



Making a difference...together

JUAN DE FUCA WATER DISTRIBUTION COMMISSION
 Notice of Meeting on **Tuesday, September 6, 2022 at 12 pm**
 Goldstream Conference Room, 479 Island Highway, Victoria, BC

For members of the **public who wish to listen to the meeting** via telephone please call **1-833-353-8610** and enter the **Participant Code 1911461 followed by #**. You will not be heard in the meeting room but will be able to listen to the proceedings.

G. Logan (Chair)
 J. Rogers (V. Chair)

G. Baird
 M. Hicks

K. Kahakauwila
 E. Logins

L. Szpak
 R. Wade

AGENDA

1. TERRITORIAL ACKNOWLEDGEMENT

2. APPROVAL OF AGENDA

3. ADOPTION OF MINUTES3

Recommendation: That the minutes of the July 5, 2022 meeting be adopted.

4. CHAIR'S REMARKS

5. PRESENTATIONS/DELEGATIONS

The public are welcome to attend Commission meetings in-person.

Delegations will have the option to participate electronically. Please complete the [online](#) 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

6.1. Water Supply Outlook [Verbal]

7. COMMISSION BUSINESS

7.1. Juan de Fuca Water Distribution Service 2023 Capital and Operating Budget.....5

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

1. *Approve the 2023 Operating and Capital Budget and the Five Year Capital Plan;*
2. *Approve the 2023 Juan de Fuca Water Distribution Service retail water rate of \$2.5466 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;*
3. *Direct staff to balance the 2022 actual operating deficit or surplus on the 2022 capital fund transfer; and*

*To ensure quorum, advise **Denise Dionne**, ddionne@crd.bc.ca if you cannot attend.*

**Juan de Fuca Water Distribution Commission
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4. *Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.*

7.2. Summary of Recommendations from Other Water Commissions44

There is no recommendation. The Summary of Recommendations is for information only.

7.3. Water Watch Report46

There is no recommendation. The Water Watch Report is for information only.

8. NOTICE(S) OF MOTION

9. NEW BUSINESS

10. ADJOURNMENT

Next Meeting: January 3, 2023 Inaugural Meeting



Making a difference...together

MINUTES OF A MEETING OF THE Juan de Fuca Water Distribution Commission, held Tuesday, July 5, 2022 at 12 p.m., Goldstream Conference Room, 479 Island Highway, Victoria, BC

PRESENT: Commissioners: G. Logan (Chair); J. Rogers (V. Chair)(EP); G. Baird; M. Hicks (EP); E. Logins (EP); L. Szpak;
Staff: T. Robbins, General Manager; I. Jesney, Senior Manager, Infrastructure Engineering; D. Dionne, Administrative Coordinator (Recorder)
REGRETS: K. Kahakauwila; R. Wade

EP = Electronic Participation

The meeting was called to order at 12:03 pm.

The Chair conducted a roll call.

1. TERRITORIAL ACKNOWLEDGEMENT

The Chair provided the Territorial Acknowledgement.

2. APPROVAL OF AGENDA

MOVED by Commissioner Baird, **SECONDED** by Commissioner Szpak,
 That the agenda be approved.

CARRIED

3. ADOPTION OF MINUTES

MOVED by Commissioner Rogers, **SECONDED** by Commissioner Baird,
 That the minutes of the March 1, 2022 meeting be adopted.

CARRIED

4. CHAIR'S REMARKS

The Chair made the following remarks:

- This will be the last meeting of the Commission before summer break, he wished everyone time to enjoy, reflect and rest during the break.
- September would likely be the last meeting of the Commission for the year, and he hopes that all members will make it out to that meeting.

5. PRESENTATIONS/DELEGATIONS

There were no presentations or delegations.

6. GENERAL MANAGER'S REPORT

6.1. Water Supply Outlook

T. Robbins spoke to the item advising that a wet cool spring has left the Sooke Lake Reservoir at 94% capacity as of yesterday, and that last year at this same time the reservoir was at 85% capacity. There are no concerns with water supply at this time.

7. COMMISSION BUSINESS

7.1. Rocky Point Water Upgrades Budget Amendment

I. Jesney introduced to the item.

MOVED by Commissioner Baird, **SECONDED** by Commissioner Szpak,
The Juan de Fuca Water Distribution Commission recommends to the Capital
Regional District Board:

That the 2022 Juan de Fuca Water Distribution Service capital plan and Project 18-05,
Rocky Point Water Upgrades, budget be amended to \$9,725,000 to reflect an increase
in Federal funding of \$411,000 for the additional archeological and environmental
monitoring costs.

CARRIED

7.2. Summary of Recommendations from Other Water Commissions

There is no recommendation, the item is for information only.

RECEIVED FOR INFORMATION

7.3. Water Watch Report

There is no recommendation, the item is for information only.

RECEIVED FOR INFORMATION

8. NEW BUSINESS

There was no new business.

9. ADJOURNMENT

MOVED by Commissioner Baird, **SECONDED** by Commissioner Szpak,
That the July 5, 2022 meeting be adjourned at 12:07 pm.

CARRIED

CHAIR

SECRETARY

**REPORT TO JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, SEPTEMBER 6, 2022**

SUBJECT **Juan de Fuca Water Distribution Service 2023 Operating and Capital Budget**

ISSUE SUMMARY

To provide an overview of the draft 2023 Juan de Fuca Water Distribution Service budget, highlighting the proposed significant changes from the 2022 budget. The report generally follows the sequence of information provided in the attached draft budget document (Appendix A).

BACKGROUND

The draft 2023 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 September. As in previous years, the draft 2023 JDF Water Distribution Service budget has been prepared considering the CRD Board's 2023 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.

2022 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	\$158,848	-2.2%
Bulk water purchase cost	\$54,990	0.8%
Capital expenditures and transfers	\$271,663	4.0%
Debt servicing - principal and interest expenditures	-\$30,209	-1.6%
Revenue	\$167,205	0.7%
Transfers from Development Cost Charges (DCC) reserves to fund DCC debt	\$0	0.0%

Rate Base

The rate base for 2023 has increased by \$11,581,339 from 2022. This increase relates to physical plant 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 2023 has increased by \$840,570 over 2022. This is resulting from an increase in operational expenses of \$446,973, increased depreciation expenses of \$286,496

net of expired depreciation on existing assets, and a net increase in the return on the rate base of \$107,100. 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 2023 operating budget reflects an increase in non-discretionary expenses such as negotiated wage/salary increases, corporate support service allocation increases, maintenance expenses due to new infrastructure additions, and other operating expense increases such as electricity costs. The net core 2023 operating budget increase is \$446,973. Operating budget forecasts for 2024 through 2027 have been presented for information.

As reported in recent years the distribution system continues to expand at an accelerated rate due to continued growth in new land development in the service area over the last several years. For context, the following summarizes the additions in 2022 (over 2021) to the asset units in the major categories, all of which require regular maintenance to ensure reliable performance:

Water distribution mains	6,000 metres
Service laterals	470 (9-metre length average)
Fire hydrants	69
Line valves	210
Flush, air and check valves	16
Water meters <50mm	430
Water meters \geq 50mm	40

As noted previously, with at least four major developments underway in the service area, including South Skirt Mountain, Bear Mountain, Royal Bay and Centre Mountain, it is expected that the water system asset base will continue to grow significantly in the near future as initial water servicing infrastructure is installed which will impact operating and maintenance costs. Given the size of the developments and anticipated phasing and build-out timelines, it is expected that there will be an element of 'revenue lag' before revenue generated from retail water sales in these and other developments offsets the initial infrastructure operating and maintenance costs. Staff have been directed to examine this issue and possible rate options to mitigate the budget implications through a Water Rate Methodology and Option Study. Due to this study being delayed, any potential changes to the rate methodology will be presented to the Commission in 2023.

Capital Budget

There are several capital projects planned for 2023 with a total value of \$26,995,000 including \$16,435,000 in projects that are in progress or are multi-year projects, and \$6,170,000 in Development Cost Charge (DCC) projects. There are also \$1,810,000 in projects cost-shared with the Regional Water Supply Service. See pages 10 to 25 of the budget document for capital plan details.

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

1. Project 18-05 Rocky Point Upgrades - This project is cost-shared with the Federal Government through a contribution agreement with the Department of National Defence (DND). The planned carry-forward of \$1,300,000 is a result of delays encountered during the detailed design portion of the project related to a rezoning variance requirement as well as

additional engineering to address any potential archeological issues that may be encountered during construction. The project is fully designed, tendered and construction is ongoing in 2022 and expected to be completed in the first quarter of 2023.

2. Project 20-07 Goldstream Asbestos Cement (AC) Replacement - The planned carry-forward of \$5,200,000 is related to the majority of construction being delayed until 2023. Design for replacement was completed in 2021 and tender for construction was issued in 2021 and closed in 2022. All bids exceeded budget therefore the tender was cancelled. The project has been carried forward to the 2023 Capital Plan and will be constructed using CRD staff. The 2023 annual AC Replacement project 20-03 budget, in the amount of \$3,000,000 will be allocated to the Goldstream AC Replacement project to have sufficient budget to complete the project.
3. 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 2022, therefore the \$1,000,000 project has been carried-forward to 2023.
4. Project 23-01 Tank 4 and McCallum Pump Station (2020-2021) and Pump Station 7 and remaining Supply Main to Skirt Mountain Reservoir (2022) – The project was initially put on hold temporarily over concerns with rising material costs and scheduling concerns related to timing of development servicing needs. Engineering design and construction tendering were completed in 2021, with construction started in August 2022 and expected to be completed in the first quarter of 2023, resulting in a \$5,000,000 carry-forward. The project is fully funded through the DCC Program.
5. Capital item 16-06 – Delay in the delivery of fleet replacement vehicles is resulting in a \$990,000 carry-forward. The vehicles are expected to be delivered and paid for in 2023.

Note, the Seagirt Water Improvement District conversion to a CRD service is in progress. Once converted, the entire improvement district water system will be reconstructed and become part of the JDF Water Distribution System. The capital project (23-03) is included in the JDF Water Distribution System capital plan, with funding from the Seagirt Water Service budget (See Appendix D) in the amount of \$2,350,000.

A five-year capital plan is presented for information. The total five-year (2023-2027) capital plan budget is currently \$64,164,000.

