



Making a difference...together

ERM 24-49

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, SEPTEMBER 25, 2024**

SUBJECT Environmental Resource Management – 2025 Operating and Capital Budget

ISSUE SUMMARY

To provide an overview of the draft Environmental Resource Management (ERM) 2025 budget, highlighting the changes from the 2024 budget.

BACKGROUND

The Capital Regional District (CRD) established a local service for solid waste disposal in 1973. The ERM division is responsible for municipal solid waste management, including waste reduction, recycling programs and the operation of Hartland Landfill.

ERM in the capital region is based on the Ministry of Environment & Climate Change Strategy's 5R pollution prevention hierarchy of Reduce, Reuse, Recycle, Resource Recovery and Residuals Management, with the goal of extending the life of Hartland Landfill by minimizing waste disposal and maximizing diversion opportunities. The CRD's solid waste mandate, using the 5R pollution hierarchy, is delivered to the community through a provincially mandated and recently approved regional Solid Waste Management Plan (SWMP). The SWMP targets reducing per capita waste generation from the current rate of 409 kg/capita to 250 kg/capita by 2030.

All costs associated with the CRD's solid waste disposal and diversion programs are funded through tipping and user fee revenues at Hartland Landfill, service delivery agreements for stewarded materials, sale of energy and sale of recyclables. There is no requisition for this service.

The draft ERM 2025 budget has been prepared for consideration by the Environmental Services Committee (Appendix A).

2024 Year-End Financial Projections

There is an estimated one-time net favorable variance of \$1,250,000 for ERM's 2024 operating budget. This variance will be utilized as a transfer to capital reserve at year end. The net variance is primarily a result of savings in operating expenditures (\$2.85 million) offset by a reduction in revenue (\$1.6 million). Details can be found in Appendix A under the 2024 Estimated Actual column.

Year-end revenue and expenditure projections for 2024 have been established, and estimated variances are summarized, as follows:

Budget Item	Variance (\$) Surplus / (Deficit)	Variance (%) Surplus / (Deficit)
Diversion Services Expenditures	\$1,750,000	
Landfilling Services Expenditures	\$750,000	
Energy Recovery Services Expenditures	\$350,000	
Total Operating Expenditures	\$2,850,000	7.8%

Budget Item	Variance (\$) Surplus / (Deficit)	Variance (%) Surplus / (Deficit)
Revenue: Tipping Fee	\$1,650,000	
Revenue: Other	-\$3,250,000	
Total Revenue	-\$1,600,000	-3.9%
Reserve Fund Transfers	\$1,250,000	

Operating cost variance/savings (7.8%): Expenses related to the processing of materials contract in the waste diversion services, heavy equipment services and bird control in the landfilling services, and landfill gas program in the energy recovery services are forecasted to be lower than budget, resulting in \$2.85 million savings.

Revenue variance/pressures (-3.9%): Overall total revenue is expected to be lower than budgeted by \$1.6 million. While solid waste tipping revenue for 2024 is forecasted to be higher than budgeted by \$1.65 million, the Operating Reserve transfer is forecasted to be \$2.7 million below the budget. Renewable Natural Gas (RNG) net sales revenue is also forecasted to be lower than budgeted by \$495,000 due to the postponed project completion date of the Hartland Biogas Upgrading Plan construction.

The 2024 net budget surplus of \$1.25 million will be transferred to the ERM capital reserve funds to assist in funding the substantial 2025-2029 capital plan requirements.

2025 Operating Budget

While the draft ERM 2025 budget was prepared, considering the Board’s service planning and financial expectations, the 2025 budget proposes significant operating and capital budget increases that will assist the community in achieving the goals set out in the new SWMP. The additional budget pressures are fully funded through revenue increases, resulting in no bottom-line impact. The following are key components of the proposed ERM 2025 budget:

Operating Budget

Operating budget expenses have increased by a total \$11.2 million over 2024 budget (31%), as follows:

- Diversion Services: increased by \$6 million over 2024 budget (26%)
 - Material Stream Diversion expenses (\$2.7 million)
 - New Curbside Blue Box contract in 2025 (\$2.4 million)

- Increase in Solid Waste Management Plan programming (\$700,000)
- Landfilling Services: increased by \$2.6 million over 2024 budget (21%)
 - Corporate overhead (\$1 million)
 - Heavy equipment contract (\$1.5 million)
- Energy Recovery Services: increased by \$2.6 million over 2024 budget (162%)
 - RNG operating contract (\$1.4 million)
 - RNG plant electricity usage (\$1.0 million)

Capital/Reserve Transfer

Relates to transfers to reserves to the Operating Reserve fund, Equipment Replacement fund (ERF) and Capital Reserve fund. The 2025 transfer to reserve budget is \$5.4 million, which is a 38.5% increase over 2024. This increase includes a one-time supplementary increase in transfer to Capital Reserve fund to fund 2025 Capital Plan requirements.

Debt Servicing

Current debt servicing costs relate to borrowing under Loan Authorization Bylaw No. 4515 for funding to complete the planned infrastructure and improvements in the 2023-2027 capital plan. The authorized \$11.7 million in borrowing was issued under two separate loan issues, which are all set to expire between April and October 2039. Annual interest and principal payments under this bylaw are \$1.23 million per year. The total 2025 budgeted debt servicing costs include the above-mentioned interest and principal payments, as well as an additional \$0.79 million of new debt servicing costs associated with Cell 5 Liner Construction and Cell 1, 2 and 3 Transition Liner projects. Details can be found in Appendix A – Operating Budget.

