

MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE
Notice of Meeting on **Tuesday, November 14, 2023 at 9:30 a.m.**
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.

M. Fossil (Chair) J. Deschenes (Vice Chair) P. Brent (EA Director) A. Cyr
W. Foster D. Reed R. Sullivan

AGENDA

- 1. APPROVAL OF AGENDA**
- 2. ADOPTION OF MINUTES3**
Recommendation: That the minutes of the September 12, 2023 meeting be adopted.
- 3. CHAIR'S REMARKS**
- 4. PRESENTATIONS/DELEGATIONS**
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 Magic Lake Estates Water and Sewer Committee at iwsadministration@crd.bc.ca.
Requests must be received no later than 4:30 p.m. two calendar days prior to the meeting.
- 5. SENIOR MANAGER'S REPORT**
 - Private Property Winterizing
- 6. COMMITTEE BUSINESS**
 - 6.1. Water Usage Statistics6**

There is no recommendation, this report is for information only.

To ensure quorum, advise IWSadministration@crd.bc.ca if you cannot attend.

6.2. 2024 Operating and Capital Budget9

Recommendation: *That the Magic Lake Estates Water and Sewer Committee:*

1. *Approve the 2024 operating and capital budget for the:*
 - a) *Magic Lake Estates Water System Local Service as presented and that the 2023 actual operating deficit be balanced on the 2023 Reserve Funds transfer (Capital Reserve Fund and/or Operating Reserve Fund); and*
 - b) *Magic Lake Estates Sewerage System Local Service as presented and that the 2023 actual operating surplus or deficit be balanced on the 2023 Reserve Funds transfer (Capital Reserve Fund and/or Operating Reserve Fund); and*

2. *Recommends that the Electoral Areas Committee recommend that the Capital Regional District Board approve the 2024 Operating and Capital Budget and the five-year Financial Plan for the Magic Lake Estates Water and Sewer Services as presented.*

6.3. Project and Operations Update45

There is no recommendation, this report is for information only.

7. CORRESPONDENCE

8. NEW BUSINESS

9. ADJOURNMENT

Next Meeting: At the call of the Chair



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MINUTES OF A MEETING OF THE Magic Lake Estates Water and Sewer Committee, held Tuesday, September 12, 2023 at 9:30 a.m., in the Goldstream Conference Room, 479 Island Highway, Victoria, BC

PRESENT: Committee Members: M. Fossil (Chair); J. Deschenes (Vice Chair) (EP); R. Sullivan; A. Cyr (EP); W. Foster; D. Reed; (EP)

Staff: J. Marr, Senior Manager, Infrastructure Engineering; M. Cowley, Manager, Wastewater Engineering & Planning; D. Robson, Manager, Saanich Peninsula & Gulf Islands Operations; C. Moch, Manager, Water Quality Operations; M. Risvold (Recorder)

REGRETS: P. Brent (EA Director)

EP = Electronic Participation

The meeting was called to order at 9:32 am.

1. APPROVAL OF AGENDA

The following items were added under New Business:

8.1 Water Rates

8.2 Kiosk Wraps

MOVED by W. Foster, **SECONDED** by D. Reed,
That the agenda be approved as amended.

CARRIED

2. ADOPTION OF MINUTES

MOVED by D. Reed, **SECONDED** by W. Foster,
That the minutes of the June 13, 2023 meeting be adopted.

CARRIED

3. CHAIR'S REMARKS

The Chair made no remarks.

4. PRESENTATIONS/DELEGATIONS

There were no presentations or delegations.

5. SENIOR MANAGER'S REPORT

• Water Sampling Results

J. Marr advised that water quality testing was recently completed as members of the public brought forward concerns due to no visible lily pads on the lake and less birds than previous years. As a precaution, staff switched the water source from 80% Buck Lake and 20% Magic Lake supply to 100% Buck Lake supply. The Capital Regional District (CRD) undertook additional testing for the presence of any chemicals which revealed no adverse

chemicals within Magic Lake. CRD has since switched back to 80% Buck Lake and 20% Magic Lake water supply.

Staff responded to a query from the previous meeting regarding the capacity of the water treatment plant. Staff advised the plant was built for a full anticipated build out of the community, advising there is approximately 15-20% capacity remaining.

6. COMMITTEE BUSINESS

6.1. Project and Operations Update

J. Marr spoke to item 6.1.

The committee asked if CRD would be concerned if the watershed on the north side of Buck Lake was to be developed. Staff advised that Islands Trust would provide a referral to CRD where staff can comment.

The committee asked about the remaining pipe that is to be replaced, expressing concerns that previously resulted in violations. Staff agreed that the remaining pipe needs to be addressed in the long term, which funding will need to be raised for as there is not enough funds in the current grant. Staff suggested completing a closed circuit television (CCTV) inspection of the pipes to check for concerns and complete spot repairs in the interim. Discussion ensued.

The committee requested that staff post when the work is scheduled to take place on a notice board as it would be beneficial and appreciated by the community.

7. CORRESPONDENCE

There was no correspondence.

8. NEW BUSINESS

8.1. Water rates

The committee discussed increasing the variable water rates, noting the current rate may be inadequate for water conservation.

Discussion ensued regarding:

- Water usage statistics for the community
- Lowering the water limit
- Lack of incentive to conserve water

8.2. Kiosk Wraps

Staff shared local images with the committee that can be used to cover the kiosks. Staff encouraged the committee to submit high resolution photos that they would like used and noted it is easier to remove graffiti from kiosks that have a wrap on them. Discussion ensued.

9. ADJOURNMENT

MOVED by D. Reed, **SECONDED** by W. Foster,
That the September 12, 2023 meeting be adjourned at 10:31 am.

CARRIED

CHAIR

SECRETARY

DRAFT



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REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE MEETING OF TUESDAY, NOVEMBER 14, 2023

SUBJECT Magic Lake Estates Water System Water Usage Statistics

ISSUE SUMMARY

To provide the Magic Lake Estates Water and Sewer Committee with water usage statistics based on volume-based billing tiers.

BACKGROUND

On September 12, 2023 the Magic Lake Estates (MLE) Water and Sewer Committee requested an explanation of the current MLE Water System billing tiers and water usage statistics. This request was made to inform the discussion of a potential to raise the rate of the higher water tiers users to potentially reduce water usage.

The following billing structure for MLE Water System users was established beginning in the third quarter of 2013; rates have been updated to reflect the most recent 2023 water rates:

- Annual fixed fee of \$356.38 to all water users
- Quarterly usage of 0m³ to 50m³ is charged at \$0.00/m³
- Quarterly usage of 50m³ to 80m³ is charged at \$0.50/m³
- Quarterly usage greater than 80m³ charged at \$1.00/m³

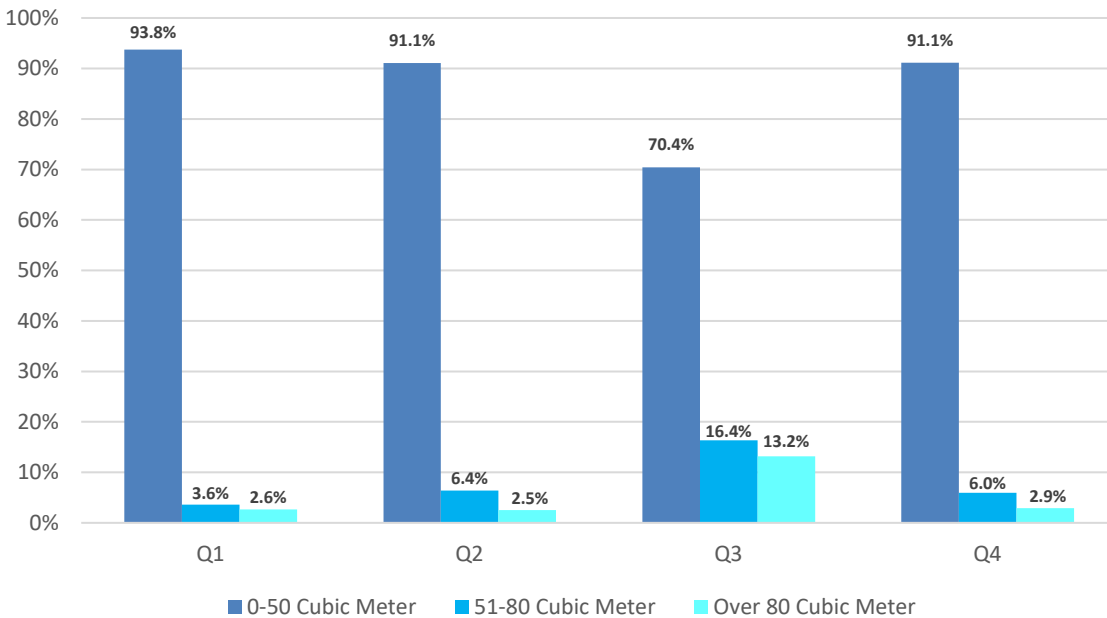
The MLE Water System has been fully metered since June 2010 and water user billing data is collected quarterly. The most recent full year cycle of water usage data has been selected to represent annual water use statistics. The MLE Water System usage statistics for 2022, based on percentage of users categorized into three billed volume-based tiers, are presented in Table 1.

Table 1: 2022 MLE Water System Quarterly Water Usage Data

	Jan - Mar		Apr - Jun		Jul - Sep		Oct - Dec	
	Quarter 1		Quarter 2		Quarter 3		Quarter 4	
	Number of Users	%	Number of Users	%	Number of Users	%	Number of Users	%
0-50 m³	993	93.8%	967	91.1%	753	70.4%	975	91.1%
51-80 m³	38	3.6%	68	6.4%	175	16.4%	64	6.0%
Over 80 m³	28	2.6%	27	2.5%	141	13.2%	31	2.9%
Total	1059	100.0%	1062	100.0%	1069	100.0%	1070	100%

Quarterly variation in billing tiered water use is presented in Figure 1. A larger variation in water use is noticeable in the third quarter which coincides with warmer and drier summer months and evidences a seasonal nature of occupancy. Despite this third quarter variation, the majority of users can be categorized as users of less than 50 cubic meters per quarter.

Figure 1: 2022 MLE Water System Quarterly Water Usage Percentage of Users by Billing Tier



A further breakdown of Q3 (summer) water use is presented in Table 2. Of the users who consumed over 80 cubic meters in Q3, 84 percent used up to 200 cubic meters, 13 percent used between 201 cubic meters and 400 cubic meters, and 3 percent used over 400 cubic meters.

