAN

2025 - 2029

Service #: 2.670/2.680
 Service Name: Regional Water Supply & JDF Water Distribution Combo

PROJECT DESCRIPTION				PROJECT BUDGET & SCHEDULE									
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2024	2025	2026	2027	2028	2029	5 - Year Total
SYSTEM REPLACEMENT AND UPGRADES THAT BENEFIT REGIONAL WATER SUPPLY AND JUAN DE FUCA DISTRIBUTION													
16-01	Renewal	Upgrades to Buildings at 479 Island Highway	Maintenance and changes to buildings, office layouts, meeting rooms, yard improvements, lab improvements and technology upgrades.	\$ 1,330,000	B	WU	\$ -	\$ 250,000	\$ 80,000	\$ 200,000	\$ 80,000	\$ 80,000	\$ 690,000
17-01	Renewal	Voice Radio Upgrade	Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.	\$ 2,125,000	E	WU	\$ 380,000	\$ 430,000	\$ -	\$ -	\$ -	\$ -	\$ 430,000
24-01	Replacement	IT Core Infrastructure Replacement	Replacement of Core IT infrastructure such as servers, network switches, UPS, etc for equipment end of life	\$ 250,000	E	WU		\$ 125,000	\$ 10,000	\$ 25,000	\$ 6,000	\$ -	\$ 166,000
25-XX	Replacement	Laboratory Upgrades	Improvements to water quality lab facilities	\$ 200,000	E	WU	\$ -	\$ 200,000.00					\$ 200,000.00
Sub-Total System Replacement and Upgrades That Benefit Regional Water Supply and Juan de Fuca Distribution				\$ 3,705,000				\$ 1,005,000	\$ 90,000	\$ 225,000	\$ 86,000	\$ 80,000	\$ 1,486,000
ANNUAL PROVISIONAL CAPITAL ITEMS													
17-03	Replacement	Office Equipment, Upgrades and Replacements	Upgrade and replacement of office equipment as required.	\$ 450,000	E	WU	\$ -	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 90,000	\$ 450,000
17-04	Replacement	Computer Upgrades	Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	\$ 950,000	E	WU	\$ -	\$ 190,000	\$ 190,000	\$ 190,000	\$ 190,000	\$ 190,000	\$ 950,000
17-05	New	Development of the Maintenance Management Systems	Develop maintenance management system.	\$ 150,000	E	WU	\$ -	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 150,000
17-06	Replacement	Small Equipment & Tool Replacement (Water Operations)	Replacement of tools and small equipment for Water Operations as required.	\$ 500,000	E	WU	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000
17-07	Replacement	Small Equipment & Tool Replacement (Corporate Fleet)	Replacement of tools and small equipment for Fleet as required.	\$ 85,000	E	WU	\$ -	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 75,000
24-02	Study	Capital Projects Delivery Optimization	Ongoing internal improvement of templates, tools and processes used in the delivery of capital projects.	\$ 160,000	S	WU	\$ -	\$ 50,000	\$ 30,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 140,000
Sub-Total for Annual Provisional Capital Items				\$ 2,295,000				\$ 475,000	\$ 455,000	\$ 445,000	\$ 445,000	\$ 445,000	\$ 2,265,000
x			GRAND TOTAL	\$ 6,000,000				\$ 1,480,000	\$ 545,000	\$ 670,000	\$ 531,000	\$ 525,000	\$ 3,751,000
\$ -													

Service: 2.670/2.680 **Regional Water Supply & JDF Water Distribution Combo**

Project Number	16-01	Capital Project Title	Upgrades to Buildings at 479 Island Highway	Capital Project Description	Maintenance and changes to buildings, office layouts, meeting rooms, yard improvements, lab improvements and technology upgrades.
Project Rationale	The budget includes the following funds to upgrade and renew the buildings at 479 Island Highway, including: <ul style="list-style-type: none"> • Improvements, Repairs, upgrades and changes to the buildings • Painting of the buildings • Repair and replacement of carpets, floors and walls • Climate Action initiatives and feasibility studies • Improvements to Meeting Rooms, including technology upgrades 				

Project Number	17-01	Capital Project Title	Voice Radio Upgrade	Capital Project Description	Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.
Project Rationale	Service Life and projected replacement: <ul style="list-style-type: none"> • The service life of the mobile and portable units was forecast as 10 years at minimum, 15 years at maximum in 2005. • The present radio models used in the system have just been taken out of production by the manufacturer, there will be no new units available for purchase as of July 1, 2015. • Support for repairs and maintenance of the present radio will continue for the next 3 years at least. • There are no pressing issues with equipment maintenance or repairs, present repair rates suggest we can maintain the system for the next few years, and perhaps reach a 12-15 year lifespan on the present equipment. 				

Project Number	20-01	Capital Project Title	#N/A	Capital Project Description	#N/A
Project Rationale	The RWS and JdF operation numerous water mains and pump stations. There are situations, when a pump station fails, construction of a pump station or bypassing a section of pipe, where a portable pump station with a generator is required to maintain the level of service. Portable PS was delivered in 2023 but some deficiencies, including the associated generator remain and may carry into 2024 to fully address.				

Service: **2.670/2.680** **Regional Water Supply & JDF Water Distribution Combo**

Project Number	17-03	Capital Project Title	Office Equipment, Upgrades and Replacements	Capital Project Description	Upgrade and replacement of office equipment as required.
Project Rationale	Funds will be used for the replacement and upgrading of office equipment and furniture, as required.				

Project Number	17-04	Capital Project Title	Computer Upgrades	Capital Project Description	Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.
Project Rationale	<p>This is an annual upgrading and replacement program of computers, photocopiers, network, monitoring and associated equipment, as required. This item has been increased from \$160,000 to \$170,000 annually to reflect actual costs.</p> <p>Capital Budget Network Switch Maintenance \$10,000 Additional Wireless Access Points and Maintenance \$15,000 Photocopier Replacement \$20,000 Additional Data Storage \$15,000 Replacement Computers \$75,000 Equipment Maintenance (contingency) \$23,000 Replace Access Control System - Gates/ Video Cameras \$12,000 Total Capital \$170,000</p>				

Project Number	17-05	Capital Project Title	Development of the Maintenance Management Systems	Capital Project Description	Develop maintenance management system.
Project Rationale	The maintenance management system needs further development to meet user needs and to facilitate reporting. It is proposed that funds be approved for the following projects:- Develop and Asset onboarding process and a fault code reporting process for the CMMS.				