Operating budget revenues are budgeted to increase by a total of \$15.5 million, as follows:

- Diversion Services (\$2.7 million) – Blue Box revenue increase from Recycle BC
- Landfilling Services (\$4.2 million) – revenue from material stream diversion policy changes
- Energy Recovery Services (\$8.4 million) – revenue from new RNG facility, Q1 start-up

Table 1: 2025 Year Over Year Budget Comparison

Expenditure Type	2025 Financial Plan	2024 Financial Plan	Change	% Change
Operations	\$47,880,452	\$36,632,697	\$11,247,755	30.7%
Debt Servicing	\$2,026,178	\$1,229,666	\$796,512	64.7%
Transfers to Capital / Reserves	\$5,467,701	\$2,118,387	\$3,349,314	158.1%
Total	\$55,374,331	\$39,980,750	\$15,393,581	38.5%

2025 Capital Budget

Capital Plan

The Hartland Landfill five-year capital plan is made up of 30 projects totalling \$40 million. These projects can be grouped into five categories:

- **Sustaining Capital:** This group includes projects that are required to support ongoing daily operations. There are 15 projects that cover items such as computer and vehicle replacements, aggregate production, gas and leachate piping purchase and installation. It also includes projects required to maintain regular operations such as landfill gas capture, Operating Certificate renewal, access improvements and electrical infrastructure upgrades. The estimated cost for this group of projects for 2025 is \$3.5 million, with an estimated five-year total cost of \$12.1 million.
- **Progressive Closure of the Landfill:** There are three projects over five years totalling \$11.3 million (\$750,000 for 2025), which include projects such as final closure of external faces, interim closure of various internal faces and aggregate stockpile covers.
- **Cell 4, 5 and 6 Preparation and North End Commercial Access Improvements:** There are 9 projects over five years totalling \$12.7 million (\$9.7 million in 2025), which include design and installation of complete liner systems for Cells 4, 5 and 6, relocating the contractor mobile equipment maintenance shop, a truck wheel wash system and relining of the stormwater sedimentation pond.
- **Renewable Natural Gas:** There are two RNG projects over five years totalling \$2.8 million (\$1.8 million in 2025) to optimize and take advantage of excess biogas from the Residuals Treatment Facility, such that all gas captured at the landfill is processed and injected into the Fortis BC natural gas distribution system, while ensuring all environmental requirements are met.
- **Solid Waste Management Plan Diversion and Beneficial Use Targets:** There is one project in 2026 totalling \$1 million to acquire land/depot asset to further diversion initiatives in the region.

Capital Funding

There are two primary elements to the capital program funding, reserve funds and debt servicing. The reserve funds are established through annual contributions to allow accumulation of funds for future expenditure. Debt servicing costs (principal and interest payments) are associated with long-term capital infrastructure financing.

Debt: New financing under the \$36 million loan authorization was approved in 2022 for the purpose of financing the solid waste facility five-year capital plan. In summary, the future capital funding will be a combination of reserves and debt financing.

Reserves: There are currently three reserve funds established for this service (2024 estimated year-end balances):

- **Operating Reserve (\$8.6 million):** This fund was established by Bylaw No. 3867 for mitigating fluctuations in tipping fee revenue and for covering operational expenditures, as required, including debt servicing. The plan is for the reserve balance to be reduced to its \$5 million target balance and then maintained.

- **Equipment Replacement Reserve (\$2.1 million):** This fund was established by Bylaw No. 945 to fund replacement of computer equipment and for Priority Equipment Replacement equipment that lasts less than 15 years. The 2025 equipment replacement reserve fund contributions are set at \$204,000.
- **Capital Reserve (\$23.5 million):** This fund was established by Bylaw No. 2164 to fund major equipment and infrastructure replacement that has a service life of 5 to 25 years or more, such as landfill facilities, roads and improvements at the Hartland Landfill site, construction of remote transfer stations, composting facilities, watershed management, closure of Phase 2 and post closure maintenance, and all related ancillary works and equipment necessary for landfill and operations. The 2025 capital reserve fund will be used to fund \$4.2 million of the 2025 capital plan.

2025 Budget Context

The following tables summarize the total 2025 ERM expenditures and revenues. The totals are also summarized in Appendix A, along with the 2024 year-end estimated actuals and the 2026-2029 future projections.

Table 2: 2025 Budgeted Expenses

Budget Component	2025 Budget	% of Total
Consultant and Contract for Services	\$21,242,140	38.4%
Internal Allocations	\$11,595,894	20.9%
Program Expenses	\$4,533,283	8.2%
Salaries and Wages	\$4,424,768	8.0%
Capital/Reserve Transfers	\$5,467,700	9.9%
Repairs and Maintenance Costs	\$2,523,000	4.6%
Debt Servicing	\$2,026,178	3.7%
Operating Cost - Other	\$1,896,100	3.4%
Utilities Costs	\$1,087,898	1.9%
Third Party Payments	\$290,000	0.5%
Operating Supplies	\$212,600	0.4%
Insurance Cost	\$74,770	0.1%
Total	\$55,374,331	100%

Table 3: 2025 Budgeted Revenue

Budget Component	2025 Budget	% of Total
Hartland Tipping Fees	\$28,209,000	50.9%
Recovery - Other	\$9,786,519	17.7%
Sale of Goods and Services	\$9,114,250	16.5%
Reserve Transfers	\$4,444,562	8.0%
Hartland Tipping Fees - Recycling	\$2,020,000	3.6%
Compost Tipping Fees	\$1,800,000	3.3%
Total	\$55,374,331	100%

ALTERNATIVES

Alternative 1

The Environmental Services Committee recommends the Committee of the Whole recommend to the Capital Regional District Board:

That Appendix A, 2025 Operating and Capital Budget – Environmental Resource Management be approved as presented and form the basis of the Provisional 2025-2029 Financial Plan.