Capital and Debt Expenditures

The 2023 capital expenditures will be partially funded through a transfer to the water capital fund budgeted at \$6,741,200, with the balance funded through debt. 2023 debt expenditures for existing and new debt servicing are budgeted to be \$1,863,294. Debt servicing expenditures have decreased by \$30,209 from 2022. Additional projected water sales revenue and corresponding capital reserve fund transfer will reduce the borrowing needs in 2023. 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

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Juan de Fuca Water Distribution Service 2023 Operating and Capital Budget

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Loan Number	Retirement Date	Loan Amount
LA3981-150	April 2035	\$5,100,000
LA4379-15X	April 2037-2038	\$11,200,000

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 10 to 12%, 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
2023	7.8%	34.1%
2024	10.8%	38.0%
2025	11.1%	6.5%
2026	10.5%	0.0%
2027	9.7%	0.0%

For 2023, the transfer to the vehicle/equipment replacement fund was increased to \$589,457 to reflect the growth in cost of future vehicle replacement. The reserve fund balance is estimated at \$792,405 at year end 2022 (See reserve schedule – Page 28 of the budget document).

The DCC projects will be funded entirely from the DCC reserve fund, which is projected to have a balance of \$10,029,191 at year end 2022 (See reserve schedule – Page 27 of the budget document).

Bulk Water Purchase

Based on the proposed 2023 budgeted water demand and Regional Water Supply wholesale water rate, the bulk water purchase budget has been set at \$7,089,860.

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 2022 year-end demand is projected to be 75,000 cubic metres over budget at 9,375,000 cubic metres.

The recommended 2023 water rate was calculated using a budget demand of 9,210,000 cubic metres (Page 7 of the budget document), which is a decrease of 90,000 cubic metres from the volume used in the 2022 budget. For 2023 the budget demand was adjusted down to reflect the reallocation of First Nations water demand from the JDF Water Distribution Service to the Regional Water Supply Service, as a result of the Regional Water Supply Service becoming the service provider to First Nations in 2023. The budget demand adjustment and corresponding revenue adjustment implication will be partially offset by the new First Nations conveyance fee funding from the Regional Water Supply Service in the amount of \$215,000 in 2023.

Proposed 2023 Wholesale Water Rate

The proposed 2023 wholesale water rate is \$0.7698 per cubic metre, a 4.99% increase from the 2022 rate, subject to the Regional Water Supply Commission's approval.

Proposed Agricultural Water Rate

Although the agricultural water rate is currently under review, the proposed 2023 agricultural water rate was maintained at the 2022 rate of \$0.2105 per cubic metre, subject to the Regional Water Supply Commission's approval. The Regional Water Supply agricultural water rate budget funds the difference between the municipal retail water rate and the agricultural water rate.

Proposed 2023 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 2023. The proposed 2023 Juan de Fuca Water Distribution Service retail water rate is \$2.5466 per cubic metre, a 6% increase from the 2022 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 2023 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2023 Juan de Fuca Water Distribution Service retail water rate of \$2.5466 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2022 actual operating deficit or surplus on the 2022 capital fund transfer; and
4. 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 2023 Operating and Capital Budget for the Commission's consideration.

IMPLICATIONS

Financial Implications

The 2023 operating and capital budget and resulting annual water rate have been prepared to meet the needs of the service. The proposed 2023 water rate generally aligns with the rate previously presented in the five-year rate projections, although the implications of the new approach to servicing First Nations were not previously reflected in the rate projections. The proposed 2023 rate would result in a \$33.74 annual increase in the cost of water for an average household.

CONCLUSION

The draft 2023 Juan de Fuca Water Distribution Service budget has been prepared for the JDF Water Distribution Commission's consideration. The Commission will make budget recommendations to the Capital Regional District Board through the Committee of the Whole in September. The draft 2023 JDF Water Distribution Service budget has been 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 2023 Operating and Capital Budget and the Five Year Capital Plan;
2. Approve the 2023 Juan de Fuca Water Distribution Service retail water rate of \$2.5466 per cubic metre, adjusted if necessary, by any change in the Regional Water Supply wholesale water rate;
3. Direct staff to balance the 2022 actual operating deficit or surplus on the 2022 capital fund transfer; and
4. Direct staff to amend the Water Distribution Local Service Conditions, Fees and Charges Bylaw accordingly.

Submitted by:	Ted Robbins, BSc., CTech., General Manager, Integrated Water Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer
Concurrence:	Kristen Morley, JD, Acting Chief Administrative Officer

ATTACHMENTS

Appendix A: 2023 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: Seagirt Improvement District

CAPITAL REGIONAL DISTRICT

2023 BUDGET

JDF Water Distribution

COMMISSION REVIEW

SEPTEMBER 2022

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:		\$0
Remaining:	Active	<u>\$14,800,000</u>

FUNDING:

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

Change in Budget 2022 to 2023			
Service:	2.680 Juan de Fuca Water Distribution	Total Expenditure	Comments
2022 Budget		22,560,391	
Change in Labour:			
		190,190	Labour charges (salaries and overhead)
	Total Change in Labour	190,190	
Other Changes:			
	Transfers to Capital Fund	366,278	
	Bulk Water Purchase	271,098	
	Transfer to Equipment Replacement Fund (ERF)	325,963	Growth of ERF contribution driven by future vehicle replacement costs
	Standard Overhead Allocation	160,579	
	Allocation - vehicles	98,020	
	Contract for Services	46,602	
	Principal & Interest Payments	(30,209)	Debt retirement of LA3164-101 for \$500,000
	Other Costs	(18,516)	
	Total Other Changes	1,219,815	
2023 Budget		23,970,396	
Summary of % Expense Increase			
	Increased transfers to capital	1.6%	
	Additional required ERF contribution	1.4%	
	Additional cost due to increased bulk water rate	1.5%	
	Reduced bulk water consumption	-0.3%	
	Support services increase	0.7%	
	Balance of increase	1.3%	
	% expense increase from 2022:	6.2%	

Overall 2022 Budget Performance
(expected variance to budget and surplus treatment)

Small favourable revenue and water sales variance of \$180,200 (0.8%) as 2022 demand forecast is slightly higher than budgeted, but below prior year actual results due to more temperate spring and summer weather. This additional revenue will be partially offset by bulk water purchase overages. There is additional favourable operating variance of \$158,800 (2.2%) largely related to temporary staff vacancies. The net surplus of \$333,000 will be transferred to the Capital Reserve Fund.

Rate Base for 2023 Revenue Year

	<u>2021 Applic</u>	<u>2022 Applic</u>	<u>End of 2022 for '23 Applic.</u>	<u>Change</u>	
Retail System					
Physical Plant	\$ 174,624,245	\$ 179,090,334	\$ 182,123,781	\$ 3,033,446	Note 1
Construction Work In Progress	962,562	5,668,389	14,161,175	8,492,787	Note 1
Cash Working Capital	854,959	880,685	935,791	55,106	
Inventory	<u>525,000</u>	<u>525,000</u>	<u>525,000</u>	<u>-</u>	
Total Retail Rate Base	\$ 176,966,766	\$ 186,164,408	\$ 197,745,747	\$ 11,581,339	

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	Projected Assets Capitalized
Pipes	\$ 7,672,230.00
Meters	1,550,000
Pump Stations	1,304,985
SCADA	230,000
Hydrants	225,000
Valve Replacement	200,000
Disaster Response Studies	199,873
Reservoir Rehabilitation and Upgrades	100,000
Building Modification	40,000
Other Projects (13 minor projects under \$50k)	185,689
Total projected assets capitalized	\$ 11,707,777
Less: current year's depreciation	(4,908,097)
Less: change in prior year forecast addition estimates, & disposals.	(3,766,234)
Change in Physical Plant	<u>\$ 3,033,446</u>

Projected Construction Work In Progress (CWIP)

Pump Stations	\$ 11,325,751
Reservoir Rehabilitation and Upgrades	827,964
Pipes	799,303
Meters	499,479
Radio Upgrades	331,393
Reservoir Demolition	204,838
SCADA	92,476
Studies (Hydraulic model)	60,000
Other Projects (2 minor projects under \$50k)	19,971
Projected CWIP	<u>\$ 14,161,175</u>
Less Prior year's projected CWIP	(5,668,389)
Change in CWIP	<u>\$ 8,492,787</u>

Schedule of Change in Physical Plant & Work In Progress

Revenue Requirements for 2023 Year

	2021 Application	2022 Application	2023 Application	Change	
Retail					
Operations & maintenance	\$ 6,934,667	\$ 7,143,332	\$ 7,590,306	\$ 446,974	
Depreciation	4,833,774	4,935,985	5,222,481	286,496	
Return on rate base	<u>2,814,700</u>	<u>3,649,200</u>	<u>3,756,300</u>	<u>107,100</u>	Note 1
Subtotal of above	\$ 14,583,141	\$ 15,728,517	\$ 16,569,087	\$ 840,570	
Non-rate revenue	(174,500)	(174,500)	(174,500)	-	
DCC Repayment	<u>(228,160)</u>	<u>(30,596)</u>	<u>(30,596)</u>	<u>-</u>	
Total retail	\$ 14,180,481	\$ 15,523,421	\$ 16,363,991	\$ 840,570	

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.