Service: 2.670/2.680 **Regional Water Supply & JDF Water Distribution Combo**

Project Number 17-06 **Capital Project Title** Small Equipment & Tool Replacement (Water Operations) **Capital Project Description** Replacement of tools and small equipment for Water Operations as required.

Project Rationale Funds will be used for replacement of a variety of Operations and Welding equipment such as cutting saws, portable generators, gas detectors, Hilti drills, plasma cutter, wire welder, etc.

Project Number 17-07 **Capital Project Title** Small Equipment & Tool Replacement (Corporate Fleet) **Capital Project Description** Replacement of tools and small equipment for Fleet as required.

Project Rationale Funds will be used for replacement of a variety of Fleet small equipment and tools as required. This includes provision to replace the Vehicle OBD reader for reading engine codes and the shop air compressor.

Project Number 24-01 **Capital Project Title** IT Core Infrastructure Replacement **Capital Project Description** Replacement of Core IT infrastructure such as servers, network switches, UPS, etc for equipment end of life

Project Rationale Ongoing end of life replacement program for IT Core Infrastructure, including servers, network switches, UPS, and other equipment.

Project Number 24-02 **Capital Project Title** Capital Projects Delivery Optimization **Capital Project Description** Ongoing internal improvement of templates, tools and processes used in the delivery of capital projects.

Project Rationale Ongoing program for small scale optimization of project delivery methods and tools.

**2.680 Juan de Fuca Water Distribution
Summary Schedule
2025 - 2029 Financial Plan**

Asset Profile

Juan de Fuca Water Distribution

Juan de Fuca assets include lands, office buildings, pump stations, pipe lines, meters, equipment, vehicles and other infrastructure.

Reserve/Fund Summary

	Estimated	Budget				
	2024	2025	2026	2027	2028	2029
DCC Reserve Account	16,421,235	17,829,235	19,872,235	22,765,235	25,488,235	28,381,235
Equipment Replacement Fund	704,757	150,821	112,717	137,409	136,664	569,654
Total	17,203,598	18,057,664	20,062,562	22,980,256	25,702,513	29,028,505

2.680 Juan de Fuca Water Distribution
 Development Cost Charges
 2025 - 2029 Financial Plan

Development Cost Charges Reserve Schedule

Reserve Fund: Development Cost Charges for Juan de Fuca Water Distribution (Bylaw # 2758)

Fund: 1055 Fund Center: 101532

	Estimated	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	13,141,235	16,421,235	17,829,235	19,872,235	22,765,235	25,488,235
Transfer to Cap Fund to fund DCC projects	(20,000)	(1,592,000)	(957,000)	(107,000)	(277,000)	(107,000)
Payment of P&I on LA 3164	-	-		-	-	-
Payment of DCC liability	-					
DCC's received From Member Municipalities	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Interest Income*	300,000					
Ending Balance \$	16,421,235	17,829,235	19,872,235	22,765,235	25,488,235	28,381,235

General Comments:
 Development Cost Charges Reserve Funds for Juan de Fuca Water Distribution was adopted in year 2000 for the purpose of providing funds for the capital costs of water facilities in the service areas.

These Reserve funds are received from Member Municipalities as Development Cost Charges (DCC's) to provide for the capital costs attributable to water sytem capacity improvements projects specified in the DCC capital expenditure program. Municipalities collect these DCC charges through building permits that are issued to developers for subdivision development.

Future years DCC's received from member municipalities are difficult to predict, due to unknown development activity in the Municipalities, influenced by market conditions. Estimates based on recent annual collections of DCCs, and the cyclical nature of property development.

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

**2.680 Juan de Fuca Water Distribution
Equipment Replacement Reserve
2025 - 2029 Financial Plan**

Equipment Replacement Reserve Schedule

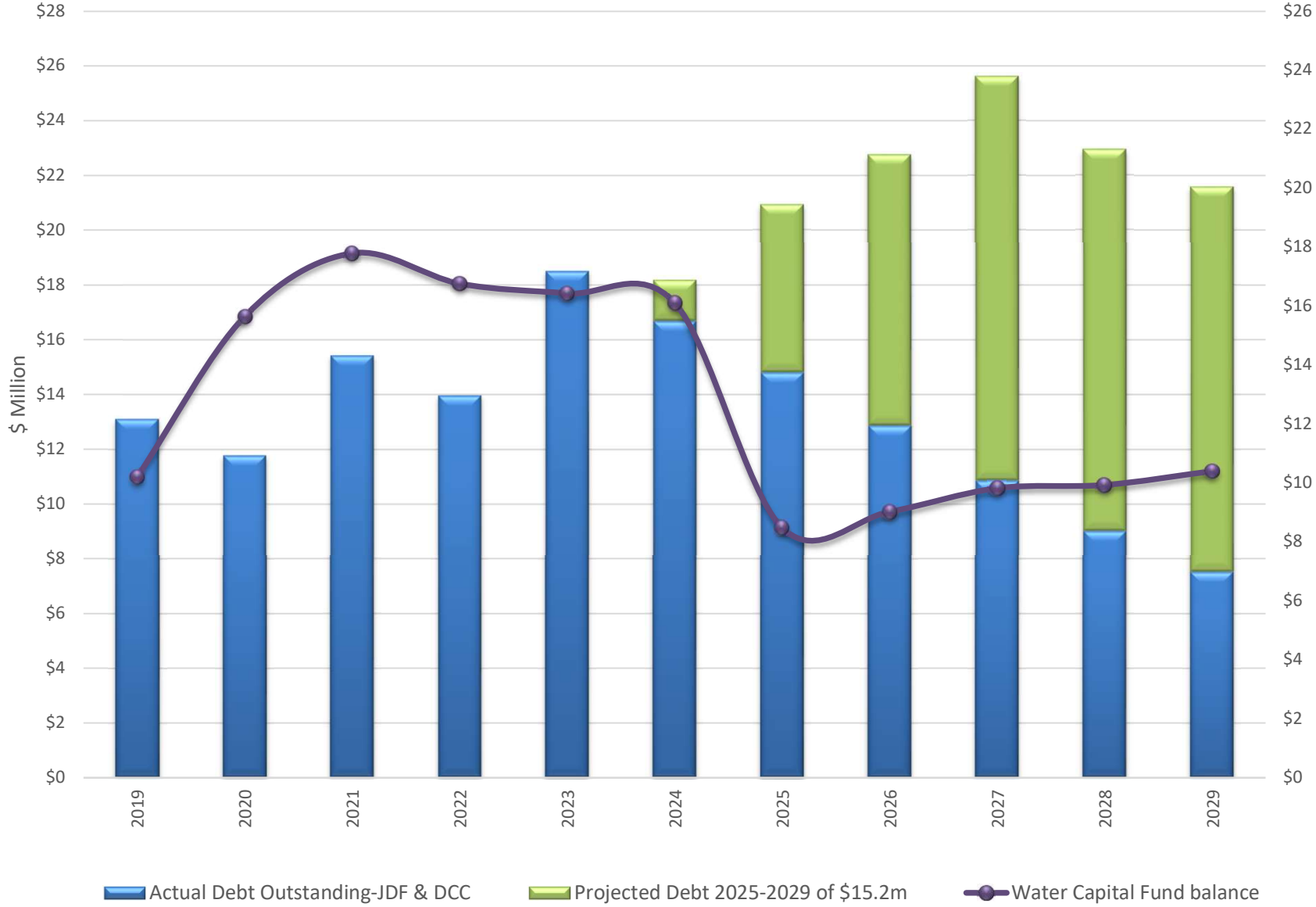
Reserve Fund: Juan de Fuca Distribution Equipment Replacement Reserve (covered by CRD-ERF Bylaw)