Alternative 2

The Environmental Services Committee recommends the Committee of the Whole recommend to the Capital Regional District Board:

That Appendix A, 2025 Operating and Capital Budget – Environmental Resource Management be approved as amended and form the basis of the Final 2025-2029 Financial Plan.

IMPLICATIONS

If the proposed budget is amended, the implications will vary depending on how the amendment impacts specific initiatives, ongoing operations, or the capital work program.

CONCLUSION

The draft 2025 Environmental Resource Management budget has been prepared for consideration by the Environmental Services Committee, with a primary focus on implementing the new Solid Waste Management Plan, with a goal of diverting waste and extending the life of Hartland Landfill. While the budget was prepared considering the Capital Regional District Board’s 2025 service planning and financial expectations, the 2025 budget proposes significant operating and capital budget increases, with no requisition requirement, that will assist the community in achieving the goals set out in the new Solid Waste Management Plan.

RECOMMENDATION

The Environmental Services Committee recommends the Committee of the Whole recommend to the Capital Regional District Board:

That Appendix A, 2025 Operating and Capital Budget – Environmental Resource Management be approved as presented and form the basis of the Provisional 2025-2029 Financial Plan.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence:	Luisa Jones, MBA, General Manager, Parks, Recreation & Environmental Services
Concurrence:	Nelson Chan, MBA, FCPA, FCMA, Chief Financial Officer, GM Finance & IT
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

ATTACHMENT

Appendix A: 2025 Environmental Resource Management Budget

CAPITAL REGIONAL DISTRICT

2025 BUDGET

Environmental Resource Management

ENVIRONMENTAL SERVICES COMMITTEE REVIEW

September 2024

PARTICIPATION:

All costs recovered through tipping fees & Sale of Goods and Services.

MAXIMUM LEVY:

No requisition

MAXIMUM CAPITAL DEBT:

Authorized:	LA Bylaw 3518	12,270,000
Borrowed:	SI Bylaw 3547	(2,000,000)
	SI Bylaw 3677	(2,500,000)
	SI Bylaw 3769	(2,200,000)

Remaining:	Expired May 14, 2013	<u><u>\$5,570,000</u></u>
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Total debt outstanding (LA3518) at [Dec 31, 2023 \\$546,598](#)
Final debt payments (LA3518) in [2026](#).

Authorized:	LA Bylaw 4515	36,000,000
Borrowed:	SI Bylaw 4562	(7,450,000)
	SI Bylaw 4597	(4,300,000)

Remaining:		<u><u>\$24,250,000</u></u>
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Total debt outstanding (LA4515) at [Dec 31, 2023 \\$7,450,000](#)
Final debt payments (LA4515) in [2038](#).

COMMISSION:

OPERATING COSTS - REFUSE DISPOSAL:

To be recovered through user fees & sale of goods and services

RESERVE FUND:

Solid Waste Refuse Disposal Reserve Fund, Bylaw No. 2164 (Sept. 8, 1993).
Waste Reduction Sustainability Operating Reserve Fund Bylaw No. 3867 (Nov 14, 2012).

1.521 & 1.525 - ERM	BUDGET REQUEST									
	2024 BOARD BUDGET	2024 ESTIMATED ACTUAL	2025 CORE BUDGET	2025 ONGOING	2025 ONE-TIME	2025 TOTAL	2026 TOTAL	2027 TOTAL	2028 TOTAL	2029 TOTAL
GENERAL PROGRAM EXPENDITURES:										
Diversion Services	22,718,789	20,950,656	28,130,424	329,200	213,750	28,673,374	26,763,711	26,920,510	27,274,712	27,635,787
Landfilling Services	12,345,185	11,595,904	13,163,957	102,123	1,723,639	14,989,719	13,881,968	13,958,954	14,290,573	14,580,314
Energy Recovery Services	1,568,723	1,229,728	1,408,309	2,809,050	-	4,217,359	4,331,215	4,381,344	4,473,018	4,566,593
TOTAL OPERATING COSTS	36,632,697	33,776,288	42,702,690	3,240,373	1,937,389	47,880,452	44,976,894	45,260,809	46,038,303	46,782,694
*Percentage Increase over prior year		-7.8%	16.6%	8.8%	5.3%	30.7%	-6.1%	0.6%	1.7%	1.6%
CAPITAL / RESERVE										
Transfer to Equipment Replacement Fund	200,000	200,000	204,000	-	-	204,000	204,000	204,000	204,000	204,000
Transfer to Operating Reserve Fund	356,635	356,635	1,011,772	-	-	1,011,772	1,224,040	-	-	-
Transfer to General Capital Reserve Fund	1,100,370	2,454,950	3,783,990	-	-	3,783,990	474,000	474,000	474,000	474,000
Transfer to Landfill Closure Capital Reserve Fund	455,120	455,120	464,222	-	-	464,222	473,507	482,977	492,637	502,489
Transfer to Millstream Remediation Debt	6,262	6,262	3,717	-	-	3,717	-	-	-	-
TOTAL CAPITAL / RESERVES	2,118,387	3,472,967	5,467,701	-	-	5,467,701	2,375,547	1,160,977	1,170,637	1,180,489
Debt Expenditures	1,229,666	1,135,336	2,026,178	-	-	2,026,178	2,718,145	2,764,022	2,770,731	2,797,561
TOTAL COSTS	39,980,750	38,384,591	50,196,569	3,240,373	1,937,389	55,374,331	50,070,586	49,185,808	49,979,670	50,760,744
*Percentage Increase over prior year		-4.0%	25.6%	8.1%	4.8%	38.5%	-9.6%	-1.8%	1.6%	1.6%
Allocation Recovery				(202,000)		(202,000)	(207,000)	(211,500)	(216,000)	(220,500)
OPERATING COSTS LESS INTERNAL RECOVERIES	39,980,750	38,384,591	50,196,569	3,038,373	1,937,389	55,172,331	49,863,586	48,974,308	49,763,670	50,540,244
FUNDING SOURCES (REVENUE)										
Surplus / (Deficit)										
Balance C/F from Prior to Current year										
Sale of Renewable Natural Gas	(495,000)	-	(8,889,250)	-	-	(8,889,250)	(8,810,066)	(8,746,722)	(8,693,936)	(8,651,707)
Revenue - Other	(10,254,750)	(10,238,922)	(13,300,320)	(329,200)	-	(13,629,520)	(13,664,520)	(13,664,520)	(13,664,520)	(13,664,520)
Transfer from Operating Reserve	(2,740,000)			(2,507,173)	(1,937,389)	(4,444,562)	-	(94,565)	(1,557,215)	(2,146,517)
TOTAL REVENUE	(13,489,750)	(10,238,922)	(22,189,570)	(2,836,373)	(1,937,389)	(26,963,332)	(22,474,586)	(22,505,807)	(23,915,671)	(24,462,744)
TIPPING FEE (based on inflation)	(26,491,000)	(28,145,670)	(28,007,000)	(202,000)	-	(28,209,000)	(27,389,001)	(26,468,501)	(25,848,000)	(26,077,500)
PROJECTED TONNAGE (General Refuse)	160,000	165,516	155,000			155,000	145,000	135,000	125,000	125,000
*Percentage Increase over prior year		6.2%	5.7%	0.8%	0.0%	6.5%	-2.9%	-3.4%	-2.3%	0.9%
AUTHORIZED POSITIONS:										
On-going	28.70	28.70	34.20			34.20	34.70	34.70	34.70	34.70
Term	1.00	1.00	1.00			1.00	1.00			