Table 2: 2022 MLE Water System Third Quarterly Water Usage Data

	Quarter 3	
	Number of Users	Percentage
81-200 Cubic Meter	118	83.7%
201-400 Cubic Meter	19	13.5%
Over 400 Cubic Meter	4	2.8%
Total	141	100.0%

CONCLUSION

Magic Lake Estates Water System water usage statistics, for the year 2022, categorized by volume-based billing tiers show that the majority of customers use less than 50 cubic meters of water per quarter. Based on 2022 data, rate increases to higher water use tier customers would likely apply to less than 15 percent of users in the summer(Q3) and less than 3 percent for the other three billing quarters.

RECOMMENDATION

There is no recommendation, this report is for information only.

Submitted by:	Natalie Tokgoz, P.Eng., Manager, Water Distribution Engineering and Planning
Concurrence:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Alicia Fraser, P. Eng., General Manager, Integrated Water Services



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**REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE
TUESDAY, NOVEMBER 14, 2023**

**SUBJECT MAGIC LAKE ESTATES WATER AND SEWER SERVICE 2024 OPERATING
AND CAPITAL BUDGET**

ISSUE SUMMARY

To present the 2024 Operating and Capital Budget for Committee approval pursuant to Bylaw No. 2339 "Magic Lake Estates Water and Sewer Committee Bylaw 1995".

BACKGROUND

The Capital Regional District (CRD) is required by legislation under the *Local Government Act* (LGA) to prepare an annual Operating and Capital budget and a five-year Financial Plan. CRD staff have, therefore, prepared the financial plans for the following services:

- Magic Lake Estates Water System Local Service (Appendix A)
- Magic Lake Estates Sewerage System Local Service (Appendix B)

The Operating Budgets include the regular annual costs to operate the service. The Capital Expenditure Plan shows the anticipated expenditures for capital additions. These may include purchases of new assets or infrastructure upgrades, improvements to existing assets or asset review and study work potentially leading to future capital improvements.

In preparing the Operating Budget, CRD staff considered:

- Actual expenditures incurred between 2021 and 2023
- Anticipated changes in level of service (if any)
- Maximum allowable tax requisition
- Annual cost per taxpayer and per single family equivalent (SFE)

In preparing the Capital Expenditure Plan, CRD staff considered:

- Available funds on hand
- Projects in progress
- Condition of existing assets and infrastructure
- Regulatory, environmental and health and safety factors

Adjustments for surpluses or deficits from 2023 may be made in January 2024. The CRD Board will give final approval to the budget and financial plan in March 2024.

The Financial Plan for the years 2025 – 2028 may be changed in future years.

BUDGET OVERVIEW

Magic Lake Estates Water System Local Service (Appendix A)

Operating Budget

It is projected that the 2023 operating expenses will be approximately \$18,758 under budget.

This is primarily due to unspent labour. The annual operating labour budget does account for some contingency labour to fund any unplanned or emergency response work that go beyond regular operational and preventive maintenance programs.

It is projected that the 2023 operating revenue will be \$5,300 lower than budget mainly due to projected lower water sales revenue.

As a result, there is an overall operating surplus of approximately \$13,458. To balance the operating budget, it is proposed that the 2023 transfer to the Capital Reserve Fund (CRF) be increased by the actual surplus amount.

Operating costs for 2024 (excluding 2023 one-time cyclical program funded by the Operating Reserve Fund (ORF) in the amount of \$10,000 to obtain a Statutory Right of Way over private property for the operation of the Magic Lake North Dam) has increased by \$34,794 (5%) compared to 2023. The increase is primarily to account for inflation, labour costs reflecting the renewed collective agreement since 2023.

Municipal Finance Authority (MFA) Debt

Loan Authorization Bylaw 3633 (LA3633) was approved and adopted in 2009 to borrow \$2,560,000 to upgrade water treatment and water systems. Table 1 below summarizes the detailed information for existing MFA debt issue related to LA3633.

Table 1 – Existing Debt Summary

<i>MFA Issues</i>	<i>Term</i>	<i>Borrowing Year</i>	<i>Retirement Year</i>	<i>Refinance Year</i>	<i>Original Interest Rate</i>	<i>Current Interest Rate</i>	<i>Principal</i>	<i>Principal Payment</i>	<i>Interest Payment</i>	<i>Total Annual Debt Cost</i>
LA3633-110	15	2010	2025	2020	4.50%	1.28%	\$723,000	\$38,812	\$9,254	\$48,066
LA3633-116	15	2011	2026	2021	4.20%	1.47%	\$250,000	\$13,420	\$3,675	\$17,095
LA3633-121	15	2012	2027	2022	2.90%	2.90%	\$559,500	\$30,035	\$18,967	\$49,002
LA3633-124	15	2013	2028	2023	3.15%	4.52%	\$1,002,500	\$53,816	\$45,313	\$99,129
LA3633-126	15	2013	2028	2023	3.85%	4.52%	\$25,000	\$1,342	\$1,130	\$2,472
Total							\$2,560,000	\$137,425	\$78,339	\$215,764

Operating Reserve Fund

The Operating Reserve Fund is evaluated as outlined in the CRD Operating Reserve Guidelines endorsed by the CRD Board in 2023 and is used to fund cyclical maintenance activities, equipment and supplies purchases that typically do not occur on an annual basis, which creates swings in expenses. The ORF is the financial strategy to mitigate the corresponding fluctuation in revenue requirement on an annual basis. Typical maintenance activities include hydrant/standpipe maintenance, reservoir cleaning and inspection. Additionally, the operating reserve is also used to respond to unforeseen events and operating emergencies. It is proposed that 2024 transfers to the operating reserve fund be set at \$10,000. The Operating Reserve Fund balance at the end of 2023 is projected to be approximately \$48,539. There is \$40,000 of planned maintenance to be funded by the ORF over the next five years.

Capital Reserve Fund

The Capital Reserve Fund (CRF) is used to pay for capital expenditures that are not funded by other sources such as grants, operating budget, or debt.

It is proposed that the budgeted transfer to the CRF be set at \$42,060 in 2024. Reserve fund transfer planning is influenced by funding requirements to support the five-year capital expenditure plan, the emergency response to infrastructure failures, and guided by Capital Reserve Funding Guidelines endorsed by the CRD Board aiming to achieve the optimal reserve fund level to ensure long-term prudent and sustainable management of service delivery objectives through capital investments. The capital reserve fund balance at the end of 2023 is projected to be \$486,977.

In addition to the general Capital Reserve Fund outlined above, there is a separate reserve fund from the insurance settlement of \$592,842 in 2021, which is dedicated to fund the Water Treatment Plant Upgrades in the future. This balance at the end of 2023 is projected to be \$652,982.

Capital Expenditure Plan

The 5-year plan includes \$462,000 of expenditures to be funded by a combination of capital on hand and the service's CRF.

Proposed 2024 capital expenditures include continuation of Phase 1 Buck Lake Dam repairs (21-04), finishing construction of an Electric Vehicle Charging Station (22-02), decommissioning of the old Magic Lake syphon and ISOPAC permanent handling and storage improvements. Other future planned works include Phase 2 Buck Lake Dam Repairs (26-01), funded by CRF.

The design and construction of Buck Lake and Magic Lake Adjustable Intakes (21-02) is estimated to be completed in 2023 and was not carried forward into 2024.

Capital Projects Fund

As specific capital projects are approved, the funding revenues for them are transferred into the capital project fund from multiple funding sources if applicable, including CRF, grant funding, external contributions, and debt. Any funds remaining upon completion of a project are transferred back to the CRF for use on future capital projects or its original non-CRF funding sources if required.

User Charge and Parcel Tax

The service is funded by fixed user charges, parcel taxes, and variable water consumption charges. Properties connected to the water system pay the annual user charge and water consumption and all properties within the local service area are responsible for the parcel tax. The tiered water consumption rates remain unchanged from 2023.

Table 2 below summarizes the 2024 over 2023 changes for parcel tax and user charge.

Table 2 – Parcel Tax and User Charge Summary

<i>Budget Year</i>	<i>Parcel Tax</i>	<i>Taxable Folios Numbers</i>	<i>Parcel Tax per Folio*</i>	<i>User Charge</i>	<i>SFE Numbers</i>	<i>User Charge per SFE</i>	<i>Parcel Tax & User Charge</i>
2023	\$580,000	1,196	\$510.41	\$377,411	1,059	\$356.38	\$866.79
2024	\$580,000	1,196	\$510.41	\$396,231	1,072	\$369.62	\$880.03
Change (\$)	\$0.00	0	\$0.00	\$18,820	13	\$13.24	\$13.24
Change (%)	0.00%	0.00%	0.00%	4.99%	1.23%	3.71%	1.53%

* Includes the 5.25% admin fee charged by the Ministry of Finance (not CRD revenue)

Magic Lake Estates Sewerage System Local Service (Appendix B)

Operating Budget

It is projected that the 2023 operating expenses will be approximately \$54,220 over budget. Factors contributing to the projected overage include emergency response and corrective maintenance primarily due to the following events:

- Schooner Wastewater Treatment Plant rebuild of sludge transfer pump.
- Schooner Sewer Lift Station electrical and control system electrical systems corrective maintenance and emergency response.
- Chart Drive Pump Station sewer forcemain leak investigation and break repairs at the intersection of Galleon Way and Dory Way.
- Sewer collection system emergency response to sewer backup Cannon Crescent, Doubloon Crescent, and Schooner Way.
- Chart Drive Lift Station pump replacement.
- Masthead Pump Station replacement of pump electrical and control systems.

It is projected that the 2023 operating revenue will be on budget.

As a result, there is an overall estimated operating deficit of approximately \$54,220. To balance the operating budget, it is proposed that the planned 2023 transfer to the Capital Reserve Fund (CRF) be reduced by the deficit amount. Otherwise, the deficit must immediately be included as an expenditure to be recovered from revenue in 2024 financial plan as required by Local Government Act Section 374(11).

Operating costs for 2024 has been increased by \$54,191 (8.7%) compared to 2023. The increase is primarily to account for inflation, labour costs reflecting the renewed collective agreement since 2023. There is a proposed increase in the 2024 budget of \$14,600 to address the costs associated with unplanned maintenance and repairs historically encountered.

Municipal Finance Authority Debt

Loan Authorization Bylaw 4048 (LA4048) to borrow \$1,530,000 was approved and adopted in 2016 for the wastewater system renewal and upgrade. Table 3 below summarizes the detailed information for existing MFA debt issues related to LA4048.