Fund: 1022 Fund Center: 101630	Estimated	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	596,250	704,757	150,821	112,717	137,409	136,664
Equipment purchases (Based on Capital Plan)	(640,000)	(1,430,000)	(774,000)	(710,000)	(750,000)	(250,000)
Transfer from Operating Budget	647,507	661,564	619,796	628,192	636,755	645,490
Proceeds on disposals	96,000	214,500	116,100	106,500	112,500	37,500
Interest Income*	5,000					
Ending Balance \$	704,757	150,821	112,717	137,409	136,664	569,654

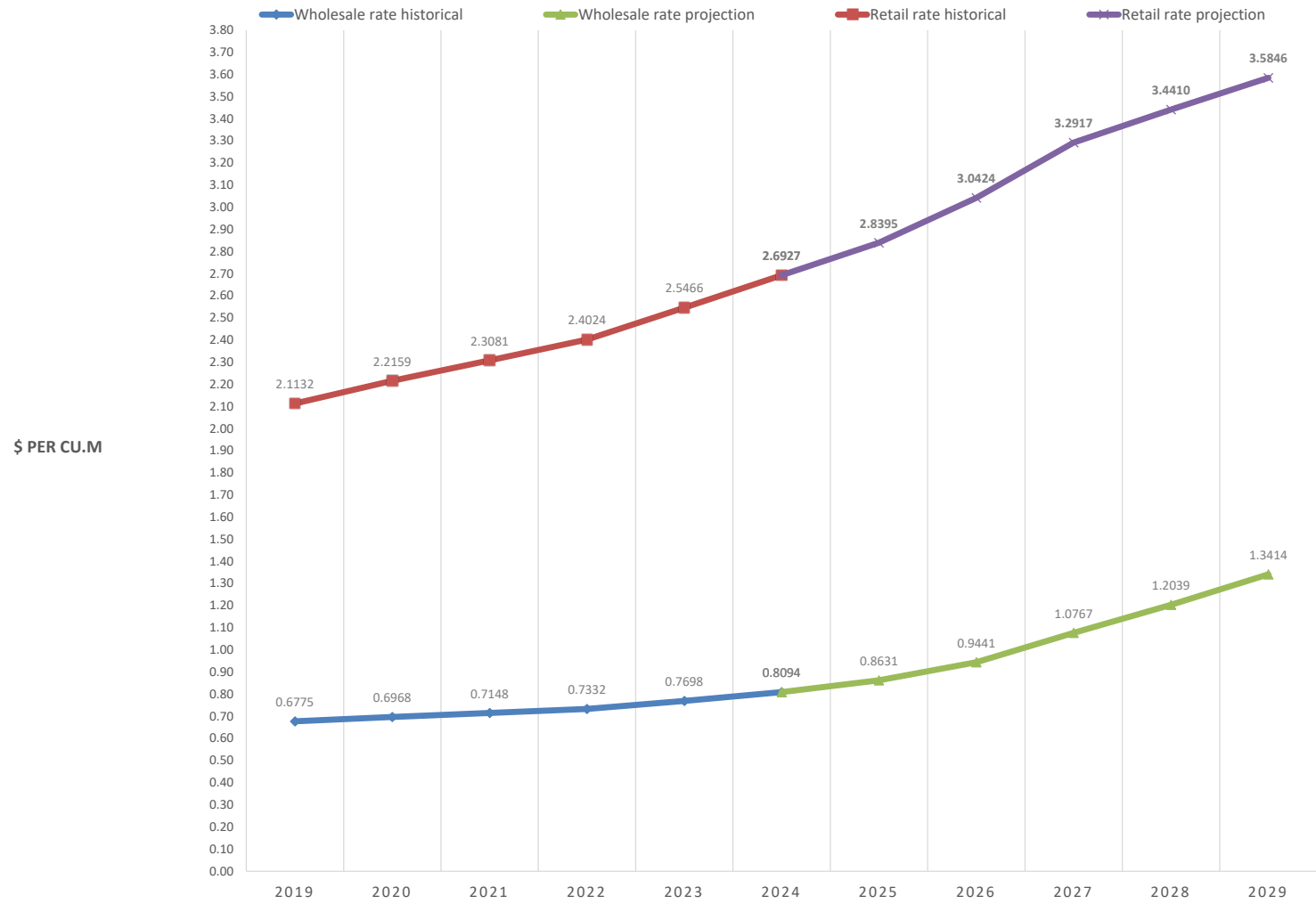
General Comments:
Reserve Fund is used for the purpose of replacing fleet vehicles including heavy equipment and associated mobile components, as outlined in the capital plan. Proceeds from disposals are estimated at 15% of replacement equipment purchases. Note not all vehicles are sold within the year in which they are replaced.