2023 Demand Estimate

Retail Demand

Years	Actual Demand cu.metre	Budgeted Demand cu.metre
2017	8,595,300	8,000,000
2018	8,853,800	8,200,000
2019	8,911,315	8,600,000
2020	9,345,130	8,900,000
2021	10,270,472	8,900,000
2022	9,375,000 ¹	9,300,000
2023 Demand Estimate	<u>9,210,000</u> ²	

1 Projected consumption for 2022
2 Reduction of estimated demand reflects First Nations to Regional Water Supply wholesale customers

Summary of Retail Water Rates

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>Change</u>
Retail (direct) water rate						
Unit cost per cu.m.	\$2.1132	\$2.2159	\$2.3081	\$2.4024	\$2.5466	\$0.1442

Retail Water Rate Increase Impact on Residential Water Bill

Average consumption per 2 month billing cycle: * 39.0 cubic meters (annual = 234.0 cu.m)

<u>Charge for Two Months Consumption</u>	<u>Year</u>	<u>Bi monthly Charge</u>	<u>Annual Charge</u>	<u>2023 Annual Change \$</u>
Average Consumption	2022	\$ 93.69	\$ 562.16	
	2023	\$ 99.32	\$ 595.90	\$ 33.74
Half Average Consumption	2022	\$ 46.85	\$ 281.08	
	2023	\$ 49.66	\$ 297.95	\$ 16.87
Twice Average Consumption	2022	\$ 187.39	\$ 1,124.32	
	2023	\$ 198.63	\$ 1,191.81	\$ 67.49

CAPITAL REGIONAL DISTRICT

Program Group: CRD-JDF Water Distribution SUMMARY 1	2022 BOARD BUDGET 2	2022 ESTIMATED ACTUAL 3	2023 BUDGET REQUEST				FUTURE PROJECTIONS			
			2023 CORE BUDGET 4	2023 ONGOING 5	2023 ONE-TIME 6	TOTAL (COL 4, 5 & 6) 7	2024 8	2025 9	2026 10	2027 11
<u>OPERATING EXPENDITURES</u>										
ALLOCATION - OPERATIONS	4,851,535	4,851,284	5,140,686	-	-	5,140,686	5,243,712	5,348,790	5,455,639	5,563,825
OPERATING - OTHER COSTS	873,371	825,966	809,318	-	-	809,318	791,381	726,573	696,811	694,739
SALARIES AND WAGES	550,949	442,817	565,643	-	-	565,643	577,789	590,193	602,854	615,802
CONTRACT FOR SERVICES	306,485	303,425	353,087	-	-	353,087	352,022	359,069	366,170	373,552
ALLOCATION - STANDARD OVERHEAD	560,992	560,992	721,571	-	-	721,571	736,003	750,723	765,737	781,052
TOTAL OPERATING EXPENDITURES	7,143,332	6,984,484	7,590,305	-	-	7,590,305	7,700,907	7,775,348	7,887,212	8,028,969
Percentage increase over prior year's board budget			6.26%			6.26%	1.46%	0.97%	1.44%	1.80%
BULK WATER PURCHASE	6,818,760	6,873,750	7,089,860	-	-	7,089,860	7,660,270	8,326,910	9,107,730	10,349,010
BULK WATER EXPENDITURES	6,818,760	6,873,750	7,089,860	-	-	7,089,860	7,660,270	8,326,910	9,107,730	10,349,010
			3.98%			3.98%				
<u>CAPITAL EXPENDITURES & TRANSFERS</u>										
TRANSFER TO WATER CAPITAL FUND	6,374,922	6,738,461	6,741,200	-	-	6,741,200	7,346,169	8,420,118	9,522,047	9,933,712
TRANSFER TO DEBT RESERVE FUND	66,380	4,500	96,280	-	-	96,280	51,770	10,770	4,770	4,770
TRANSFER TO EQUIPMENT REPLACEMENT FUND	263,494	263,494	339,457	250,000	-	589,457	619,594	696,867	689,379	704,503
TOTAL CAPITAL EXPENDITURES & TRANSFERS	6,704,796	7,006,455	7,176,937	250,000	-	7,426,937	8,017,533	9,127,755	10,216,196	10,642,985
<u>DEBT SERVICING</u>										
DEBT - INTEREST & PRINCIPAL	1,893,503	1,862,907	1,863,294	-	-	1,863,294	2,839,345	3,189,948	3,232,408	3,189,908
TOTAL DEBT EXPENDITURES	1,893,503	1,862,907	1,863,294	-	-	1,863,294	2,839,345	3,189,948	3,232,408	3,189,908
TOTAL EXPENDITURES	22,560,391	22,727,596	23,720,396	250,000	-	23,970,396	26,218,055	28,419,961	30,443,546	32,210,872
<u>SOURCES OF FUNDING</u>										
REVENUE - SALES	(22,342,320)	(22,522,500)	(23,419,020)	(35,000)	-	(23,454,020)	(25,772,485)	(28,011,005)	(30,036,116)	(31,798,879)
REVENUE - OTHER	(187,475)	(174,500)	(301,376)	(215,000)	-	(516,376)	(445,570)	(408,956)	(407,430)	(411,993)
TOTAL SOURCE OF FUNDING FROM OPERATIONS	(22,529,795)	(22,697,000)	(23,720,396)	(250,000)	-	(23,970,396)	(26,218,055)	(28,419,961)	(30,443,546)	(32,210,872)
<u>SOURCES OF OTHER FUNDING</u>										
TRANSFER FROM DCC RESERVES TO FUND DCC DEBT	(30,596)	(30,596)	-	-	-	-	-	-	-	-
TRANSFER FROM PRIOR YEAR	-	-	-	-	-	-	-	-	-	-
TRANSFER TO FOLLOWING YEAR										
TOTAL SOURCES OF ALL FUNDING	(22,560,391)	(22,727,596)	(23,720,396)	(250,000)	-	(23,970,396)	(26,218,055)	(28,419,961)	(30,443,546)	(32,210,872)
Percentage increase over prior year's board budget			5.14%			6.25%	9.38%	8.40%	7.12%	5.81%

CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2023 to 2027

Service No.	2.680	Carry Forward from 2022	2023	2024	2025	2026	2027	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	\$15,445,000	\$25,715,000	\$11,510,000	\$8,355,000	\$7,705,000	\$6,355,000	\$59,640,000	
Vehicles	\$990,000	\$1,280,000	\$855,000	\$905,000	\$774,000	\$710,000	\$4,524,000	

\$16,435,000	\$26,995,000	\$12,365,000	\$9,260,000	\$8,479,000	\$7,065,000	\$64,164,000
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SOURCE OF FUNDS

Capital Funds on Hand	\$9,295,000	\$7,785,000	\$6,790,000	\$7,735,000	\$7,685,000	\$6,335,000	\$36,330,000	
Debenture Debt (New Debt Only)	\$0	\$9,200,000	\$4,700,000	\$600,000	\$0	\$0	\$14,500,000	
Equipment Replacement Fund	\$990,000	\$1,080,000	\$855,000	\$905,000	\$774,000	\$710,000	\$4,324,000	
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Donations / Third Party Funding	\$0	\$2,760,000	\$0	\$0	\$0	\$0	\$2,760,000	
Reserve Fund	\$6,150,000	\$6,170,000	\$20,000	\$20,000	\$20,000	\$20,000	\$6,250,000	

\$16,435,000	\$26,995,000	\$12,365,000	\$9,260,000	\$8,479,000	\$7,065,000	\$64,164,000
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CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2023 to 2027

Service No.	2.670/2.680	Carry Forward from 2022	2023	2024	2025	2026	2027	TOTAL
	Regional Water Supply & JDF Wate							

EXPENDITURE

Buildings	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
Equipment	\$1,100,000	\$1,730,000	\$530,000	\$330,000	\$330,000	\$340,000	\$3,260,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0

\$1,100,000	\$1,810,000	\$610,000	\$410,000	\$410,000	\$420,000	\$3,660,000
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SOURCE OF FUNDS

Capital Funds on Hand	\$1,100,000	\$1,810,000	\$610,000	\$410,000	\$410,000	\$420,000	\$3,660,000
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

\$1,100,000	\$1,810,000	\$610,000	\$410,000	\$410,000	\$420,000	\$3,660,000
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CAPITAL REGIONAL DISTRICT
5 YEAR CAPITAL PLAN
2023 - 2027

Project Number Project number format is "yy-##" "yy" is the last two digits of the year the project is planned to start. "##" is a numerical value. For example, 23-01 is a project planned to start in 2023. For projects in previous capital plans, use the same project numbers previously assigned.	Capital Project Description Briefly describe project scope and service benefits. For example: "Full Roof Replacement of a 40 year old roof above the swimming pool area; the new roofing system meets current energy standards with an expected service life of 35 years".	Carryforward from 2022 Input the carryforward amount from the 2022 capital plan that is remaining to be spent. Forecast this spending in 2023 to 2027.	Project Drivers Maintain Level of Service = Project maintains existing or improved level of service. Advance Board or Corporate Priority = Project is a Board or Corporate priority. Emergency = Project is required for health or safety reasons. Cost Benefit = Project provide economic benefit to the organization.
Capital Expenditure Type Study - Expenditure for feasibility and business case report. New - Expenditure for new asset only Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service Replacement - Expenditure replaces an existing asset	Total Project Budget Provide the total project budget, even if it extends beyond the 5 years of this capital plan.	Funding Source Codes Debt = Debenture Debt (new debt only) ERF = Equipment Replacement Fund Grant = Grants (Federal, Provincial) Cap = Capital Funds on Hand Other = Donations / Third Party Funding Res = Reserve Fund STLoan = Short Term Loans WU = Water Utility If there is more than one funding source, use additional rows for the project.	Long-term Planning Master Plan / Servicing Plan = Plan that identifies new assets required to meet future needs. Asset Management Plan / Sustainable Service Delivery Plan = Integrated plan that identifies asset replacements based on level of service, criticality, condition, risk, replacement costs as well as external impacts. Replacement Plan = Plan that identifies asset replacements based primarily on asset age and/or asset material/type. Condition Assessment = Assessment that identifies asset replacements based on asset condition.
Capital Project Title Input title of project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".	Asset Class L - Land S - Engineering Structure B - Buildings V - Vehicles		Cost Estimate Class Class A (±10-15%) = Estimate based on final drawings and specifications; used to evaluate tenders. Class B (±15-25%) = Estimate based on investigations, studies or preliminary design; used for budget planning. Class C (±25-40%) = Estimate based on limited site information; used for program planning. Class D (±50%) = Estimate based on little/no site information; used for long-term planning.