Change in Budget 2024 to 2025
Service: 1.521 & 1.525 ERM

Total Expenditure

Comments

2024 Budget **39,980,750**

Change in Salaries:

Base salary and benefit change	81,744	Inclusive of estimated collective agreement changes
Step increase/paygrade change	(203,889)	
Other (explain as necessary)	(8,000)	
3.0 FTE Environmental Analyst & Attendant	304,011	2025 IBC 3a-1.3 Hartland 2100
2.0 FTE Managers	419,062	2025 IBC 1b-4.2 Innovative Projects Work Unit 2025
Reduction in auxiliary wages	(100,000)	
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Total Change in Salaries	492,928	

Other Changes:

Trf to Capital Reserve Fund	2,683,620	To fund 2025 Capital Plan requirements
Contract for Services		
-Waste Diversion	1,220,000	Additional costs related to processing of materials contract (2024 IBC 3a-1.1 Hartland 2100)
	329,200	Additional costs related to kitchen scraps contract
	255,000	Additional costs related to curbside collection contract
	213,750	To provide the waste flow management consultant support (2025 IBC 3a-1.3 Hartland 2100)
-RNG Project	1,417,390	To fund for Annual O&M contract for the RNG Project
		To reflect the anticipated costs related to heavy equipment services and landfilling of standard refuse and controlled waste
-Landfilling	1,700,000	To fund for the Material Stream Diversion - Hauler incentive
Program Development	1,725,000	To fund for Solid Waste Management Plan - implement new programming
	1,000,000	To fund for the electricity cost for the RNG Project
Electricity Costs	972,598	
Standard Overhead Allocation	1,644,428	Increase in 2024 operating costs
Bylaw Allocation	86,778	2025 IBC 3a-1.3 Hartland 2100
Human Resources Allocation	25,987	Increase in 2024 salary budget; corporate safety resourcing
Insurance costs	16,850	Recognize growing insurance premiums
Building Occupancy	13,867	
Debt Expenditures	796,512	To fund 2025 Capital Plan requirements
Trf to Operating Reserve Fund	655,136	To mitigate fluctuations in tipping fee revenue
Other Costs	144,537	
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Total Other Changes	14,900,653	

2025 Budget **55,374,331**

Summary of % Expense Increase

2025 Base salary and benefit change	0.2%
2025 IBC Expense	5.6%
Waste Diversion	11.3%
RNG Project	6.0%
Capital Transfers	6.7%
Landfilling	4.3%
Standard Overhead Allocation	4.1%
Balance of increase	0.3%
<i>% expense increase from 2024:</i>	38.5%

% Requisition increase from 2024 (if applicable):

%

Requisition funding is (x)% of service revenue

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

'Overall Solid Waste Tipping Revenue for 2024 is forecasted to be higher than budget by \$1.6 million. Tipping fee revenues higher due to an increased quantity of solid waste being received. Recycling revenue for scrap metal (price fluctuates with the global commodity markets) is also higher than budgeted. Landfill Operations/Diversion Services/Energy Recovery services expenses are forecasted to be lower than budget for 2024 by \$2.8 million. The estimated surplus will be transferred for the Capital Reserve Fund.