* Interest should be included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

JDF Water Distribution & DCC Debt Outstanding vs Water Capital Fund Balance



CRD WATER WHOLESALE & RETAIL RATE, HISTORICALS & PROJECTIONS



Initiative Business Case (IBC) Summaries

2b-2.1 Utility Operator (Water Operations)

The Capital Regional District (CRD) operates the Juan de Fuca (JdF) Water Distribution System, serving approximately 60,000 customers in Colwood, Langford, Metchosin, View Royal, Sooke, Highlands, and the JdF Electoral Area (East Sooke). The aging infrastructure has been strained by ongoing development projects, affecting reliability and efficiency. Over the past five years, the JdF Distribution system has expanded by 28,000 meters of new water main, 2,310 residential meters, and 350 fire hydrants. This initiative aims to create a new full-time position in the Water Infrastructure Operations division, focusing on enhancing the resilience of the drinking water system through water main construction, infrastructure renewal, and developer expansion. Funding for this initiative will be covered through fee-for-service.

Population growth in the region has increased demand, putting pressure on the water and wastewater systems. Preventative maintenance and new capital projects are crucial for ensuring reliable infrastructure, improving efficiency by reducing after-hours and emergency repairs, and optimizing equipment performance. These efforts also extend the lifespan of assets, decrease unplanned downtime, and build resilience to climate change impacts. Currently, the demand for preventative maintenance and project support exceeds the staffing in two critical areas of the Wastewater Infrastructure Operations division:

- **2b-2.3 Systems Maintenance Electronics Technologist**

The Systems Maintenance team: in 2023, the team had approximately 910 hours of unfinished preventative maintenance work and a backlog of 1,750 hours for capital project support, equivalent to more than a full-time employee's workload. To maintain critical systems for which we forecast an increased workload in 2024, this initiative seeks to create a new regular full-time electronics technician position. Funding for this initiative will come from requisition and fee-for-service, with operating reserves used for one-time equipment purchases.

- **2b-2.4 Systems Maintenance Electrician**

The Industrial Automation team: in 2023, the team was unable to complete approximately 3,400 hours of work, equivalent to almost two full-time employees' workload. This shortfall was partly due to difficulties in filling vacancies and partly due to insufficient staffing capacity. To address this issue, the initiative seeks to create a new regular full-time electrician position. Funding for this initiative will come from fee-for-service, with operating reserves used for one-time equipment purchases.



Making a difference...together

REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION MEETING OF TUESDAY, OCTOBER 01, 2024

SUBJECT: Modernizing Capital Regional District Water Billing

ISSUE SUMMARY

To provide an overview of modernization and customer experience opportunities related to Capital Regional District (CRD) water billing.

BACKGROUND

This staff report responds to a question raised by a CRD water customer through a municipal councillor, providing background and opportunities for modernization through asset management and replacement, improving payment operations and gathering additional customer feedback to inform service delivery.

Primary functions of the water billing office include managing accounts, handling and processing various payment options and enabling e-billing services. The water billing team is vital in assisting residents with new water connections and relocations while raising awareness about water consumption and leak detection. Operational metrics show consistent trending in the growing number of billing accounts, the complexity and changing of accounts and end-of-life meter replacements. The team is an essential part of maintaining customer satisfaction and operational effectiveness.

Continuous improvement initiatives are critical to sustainable service delivery. As such, the following initiatives have been identified in a development roadmap for water billing.

1. Meter Technology and Replacement Program Review
 - Assess potential vendors and alternative water meter and meter reading technologies for suitability
2. Process Review and Bylaw Modernization
 - Reduce manual processes through enhanced batch processing and updates to the enterprise management system/accounting software
 - Review and modernize existing bylaws as needed
3. Payment Modernization
 - Investigate additional payment options beyond traditional methods like cash, cheques, debit cards and online banking
4. Online Access for Customer Invoices/Account Access
 - Evaluate the implementation of a web portal for customer access to invoices and account information

Through the annual planning process, staff develop initiative business plans for consideration and inclusion in service plans and budgets. These are evaluated by the Executive Leadership Team (ELT) and if approved are included in the financial plan. Incorporating modernization initiatives into the financial plan ensures they are prioritized, sustainably funded and aligned with CRD's commitment to operational efficiency and customer service improvement.

IMPLICATIONS

Financial & Service Delivery Implications

Billing for water services is a complex business process requiring various inputs, especially from operations. End-to-end integration in the process design is essential for efficient service delivery and ultimate customer satisfaction. Staff currently see these initiatives as crucial to optimizing efficient operations and achieving intended results.

1. Meter Technology and Replacement Program Review

Staff are preparing to undertake a comprehensive review of the existing water meter program through the Water Meter Strategic Plan, included in the approved Juan de Fuca capital plan. A consultant-led study is scheduled to begin in 2025. This study will explore the cost-benefit analysis of meter replacement versus meter repair, review available meter technologies and outline both short- and long-term implementation strategies. The objective is to gather data that will guide future decisions on improving water consumption measurement, billing accuracy and service efficiency.

Meter Replacement Strategic Plan and Review Phases

- a) Meter Technology Review: This phase will include the consultant-led study mentioned above, which will evaluate existing meter hardware and explore the potential for advanced meter reading technologies, such as tower-based radio systems in rural areas.
- b) Replacement of Meter Radio Reader Technology: Integrate advanced radio reader technologies onto existing meters to minimize the need for full replacements, reducing costs. This phased implementation will also involve augmenting the workforce to manage backlogs and ensure continuity until mid- and long-term upgrades are fully operational.
- c) Maintenance Phase: Re-establish an in-house meter repair shop to proactively manage ongoing maintenance needs, enhancing service reliability and responsiveness. A review of policies and bylaws will also be conducted to address any gaps that could improve the metering and meter reading process.