Table 3 – Existing Debt Summary (applicable to all Properties in the service area)

MFA Issues	Term	Borrowing Year	Retirement Year	Refinance Year	Interest Rate	Principal	Principal Payment	Interest Payment	Total Annual Debt Cost
LA4048-139	10	2016	2026	NA	2.10%	\$745,000	\$64,987	\$15,645	\$80,632
LA4048-142	10	2017	2027	NA	3.15%	\$250,000	\$21,808	\$7,875	\$29,683
LA4048-146	10	2018	2028	NA	3.20%	\$535,000	\$46,668	\$17,120	\$63,788
Total						\$1,530,000	\$133,463	\$40,640	\$174,103

Loan Authorization Bylaw 4320 (LA4320) to borrow up to \$6,000,000 was approved and adopted in 2019 for Wastewater Treatment Plant Improvements. One-time lump-sum special payment option was provided to the ratepayers and 137 properties exercised the payment option. As the result, \$1,130,268 was collected from lump-sum payments. In 2021, total of \$3,760,000 was borrowed through two debt issuances, LA4320-153 in the spring and LA4320-156 in the fall, and another \$1,000,000 was borrowed through LA4320-157 in the spring of 2022 to finance the Wastewater Treatment Plant Improvements project. Only the properties that didn't exercise the one-time lump sum payment option will pay the debt servicing cost related to LA4320 for the debt term of 30 years.

Table 4 below summarizes the detailed information for existing MFA debt issues related to LA4320.

Table 4 – Existing Debt Summary (only applicable to properties no one-time payment received)

MFA Issues	Term	Borrowing Year	Retirement Year	Refinance Year	Interest Rate	Principal	Principal Payment	Interest Payment	Total Annual Debt Cost
LA4320-153	30	Spring 2021	2051	2031	2.41%	\$2,500,000	\$59,248	\$60,250	\$119,498
LA4320-156	30	Fall 2021	2051	2031	1.98%	\$1,260,000	\$29,861	\$24,948	\$54,809
LA4320-157	30	Spring 2022	2052	2032	3.36%	\$1,000,000	\$22,778	\$33,600	\$56,378
Total						\$4,760,000	\$111,887	\$118,798	\$230,685

Operating Reserve Fund

The Operating Reserve Fund (ORF) is evaluated as outlined in the CRD Operating Reserve Guidelines endorsed by the CRD Board in 2023 and is used to fund cyclical maintenance activities, equipment and supplies purchases that typically do not occur on an annual basis, which creates swings in expenses. The ORF is the financial strategy to mitigate the corresponding fluctuation in revenue requirement on an annual basis. Typical maintenance activities include treatment facility tank draining/cleaning/inspection, sewer collection system flushing and outfall inspections. Additionally, the operating reserve is also used to respond to unforeseen events and operating emergencies.

It is proposed that 2024 transfers to the Operating Reserve Fund be set at \$13,260. The Operating Reserve Fund balance at the end of 2023 is projected to be approximately \$38,046. There is \$55,000 of planned maintenance to be funded by the Operating Reserve Fund over the next five years.

Capital Reserve Fund

The Capital Reserve Fund is to be used to pay for capital expenditures that are not funded by other sources such as grants, operating budget, or debt.

It is proposed that the budgeted transfer to the CRF be set at \$46,540 in 2024. Reserve fund transfer planning is influenced by funding requirements to support the five-year capital expenditure plan, the emergency response to infrastructure failures and guided by Capital Reserve Funding Guidelines endorsed by the CRD Board in aiming to achieve the optimal reserve fund level to ensure long-term prudent and sustainable management of service delivery objectives through capital investments.

The capital reserve balance at the end of 2023 is projected to be approximately \$391,248.

Capital Expenditure Plan

The 5-year plan includes \$4,345,000 of expenditures. In 2024, \$4,060,000 in expenditures are forecasted for renewals to Galleon Pump Station and Schooner Pump Station, replacement of Cannon Wastewater Treatment Plant with a new Pump Station, and upgrades to Schooner Wastewater Treatment Plant, including headworks, equalization tank, additional aeration tank, new clarifiers and electrical/genset upgrades (21-02 & 24-01), which will be funded by a combination of debt (indicated as capital on hand after debt borrowed in 2021 and 2022), new grant funding as announced by the Province in August of 2021, and the service's CRF.

CCTV inspection of asbestos cement (AC) pipe (28-01), additional pump station improvements (Buccaneer, Capstan, Cutlass and Masthead (28-02) as well as AC sewer pipe replacement improvements (28-03) have been deferred due to budget constraints made apparent upon receipt of tender submissions.

Capital Projects Fund

As specific capital projects are approved, the funding revenues for them are transferred into the Capital Project Fund from multiple funding sources if applicable, including CRF, grant funding, external contributions, and debt. Any funds remaining upon completion of a project are transferred back to the CRF for use on future capital projects or its original non-CRF funding sources if required.

User Charge and Parcel Tax

The service is mainly funded by user charge and parcel tax. Properties connected to the wastewater system pay the annual user charge and all properties within the local service area are responsible for the parcel tax. Table 6 below summarizes the 2024 over 2023 changes for parcel tax and user charge.

Table 6 – Parcel Tax 1 and User Charge Summary

Budget Year	Parcel Tax 1	Taxable Folios Numbers	Parcel Tax per Folio*	User Charge	SFE Numbers	User Charge per SFE	Parcel Tax & User Charge
2023	\$586,010	709	\$869.92	\$267,099	642	\$416.04	\$1,285.97
2024	\$606,518	709	\$900.37	\$291,047	651	\$447.08	\$1,347.44
Change (\$)	\$20,508	0	\$30.45	\$23,948	9	\$31.04	\$61.48
Change (%)	3.50%	0.00%	3.50%	8.97%	1.40%	7.46%	4.78%

* Includes the 5.25% admin fee charged by the Ministry of Finance (not CRD revenue)

In 2020 property owners were provided the option of paying a one-time lump sum of \$8,249.30 for their share of the cost of the Wastewater Treatment Plant Upgrade or to pay debt servicing costs over 30 years through parcel tax. The new debt servicing cost must be budgeted and levied separately through a second parcel tax roll (Parcel Tax 2) in order to facilitate a parcel tax only levied to those taxable folios that did not pay the lump-sum.

The estimated parcel tax on the second parcel roll (Parcel Tax 2) related to the debt servicing cost is displayed in Table 7 below. Parcel Tax 2 excludes 137 folios that elected to pay one-time lump sums totaling \$1,130,268.

Table 7 – Parcel Tax 2 Summary – New Debt Only

Budget Year	Parcel Tax 2	Taxable Folios Numbers	Parcel Tax per Folio*
2023	\$234,106	573	\$430.01
2024	\$229,535	573	\$421.62
Change (\$)	-\$4,571	0	-\$8.39
Change (%)	-1.95%	0.00%	-1.95%

* Includes the 5.25% admin fee charged by the Ministry of Finance (not CRD revenue)

A summary of total parcel tax (1 and 2) and user charge arranged by payment option on new debt is displayed in table 8 below.

Table 8 – Comparative - Total Parcel Tax and User Charge per Folio by Payment Option

Parcel Tax and User Charge	2023	2024 Lump-sum option			2024 Debt-servicing option		
		Amount	Change (\$)	Change (%)	Amount	Change (\$)	Change (%)
Parcel Tax 1	\$869.92	\$900.37	\$30.44	3.50%	\$900.37	\$30.44	3.50%
Parcel Tax 2	\$430.01				\$421.62	-\$8.40	-1.95%
User Charge	\$416.04	\$447.08	\$31.03	7.46%	\$447.08	\$31.03	7.46%
Total	\$1,715.97	\$1,347.44	\$61.48	4.78%	\$1,769.06	\$53.09	3.09%

RECOMMENDATION

That the Magic Lake Estates Water and Sewer Committee:

1. Approve the 2024 operating and capital budget for the:
 - (a) Magic Lake Estates Water System Local Service as presented and that the 2023 actual operating deficit be balanced on the 2023 Reserve Funds transfer (Capital Reserve Fund and/or Operating Reserve Fund); and
 - (b) Magic Lake Estates Sewerage System Local Service as presented and that the 2023 actual operating surplus or deficit be balanced on the 2023 Reserve Funds transfer (Capital Reserve Fund and/or Operating Reserve Fund); and

2. Recommends that the Electoral Areas Committee recommend that the Capital Regional District Board approve the 2024 Operating and Capital Budget and the five-year Financial Plan for the Magic Lake Estates Water and Sewer Services as presented.

Submitted by:	Jason Dales, B.Sc., WD IV, Senior Manager, Wastewater Infrastructure Operations
Submitted by:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Submitted by:	Rianna Lachance, B.Com, CPA, CA, Senior Manager, Financial Services
Concurrence:	Alicia Fraser, P.Eng., General Manager, Integrated Water Services
Concurrence:	Ted Robbins, B.Sc., C.Tech., Chief Administrative Officer

ATTACHMENTS:

- Appendix A: 2024 Magic Lake Estates Water Operating and Capital Budget
 Appendix B: 2024 Magic Lake Estates Sewer Operating and Capital Budget

CAPITAL REGIONAL DISTRICT

2024 Budget

Magic Lake Water

Commission Review

NOVEMBER 2023

Service: 2.630 Magic Lake Estates Water

Committee: Electoral Area

DEFINITION:

LSA -1 To provide and operate water supply and distribution facilities for the Magic Lake Estates Water System. Specified Area on North Pender Island. Bylaw No. 1874 (June 11, 1991).

PARTICIPATION:

Local Service Area # 1 - D(764) LSA #9.

MAXIMUM LEVY:

Greater of \$160,000 or \$3.50 / \$1,000 of actual assessed value of land and improvements. To a maximum of \$3,080,195.

COMMITTEE:

Magic Lake Estates Water & Sewer Committee established by Bylaw No. 1870 (November 28, 1990).

FUNDING:

Any deficiencies after user charge and/or frontage tax or parcel tax to be levied on taxable school assessments.