**CAPITAL REGIONAL DISTRICT
FIVE YEAR CAPITAL EXPENDITURE PLAN SUMMARY - 2024 to 2029**

Service No.	1.521							
	Environmental Resource Management	Carry Forward from 2024	2025	2026	2027	2028	2029	TOTAL

EXPENDITURE

Buildings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$455,000	\$385,000	\$385,000	\$385,000	\$385,000	\$385,000	\$1,995,000
Land	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$1,000,000
Engineered Structures	\$3,100,000	\$15,306,000	\$11,125,000	\$6,600,000	\$2,350,000	\$1,600,000	\$1,600,000	\$36,981,000
Vehicles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$3,100,000	\$15,761,000	\$12,510,000	\$6,985,000	\$2,735,000	\$1,985,000	\$1,985,000	\$39,976,000

SOURCE OF FUNDS

Capital Funds on Hand	\$500,000	\$1,406,000	\$125,000	\$0	\$0	\$0	\$0	\$1,531,000
Debenture Debt (New Debt Only)	\$1,500,000	\$8,650,000	\$2,350,000	\$0	\$350,000	\$0	\$0	\$11,350,000
Equipment Replacement Fund	\$250,000	\$455,000	\$385,000	\$385,000	\$635,000	\$385,000	\$385,000	\$2,245,000
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	\$850,000	\$5,250,000	\$9,650,000	\$6,600,000	\$1,750,000	\$1,600,000	\$1,600,000	\$24,850,000
	\$3,100,000	\$15,761,000	\$12,510,000	\$6,985,000	\$2,735,000	\$1,985,000	\$1,985,000	\$39,976,000

CAPITAL REGIONAL DISTRICT

5 YEAR CAPITAL PLAN

2024 - 2028

Service #:

1.521

Service Name:

Environmental Resource Management

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	PROJECT BUDGET & SCHEDULE									
				Total Project Budget	Asset Class	Funding Source	Carryforward from 2024	2025	2026	2027	2028	2029	5 - Year Total
16-06	Renewal	Replacing of Small Equipments	Replacing of Small Equipments	\$ 1,430,000	E	ERF		\$ 240,000	\$ 270,000	\$ 270,000	\$ 270,000	\$ 270,000	\$ 1,320,000
17-01	Renewal	Gas & Leachate Collection Pipe Extension	Gas & Leachate Collection Pipe Extension	\$ 2,550,000	S	Res		\$ 650,000	\$ 500,000	\$ 550,000	\$ 550,000	\$ 550,000	\$ 2,800,000
17-02	Renewal	Aggregate Production for Internal Use	Aggregate Production for Internal Use	\$ 15,485,000	S	Res		\$ 850,000	\$ 850,000	\$ 850,000	\$ 850,000	\$ 850,000	\$ 4,250,000
17-02	Renewal	Aggregate Production for Internal Use	Aggregate Production for Internal Use	\$	S	Cap							\$ -
17-04	Renewal	Progressive Closure of External Faces	Progressive Closure of External Faces	\$ 10,000,000	S	Res		\$ -	\$ 6,000,000	\$ 4,000,000			\$ 10,000,000
17-07	Renewal	Computer Equipment	Computer Equipment	\$ 71,000	E	ERF		\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 75,000
17-09	Renewal	Vehicle Replacements	Vehicle Replacements	\$ 500,000	E	ERF		\$ 200,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
17-12	Renewal	Hartland Environmental Performance Model	Hartland Environmental Performance Model	\$ 225,000	S	Cap		\$ -		\$ -	\$ -		\$ -
17-14	New	Landfill Gas Utilization	Landfill Gas Utilization	\$ 7,213,000	S	Debt							\$ -
17-14	New	Landfill Gas Utilization	Landfill Gas Utilization	\$	S	Cap							\$ -
17-14	New	Landfill Gas Utilization	Landfill Gas Utilization	\$ 23,718,000	S	Res							\$ -
18-01	New	Interim Covers	Interim Covers - West and North Slopes	\$ 1,000,000	S	Res				\$ 200,000	\$ 200,000	\$ 200,000	\$ 600,000
22-01	Renewal	Sedimentation Pond Relining	NW Sedimentation Pond Relining & Expansion	\$ 1,000,000	S	Res			\$ 1,000,000				\$ 1,000,000
22-07	Study	Recycling Area Upgrades	Recycling Area Upgrades	\$ 225,000	S	Res							\$ -
22-10	New	Storm Water Sedimentation pond Emergency Repairs	Storm Water Sedimentation pond Emergency Repairs	\$ 250,000	E	Res							\$ -
23-02	New	Contractor Workshop Relocation	Contractor Workshop Relocation	\$ 1,250,000	S	Res	650,000	\$ 650,000					\$ 650,000
23-02	New	Contractor Workshop Relocation	Contractor Workshop Relocation	\$	S	Cap	500,000	\$ 500,000					\$ 500,000
23-04	New	North End Commercial Access Improvements	North End Commercial Access Improvements	\$ 700,000	S	Res							\$ -
23-05	New	Existing Manual and Commercial Scale Upgrades	Existing Manual and Commercial Scale Upgrades	\$ 250,000	S	ERF	250,000				\$ 250,000		\$ 250,000
24-01	New	Cell 5&6 GRW	Cell 5&6 Gravity Retaining Wall Construction	\$ 2,000,000	S	Debt	750,000	\$ 750,000	\$ 1,250,000				\$ 2,000,000
24-02	Study	Hartland North Master Plan	Hartland North Master Plan	\$ 150,000	S	Res					\$ 150,000		\$ 150,000
24-05	New	Cell 5 Liner Construction	Cell 5 Liner Construction	\$ 7,900,000	S	Debt		\$ 4,900,000					\$ 4,900,000
24-06	New	Cell 1, 2 & 3 Transition Liner	Cell 1, 2 & 3 Transition Liner	\$ 4,000,000	S	Debt		\$ 2,000,000					\$ 2,000,000
24-07	New	Relocation of N. Toe Road Sedimentation Pond	Relocation of N. Toe Road Sedimentation Pond	\$ 500,000	S	Debt			\$ 500,000				\$ 500,000
25-01	New	NE & NW Aggregate Stockpile cover	NE & NW Aggregate Stockpile cover	\$ 750,000	S	Debt	750,000	\$ 750,000					\$ 750,000
25-02	Renewal	North End Wheel Wash	North End Wheel Wash	\$ 800,000	S	Res	200,000	\$ 400,000					\$ 400,000
25-03	New	Landfill Gas capture to meet New Federal Regs	Landfill Gas capture to meet New Federal Regs	\$ 250,000	S	Res		\$ 100,000	\$ 150,000				\$ 250,000
25-04	New	Hartland Operating Certificate Renewal	Hartland Operating Certificate Renewal	\$ 100,000	S	Res		\$ 100,000					\$ 100,000
25-05	New	Hartland Leachate Pipe Mods for Pigging	Hartland Leachate Pipe Mods for Pigging	\$ 150,000	S	Res			\$ 150,000				\$ 150,000
25-06	New	Quarry Wall liner	Quarry Wall liner	\$ 250,000	S	Res		\$ 250,000					\$ 250,000
25-07	New	Cell 4, 5A & 5B Construction Field QA/QC	Cell 4, 5A & 5B Construction Field QA/QC	\$ 500,000	S	Debt		\$ 250,000	\$ 250,000				\$ 500,000
25-08	New	RNG Optimization Projects	RNG Optimization Projects	\$ 831,000	S	Cap		\$ 831,000					\$ 831,000
25-08	New	RNG Optimization Projects	RNG Optimization Projects	\$ 1,000,000	S	Res		\$ 1,000,000					\$ 1,000,000
25-09	New	Hartland North - Willis P Driveway Upgrades	Hartland North - Willis P Driveway Upgrades	\$ 500,000	S	Res		\$ 500,000					\$ 500,000