2. Process Review and Bylaw Modernization

A redesign of business processes is planned to enhance key operational areas, particularly payment processing and customer account management, with an aim to directly improve the customer experience. A prerequisite for this includes transitioning the enterprise resource planning system to SAP S/4HANA, as identified in the financial plan. The new system will offer additional features and improved integration with various SAP modules, resulting in faster and more accurate service for customers. Additionally, by reviewing and modernizing the bylaw, administrative procedures will be streamlined, making processes more transparent and easier for customers to navigate.

3. Payment Modernization

Modernizing payment methods is a transformative initiative with the potential to significantly elevate customer experiences. This involves exploring a variety of payment options, including

credit cards, pre-authorized withdrawals and digital payment methods, offering customers a wider range of convenient choices.

This initiative is centered on redefining the customer payment experience in terms of service delivery. The goal is to integrate payment systems that are user-friendly, secure and highly efficient, ultimately leading to a marked improvement in overall customer satisfaction and experience. This initiative will require collaboration with Information Technology (IT), including the creation and approval of an IT project charter and a new Initiative Business Case for ELT approval. Additionally, it will involve a request for proposal process as substantial modifications to current banking services are required.

4. Online Access for Customer Invoices/Account Access

The CRD is planning development on a centralized user-friendly platform for residents and businesses to access its services. Providing secure 24/7 online access will meet the growing demand for self-service, enabling streamlined account management and invoice viewing. The 'My CRD' platform, detailed in the 2025 13a-5.2 Initiative Business Case, will integrate online payments, allowing residents to conveniently pay for services across the CRD, including water bills in the future.

CONCLUSION

The CRD's initiatives to modernize water billing and customer service aim to address key operational challenges and enhance the overall customer satisfaction. By focusing on specific upgrades such as advanced metering technology, expanded payment options and the introduction of the 'My CRD' platform, the CRD is committed to improving service efficiency accuracy, and accessibility. These efforts will not only streamline internal processes but also meet the evolving customer expectations, ensuring a reliable and modernized service experience for all CRD water customers.

RECOMMENDATION

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

Submitted by:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT
Submitted by:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer



Capital Regional District

HOTSHEET AND ACTION LIST

Regional Water Supply Commission

Wednesday, September 25, 2024

11:30 AM

Board Room, 6th Floor
625 Fisgard Street
Victoria, BC

The following is a quick snapshot of the FINAL Regional Water Supply Commission decisions made at the meeting. The minutes will represent the official record of the meeting. A name has been identified beside each item for further action and follow-up.

3. ADOPTION OF MINUTES

The minutes of the July 17, 2024 meeting were adopted as circulated.

7. CONSENT AGENDA

7.1. Regional Water Supply Strategic Plan Update

Recommendation: 1. That the revised draft 2025 Strategic Plan for the Greater Victoria Water Supply System be endorsed; and
2. That staff be directed to proceed with the engagement plan.

CARRIED

7.2. Designation of Watershed Security Officers

Recommendation: The Regional Water Supply Commission recommends that the Capital Regional District Board: Appoint Nathan Prenger as Watershed Security Officer for the purpose of Section 233 of the Local Government Act and Section 28(3) of the Offence Act, and in accordance with Capital Regional District Bylaw No. 2681.

CARRIED

8. COMMISSION BUSINESS

8.1. Update on Regional Water Supply Development Cost Charge Program

Recommendation: That staff be directed to complete further public and development community engagement related to the draft Regional Water Supply Development Cost Charges Background Report, attached as Appendix B, prior to drafting the Regional Water Supply Development Cost Charge Bylaw.

CARRIED

8.2. Regional Water Supply Service 2025 Budget Requirement for Bear Hill Extension Project

Recommendation: That the cost of the Bear Hill Trunk Watermain Extension capital project No. 21-05 be cost-shared between the Regional Water Supply and Saanich Peninsula Water services, with up to 50% of the total cost being included in the 2025 Regional Water Supply Capital Plan

CARRIED

The following items were received for information:

7.3. Recommendations from Other Water Commissions

7.4. Water Watch Report

8.3. Demand Management Program Update

Action:

Provide the Commission with a wildfire update report in October.

Annette



Capital Regional District

HOTSHEET AND ACTION LIST

Saanich Peninsula Water Commission

Thursday, July 18, 2024

9:30AM

Meeting Room 2
Sidney Community Safety Building
2245 Oakville Ave.
Victoria, BC

The following is a quick snapshot of the FINAL Saanich Peninsula Water Commission decisions made at the meeting. The minutes will represent the official record of the meeting. A name has been identified beside each item for further action and follow-up.

3. ADOPTION OF MINUTES

The minutes of the May 16, 2024 meeting were adopted as circulated.

7. COMMISSION BUSINESS

The following Items were received for information:

- 7.1 Saanich Peninsula Water Service 2024 Mid-Year Capital Projects and Operations Update**
- 7.2 Summary of Recommendations from Other Water Commissions**
- 7.3 Water Watch Report**



Capital Regional District

HOTSHEET AND ACTION LIST

Regional Water Supply Commission

Wednesday, July 17, 2024

11:00 AM

Board Room, 6th Floor
625 Fisgard Street
Victoria, BC

The following is a quick snapshot of the FINAL Regional Water Supply Commission decisions made at the meeting. The minutes will represent the official record of the meeting. A name has been identified beside each item for further action and follow-up.

3. ADOPTION OF MINUTES

The minutes of the June 19, 2024 meeting were adopted as circulated.

7. COMMISSION BUSINESS

7.1. Draft Regional Water Supply 2025 Strategic Plan – Presentation & Workshop

Recommendation:

- 1 That the draft 2025 Strategic Plan for the Greater Victoria Water Supply System be endorsed as presented; and
- 2 That staff be directed to proceed with the engagement plan.

Recommendation not Considered at this Meeting

That staff take the actions and feedback received from the Commission and incorporate into the draft strategic plan for consideration at a future meeting.