Service #: **2.680**

Service Name: **JDF Water Distribution**

SECTION 1: PROJECT DESCRIPTION AND BUDGET

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
INFRASTRUCTURE ENGINEERING AND OPERATIONS													
Planning													
16-03	Renewal	Asset Management Plan	Combine past studies to plan out future capital expenditures.	\$150,000	S	WU	\$0	\$50,000	\$100,000	\$0	\$0	\$0	\$150,000
21-14	Renewal	Fire Storage Analysis	Assess and update the fire flow upgrade program to inform future capital works.	\$120,000	S	WU	\$120,000	\$120,000	\$0	\$0	\$0	\$0	\$120,000
Capital													
16-05	Renewal	Comprehensive Pump Station Upgrades (10 year Program)	Continue pump station condition assessments, plan and carry out upgrades.	\$5,000,000	S	WU	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$450,000	\$0	\$3,450,000
18-02	Renewal	JDF Reservoir Upgrades	Reservoir improvements are required at the JDF Reservoirs.	\$1,250,000	S	WU	\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$400,000
18-03	Renewal	JDF Site Decommissioning Program	Decommissioning of facilities that are no longer in use based on preliminary work from Annual Provisional	\$1,050,000	S	WU	\$425,000	\$425,000	\$350,000	\$100,000	\$0	\$0	\$875,000
18-05	Replacement	Rocky Point Upgrades	Replacement of Rocky Point P.S., additional storage at Rocky Point Reservoir & water main upgrades. Partnered with DND.	\$9,724,000	S	WU	\$1,300,000	\$1,300,000	\$0	\$0	\$0	\$0	\$1,300,000
18-05					S	Other	\$0	\$410,000	\$0	\$0	\$0	\$0	\$410,000
18-06	New	Disaster Response Plan for Water Supply and Distribution	Determine and supply response equipment for disaster response.	\$450,000	S	WU	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$250,000
19-06	Renewal	Corrosion Protection Program	Undertake a program to assess and prevent corrosion to existing steel pipe within the Juan du Fuca water system.	\$50,000	S	WU	\$0	\$5,000	\$5,000	\$0	\$0	\$0	\$10,000
19-09	New	Distribution System Seismic Resiliency Improvements	Determine and commence improvements to the distribution system to provide seismic resiliency.	\$1,750,000	S	WU	\$250,000	\$250,000	\$500,000	\$500,000	\$500,000	\$0	\$1,750,000
20-03	Replacement	AC Pipe Replacement Program	Replacement of aging asbestos cement pipe as highlighted in the 2019 update report	\$25,200,000	S	WU	\$0	\$3,000,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$16,200,000
20-04	Replacement	William Head & VGH Meter Replacement	Replacement of the meter and chambers at William Head & VGH with the possibility of resilient connections.	\$700,000	S	WU	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$200,000
20-07	Replacement	Goldstream AC Replacement	Replacement of aging asbestos cement pipe within Goldstream Rd, from VMP to Spencer.	\$5,800,000	S	WU	\$5,200,000	\$5,200,000	\$0	\$0	\$0	\$0	\$5,200,000
21-02	Replacement	Sooke Rd - 2,200m of 600m Pipe - VMP to Jacklin	Replacement of aged, large diameter water main from Jacklin Rd to VMP	\$3,000,000	S	WU	\$200,000	\$200,000	\$2,800,000	\$0	\$0	\$0	\$3,000,000
21-13	Replacement	SCADA Master Plan Update & Upgrades	Update the SCADA Master Plan in conjunction with the RWS, Saanich Peninsula and Core Area infrastructure.	\$1,800,000	S	WU	\$600,000	\$900,000	\$300,000	\$300,000	\$300,000	\$0	\$1,800,000
22-01	New	East Sooke Interconnect Water Main	Construction approximately 430 m of watermain for system improvements.	\$500,000	S	WU	\$500,000	\$500,000	\$0	\$0	\$0	\$0	\$500,000
22-02	New	Microwave Radio Upgrades	Installation of high-bandwidth microwave radio infrastructure to accommodate CRD infrastructure	\$550,000	S	WU	\$100,000	\$200,000	\$100,000	\$100,000	\$100,000	\$0	\$500,000
23-03	New	Seagirt Watermain Extension	Seagirt water system is being replaced as part of inclusion into the JDF system.	\$2,350,000	S	Other	\$0	\$2,350,000	\$0	\$0	\$0	\$0	\$2,350,000
Sub-Total System Infrastructure Engineering and Operations				\$59,444,000			\$9,295,000	\$16,560,000	\$8,505,000	\$5,350,000	\$4,700,000	\$3,350,000	\$38,465,000
CUSTOMER AND TECHNICAL SERVICES													
16-06	Replacement	Vehicle & equipment replacement (funding from replacement fund)	Vehicle and equipment replacement.	\$2,094,000	V	ERF	\$990,000	\$1,080,000	\$855,000	\$905,000	\$774,000	\$710,000	\$4,324,000
23-02	New	Vehicle to support the meter replacement program	Purchase of a Transit Van equipped with tools and equipment to support the meter replacement program	\$200,000	V	WU	\$0	\$200,000	\$0	\$0	\$0	\$0	\$200,000
Sub-Total Customer and Technical Services				\$2,294,000			\$990,000	\$1,280,000	\$855,000	\$905,000	\$774,000	\$710,000	\$4,524,000

Service #: 2.680
Service Name: JDF Water Distribution

SECTION 1: PROJECT DESCRIPTION AND BUDGET													
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	5 - Year Total
													\$0
ANNUAL PROVISIONAL ITEMS													
17-07	New	Site Decommissioning - General	Planning for decommissioning of unused sites.	\$50,000	S	WU	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
17-09	Replacement	Emergency Main Replacement	Major main replacement under emergencies.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
17-12	Replacement	Large Meters/Meter Vaults Components Replacement	Replacement or repairs to components in large meters/vaults as required.	\$1,250,000	S	WU	\$0	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$1,250,000
17-13	New	Site Security Upgrades	Upgrading and replacement of security systems for sites as required.	\$200,000	S	WU	\$0	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$200,000
17-15	Renewal	Distribution System Improvements	Unplanned distribution system improvements.	\$2,250,000	S	WU	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,250,000
17-16	New	Hydraulic Model Yearly Update	Annual hydraulic model update.	\$300,000	S	WU	\$0	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$300,000
21-03	Replacement	Hydrant & Flush Replacement, Upgrades and Additions	Upgrade, replacement or installation of flushes and fire hydrants, and fire flow testing.	\$1,125,000	S	WU	\$0	\$225,000	\$225,000	\$225,000	\$225,000	\$225,000	\$1,125,000
21-04	Replacement	Residential Service & Meter Replacement	Replacement of residential water meters as highlighted by the 2017 KWL Water Audit report.	\$6,500,000	S	WU	\$0	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$6,500,000
21-05	Replacement	Pump Station Equipment Replacements	Unplanned pump station repairs and equipment replacement	\$750,000	S	WU	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$750,000
21-06	Replacement	SCADA Equipment Replacement	Unplanned replacement of SCADA and electrical equipment.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
21-07	Renewal	Reservoir Equipment Replacement	Replacement or repairs to components at reservoir sites.	\$500,000	S	WU	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000
21-09	Replacement	Valve Replacement	Unplanned replacement and repair of isolation and line valves, air valves, and pressure control valves.	\$1,000,000	S	WU	\$0	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
Sub-Total for Annual Provisional Items				\$14,925,000			\$0	\$2,985,000	\$2,985,000	\$2,985,000	\$2,985,000	\$2,985,000	\$14,925,000
DEVELOPMENT COST CHARGE (DCC)													
16-07	New	Update DCC Bylaw (Comprehensive Update in 2022)	Planned update of the DCC Bylaw.	\$295,000	S	Res	\$150,000	\$170,000	\$20,000	\$20,000	\$20,000	\$20,000	\$250,000
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	\$0	\$0	\$0	\$0	\$1,000,000
23-01	New	Tank 4 and McCallum Pump Station (2020-2021) and Pump Station 7 and remaining Supply Main to Skirt Mtn Reservoir (2022)	Upgrades to complete the South Skirt Water System	\$9,110,000	S	Res	\$5,000,000	\$5,000,000	\$0	\$0	\$0	\$0	\$5,000,000
Sub-Total for Development Cost Charges (DCC)				\$10,405,000			\$6,150,000	\$6,170,000	\$20,000	\$20,000	\$20,000	\$20,000	\$6,250,000
GRAND TOTAL				\$87,068,000			\$16,435,000	\$26,995,000	\$12,365,000	\$9,260,000	\$8,479,000	\$7,065,000	\$64,164,000

CAPITAL REGIONAL DISTRICT
5 YEAR CAPITAL PLAN
2023 - 2027

Project Number
Project number format is "yy-##"
"yy" is the last two digits of the year the project is planned to start.
"##" is a numerical value. For example, 23-01 is a project planned to start in 2023.

For projects in previous capital plans, use the same project numbers previously assigned.

Capital Expenditure Type
Study - Expenditure for feasibility and business case report.
New - Expenditure for new asset only
Renewal - Expenditure upgrades an existing asset and extends the service ability or enhances technology in delivering that service
Replacement - Expenditure replaces an existing asset

Capital Project Title
Input title of project. For example "Asset Name - Roof Replacement", "Main Water Pipe Replacement".

Capital Project Description
Briefly describe project scope and service benefits.
For example: *"Full Roof Replacement of a 40 year old roof above the swimming pool area; The new roofing system meets current energy standards with an expected service life of 35 years".*

Total Project Budget
Provide the total project budget, even if it extends beyond the 5 years of this capital plan.

Asset Class
L - Land
S - Engineering Structure
B - Buildings
V - Vehicles

Funding Source Codes
Debt = Debenture Debt (new debt only)
ERF = Equipment Replacement Fund
Grant = Grants (Federal, Provincial)
Cap = Capital Funds on Hand
Other = Donations / Third Party Funding
Res = Reserve Fund
STLoan = Short Term Loans
WU - Water Utility
If there is more than one funding source, use additional rows for the project.

Carryforward from 2022
Input the carryforward amount from the 2022 capital plan that is remaining to be spent. Forecast this spending in 2023 to 2027.

Long-term Planning
Master Plan / Servicing Plan = Plan that identifies new assets required to meet future needs.
Asset Management Plan / Sustainable Service Delivery Plan = Integrated plan that identifies asset replacements based on level of service, criticality, condition, risk, replacement costs as well as external impacts.
Replacement Plan = Plan that identifies asset replacements based primarily on asset age and/or asset material/type.
Condition Assessment = Assessment that identifies asset replacements based on asset condition.

Cost Estimate Class
Class A (±10-15%) = Estimate based on final drawings and specifications; used to evaluate tenders.
Class B (±15-25%) = Estimate based on investigations, studies or preliminary design; used for budget planning.
Class C (±25-40%) = Estimate based on limited site information; used for program planning.
Class D (±50%) = Estimate based on little/no site information; used for long-term planning.