Service #: 1.521

Service Name: Environmental Resource Management

Project Number	Capital Expenditure Type	Capital Project Title	Capital Project Description	PROJECT BUDGET & SCHEDULE										
				Total Project Budget	Asset Class	Funding Source	Carryforward from 2024	2025	2026	2027	2028	2029	5 - Year Total	
25-10	New	Hartland North Electrical	Hartland North Electrical	\$ 750,000	S	Res		\$ 750,000						\$ 750,000
25-11	New	Hartland Environmental Monitoring and Containment Projects	Hartland Environmental Monitoring and Containment Projects	\$ 75,000	S	Cap		\$ 75,000						\$ 75,000
26-01	New	Cell 4& 5 Bottom Lift Gas Wells / Leachate Drain	Cell 4 Bottom Lift Gas Wells / Leachate Drain	\$ 700,000	S	Debt			\$ 350,000		\$ 350,000			\$ 700,000
26-02	New	Hartland 5 year DOCP update	Hartland 5 year DOCP update	\$ 125,000	S	Cap			\$ 125,000					\$ 125,000
26-03	New	ERM Land Acquisition	ERM Land Acquisition	\$ 1,000,000	L	Res			\$ 1,000,000					\$ 1,000,000
26-04	New	RTF Biogas Tie-In to RNG	RTF Biogas Tie-In to RNG	\$ 1,000,000	S	Res				\$ 1,000,000				\$ 1,000,000
														\$ -
														\$ -
			GRAND TOTAL	\$ 89,198,000			\$ 3,100,000	\$ 15,761,000	\$ 12,510,000	\$ 6,985,000	\$ 2,735,000	\$ 1,985,000	\$ 39,976,000	

Service: **1.521** **Environmental Resource Management**

Project Number	16-06	Capital Project Title	Replacing of Small Equipments	Capital Project Description	Replacing of Small Equipments
Project Rationale	Replacement of small equipments that have reached their end of life				

Project Number	17-01	Capital Project Title	Gas & Leachate Collection Pipe Extension	Capital Project Description	Gas & Leachate Collection Pipe Extension
Project Rationale	To meet BC Ministry of Environment regulations, gas wells and leachate collectors are installed in each lift of refuse and have to be connected to the existing header system to collect methane gas. Well heads, valves, condensation traps, monitoring points, and piping has to be installed to each gas well and leachate collector. The gas is then conveyed to the gas plant, and the leachate is conveyed to the lined storage lagoons and then discharged into the municipal sewer. Cost estimate is derived from historical construction information and includes consulting costs to layout pipe design/headers.				

Project Number	17-02	Capital Project Title	Aggregate Production for Internal Use	Capital Project Description	Aggregate Production for Internal Use
Project Rationale	Producing aggregate annually from shot rock that was quarried to make airspace provides the CRD with a number of benefits including: prolonging the landfill life (creating landfilling airspace), providing aggregate for on-site needs, effective interception of shallow groundwater inflows, cost and space savings by not having to import aggregate, and reduced social and environmental impacts by not having to truck in aggregate. Cost estimate is derived from historical tender data.				

Project Number	17-04	Capital Project Title	Progressive Closure of External Faces	Capital Project Description	Progressive Closure of External Faces
Project Rationale	As specified under the BC Ministry of Environments Landfill Criteria for Municipal Solid Waste, completed landfill areas and slopes must be closed with a progressive closure system on an annual basis. The closure system consists of a clay or synthetic cover placed over a gravel drainage layer This progressive closure system stays in place until economies of scale makes it cost effective to proceed with installation of a final closure system. The completion of Cell 3 in 2025/2026 requires closure of the areas that will not be filled against going forward.				