- User Charge:** Annual charge per single family equivalency unit connected to the system.
The consumption charge for water will be the total volume of water metered to the water service connections, measured in cubic meters at the following rate:
- Greater than 50 cubic metres - \$0.50 / cubic metre
 - Greater than 80 cubic metres - \$1.00 / cubic metre
- Parcel Tax:** LSA-1 Annual charge only on properties capable of being connected to the system.
- Turn on/Turn Off Fee:** \$0 during normal working hours; \$25 outside of normal working hours
- Connection Charges:** Actual Engineering and Construction costs, plus 15% Administration costs. The minimum charge is \$500

RESERVE FUND:

Magic Lake Estates - Water System Capital Reserve Fund. Bylaw No. 1498
Magic Lake Estates - Water System Operating Reserve Fund. Bylaw No. 4144

APPENDIX A

2.630 - Magic Lake Water	2023		BUDGET REQUEST				FUTURE PROJECTIONS			
	BOARD BUDGET	ESTIMATED ACTUAL	CORE BUDGET	ONGOING	ONE-TIME	TOTAL	2025	2026	2027	2028
<u>OPERATING COSTS</u>										
Repairs & Maintenance	32,470	40,700	23,610	2,100	-	25,710	24,070	64,560	25,050	25,550
Allocations	54,398	54,398	57,263	-	-	57,263	58,409	59,583	60,773	61,988
Water Testing	19,941	19,900	20,643	1,000	-	21,643	22,075	22,516	22,967	23,426
Electricity	51,100	47,300	52,480	-	-	52,480	53,530	54,600	55,690	56,800
Supplies	57,180	51,220	58,800	-	-	58,800	59,980	61,180	62,410	63,660
Labour Charges	428,920	411,600	466,700	-	-	466,700	476,038	485,563	495,275	505,181
Other Operating Expenses	65,303	65,436	54,610	3,600	-	58,210	55,290	56,620	57,990	59,420
TOTAL OPERATING COSTS	709,312	690,554	734,106	6,700	-	740,806	749,392	804,622	780,155	796,025
*Percentage Increase over prior year			3.5%	0.9%		4.4%	1.2%	7.4%	-3.0%	2.0%
<u>DEBT / RESERVES</u>										
Transfer to Operating Reserve Fund	10,000	10,000	10,000	-	-	10,000	10,000	20,000	30,000	40,000
Transfer to Capital Reserve Fund	82,415	95,873	42,060	-	-	42,060	45,590	73,745	71,740	125,980
MFA Debt Reserve Fund	570	570	740	-	-	740	740	740	740	740
MFA Debt Principal	133,582	133,582	137,425	-	-	137,425	137,425	98,613	85,193	55,158
MFA Debt Interest	64,439	64,439	78,339	-	-	78,339	73,712	67,248	65,410	23,787
TOTAL DEBT / RESERVES	291,006	304,464	268,564	-	-	268,564	267,467	260,346	253,083	245,665
TOTAL COSTS	1,000,318	995,018	1,002,670	6,700	-	1,009,370	1,016,859	1,064,968	1,033,238	1,041,690
<u>FUNDING SOURCES (REVENUE)</u>										
Transfer from Operating Reserve Fund	(10,000)	(10,000)	-	-	-	-	-	(40,000)	-	-
Sales - Water	(22,000)	(16,000)	(22,000)	-	-	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)
User Charges	(377,411)	(377,411)	(389,530)	(6,700)	-	(396,230)	(404,159)	(412,238)	(420,478)	(428,890)
Lease Revenue	(8,100)	(8,100)	(8,100)	-	-	(8,100)	(8,100)	(8,100)	(8,100)	(8,100)
Other Revenue	(2,807)	(3,507)	(3,040)	-	-	(3,040)	(2,600)	(2,630)	(2,660)	(2,700)
TOTAL REVENUE	(420,318)	(415,018)	(422,670)	(6,700)	-	(429,370)	(436,859)	(484,968)	(453,238)	(461,690)
REQUISITION - PARCEL TAX	(580,000)	(580,000)	(580,000)	-	-	(580,000)	(580,000)	(580,000)	(580,000)	(580,000)
*Percentage increase over prior year										
Sales - Water			0.0%			0.0%	0.0%	0.0%	0.0%	0.0%
User Fees			3.2%	1.8%		5.0%	2.0%	2.0%	2.0%	2.0%
Requisition			0.0%			0.0%	0.0%	0.0%	0.0%	0.0%
Combined			1.2%	0.7%		1.9%	0.8%	0.8%	0.8%	0.8%

Magic Lake Water
Reserve Summary Schedule
2024 - 2028 Financial Plan

Reserve/Fund Summary

	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
Operating Reserve Fund	48,539	58,539	68,539	48,539	78,539	118,539
Capital Reserve Fund	486,977	384,037	407,627	336,372	333,112	399,092
Capital Reserve Fund - Settlement Fund	652,982	652,982	652,982	652,982	652,982	652,982
Total	1,188,498	1,095,558	1,129,148	1,037,893	1,064,633	1,170,613

Reserve Schedule

Reserve Fund: 2.630 Magic Lakes Estate Water - Operating Reserve Fund - Bylaw 4144

Reserve fund used for: unforeseen operational repairs and maintenance; infrequent maintenance activities such as reservoir cleaning and inspection, hydrant maintenance etc.

Reserve Cash Flow

Fund:	1500	Estimated	Budget				
		2023	2024	2025	2026	2027	2028
Fund Centre:	105212						
Beginning Balance		45,504	48,539	58,539	68,539	48,539	78,539
Transfer from Ops Budget		10,000	10,000	10,000	20,000	30,000	40,000
Transfer to Ops Budget		(10,000)	-	-	(40,000)	-	-
Planned Maintenance Activity		Acquire SRW over MLE North Dam			Frigate & Captains Reservoir cleaning & inspection		
Interest Income*		3,034					
Ending Balance \$		48,539	58,539	68,539	48,539	78,539	118,539

Assumptions/Background:
 * Interest is included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

Reserve Schedule

Reserve Fund: 2.630 Magic Lakes Estate Water - Capital Reserve Fund

Bylaw 1498

Reserve Cash Flow

Fund:	1024	Estimated	Budget				
		2023	2024	2025	2026	2027	2028
Fund Centre:	101368						
Beginning Balance		506,552	486,977	384,037	407,627	336,372	333,112
Transfer from Ops Budget		82,415	42,060	45,590	73,745	71,740	125,980
Transfer to Cap Fund		(120,000)	(145,000)	(22,000)	(145,000)	(75,000)	(60,000)
Transfer from Cap Fund		-					
Interest Income*		18,010					
Ending Balance \$		486,977	384,037	407,627	336,372	333,112	399,092

Assumptions/Background:
 * Interest is included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

Reserve Schedule

Reserve Fund: 2.630 Magic Lakes Estate Water - Capital Reserve Fund (Settlement Funds)

Bylaw 1498

Reserve Cash Flow

Fund: Fund Centre:	1024 102245	Estimated	Budget				
		2023	2024	2025	2026	2027	2028
Beginning Balance		614,832	652,982	652,982	652,982	652,982	652,982
Transfer to Cap Fund		-					
Interest Income*		38,150					
Ending Balance \$		652,982	652,982	652,982	652,982	652,982	652,982

Assumptions/Background:
 * Interest is included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2024 to 2028**

Service No.	2.630 Magic Lake Estates Water (Pender)	Carry Forward from 2023	2024	2025	2026	2027	2028	TOTAL
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EXPENDITURE

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$15,000	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$5,000	\$145,000	\$22,000	\$145,000	\$75,000	\$60,000	\$60,000	\$447,000
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$20,000	\$160,000	\$22,000	\$145,000	\$75,000	\$60,000	\$60,000	\$462,000

SOURCE OF FUNDS

Capital Funds on Hand	\$15,000	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000
Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Replacement Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$5,000	\$145,000	\$22,000	\$145,000	\$75,000	\$60,000	\$60,000	\$447,000
	\$20,000	\$160,000	\$22,000	\$145,000	\$75,000	\$60,000	\$60,000	\$462,000

APPENDIX A

Service: **2.630** **Magic Lake Estates Water (Pender)**

Project Number 21-04 **Capital Project Title** Buck Lake Dam Repairs - Phase 1 **Capital Project Description** Conduct additional inspections, minor repairs, and performance analysis highlighted in the 2019 Dam Safety Review. Phase 2 dam improvements to be completed in the following five years.

Project Rationale Resulting from the Hatch 2019 Dam Safety Review, funds are required to conduct additional inspections, minor dam repairs, and performance analysis. Phase 2 dam improvements to be completed in the following five years.

Project Number 22-02 **Capital Project Title** EV Charging Station **Capital Project Description** Construct a new EV Charging Station at the Water Treatment Plant, project to be split across MLE Water, Waste Water, and a possible grant.

Project Rationale Construct a new EV Charging station at the water treatment plan, proeject is to be partially funded through a cost matching grant and the MLE Waste Water Service.

Project Number 23-01 **Capital Project Title** Decommission Magic Lake old Syphon **Capital Project Description** The old syphon is still in place and will require decommissioning to ensure dam performance.

Project Rationale The old syphon at Magic Lake is no longer required, and does not function. Funds are required to remove the overland and underwater pipe, and decommission the underground pipe.

Project Number 23-02 **Capital Project Title** ISOPAC Permanent Handling & Storage **Capital Project Description** Permenant solution to reduce drum waste and reduce handing is required.

Project Rationale Safety improvements to reduce Operator injury when handling the ISOPAC drums were carried out in 2019-2020. A permanent solution to reduce the use of drums which cannot be readily disposed of, and reduce handling of the product is proposed in 2023.

Project Number 26-01 **Capital Project Title** Buck Lake Dam Repairs - Phase 2 **Capital Project Description** Conduct additional geotechnical investigations, seepage analysis, monitoring, tree removal and the next DSR (2029).

Project Rationale Resulting from the Hatch 2019 Dam Safety Review, funds are required to conduct additional geotechnical investigations, seepage analysis and monitoring, tree removal, and the next Dam Safety Review (2029).