CARRIED

The following items were received for information:

- 7.2 Water Supply Service 2024 Mid-Year Capital Projects and Operations Update
- 7.3 Water Quality Summary Report for Greater Victoria Drinking Water Supply – January to April 2024
- 7.4 Recommendations from Other Water Commissions
- 7.5 Water Watch Report
- 10.1 Correspondence [Received]: From Mr. Jack Hull: Regional Water Supply Master Plan

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued September 23, 2024

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	September 30 5 Year Ave		September 30/23		September 22/24		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	64,109	14,104	61,346	13,496	63,041	13,869	68.0%
Goldstream	6,644	1,462	7,459	1,641	8,053	1,772	81.2%
Total	70,753	15,566	68,805	15,137	71,094	15,641	69.3%

2. Average Daily Demand:

For the month of September	164.0 MLD	36.08 MIGD
For week ending September 22, 2024	148.8 MLD	32.74 MIGD
Max. day September 2024, to date:	195.0 MLD	42.91 MIGD

3. Average 5 Year Daily Demand for September

Average (2019 - 2023)	157.4 MLD ¹	34.63 MIGD ²
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¹MLD = Million Litres Per Day ²MIGD = Million Imperial Gallons Per Day

4. Rainfall September:

Average (1914 - 2023):	65.5 mm
Actual Rainfall to Date	17.5 mm (27% of monthly average)

5. Rainfall: Sep 1- Sep 22

Average (1914 - 2023):	42.1 mm
2023/2024	17.5 mm (42% of average)

6. Water Conservation Action Required:

CRD's Stage 1 Water Conservation Bylaw is now in effect through September 30, 2024
Visit our website at www.crd.bc.ca/water for more information.

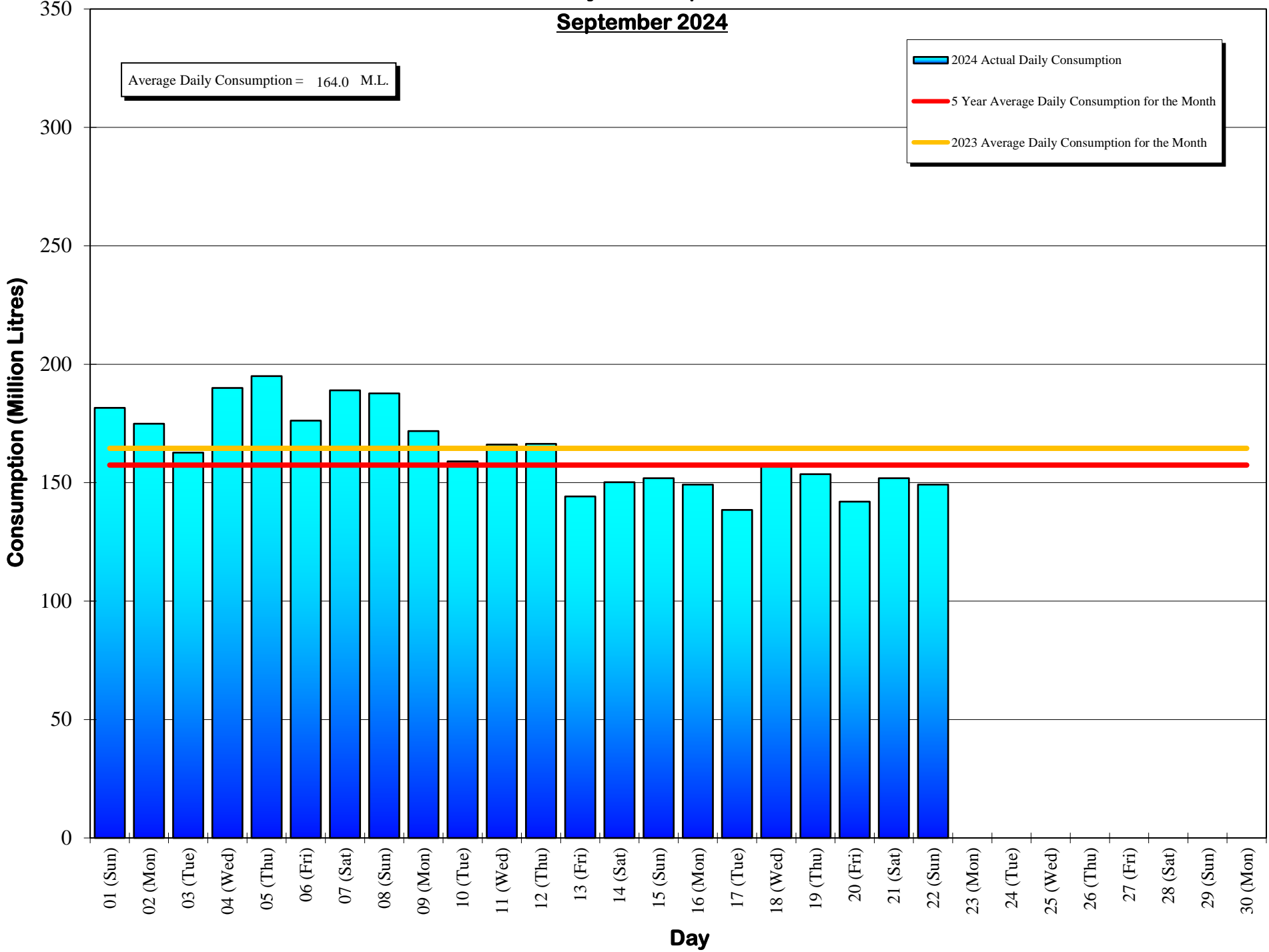
If you require further information, please contact:

Alicia Fraser, P. Eng.
General Manager, CRD - Integrated Water Services
or
Glenn Harris, Ph D., RPBio
Senior Manager - Environmental Protection

Capital Regional District Integrated Water Services
479 Island Highway
Victoria, BC V9B 1H7
(250) 474-9600