Project Drivers
Maintain Level of Service = Project maintains existing or improved level of service.
Advance Board or Corporate Priority = Project is a Board or Corporate priority.
Emergency = Project is required for health or safety reasons.
Cost Benefit = Project provide economic benefit to the organization.

Service #: 2.670/2.680

Service Name: Regional Water Supply & JDF Water Distribution Combo

SECTION 1: PROJECT DESCRIPTION AND BUDGET													
Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	Total Project Budget	Asset Class	Funding Source	Carryforward from 2022	2023	2024	2025	2026	2027	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 and office layouts.	\$320,000	B	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-01	Renewal	Voice Radio Upgrade	Replacement of end of life voice radio system repeaters, office, vehicle and handheld radios.	\$1,560,000	E	WU	\$1,000,000	\$1,300,000	\$200,000	\$0	\$0	\$0	\$1,500,000
20-01	New	Portable Pump Station	Portable pump station and generator to provide backup when a pump station is offline, in construction or to bypass a section of pipe.	\$750,000	E	WU	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$50,000
Sub-Total System Replacement and Upgrades That Benefit Regional Water Supply and Juan de Fuca Distribution				\$2,630,000			\$1,050,000	\$1,430,000	\$280,000	\$80,000	\$80,000	\$80,000	\$1,950,000
ANNUAL PROVISIONAL CAPITAL ITEMS													
17-03	Replacement	Office Equipment, Upgrades and Replacements	Upgrade and replacement of office equipment as required.	\$225,000	E	WU	\$0	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$225,000
17-04	Replacement	Computer Upgrades	Annual upgrade and replacement program for computers, copiers, printers, network equipment as required.	\$850,000	E	WU	\$0	\$170,000	\$170,000	\$170,000	\$170,000	\$170,000	\$850,000
17-05	New	Development of the Maintenance Management Systems	Develop maintenance management system.	\$100,000	E	WU	\$50,000	\$70,000	\$20,000	\$20,000	\$20,000	\$20,000	\$30,000
17-06	Replacement	Small Equipment & Tool Replacement (Water Operations)	Replacement of tools and small equipment for Water Operations as required.	\$400,000	E	WU	\$0	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
17-07	Replacement	Small Equipment & Tool Replacement (Corporate Fleet)	Replacement of tools and small equipment for Fleet as required.	\$75,000	E	WU	\$0	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$75,000
													\$0
													\$0
													\$0
Sub-Total for Annual Provisional Capital Items				\$1,650,000			\$50,000	\$380,000	\$330,000	\$330,000	\$330,000	\$340,000	\$1,710,000
GRAND TOTAL				\$4,280,000			\$1,100,000	\$1,810,000	\$610,000	\$410,000	\$410,000	\$420,000	\$3,660,000

25

14

25

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	Several studies have been completed and are in progress to assess the JDF assets and programs and the proposed Strategic Asset Management Plan will consolidate the findings of the previous studies in a comprehensive approach to identify and prioritizes future capital expenditures and programs.		
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	In order to meet Fire Underwriters Survey recommendations for fire protection, it is necessary to provide certain volumes of water storage. It is proposed to assess fire storage volume requirements for different parts of the system and determine any required upgrades. Funding is required to retain a consultant to complete the analysis.		
Project Number	16-05	Capital Project Title	Comprehensive Pump Station Upgrades (10 year Program)
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. This study concluded that on average approximately \$1.0M per year for the next ten years is needed to upgrade existing pump stations. Design and construction of the Ludlow Pump Station replacement was undertaken in 2020 and 2021. Ludlow has been delayed due to supply chain issues until late in 2022. Funds in 2023 are for design of and to start construction of the Coppermine PS and Bear Mountain PS #1.		
Project Number	18-02	Capital Project Title	JDF Reservoir Upgrades
Capital Project Description	Reservoir improvements are required at the JDF Reservoirs.		
Project Rationale	Numerous deficiencies at the Walfred, Peacock and Helgesen reservoirs have been identified while operating the infrastructure. In 2021 planning and design of improvements such as valve reconfiguration, site drainage and controls will be undertaken in 2022 at the Peacock, Helgesen and Walfred reservoirs. Effort carrying forward in 2023 will be the completion of Walfred. All other works are complete.		

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 complete decommission of the sites and then demolish them. In 2021 the Treanor pump station demolition was carried out. The Townsview PS and Tank started planning in 2021 and will continue through 2023.		
Project Number	18-05	Capital Project Title	Rocky Point Upgrades
Capital Project Description	Replacement of Rocky Point P.S., additional storage at Rocky Point Reservoir & water main upgrades. Partnered with DND.		
Project Rationale	Proposed work includes the design and construction of upgrades to the existing Rocky Point Pump Station, storage tank and associated water main upgrades. This work will improve the level of service to both the existing Metchosin water users and the expected increase in flow associated with the Spirit Bay Development in Beecher Bay. Cost sharing with DND for design and construction is underway with construction completion in spring 2023.		
Project Number	18-06	Capital Project Title	Disaster Response Plan for Water Supply and 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 th		
Project Number	19-06	Capital Project Title	Corrosion Protection Program
Capital Project Description	Undertake a program to assess and prevent corrosion to existing steel pipe within the Juan du Fuca water system.		
Project Rationale	There are numerous steel pipes within the Juan du Fuca water distribution system. Some are located in corrosive conditions or connected to dissimilar metals. Funds are required to undertake a program to assess and prevent corrosion to existing pipes. A study started in 2021 will inform future works.		

Service: 2.680 JDF Water Distribution			
Project Number	19-09	Capital Project Title	Distribution System Seismic Resiliency Improvements
Capital Project Description	Determine and commence improvements to the distribution system to provide seismic resiliency.		
Project Rationale	Determine and commence improvements to the distribution system to provide resiliency. In 2023, sites will be prioritized with design commencing in 2024 and construction starting in 2024.		
Project Number	20-03	Capital Project Title	AC Pipe Replacement Program
Capital Project Description	Replacement of aging asbestos cement pipe as highlighted in the 2019 update report		
Project Rationale	This item is the 2021 to 2026 program for replacement of the water mains identified in the Water Main Upgrading and Replacement Program Update in 2021. All mains were assessed for such criteria as age, pipe material, record of leaks and hydraulic adequacy, and a long-term replacement program was developed. 2023 funds will be allocated to the Goldstream AC Main Replacement project to supplement the Goldstream project budget due to higher than anticipated construction costs.		
Project Number	20-04	Capital Project Title	William Head & VGH Meter Replacement
Capital Project Description	Replacement of the meter and chambers at William Head & VGH with the possibility of resilient connections.		
Project Rationale	Identified through Statement of Works, the William Head and Victoria General Hospital meters require replacement and redundancy to maintain service to the two facilities. In 2021 funds will be utilized to complete design of the two new meters that will allow for construction of the meters while maintaining service. Design will be completed in 2022 with construction starting in 2023.		
Project Number	20-07	Capital Project Title	Goldstream AC Replacement
Capital Project Description	Replacement of aging asbestos cement pipe within Goldstream Rd, from VMP to Spencer.		
Project Rationale	The existing water main within Goldstream Rd, from VMP to Spencer Rd, is aging asbestos cement and identified as a risk for failure. Due to the numerous large connections to the RWS transmission main and complexity replacement of this water main cannot be carried out within the AC Replacement Program. The project was tendered in 2022 and came in over budget. It has now been combined with project 20-03, AC replacement project and will be completed in 2023 by CRD forces.		

Service: 2.680 JDF Water Distribution			
Project Number	21-02	Capital Project Title	Capital Project Description
		Sooke Rd - 2,200m of 600m Pipe - VMP to Jacklin	Replacement of aged, large diameter water main from Jacklin Rd to VMP
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. Due to increased material and construction costs, it is proposed to update the condition assessment to determine whether this project is still required or could be deferred.		
Project Number	22-01	Capital Project Title	Capital Project Description
		East Sooke Interconnect Water Main	Construction approximately 430 m of watermain for system improvements.
Project Rationale	Funds are required to design and construct approximately 430 m of a new watermain interconnection in East Sooke. Interconnection will provide redundancy and improve flows in the area.		
Project Number	22-02	Capital Project Title	Capital Project Description
		Microwave Radio Upgrades	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	16-06	Capital Project Title	Capital Project Description
		Vehicle & equipment replacement (funding from replacement fund)	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.		

Service: 2.680 JDF Water Distribution			
Project Number	17-07	Capital Project Title	Site Decommissioning - General
Capital Project Description	Planning for decommissioning of unused sites.		
Project Rationale	This is a provisional item to allow engineering and planning reviews of old facilities with a view to possible future site uses.		
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.		
Project Number	17-12	Capital Project Title	Large Meters/Meter Vaults Components Replacement
Capital Project Description	Replacement or repairs to components in large meters/vaults as required.		
Project Rationale	This is an annual provision for the replacement of obsolete and worn out large (greater than 2" diameter) meters, adding new meters and upgrading meter vaults.		
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.		

Service: 2.680 JDF Water Distribution			
Project Number	17-15	Capital Project Title	Distribution System Improvements
Capital Project Description	Unplanned distribution system improvements.		
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.		
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.		

Service: 2.680 JDF Water Distribution			
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.		
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.		

Service: 2.680 JDF Water Distribution				
Project Number	16-07	Capital Project Title	Update DCC Bylaw (Comprehensive Update in 2022)	Capital Project Description
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 was completed in 2017, with the next update scheduled to start in 2022.			
Project Number	21-01	Capital Project Title	Sooke Henlyn Supply & Distribution Mains	Capital Project Description
Project Rationale	Proposed work includes the continued installation of the supply and distribution water mains connected to the Helgesen pump station which was previously constructed in 2011 as part of the DCC program. The supply and distribution water mains will continue west as development proceeds towards the proposed Henlyn Tank.			
Project Number	23-01	Capital Project Title	Tank 4 and McCallum Pump Station (2020-2021) and Pump Station 7 and remaining Supply Main to Skirt Mtn Reservoir (2022)	Capital Project Description
Project Rationale	Design and construct Tank 4, Pump Station 7, McCallum Pump Station and remaining supply main to the Skirt Mountain Reservoir based upon development and demand.			
Project Number	23-02	Capital Project Title	Vehicle to support the meter replacement program	Capital Project Description
Project Rationale	A Transit Van equipped with tools and equipment is required for the on site work to be done during the multi year meter replacement program. It will be more effective to setup a vehicle with the required tools and fittings related to replacing meters rather than having to setup a different vehicle based on the operational needs of the day/week/month.			