2.630 - Magic Lake Water Utility (Pender)

Capital Projects

Updated @ Oct 05, 2023

Year	Project#	Status	Capital Project Description	Total Project Budget	Spending		Cap on Hand
					Expenditure Actuals	Remaining Spending	
2010	CE.258	Open	Water System Upgrade	8,932,557	8,658,879	273,678	8,932,557
2019	CE.678.5501	Open	2019 Buck Lake Dam - Dam Safety Review	50,000	45,715	4,285	50,000
2020	CE.671	Open	MLE Wtr Air Valve Upgrades	110,000	69,314	40,686	110,000
2021	CE.744	Open	MLE Safety Improvements	20,000	11,604	8,396	20,000
2021	CE.779.7501	Open	Design and Construction of Buck Lake and Magic Lake Adjustable Intakes	225,000	55,563	169,437	225,000
2021	CE.678	Open	Buck Lake Dam Repairs	135,000	62,600	72,400	135,000
2022	CE.779.7502	Open	Failed Valve Replacement	50,000	42,091	7,909	50,000
2023	CE.779.1602	Open	SCADA and Radio Communication Upgrades	90,000	-	90,000	90,000
2023	CE.779.1603	Open	EV Charging Station	20,000	882	19,118	20,000
			Totals	9,632,557	8,946,649	685,909	9,632,557

Service:	2.630	Magic Lake Water	Committee: Electoral Area
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<u>Year</u>	<u>Taxable Folios</u>	<u>Parcel Tax Per Folio</u>	<u>SFE's</u>	<u>User Charge Per SFE*</u>	<u>Total Tax & Charges</u>	<u>Bylaw</u>	<u>Actual Assessments \$(000's)</u>
2012	1,206	\$496.57	1,005	\$250.00	\$746.57	3847	\$390,273.10
2013	1,206	\$496.57	1,008	\$250.00	\$746.57	3892	\$356,311.00
2014	1,206	\$496.57	1,011	\$250.00	\$746.57	3924	\$336,525.60
2015	1,206	\$496.57	1,012	\$250.00	\$746.57	3987	\$327,129.00
2016	1,205	\$496.98	1,015	\$281.69	\$778.67	4074	\$327,129.00
2017	1,203	\$497.81	1,020	\$280.31	\$778.12	4170	\$328,976.80
2018	1,203	\$497.81	1,020	\$291.37	\$789.18	4233	\$407,278.90
2019	1,203	\$497.81	1,028	\$302.10	\$799.91	4274	\$469,844.20
2020	1,202	\$497.81	1,034	\$321.96	\$819.76	4337	\$510,125.00
2021	1,202	\$497.81	1,043	\$329.39	\$827.20	4389	\$544,463.70
2022	1,199	\$508.38	1,050	\$334.56	\$842.94	4471	\$757,028.70
2023	1,196	\$510.41	1,059	\$356.38	\$866.79	4524	\$880,055.80
2024	1,196	\$510.41	1,072	\$369.62	\$880.03		

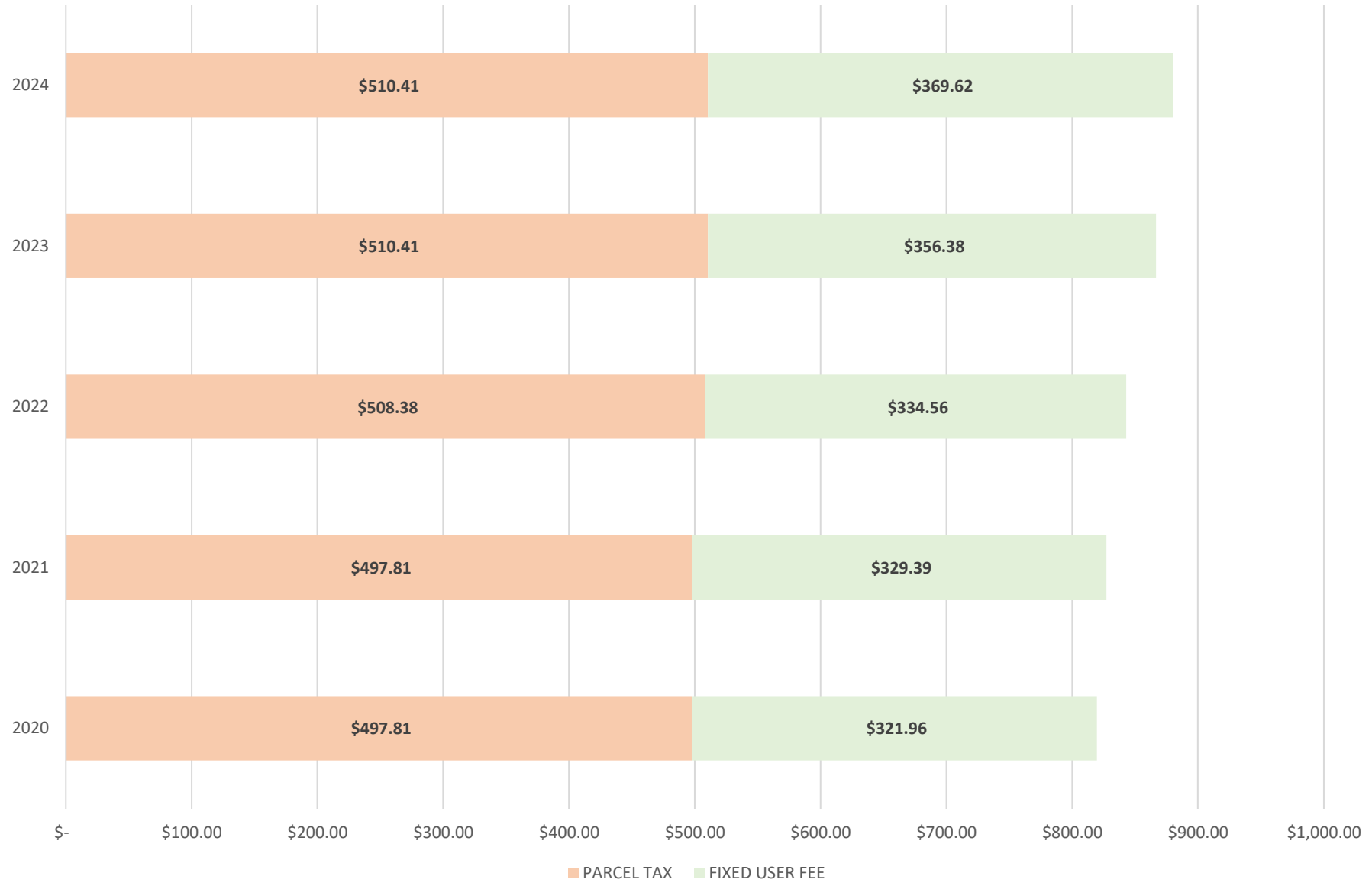
Change from 2023 to 2024

\$0.00	\$13.24	\$13.24
0.00%	3.71%	1.53%

* Parcel Tax authority under LSA-1

**User Charge is an annual charge per connected SFE

Magic Lake Estate Water Funding Analysis 2020 - 2024



CAPITAL REGIONAL DISTRICT

2024 Budget

Magic Lake Estates Sewer

Commission Review

NOVEMBER 2023

Service: 3.830 Magic Lake Sewer Utility (Pender)	Committee: Electoral Area
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DEFINITION:

To provide, operate and maintain sewage collection and disposal facilities for the Magic Lake Estates Sewerage System Specified Area on North Pender Island (Local Service Establishment Bylaw No. 1873 - June 26, 1991).

PARTICIPATION:

Specified Area - B(764) SA#8

MAXIMUM LEVY:

Greater of \$200,000 or \$7.10 / \$1,000 on actual assessed value of land and improvements. To a maximum of \$3,789,878.

MAXIMUM CAPITAL DEBT:

AUTHORIZED: LA Bylaw No. 4048 (Dec 2015). Fall Borrowing \$1,530,000 for 10 years

COMMITTEE:

Magic Lake Estates Water & Sewer Committee established by Bylaw No. 1870 (November 28, 1990).

FUNDING:

- User Charge:** Per single family equivalency unit to connected properties only
- Parcel Tax:** Only on properties capable of being connected to system.
- Connection Charge:** Actual Engineering and Construction costs, plus 15% Administration costs. The minimum charge is \$500.

RESERVE FUND:

Magic Lake Estates sewage system capital reserve fund (Dec 17, 1986). Bylaw No. 1497.

APPENDIX B

3.830 - Magic Lake Estates Sewer	2023		BUDGET REQUEST				FUTURE PROJECTIONS			
	BOARD BUDGET	ESTIMATED ACTUAL	CORE BUDGET	2024 ONGOING	ONE-TIME	TOTAL	2025	2026	2027	2028
<u>OPERATING COSTS</u>										
Sludge Hauling Contracts	93,440	80,000	108,000	-	-	108,000	110,160	112,360	114,610	116,900
Grit & Waste Sludge Disposal	93,440	63,000	85,000	-	-	85,000	86,700	88,430	90,200	92,000
Repairs & Maintenance	11,940	31,400	12,360	14,600	-	26,960	29,950	70,450	45,960	31,470
Allocations	45,735	45,735	46,397	-	-	46,397	47,322	48,269	49,240	50,225
Electricity	24,370	23,000	25,030	-	-	25,030	25,530	26,040	26,560	27,090
Supplies	22,590	27,730	24,610	-	-	24,610	25,100	25,600	26,120	26,640
Labour Charges	298,256	365,836	323,715	-	-	323,715	330,189	336,793	343,529	350,400
Other Operating Expenses	35,640	42,930	39,890	-	-	39,890	36,710	37,590	38,490	39,410
TOTAL OPERATING COSTS	625,411	679,631	665,002	14,600	-	679,602	691,661	745,532	734,709	734,135
*Percentage Increase over prior year			6.3%	2.3%		8.7%	1.8%	7.8%	-1.5%	-0.1%
<u>DEBT / RESERVES</u>										
Transfer to Capital Reserve Fund	55,735	1,515	46,540	-	-	46,540	52,735	57,495	136,210	170,847
Transfer to Operating Reserve Fund	13,260	13,260	13,260	-	-	13,260	13,260	13,260	20,000	20,000
Debt Reserve Fund	290	290	380	-	-	380	380	380	380	380
MFA Principal Payment	133,463	133,463	133,463	-	-	133,463	133,463	133,463	68,476	46,668
MFA Interest Payment	40,640	40,640	40,640	-	-	40,640	40,640	40,640	24,995	17,120
TOTAL DEBT / RESERVES	243,388	189,168	234,283	-	-	234,283	240,478	245,238	250,061	255,015
TOTAL COSTS	868,799	868,799	899,285	14,600	-	913,885	932,139	990,770	984,770	989,150
Sludge Disposal Recovery	(11,200)	(11,200)	(11,590)	-	-	(11,590)	(11,820)	(12,060)	(12,300)	(12,550)
TOTAL COSTS NET OF RECOVERIES	857,599	857,599	887,695	14,600	-	902,295	920,319	978,710	972,470	976,600
<u>FUNDING SOURCES (REVENUE)</u>										
Transfer from Operating Reserve Fund	-	-	-	-	-	-	-	(40,000)	(15,000)	-
User Charges	(267,099)	(267,099)	(276,447)	(14,600)	-	(291,047)	(296,870)	(302,810)	(308,870)	(315,050)
Grants in Lieu of Taxes	(3,330)	(3,330)	(3,450)	-	-	(3,450)	(3,520)	(3,590)	(3,660)	(3,730)
Other Revenue	(1,160)	(1,160)	(1,280)	-	-	(1,280)	(1,280)	(1,290)	(1,300)	(1,310)
TOTAL REVENUE	(271,589)	(271,589)	(281,177)	(14,600)	-	(295,777)	(301,670)	(347,690)	(328,830)	(320,090)
REQUISITION - PARCEL TAX	(586,010)	(586,010)	(606,518)	-	-	(606,518)	(618,649)	(631,020)	(643,640)	(656,510)
*Percentage increase over prior year										
User Fees			3.5%	5.5%		9.0%	2.0%	2.0%	2.0%	2.0%
Requisition			3.5%			3.5%	2.0%	2.0%	2.0%	2.0%
Combined			3.5%	1.7%		5.2%	2.0%	2.0%	2.0%	2.0%

**Magic Lake Estates Sewer
Reserve Summary Schedule
2024 - 2028 Financial Plan**

Reserve/Fund Summary

	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
Operating Reserve Fund	38,046	51,306	64,566	37,826	42,826	62,826
Capital Reserve Fund	391,248	377,788	430,523	488,018	624,228	630,075
Total	429,294	429,094	495,089	525,844	667,054	692,901

Reserve Schedule

Reserve Fund: 3.830 Magic Lake Sewer System - Operating Reserve Fund - Bylaw 4144

Reserve fund used for: unforeseen operational repairs and maintenance; infrequent maintenance activities such as treatment facility tankage draining/cleaning/inspection etc.