Daily Consumption

September 2024



Daily Consumptions: - September 2024

Date	Total Consumption		Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am			
	(ML) ¹	(MIG) ²	High (°C)	Low (°C)		Rainfall (mm)	Snowfall ³ (mm)	Total Precip.	
01 (Sun)	181.6		39.9	28	15	Cloudy / P. Sunny	0.0	0.0	0.0
02 (Mon)	174.9		38.5	24	13	Sunny / P. Cloudy	0.0	0.0	0.0
03 (Tue)	162.7		35.8	21	12	Cloudy / P. Sunny	0.0	0.0	0.0
04 (Wed)	190.0		41.8	25	12	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Thu)	195.0	<=Max	42.9	30	14	Sunny	0.0	0.0	0.0
06 (Fri)	176.2		38.8	30	16	Sunny	0.0	0.0	0.0
07 (Sat)	189.0		41.6	27	16	Cloudy	0.0	0.0	0.0
08 (Sun)	187.7		41.3	23	15	Cloudy / P. Sunny	0.0	0.0	0.0
09 (Mon)	171.8		37.8	21	13	Sunny / P. Cloudy	0.0	0.0	0.0
10 (Tue)	159.0		35.0	21	11	Sunny / P. Cloudy / Showers	1.8	0.0	1.8
11 (Wed)	166.1		36.5	16	11	Cloudy / Showers	1.3	0.0	1.3
12 (Thu)	166.4		36.6	20	10	Sunny / P. Cloudy	0.0	0.0	0.0
13 (Fri)	144.2		31.7	19	10	Cloudy / Showers	13.5	0.0	13.5
14 (Sat)	150.2		33.0	18	10	Sunny / P. Cloudy / Showers	0.3	0.0	0.3
15 (Sun)	151.9		33.4	18	9	Sunny / P. Cloudy	0.0	0.0	0.0
16 (Mon)	149.2		32.8	21	9	Cloudy / P. Sunny / Showers	0.3	0.0	0.3
17 (Tue)	138.5	<=Min	30.5	18	10	Cloudy	0.0	0.0	0.0
18 (Wed)	156.9		34.5	19	12	Cloudy	0.0	0.0	0.0
19 (Thu)	153.6		33.8	19	10	Sunny / P. Cloudy	0.0	0.0	0.0
20 (Fri)	142.0		31.2	17	10	Cloudy / P. Sunny	0.0	0.0	0.0
21 (Sat)	151.9		33.4	19	10	Sunny / P. Cloudy	0.0	0.0	0.0
22 (Sun)	149.2		32.8	20	10	Cloudy / Showers	0.3	0.0	0.3
23 (Mon)									
24 (Tue)									
25 (Wed)									
26 (Thu)									
27 (Fri)									
28 (Sat)									
29 (Sun)									
30 (Mon)									
TOTAL	3608.0 ML	793.79 MIG					17.5	0	17.5
MAX	195.0	42.91	30	16			13.5	0	13.5
AVG	164.0	36.08	21.5	11.7			0.8	0	0.8
MIN	138.5	30.46	16	9			0.0	0	0.0

1. ML = Million Litres

2. MIG = Million Imperial Gallons

3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

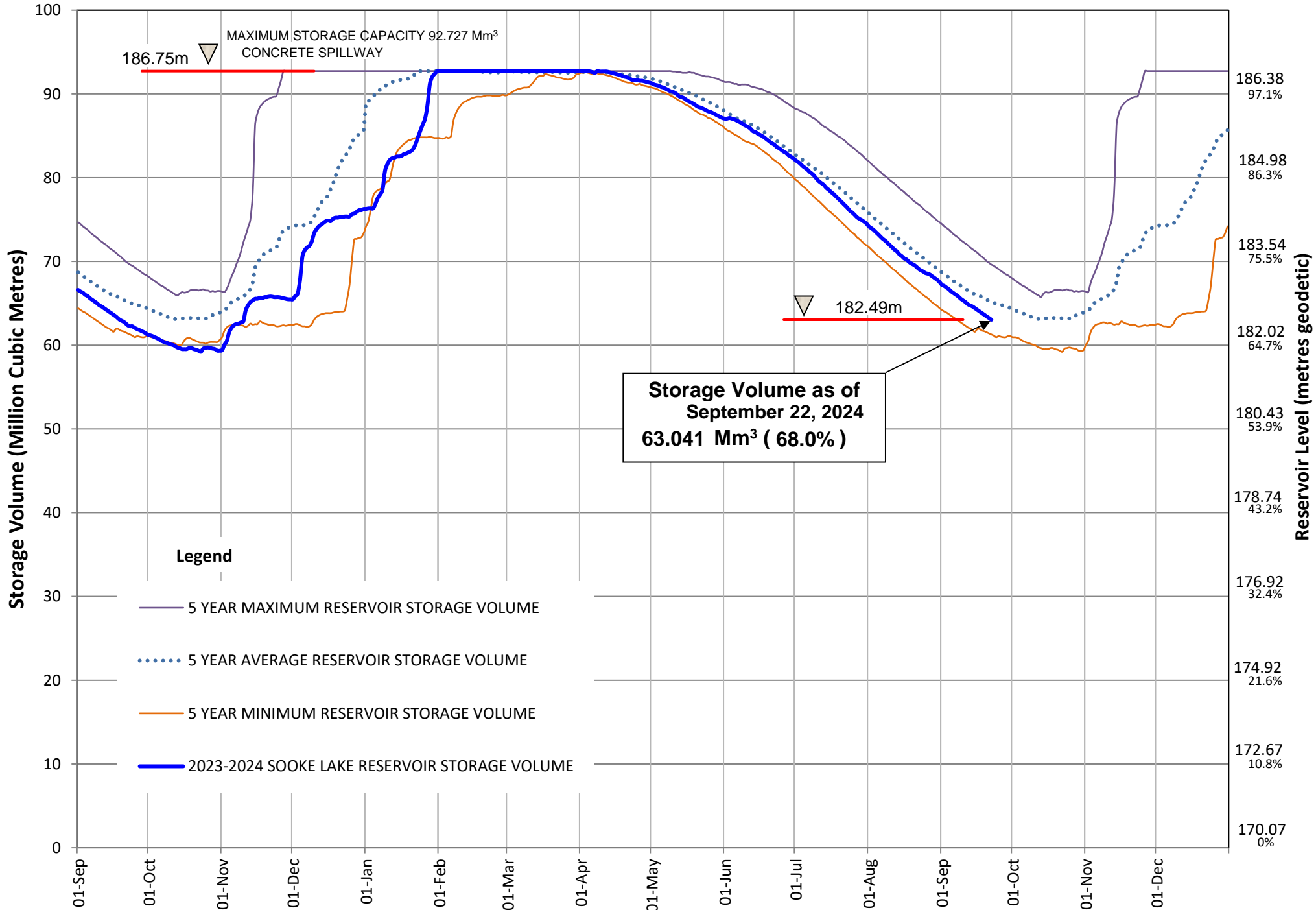
Average Rainfall for September (1914-2023)	65.5 mm
Actual Rainfall: September	17.5 mm
% of Average	27%
Average Rainfall (1914-2023): Sept 01 - Sep 22	42.1 mm
Actual Rainfall (2023/24): Sept 01 - Sep 22	17.5 mm
% of Average	42%