Service: 1.521 Environmental Resource Management

Project Number	17-07	Capital Project Title	Computer Equipment	Capital Project Description	Computer Equipment
Project Rationale	Replacement of computer equipment due to end of life cycle				

Project Number	17-09	Capital Project Title	Vehicle Replacements	Capital Project Description	Vehicle Replacements
Project Rationale	Replacement of vehicle due to end of life cycle				

Project Number	17-12	Capital Project Title	Hartland Environmental Performance Model	Capital Project Description	Hartland Environmental Performance Model
Project Rationale	The CRD is interested in developing a site-specific computer model that integrates engineering design with environmental performance for the Hartland Landfill. In 2016 the BC MOE made revisions to the BC Landfill Criteria. Many of Hartland's design and operations are already compliant, however a preliminary review identified additional conformance requirements for Hartland under the status quo. The model will enable the CRD to better demonstrate technical justification and environmental conformance over the lifespan of the landfill.				

Project Number	17-14	Capital Project Title	Landfill Gas Utilization	Capital Project Description	Landfill Gas Utilization
Project Rationale	The landfill gas is currently utilized as fuel to power a generator system to generate electricity and sold to BC Hydro. The excess landfill gas which is approximately 50% currently generated from the landfill is destructured by burning. ERM and EE have initiated a project to process the landfill gas to a higher quality could be utilized as natural gas. Fortis BC is interested to purchase the processed landfill gas from the CRD. The projected gas revenues from Fortis is significantly higher than the current arrangement with BC Hydro. This project is to carry out the feasibility study, preliminary engineering, and conduct business case and triple-bottom-line analysis, if the project proved to be feasible the detailed design and implementation will be followed.				

Service: 1.521 Environmental Resource Management

Project Number 18-01 **Capital Project Title** Interim Covers **Capital Project Description** Interim Covers - West and North Slopes

Project Rationale Following Golder's Leachate Management Plan, once an active landfilling cell is completed, but hasn't reached future filling contours, tarping is required to shed rainwater and divert to the freshwater collection system to prevent it from entering the leachate collection system and overwhelming the leachate storage ponds. Cost estimate is derived from historical in-house cost data.

Project Number 22-01 **Capital Project Title** Sedimentation Pond Relining **Capital Project Description** NW Sedimentation Pond Relining & Expansion

Project Rationale To prevent leakage and fines from migrating off site into the north freshwater drainage area, the sedimentation pond must be relined. In addition the sedimentation pond must be enlarged to meet MOE requirements for retaining 24 hrs of precipitation from a 100 year storm event. Finally, the sedimentation pond requires inlet valving and piping to permit flows to be diverted to the upper lagoon in the event there is an onsite spill that must be contained and diverted from fresh water courses.

Project Number 22-07 **Capital Project Title** Recycling Area Upgrades **Capital Project Description** Recycling Area Upgrades

Project Rationale The project has been set up to conduct a design review of the existing recycling area at Hartland and investigate changes relating to efficient accessibility due to growing public interest in the depot and to include safety considerations such as protection from the sun during hot weather.

Project Number 22-10 **Capital Project Title** Storm Water Sedimentation pond Emergency Repairs **Capital Project Description** Storm Water Sedimentation pond Emergency Repairs

Project Rationale Leachate has been detected getting into the fresh water sedimentation pond. This project has been set up to explore sources of contamination and make remedial works to the pond, incoming pipes and outgoing infrastructure as necessary to ensure containment of any contaminants. This project also includes the installation of any new monitoring wells, including consulting fees to locate, prove/commission and report findings/recommendations.

Project Number 23-02 **Capital Project Title** Contractor Workshop Relocation **Capital Project Description** Contractor Workshop Relocation

Project Rationale The current contractors workshop is located in the future Cell 5 of the landfill and must be relocated so critical landfill infrastructure can be completed for Cell 4, 5 and 6. This project includes removal of the existing structure and reuse (if economical) in a new location adjacent to future cells so the operations contractor can conduct repairs on large landfill operations equipment (Packer, Bull-Dozer, excavators etc).

Service: 1.521 Environmental Resource Management

Project Number 23-04 **Capital Project Title** North End Commercial Access Improvements **Capital Project Description** North End Commercial Access Improvements

Project Rationale This project includes necessary improvements to ensure the North Entrance and Scales are equipped for fully automated commercial access off Willis Point Road when Cell 4 is ready for filling. Improvements include landscaping, scale house improvements, automated gates, staging lanes, card readers/scanners, RFID systems, scale safety rails, bollards, radio intercoms, sidewalks, signage, etc.

Project Number 23-05 **Capital Project Title** Existing Manual and Commercial Scale Upgrades **Capital Project Description** Existing Manual and Commercial Scale Upgrades

Project Rationale The South Entrance Commercial scale approach/exit ramps are in poor condition. This project includes sawcutting and removal of old scale ramps and pouring new concrete with Rebar to eliminate further safety hazards to trucks and employees. The South Entrance Manual Scale deck is in poor condition. It requires replacement and/or major repair. This project accounts for all work that needs to be done after detailed assessment to ensure life of the existing manual and commercial scales can continue reliably for the next 20 years.