Reserve Cash Flow

Fund: Fund Centre:	1500 105217	Estimated	Budget				
		2023	2024	2025	2026	2027	2028
Beginning Balance		23,075	38,046	51,306	64,566	37,826	42,826
Transfer from Ops Budget		13,260	13,260	13,260	13,260	20,000	20,000
Planned Expenditures		-	-	-	(40,000)	(15,000)	-
Planned Maintenance Activity					Sewer System Flushing	Outfall Inspection	
Interest Income*		1,711					
Ending Balance \$		38,046	51,306	64,566	37,826	42,826	62,826

Assumptions/Background:
 * Interest is included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

Reserve Schedule

Reserve Fund: 3.830 Magic Lake Sewer System - Capital Reserve Fund

Bylaw 1497

Reserve Cash Flow

Fund: 1042 Fund Centre: 101386	Estimated	Budget				
	2023	2024	2025	2026	2027	2028
Beginning Balance	374,653	391,248	377,788	430,523	488,018	624,228
Transfer from Ops Budget	1,515	46,540	52,735	57,495	136,210	170,847
Transfer to Cap Fund	-	(60,000)	-	-	-	(165,000)
Transfer from Cap Fund	-					
Interest Income*	15,080					
Ending Balance \$	391,248	377,788	430,523	488,018	624,228	630,075

Assumptions/Background:
 * Interest is included in determining the estimated ending balance for the current year. Interest in planning years nets against inflation which is not included.

APPENDIX B

3.830 - Magic Lake Estates Sewer - Debt Only
 - 6M Phase 1 Wastewater Treatment Plan Upgrade

	2023		BUDGET REQUEST				FUTURE PROJECTIONS			
	BOARD BUDGET	ESTIMATED ACTUAL	CORE BUDGET	ONGOING	ONE-TIME	TOTAL	2025	2026	2027	2028
<u>DEBT</u>										
Debt Reserve Fund	570	570	1,030	-	-	1,030	1,030	1,030	1,030	1,030
MFA Principal Payment	111,887	111,887	111,887	-	-	111,887	111,887	111,887	111,887	111,887
MFA Interest Payment	118,798	118,798	118,798	-	-	118,798	118,798	118,798	118,798	118,798
TOTAL DEBT	231,255	231,255	231,715	-	-	231,715	231,715	231,715	231,715	231,715
<u>FUNDING SOURCES (REVENUE)</u>										
Balance c/fwd from 2022 to 2023	4,529	4,529	-	-	-	-	-	-	-	-
MFA Debt Reserve Earning	(570)	(570)	(1,030)	-	-	(1,030)	(1,030)	(1,030)	(1,030)	(1,030)
Grants in Lieu of Taxes	(1,108)	(1,108)	(1,150)	-	-	(1,150)	(1,170)	(1,190)	(1,210)	(1,230)
REQUISITION - PARCEL TAX	234,106	234,106	229,535	-	-	229,535	229,515	229,495	229,475	229,455
*Percentage increase over prior year Requisition						-2.0%	0.0%	0.0%	0.0%	0.0%

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2024 to 2028**

Service No.	3.830	Carry Forward from 2023	2024	2025	2026	2027	2028	TOTAL
	Magic Lake Sewer Utility (Pender)							

EXPENDITURE

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000
Land	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Engineered Structures	\$4,000,000	\$4,000,000	\$80,000	\$0	\$0	\$0	\$205,000	\$4,285,000
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$4,000,000	\$4,060,000	\$80,000	\$0	\$0	\$0	\$205,000	\$4,345,000

SOURCE OF FUNDS

Capital Funds on Hand	\$1,500,000	\$1,500,000	\$30,000	\$0	\$0	\$0	\$0	\$1,530,000
Debenture Debt (New Debt Only)	\$0	\$0	\$0	\$0	\$0	\$0	\$40,000	\$40,000
Equipment Replacement Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Grants (Federal, Provincial)	\$2,500,000	\$2,500,000	\$50,000	\$0	\$0	\$0	\$0	\$2,550,000
Donations / Third Party Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reserve Fund	\$0	\$60,000	\$0	\$0	\$0	\$0	\$165,000	\$225,000
	\$4,000,000	\$4,060,000	\$80,000	\$0	\$0	\$0	\$205,000	\$4,345,000

Service: **3.830** **Magic Lake Sewer Utility (Pender)**

Project Number 21-02 **Capital Project Title** Wastewater Improvements - Pump Station and Treatment Plant Upgrades **Capital Project Description** 1. Renew Galleon and Schooner Pump Stations
2. Replace Cannon WWTP with a new pump station
3. Upgrade Schooner WWTP (headworks, EQ tank, 2nd aeration tank, new clarifiers, electrical/genset)
Project Rationale Wastewater Improvements - Pump Station and Treatment Plant Upgrades

Project Number 24-01 **Capital Project Title** Towable Genset Replacement **Capital Project Description** Replacement of the towable genset as it is nearing the end of life.
Project Rationale Replacement of the towable genset as it is nearing the end of life.

Project Number 28-01 **Capital Project Title** CCTV Inspection of AC Pipe **Capital Project Description** Conduct a CCTV inspection of all remaining asbestos cement pipe to monitor its condition and identify pipe that might require replacement.
Project Rationale CCTV inspections of AC sewer mains to prioritize replacement.

Project Number 28-02 **Capital Project Title** Pump Stations - Mechanical and Electrical Upgrades (Replace when grant received or sufficient funds in CRF) **Capital Project Description** Renew Buccaneer, Capstan, Cutlass and Masthead Pump Stns
Project Rationale Additional funding required to carry out the works to upgrade Buccaneer, Capstan, Cutlass and Masthead PS's.

Project Number 28-03 **Capital Project Title** AC Sewer Pipe Replacement **Capital Project Description** Based on CCTV inspection, replace portions of AC pipe that are failing.
Project Rationale Replacement of AC sewer pipes based on CCTV. Cost estimation to be further developed following CCTV and concept design.

3.830 - Magic Lake Sewer Utility (Pender)

Capital Projects Fund

Updated @ Oct 05, 2023

Year	Project#	Capital Plan#	Status	Capital Project Description	Total Project Budget	Spending		Total Funding in Place	Funding Pending Receivable
						Expenditure Actuals	Remaining Spending		
2020	CE.708	20-01	Open	MLE Wastewater Treatment Plant Upgrade	11,653,266	3,015,983	8,637,283	6,536,842	5,116,424
2021	CE.775	21-01	Open	MLE Safety Upgrades	30,000	10,408	19,592	30,000	-
				Total	11,683,266	3,026,391	8,656,875	6,566,842	5,116,424