Service: 2.680 JDF Water Distribution			
Project Number	23-03	Capital Project Title	Seagirt Watermain Extension
Capital Project Description	Seagirt water system is being replaced as part of inclusion into the JDF system.		
Project Rationale	The Seagirt Improvement District is being included in the JDF Service. The distribution system is being replaced to meet JDF standards and is being funded by the Improvement District.		

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 and office layouts.		
Project Rationale	<p>The budget includes the following funds to upgrade and renew the buildings at 479 Island Highway:</p> <ul style="list-style-type: none"> • Repairs, upgrades and changes to the buildings (provisional \$50,000) • Painting of the buildings. (provisional \$10,000 annually) • Repair and replacement of carpets, floors and walls. (provisional \$10,000 annually) • Repair, refurbishment and replacement of equipment and property. (provisional \$10,000 annually) 		
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	<p>Service Life and projected replacement:</p> <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 		
Project Number	20-01	Capital Project Title	Portable Pump Station
Capital Project Description	Portable pump station and generator to provide backup when a pump station is offline, in construction or to bypass a section of pipe.		
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. Funds will be used in 2020 to design and in 2021 to procure a portable pump station and generator .		
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.		

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

2.680 Juan de Fuca Water Distribution
Summary Schedule
2023 - 2027 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				
	2022	2023	2024	2025	2026	2027
DCC Reserve Account	10,029,191	6,059,191	8,239,191	10,419,191	12,599,191	14,799,191
Equipment Replacement Fund	792,405	463,862	356,706	284,323	315,802	416,805
Total	10,899,202	6,600,661	8,673,507	10,781,126	12,992,607	15,293,612

2.680 Juan de Fuca Water Distribution
Development Cost Charges
2023 - 2027 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				
	2022	2023	2024	2025	2026	2027
Beginning Balance	13,147,386	10,029,191	6,059,191	8,239,191	10,419,191	12,599,191
Transfer to Cap Fund to fund DCC projects	(5,477,600)	(6,170,000)	(20,000)	(20,000)	(20,000)	-
Payment of P&I on LA 3164	(30,595)	-		-	-	-
Payment of DCC liability						
DCC's received From Member Municipalities	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000
Interest Income*	190,000					
Ending Balance \$	10,029,191	6,059,191	8,239,191	10,419,191	12,599,191	14,799,191

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
2023 - 2027 Financial Plan

Equipment Replacement Reserve Schedule

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

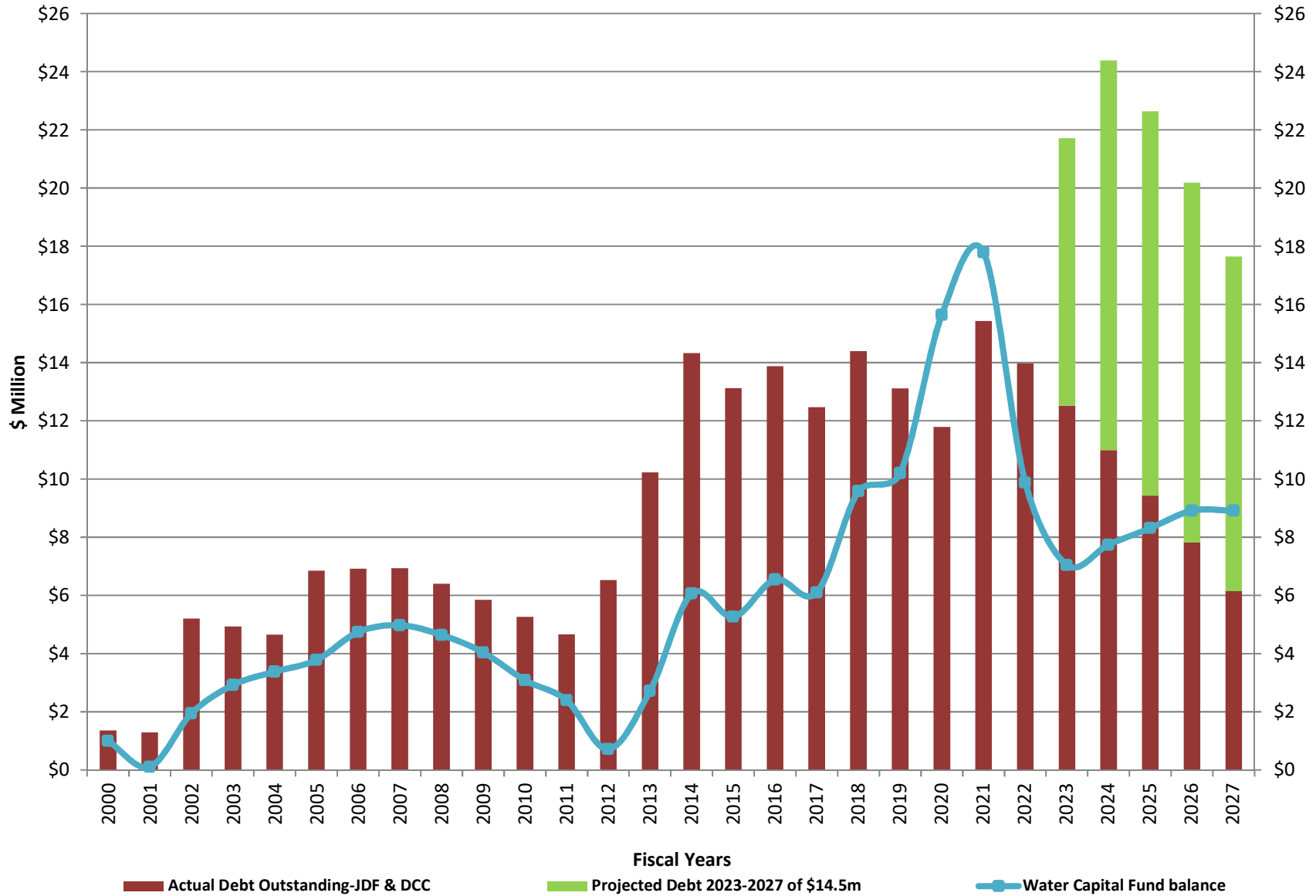
Fund: 1022 Fund Center: 101630	Actual	Estimated	Budget				
	2021	2022	2023	2024	2025	2026	2027
Beginning Balance	556,248	585,011	792,405	463,862	356,706	284,323	315,802
Equipment purchases (Based on Capital Plan)	(232,664)	(70,000)	(1,080,000)	(855,000)	(905,000)	(774,000)	(710,000)
Transfer from Operating Budget	258,003	263,494	589,457	619,594	696,867	689,379	704,503
Proceeds on disposals		10,500	162,000	128,250	135,750	116,100	106,500
Interest Income*	3,424	3,400					
Ending Balance \$	585,011	792,405	463,862	356,706	284,323	315,802	416,805

General Comments:

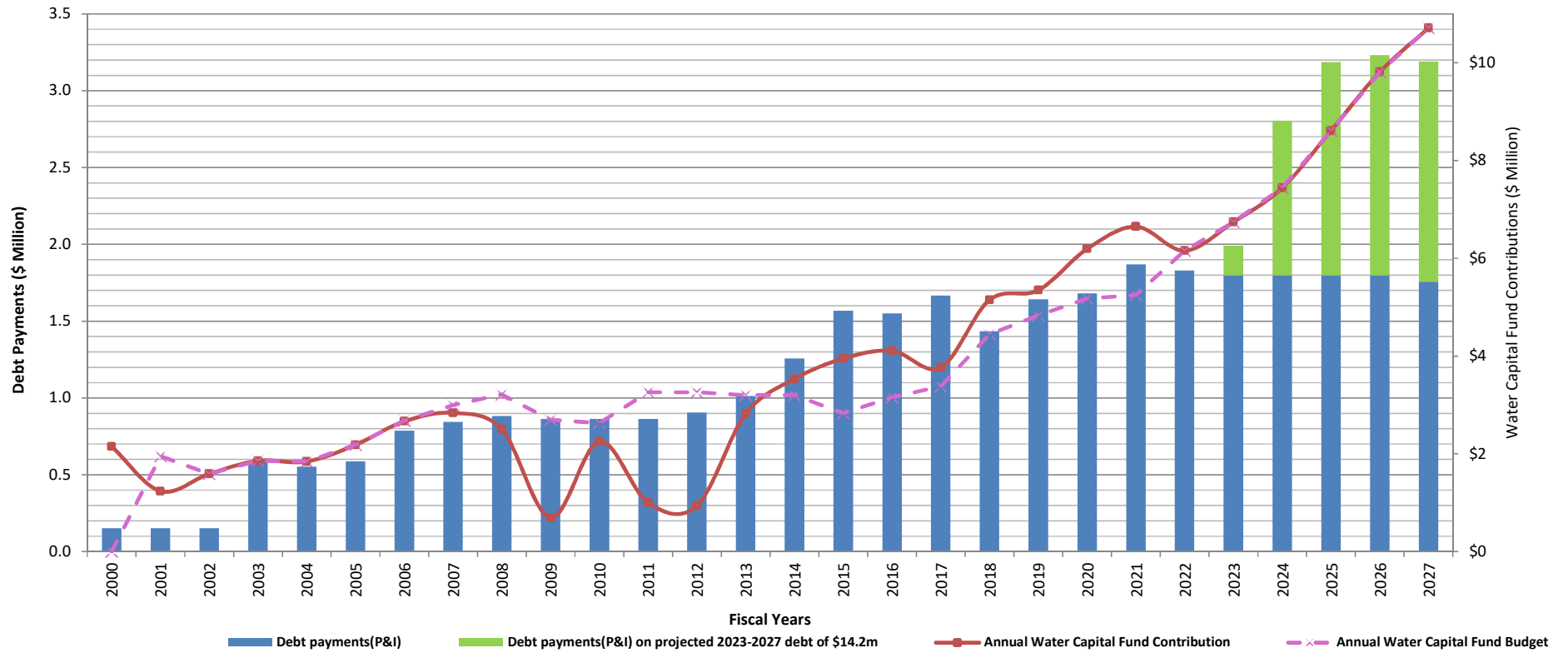
Reserve Fund is used for the purpose of replacing fleet vehicles including heavy equipment and associated mobile components, as outlined in the capital plan. Proceeds from disposals are estimated at 15% of replacement equipment purchases. Note not all vehicles are sold within the year in which they are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