Number days with precip. 0.2 or more
6

Water spilled at Sooke Reservoir to date (since Sept. 1) = 0.00 Billion Imperial Gallons
 = 0.00 Billion Litres

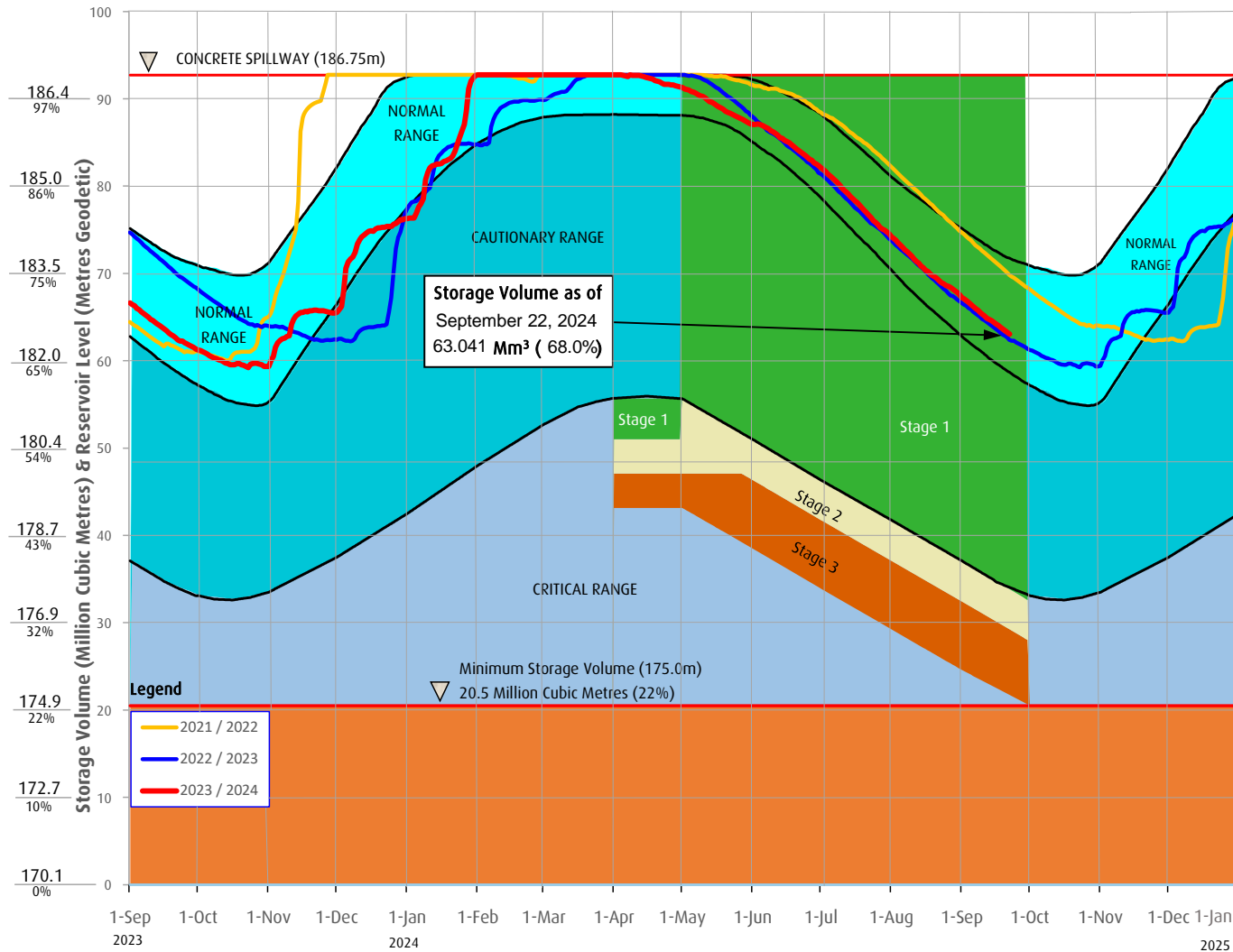
SOOKE LAKE RESERVOIR STORAGE SUMMARY

2023 / 2024



Sooke Lake Reservoir Storage Level

Water Supply Management Plan



FAQs

How are water restriction stages determined?

Several factors are considered when determining water use restriction stages, including,

1. Time of year and typical seasonal water demand trends;
2. Precipitation and temperature conditions and forecasts;
3. Storage levels and storage volumes of water reservoirs (Sooke Lake Reservoir and the Goldstream Reservoirs) and draw down rates;
4. Stream flows and inflows into Sooke Lake Reservoir;
5. Water usage, recent consumption and trends; and customer compliance with restriction;
6. Water supply system performance.

The Regional Water Supply Commission will consider the above factors in making a determination to implement stage 2 or 3 restrictions, under the Water Conservation Bylaw.

At any time of the year and regardless of the water use restriction storage, customers are encouraged to limit discretionary water use in order to maximize the amount of water in the Regional Water Supply System Reservoirs available for nondiscretionary potable water use.

Stage 1 is normally initiated every year from May 1 to September 30 to manage outdoor use during the summer months. During this time, lawn watering is permitted twice a week at different times for even and odd numbered addresses.

Stage 2 is initiated when it is determined that there is an acute water supply shortage. During this time, lawn water is permitted once a week at different times for even and odd numbered addresses.

Stage 3 is initiated when it is determined that there is a severe water supply shortage. During this time, lawn watering is not permitted. Other outdoor water use activities are restricted as well.

For more information, visit www.crd.bc.ca/drinkingwater

Useable Reservoir Volumes in Storage for September 22, 2024