Service:	3.830 Magic Lake Sewe	3.830 Magic Lake Sewer Utility (Pender)	Committee: Electoral Area
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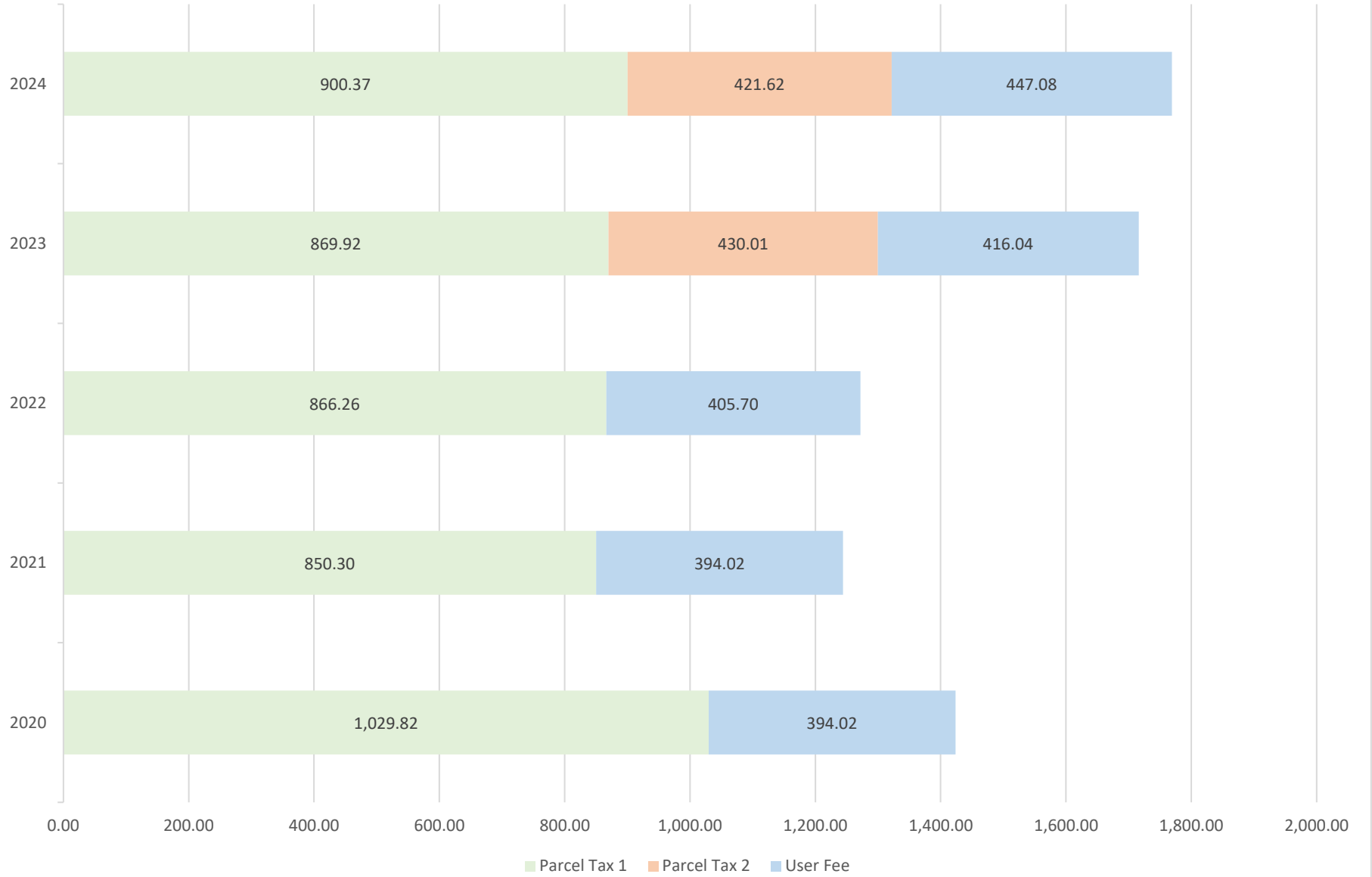
<u>Year</u>	<u>Taxable Folios</u>	<u>Parcel Tax 1 per Folio</u>	<u>Taxable Folios</u>	<u>Parcel Tax 2 per Folio</u>	<u>SFE's</u>	<u>User Charge per SFE</u>	<u>Total Tax(1&2) & Charges</u>	<u>Bylaw</u>
2012	714	\$414.76			617	\$272.00	\$686.76	3847
2013	714	\$414.76			621	\$272.00	\$686.76	3892
2014	714	\$414.76			620	\$272.00	\$686.76	3924
2015	714	\$414.76			621	\$272.00	\$686.76	3987
2016	714	\$493.70			623	\$271.12	\$764.83	4074
2017	713	\$750.36			623	\$271.12	\$1,021.48	4170
2018	713	\$750.37			623	\$300.40	\$1,050.77	4233
2019	713	\$777.60			623	\$381.54	\$1,159.14	4274
2020	714	\$1,029.82			630	\$394.02	\$1,423.83	4337
2021	714	\$850.30	577	\$144.49	635	\$394.02	\$1,388.81	4389
2022	712	\$866.26	575	\$387.35	639	\$405.70	\$1,659.31	4471
2023	709	\$869.92	573	\$430.01	642	\$416.04	\$1,715.97	4524
2024	709	\$900.37	573	\$421.62	651	\$447.08	\$1,769.06	

Change from 2023 to 2024

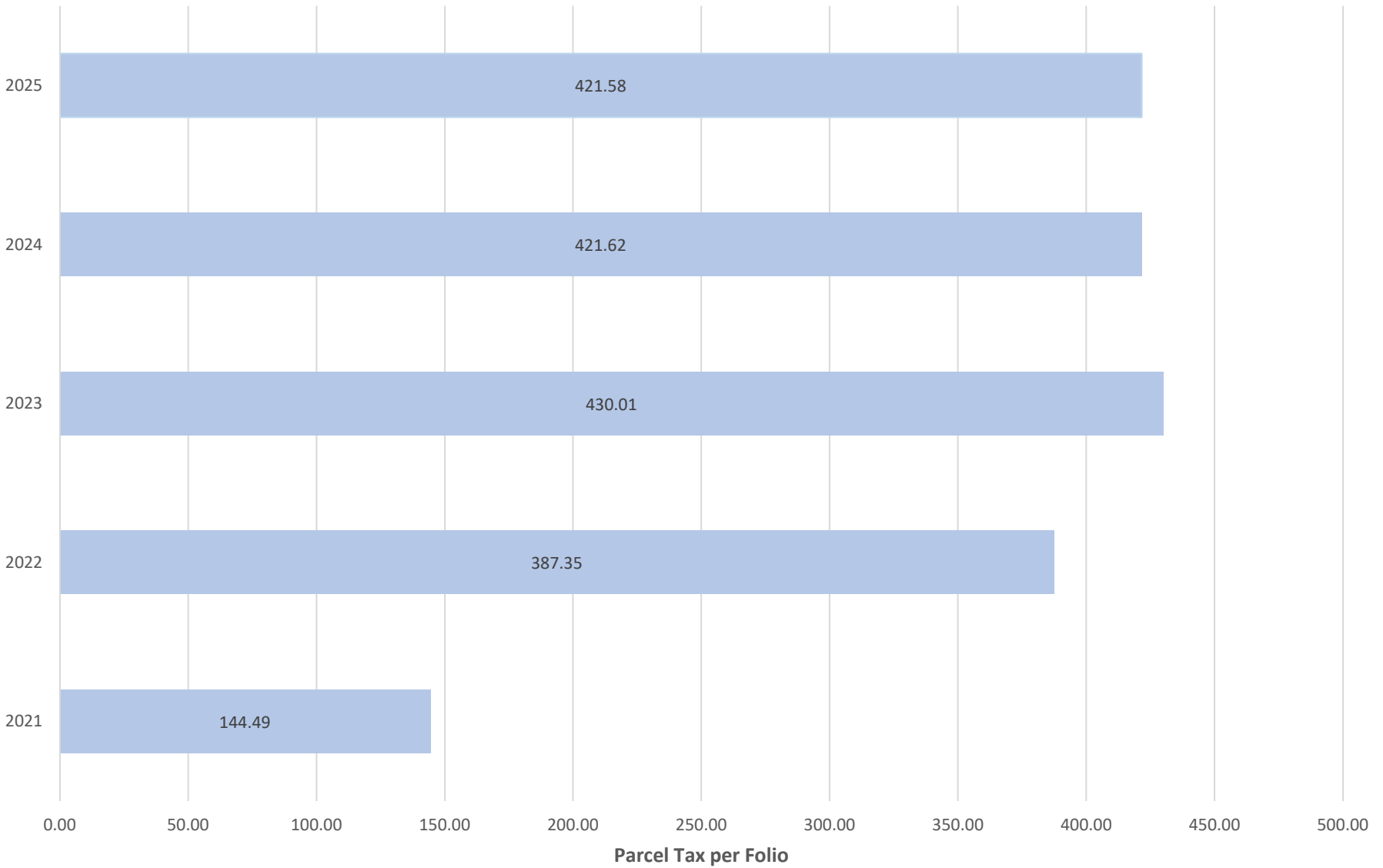
\$30.45	-\$8.39	\$31.04	\$53.09
3.50%	-1.95%	7.46%	<u>3.09%</u>

Total Parcel Tax(1) and Charges (lump-sum payment option only)	\$1,347.44
Change from 2023 to 2024	\$61.48 4.78%

Magic Lake Estates Sewer Funding Analysis 2020-2024



Magic Lake Estates Sewer - \$6M Debt Funding Analysis 2021-2025





Making a difference...together

**REPORT TO MAGIC LAKE ESTATES WATER AND SEWER COMMITTEE
MEETING OF TUESDAY, NOVEMBER 14, 2023**

SUBJECT Capital Project Status Reports and Operational Updates

ISSUE SUMMARY

To provide the Magic Lake Estates Water and Sewer Committee with capital project status reports and operational updates up to and including August 31, 2023.

BACKGROUND

The Magic Lake Estates (MLE) Water and Sewer Systems are located on the south shore of North Pender Island in the Southern Gulf Islands Electoral Area and provides drinking water and wastewater services to approximately 1,072 customers. Capital Regional District (CRD) Integrated Water Services is responsible for the overall operation of the water and wastewater systems with day-to-day operation, maintenance, design and construction of water and wastewater system facilities provided by the CRD Infrastructure Engineering and Operations Divisions. The quality of drinking water provided to customers in the Magic Lake Estates Water System is overseen by the CRD Water Quality Section.

CAPITAL PROJECT UPDATE

Magic Lake Estates Water

23-03 | SCADA and Radio Communication Upgrades

Project Description: Replace SCADA Communication infrastructure with modern radio system based on Radio Pathway Study completed under wastewater capital project 21-01.

Project Rationale: Upgrade communication equipment at water facilities as part of the wastewater upgrades (under Project 21-01) to make the entire system more secure and reliable.

Project Update and Milestones:

- The scope of work for the SCADA and Radio upgrades was included in the Wastewater Upgrade Tender.
- Contract 2022-846 - Magic Lake Estates Wastewater Pump Station and Treatment Plant Upgrades was awarded to Coast Utility Contracting Ltd. in April 2023.
- Installation of the radio upgrades will likely occur towards the end of the Treatment Plant upgrades in 2024.

Milestone	Completion Date
Detailed Design	January 2023
Tender	March 2023
Construction	May 2023 – May 2024
Commissioning (Substantial Completion)	May 2024
Warranty	May 2025

21-02 | Design and Construction Buck Lake and Magic Lake Adjustable Intakes

Project Description: Detailed design and construction of adjustable intakes to inform future capital works to maintain water quality.

Project Rationale: Both the Buck and Magic Lake adjustable intakes are unsafe to clean and adjust without employing divers. Funds are required to design and construct adjustable intakes.

Project Update and Milestones:

- A consultant was retained in November 2021 and they produced a draft design report summarizing design requirements for the intakes and floats on December 6, 2021.
- Design was completed.
- Tendering closed on June 29, 2022 but no bids were received.
- CRD had discussions with potential bidders who may be interested in providing quotations for this scope, only Pacific Industrial Marine (PIM) was interested in bidding.
- Recommendation to Award to PIM was signed off on November 4, 2022.
- Contract was executed on February 1, 2023 and Notice to Proceed was provided on February 7, 2023.
- Shop drawings have been reviewed and returned to Contractor to commence off-site construction.
- The stipulated Substantial Completion date is September 30, 2023 but there is a potential for this to push out slightly based on Contractor deliverables and operational coordination requirements (e.g. lower water demand period and ease of launch once water levels rise). Installation is still expected to be complete by end of 2023.