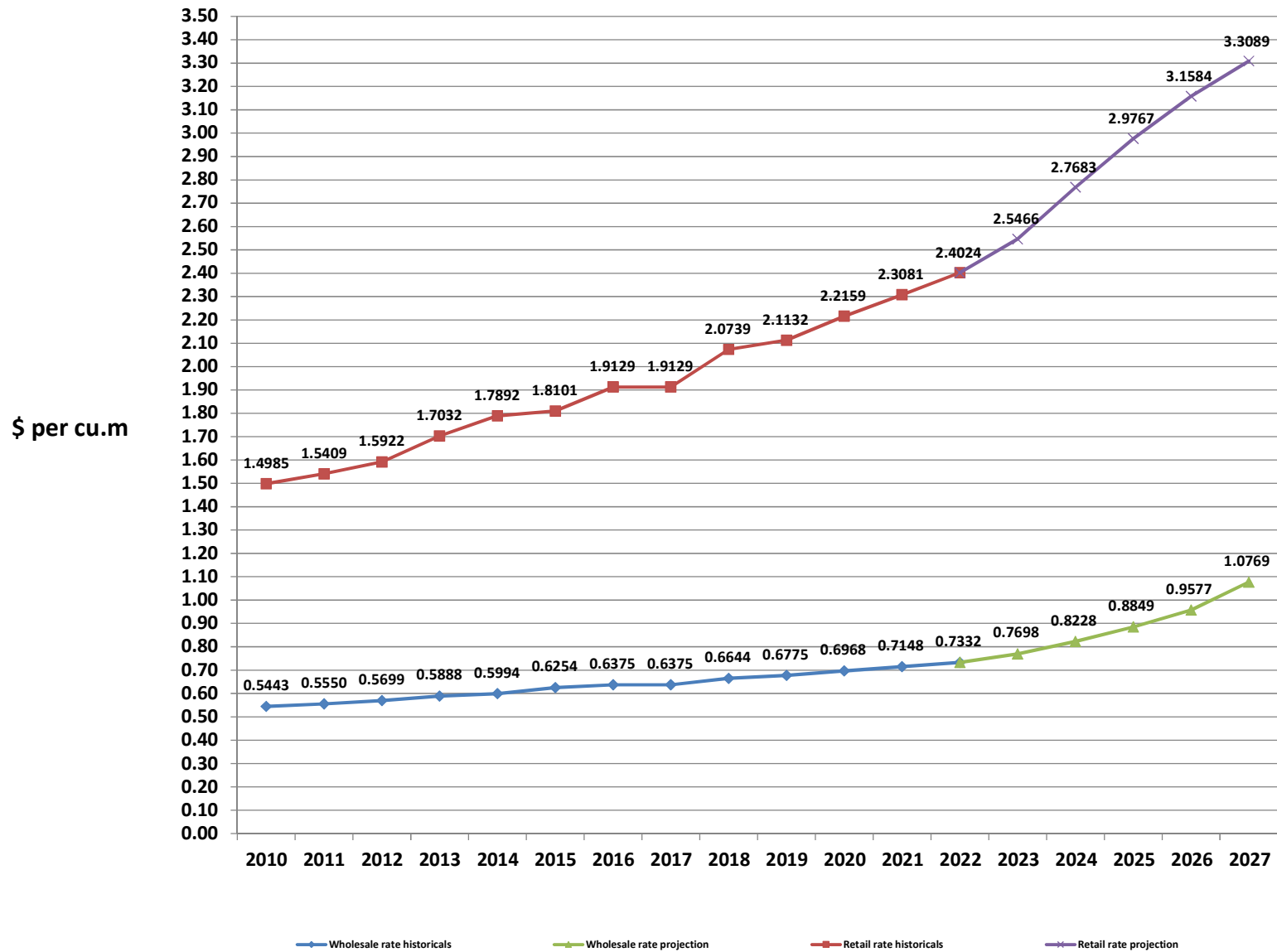
JDF Water Distribution & DCC Debt Outstanding vs Water Capital Fund Balance



JDF Water Distribution Debt Payments (P&I) vs Water Capital Fund Contributions



CRD Water Wholesale & Retail Rate, Historicals & Projections



2.682 - Seagirt Water System - \$2.1M Water System Upgrade	2022		BUDGET REQUEST				FUTURE PROJECTIONS			
	BOARD BUDGET	ESTIMATED ACTUAL	2023				2024	2025	2026	2027
			CORE BUDGET	ONGOING	ONE-TIME	TOTAL				
DEBT										
Water Purchase	-	-	43,453	-	-	43,453	-	-	-	-
Debt Reserve Fund	-	-	-	-	-	-	21,000	-	-	-
MFA Principal Payment	-	-	-	-	-	-	-	61,480	61,480	61,480
MFA Interest Payment	-	-	63,000	-	-	63,000	94,850	102,900	102,900	102,900
	-	-	-							
TOTAL DEBT	-	-	106,453	-	-	106,453	115,850	164,380	164,380	164,380
REQUISITION - PARCEL TAX	-	-	(106,453)	-	-	(106,453)	(115,850)	(164,380)	(164,380)	(164,380)
Percentage increase over prior year Requisition							8.8%	41.9%	0.0%	0.0%



REGIONAL WATER SUPPLY COMMISSION
Wednesday, July 20, 2022 at 11:30 AM

MEETING HOTSHEET (ACTION LIST)

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.

3. ADOPTION OF MINUTES

That the minutes of the June 15, 2022 meeting be adopted.

CARRIED

7. COMMISSION BUSINESS

3.1. Summary of Feedback - 2022 Regional Water Supply Service Master Plan

That the Regional Water Supply Commission:

1. Approve the 2022 Master Plan, as a guide to future water supply planning; and
2. Recommend that the Capital Regional District Board approve the 2022 Master Plan, as a guide to future water supply planning.

CARRIED

Motion Arising:

That the recommendation to approve be postponed to the next meeting to allow commissioners the opportunity to read the 2022 Master Plan, to ensure that the Plan is published on a Commission agenda and to allow the Malahat nation the opportunity to comment on the plan.

FAILED

Action:

That staff include the complete 2022 Master Plan report in the package being presented to the Board.

3.2. Bylaw No. 4509, "Capital Regional District Greater Victoria Water Supply Area Protection Bylaw No. 1, 2000, Amendment Bylaw No. 2, 2022"

The Regional Water Supply Commission recommends to the Capital Regional District Board:

1. That Bylaw No. 4509, "Capital Regional District Greater Victoria Water Supply Area Protection Bylaw No. 1, 2000, Amendment Bylaw No. 2, 2022", be introduced and read a first, second, and a third time.
2. That Bylaw No. 4509 be adopted.

CARRIED

**Regional Water Supply Commission
Hotsheet – Wednesday, July 20, 2022**

2

3.3. Greater Victoria Water Supply Area 2022 Public and School Tours Summary

RECEIVED

3.4. Summary of Recommendations from Other Water Commissions

RECEIVED

3.5. Water Watch Report

RECEIVED

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued August 29, 2022

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	August 31 5 Year Ave		August 31/21		August 28/22		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	68,236	15,012	64,685	14,231	75,645	16,642	81.6%
Goldstream	5,843	1,286	6,622	1,457	9,004	1,981	90.8%
Total	74,079	16,297	71,307	15,688	84,649	18,623	82.5%

2. Average Daily Demand:

For the month of August	210.7 MLD	46.36 MIGD
For week ending August 28, 2022	205.5 MLD	45.21 MIGD
Max. day August 2022, to date:	240.1 MLD	52.81 MIGD

3. Average 5 Year Daily Demand for August

Average (2017 - 2021)	198.5 MLD ¹	43.67 MIGD ²
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¹MLD = Million Litres Per Day

²MIGD = Million Imperial Gallons Per Day

4. Rainfall August:

Average (1914 - 2021):	29.1 mm
Actual Rainfall to Date	1.3 mm (4% of monthly average)

5. Rainfall: Sep 1- Aug 28

Average (1914 - 2021):	1,628.7 mm
2021 - 2022	2,033.0 mm (125% of average)

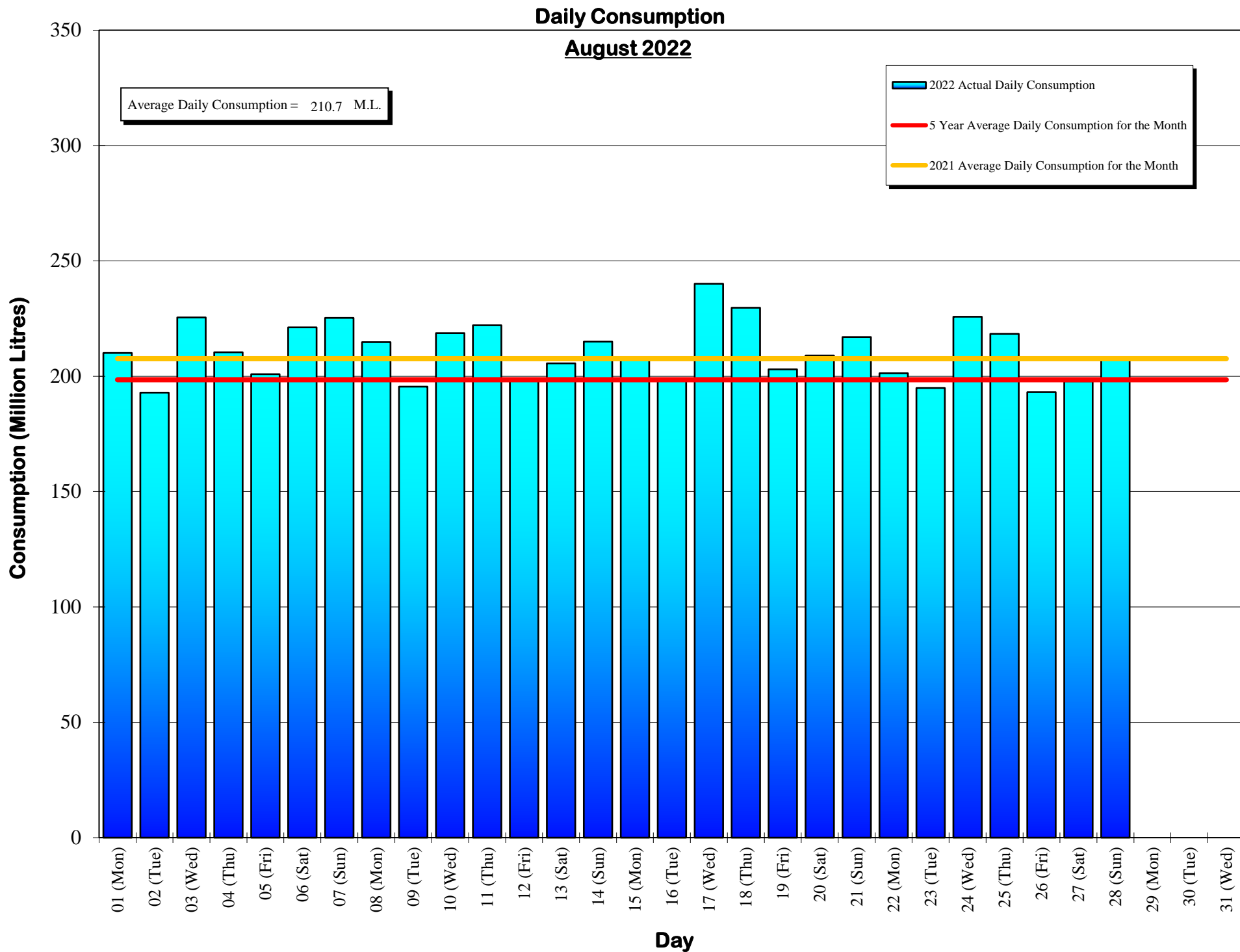
6. Water Conservation Action Required:

CRD's Stage 1 Water Conservation Bylaw is now in effect through September 30, 2022.
Visit our website at www.crd.bc.ca/water for scheduling information.

If you require further information, please contact:

Ted Robbins, B.Sc., C.Tech
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 Consumptions: - August 2022

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 (Mon)	210.1		29	16	Sunny / P. Cloudy	0.0	0.0	0.0
02 (Tue)	192.9	<=Min	24	13	Sunny	0.0	0.0	0.0
03 (Wed)	225.5		26	13	Sunny / P. Cloudy	0.0	0.0	0.0
04 (Thu)	210.4		20	13	Sunny / P. Cloudy	0.0	0.0	0.0
05 (Fri)	200.9		25	11	Sunny	0.0	0.0	0.0
06 (Sat)	221.2		29	13	Sunny	0.0	0.0	0.0
07 (Sun)	225.3		31	14	Sunny	0.0	0.0	0.0
08 (Mon)	214.8		30	16	Sunny / P. Cloudy	0.0	0.0	0.0
09 (Tue)	195.5		26	16	Sunny / P. Cloudy	0.0	0.0	0.0
10 (Wed)	218.7		25	17	Sunny / P. Cloudy / Showers	0.8	0.0	0.8
11 (Thu)	222.1		26	15	Sunny / P. Cloudy	0.0	0.0	0.0
12 (Fri)	198.7		26	14	Sunny / P. Cloudy	0.0	0.0	0.0
13 (Sat)	205.6		22	14	Sunny / P. Cloudy / Showers	0.5	0.0	0.5
14 (Sun)	215.0		26	13	Sunny / P. Cloudy	0.0	0.0	0.0
15 (Mon)	207.8		28	15	Sunny	0.0	0.0	0.0
16 (Tue)	198.7		28	15	Sunny	0.0	0.0	0.0
17 (Wed)	240.1	<=Max	32	15	Sunny / P. Cloudy	0.0	0.0	0.0
18 (Thu)	229.7		32	18	Sunny / P. Cloudy	0.0	0.0	0.0
19 (Fri)	203.0		31	18	Sunny / P. Cloudy	0.0	0.0	0.0
20 (Sat)	209.0		26	15	Sunny / P. Cloudy	0.0	0.0	0.0
21 (Sun)	217.0		26	15	Sunny / P. Cloudy	0.0	0.0	0.0
22 (Mon)	201.3		29	14	Sunny / P. Cloudy	0.0	0.0	0.0
23 (Tue)	194.9		27	15	Sunny	0.0	0.0	0.0
24 (Wed)	225.8		30	17	Sunny	0.0	0.0	0.0
25 (Thu)	218.4		31	17	Sunny	0.0	0.0	0.0
26 (Fri)	193.1		23	14	Sunny	0.0	0.0	0.0
27 (Sat)	197.8		21	13	Sunny / P. Cloudy	0.0	0.0	0.0
28 (Sun)	207.2		23	14	Sunny	0.0	0.0	0.0
29 (Mon)								
30 (Tue)								
31 (Wed)								
TOTAL	5900.5 ML	1298.07 MIG				1.3	0	1.3
MAX	240.1	52.81	32	18		0.8	0	0.8
AVG	210.7	46.36	26.9	14.8		0.0	0	0.0
MIN	192.9	42.44	20	11		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.

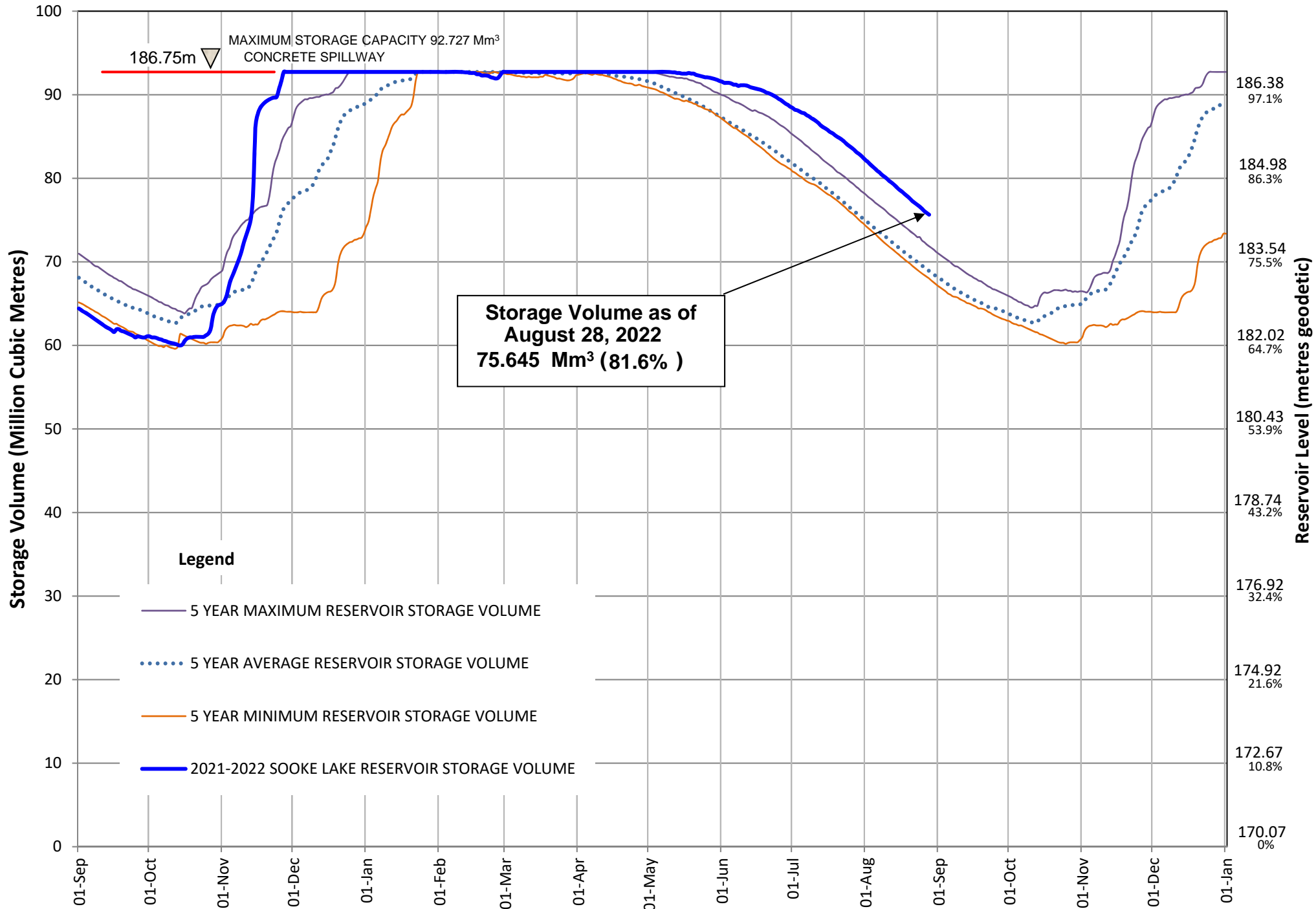
Average Rainfall for August (1914-2021)	29.1 mm
Actual Rainfall: August	1.3 mm
% of Average	4%
Average Rainfall (1914-2021): Sept 01 - Aug 28	1,628.7 mm
Actual Rainfall (2021): Sept 01 - Aug 28	2,033.0 mm
% of Average	125%

Number days with precip. 0.2 or more
2

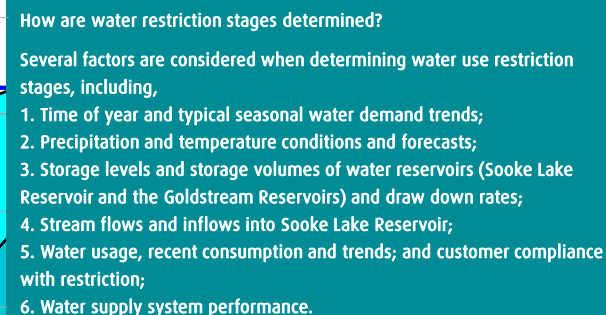
Water spilled at Sooke Reservoir to date (since Sept. 1) = 12.54 Billion Imperial Gallons
= 57.00 Billion Litres

SOOKE LAKE RESERVOIR STORAGE SUMMARY

2021 / 2022



FAQs



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 August 28, 2022