Milestone	Completion Date
Consultant retained	November 12, 2021
Draft conceptual design report received	December 6, 2021
Design submitted to Front Counter BC for notification	April 21, 2022
Original Tender Closing (no bids)	June 29, 2022
Subsequent bid and Recommendation to Award to PIM	November 4, 2022
Contract Executed	February 1, 2023
Notice to Proceed	February 7, 2023
Shop Drawing Review	August 22, 2023
Substantial Completion (Anticipated)	Q4 2023

21-04 | Buck Lake Dam Repairs - Phase 1

Project Description: Conduct additional inspections, minor repairs, and performance analysis highlighted in the 2019 Dam Safety Review. Phase 2 dam improvements to be completed in the following five years.

Project Rationale: Resulting from the Hatch 2019 Dam Safety Review, funds are required to conduct additional inspections, minor dam repairs, and performance analysis. Phase 2 dam improvements to be completed in the following five years. The November 26, 2020 staff report outlines the detailed expenditure plan for Phase 1.

Project Update and Milestones:

- Detailed scope of work and acceptable options for preventing high live loads at Buck Lake Dam’s west dam have been developed. This was reviewed during the 2022 annual inspection and a scope for warning signage is being proposed to be installed in 2023.
- Consultant was retained to conduct a dam breach analysis for both dams to confirm the dam flood area and improve the dam emergency plan. This report was finalized in January 2023.
- Operations to coordinate with CRD Protective Services so that dam emergencies are part of CRD’s Public Alert Notification System (PANS).
- CRD staff have started compiling required information for the dam emergency plan and operating and maintenance manuals. Updates are being completed as of January 2023.
- In 2023, engineering is assessing options for installation of a v-notch weir to monitor lower flow seepage rates and will continue with design work into Q4 of 2023.

Milestone	Completion Date
Consultant retained to conduct dam breach analysis	December 20, 2021
Draft Dam Breach Analysis Complete and Comments returned	July 14, 2022
Final Dam Breach Analysis Complete	January 2023
Design of Seepage Weir on West Dam Commenced	August 2023

22-01 | Failed Valve Replacement

Project Description: Replace six failed water main valves.

Project Rationale: Through annual operations of the water system, three valves have been identified as having failed. Funding is required to replace these valves at Capstan Crescent, Schooner Way and Privateers, Rum Road, Schooner Way and Ketch Road, Bosun Way, and Galleon Way.

Project Update and Milestones:

- Project to commence upon CRD Board approval of the 5-year capital plan at the March 16, 2022 meeting.
- Operations has completed three of the six valve locations and determined two of the sites no longer require replacement due to increased corrective maintenance. The remaining valve replacement sites are being further reviewed operationally. If further work is to proceed it will be completed by the end of 2023.

22-02 | EV Charging Station

Project Description: Construct a new Electric Vehicle (EV) Charging Station at the Water Treatment Plant.

Project Rationale: Construct a new EV Charging station at the water treatment plant, project is to be partially funded through a cost matching grant and the Service.

Project Update and Milestones:

- Project delivery is currently being planned with CRD Facilities and Operations.
- This project is now anticipated to be delivered in late 2023 to align with anticipated delivery time of electric vehicles.

Milestone	Completion Date
Notification of conditional grant approval	January 18, 2022

WATER SYSTEM OPERATIONAL UPDATE

This is a water system operational update report for September and October 2023.

- Stage 2 water conservation measures enacted in accordance with the Electoral Areas Water Conservation Bylaw 4492 on July 17. Public communications included issuing a Public Service Announcement (PSA), updating water conservation signage within the community and notification directly to the Magic Lake Estates Committee.
- Initialized discussions with two Magic Lake property owners whose properties are situated on the Magic Lake North Dam, to negotiate Statutory Right of Way's (SRW) over these properties. The SRW's are necessary for CRD to operate and maintain the Magic Lake North Dam in accordance with Dam Safety Regulatory requirements. This work is being funded from the Operations Reserve Fund (ORF) as provided in the Magic Lake Estates Water Financial Plan.
- Water system leak/break repairs:
 - Gunwhale Road – July 25
 - Ketch Road – August 13
 - Intersection of Privateers and Doubloon (standpipe riser cracked) – July 31
- Ongoing water distribution system Schooner/Buccaneers interconnect leak repairs.
- Buck Lake and Magic Lake raw water intake infrastructure cleaning and inspection by certified diving company on July 19. The intake screens needed cleaning as noted in the inspection report. Some deficiencies were noted for the existing Buck Lake float. These deficiencies will be addressed as part of adjustable intake capital work scheduled this year. The capital work will provide operations the ability to complete regular intake cleaning without the need for a certified diving company.
- Annual formal site dam inspections performed for Buck Lake and Magic Lake dam structures on August 30.

Magic Lake Estates Sewer Utility

21-01 | Wastewater Improvements – Pump Station and Treatment Plant Upgrades

Project Description:

1. Renew Galleon and Schooner Pump Stations (upgrade communications at Buccaneer, Capstan, Cutlass and Masthead Pump Stations).
2. Replace Cannon Wastewater Treatment Plant (WWTP) with a new pump station.
3. Upgrade Schooner WWTP.

Project Rationale: Successfully received an Infrastructure Canada grant to complete upgrades on pump stations, install a new pump station at Cannon to pump to Schooner WWTP, and upgrade Schooner WWTP to treat flow from Cannon and renew many components to bring the wastewater system into compliance with environmental regulations.

Project Update and Milestones:

- Notice to Proceed for Contract 2022-846 was issued to Coast Utility Contracting Ltd. in May 2023. The contractor mobilized in late June/early July.
- About 78m3 of bedrock was removed from the Schooner WWTP excavation on August 15.

- About 13m³ of bedrock was removed from the Cannon Pump Station excavation on September 27.
- Pre-purchased equipment is continuing to be delivered to the site.
- Schooner WWTP concrete tanks are complete except for the suspended slab on the Equalization tank.
- Cannon pump station wet well base is being constructed.
- The Ministry of Forests, Lands and Natural Resources has received the Habitat Restoration Plan for compensation of disturbing the wetland area adjacent to Schooner WWTP, and additional information has been requested.
- See photos below the table showing some of the progress.
- Overall the project is about 20% complete.
- See the financial status of the project below. Overall, the project is projected to be completed within the revised project scope budget.

Milestone	Completion Date
Preliminary Design (30%)	September 2022
Detailed Design (90%)	December 2022
Tender Period	January 27 – March 14, 2023
Construction Period	May 2023 – June 2024
Substantial Completion	July 2024
Warranty Period	July 2025



Inlet Screen Channel Foundation



Pouring concrete for WWTP Tanks



Excavation at Cannon Pump Station

Financial Status of Projects 21-01 and 23-01 (as of October 13, 2023)

Projects/Tasks	Revised Budget	Actual and Committed Cost To Date	Remaining Cost To Complete	Variance
21-01 WWTP and Pump Station (Phase 2/3)	\$9,205,045	\$8,633,183	\$520,532	\$51,330
<i>Construction</i>	\$8,000,000	\$7,579,585	\$350,000 <i>Note 1</i>	\$70,415
<i>Implementation</i>	\$ 250,000	\$214,513	\$35,487 <i>Note 2</i>	\$0
<i>Design and Inspection</i>	\$ 850,000	\$839,085	\$30,000	(\$19,085)
<i>Contingency</i>	\$105,045	\$0	\$105,045 <i>Note 3</i>	\$0
Project Management	\$84,864	\$84,864	\$0	\$0
23-01 SCADA Upgrades	\$90,000	\$112,000 <i>Note 4</i>	\$0	(\$22,000)
Total (both projects)	\$9,379,909	\$8,830,047	\$520,532	\$29,330

1. The Construction remaining cost includes about \$60,000 of additional rock removal, additional gravel, BC Hydro service fees, environmental compensation, and other unforeseen construction change orders.
2. The Implementation and Design (\$65,487) amounts for unforeseen changes for McElhanney and PBX to complete the programming and commissioning of the new facilities.
3. Contingency allowance of \$105,045 remains to cover off any other project related changes.
4. The SCADA (\$112,000) amount is based on the tender 2022-846 amount for that specific line item.

WASTEWATER SYSTEM OPERATIONAL UPDATE

This is a wastewater system operational update report for June, July, and August 2023.

- Chart Drive sewage pump station pump corrective maintenance that included the replacement of a failed pump.
- Schooner Wastewater Treatment Plant air blower corrective maintenance.
- Masthead Pump Station corrective maintenance that included troubleshooting and replacement of pumping control system equipment.
- Cutlass Court Pump Station corrective maintenance that included removing and de-ragging (removing obstructions) of the pumps. This occurred during the last reporting period.
- Buccaneers Pump Station corrective maintenance that included responding to a pump electrical overload condition. The pumps required removal for further troubleshooting and repairs.
- Operations assistance at the Schooner Wastewater Treatment Plant Capital Project upgrades on July 11 when the contractor inadvertently struck and damaged an active sewer pipe infrastructure resulting in a sewage spill.

Table 1: Operating Permit Regulatory Non-compliance reporting for June, July, and August 2023

Facility	June, July, and August Reports Issued	Reports YTD 2023	Total Reports 2022	Cause
Schooner WWTP	0	4	20	Environmental Incidence Reports are issued typically as a result of: 1. Facility power outage causing loss of UV disinfection resulting in exceedance of fecal coliform (FC) regulatory requirements (permit <200 cfu/100ml). 2. Exceedance of permitted daily maximum flows (< 640m ³ /day). Flow exceedances are due to excessive collection system inflow and infiltration (I&I). 3. Exceedance of permitted total suspended solids (TSS) (<45mg/l). This is type of exceedance is the result of high I&I.
Schooner Pump Station	0	0	1	Typically, these are overflow events into the marine environment (Boat Nook) due to extended power failures in the area. There is no standby power at the facility.
Cannon WWTP	0	1	12	Exceeding maximum daily flows due to storm water entering through I&I. However other non-compliances can be: <ul style="list-style-type: none"> • Permit exceedance: total suspended solids (TSS) (<60mg/l) and carbonaceous biochemical oxygen demand (CBOD) (<45mg/l) • Toxicity testing

RECOMMENDATION

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

Submitted by:	Malcolm Cowley, P.Eng., Manager, Wastewater Engineering and Planning
Submitted by:	Dan Robson, A.Sc.T., Manager, Saanich Peninsula and Gulf Islands Operations
Submitted by:	Jared Kelly, P.Eng., Manager, Capital Projects
Concurrence:	Joseph Marr, P.Eng., Senior Manager, Infrastructure Engineering
Concurrence:	Jason Dales, B.Sc., WD IV., Senior Manager, Infrastructure Wastewater Operations
Concurrence:	Alicia Fraser, P.Eng., General Manager, Integrated Water Services