Project Number 24-01 **Capital Project Title** Cell 5&6 GRW **Capital Project Description** Cell 5&6 Gravity Retaining Wall Construction

Project Rationale This project will allow for the construction of a new mounded structural earth berm north of cell 1&2 at 5 corners intersection to serve as the new toe of cells 5 & 6. As part of this berm, the project includes installation of a critical sub-grade landfill leachate containment system (grout wall/curtain) and raising the clay containment berm from 130mASL to 135mASL to ensure leachate capture from future landfill cells 4, 5 & 6. The project also includes relocation of any existing infrastructure (LFG, Leachate, Water, electrical etc) that currently resides in the future footprint of the MSE berm.

Project Number 24-02 **Capital Project Title** Hartland North Master Plan **Capital Project Description** Hartland North Master Plan

Project Rationale With the recent completion of the new Residuals Treatment Facility and associated access and new scales at Hartland North, this design project will ensure that there is adequate future planning and integration with the existing landfill site

Project Number 24-05 **Capital Project Title** Cell 5 Liner Construction **Capital Project Description** Cell 5 Liner Construction

Project Rationale A new drainage and liner system will ensure effective removal of leachate from within the new Cell 5 area and prevent any off site migration. The liner will also include an underdrain which will relieve pore pressure and ensure fresh ground water does not contribute to ongoing leachate collection and processing. Improvements include all temporary and permanent access road and related infrastructure to allow refuse to be deposited in Cell 5.

Project Number 24-06 **Capital Project Title** Cell 1, 2 & 3 Transition Liner **Capital Project Description** Cell 1, 2 & 3 Transition Liner

Project Rationale A new drainage and liner system will ensure effective removal of leachate above Cells 1 & 2 from garbage placed ontop of it from cells 4, 5 and 6. This liner provides continuity, separation and acts as a transition between old cells of the landfill and cells 4-6. The liner will also include an underdrain which will relieve pore pressure and ensure leachate from Cell 1, 2 & 3 can properly drain to heal basin or the upper lagoon. Also included is an access road to anchor the transition liner.

Service: 1.521 Environmental Resource Management

Project Number 24-07 **Capital Project Title** Relocation of N. Toe Road Sedimentation Pond **Capital Project Description** Relocation of N. Toe Road Sedimentation Pond
Project Rationale The North Toe Road fresh water sedimentation collection pond sits on top of Cell 1 garbage. The future Gravity Retaining Wall will be constructed on top of the pond so it must be relocated.

Project Number 25-01 **Capital Project Title** NE & NW Aggregate Stockpile cover **Capital Project Description** NE & NW Aggregate Stockpile cover
Project Rationale This project allows for mitigation measures needed to protect the environment from minerals that may runoff the stockpiles from precipitation. Mitigation includes the deployment of a temporary impermeable membranes overtop the NE and NW, installation of ground/surface monitoring wells, improvement projects intended to intercept and convey impacted ground/surface water to leachate disposal collectors, including any consultant work required to design/direct staff on the mitigation measures.

Project Number 25-02 **Capital Project Title** North End Wheel Wash **Capital Project Description** North End Wheel Wash
Project Rationale This project accounts for a new commercial truck wheel wash system to be installed on the North End to ensure trucks don't track mud onto Willis Point Road. Project includes a temporary wheel wash needed until the final Cell 5 access roads are ready to be utilized.

Project Number 25-03 **Capital Project Title** Landfill Gas capture to meet New Federal Regs **Capital Project Description** Landfill Gas capture to meet New Federal Regs
Project Rationale Environment & Climate Change Canada has released a proposed Landfill Methane Regulation that is expected to come into force in Q1/Q2 of 2024, with the intent of reducing fugitive landfill emissions across the country. The regulation sets thresholds for surface emissions at landfills emitting more than 10,000 tonnes of CO2e per year (Hartland exceeds this). Based on required monitoring events, any surface methane concentrations that exceed proposed levels require a corrective action plan and mitigation within a specified timeframe. Based on current surface emissions data, it is expected that Hartland will need to implement additional controls, improve gas collection, or repair infrastructure to reduce surface methane concentrations to achieve compliance with these proposed limits.

Project Number 25-04 **Capital Project Title** Hartland Operating Certificate Renewal **Capital Project Description** Hartland Operating Certificate Renewal
Project Rationale Hartland's Operating Certificate (OC) has not been modified since January 27, 2010. CRD has committed to updating its OC in light of recent MOE discussion and approval of ERM's SWMP. This project covers staff time and consultant/legal fees to assist the CRD in updating the OC with the MOE.

Project Number 25-05 **Capital Project Title** Hartland Leachate Pipe Mods for Pigging **Capital Project Description** Hartland Leachate Pipe Mods for Pigging
Project Rationale Leachate design, materials and installation to modify the leachate piping between HB-15 and the new RTF Centrate Line to reinstate pigging of the section of pipe between HB-15 and the Centrate return line).

Service: 1.521 Environmental Resource Management

Project Number 25-06 **Capital Project Title** Quarry Wall liner **Capital Project Description** Quarry Wall liner

Project Rationale A portion of Cell 4 liner could not be installed due to accessibility during construction. The project includes implementing a seal between the bedrock quarry wall bench and the existing liner in Cell 4 in toulte valley. The construction will be conducted when waste filling has reached the elevation of the area to allow safe installation by Contractors. The project includes the supply, installation, QA/QC needed to install the small section of liner.

Project Number 25-07 **Capital Project Title** Cell 4, 5A & 5B Construction Field QA/QC **Capital Project Description** Cell 4, 5A & 5B Construction Field QA/QC

Project Rationale Cell 4, 5 and 6 and related incrastructure construction will occur over multiple years. The project requires that the engineer of record be onsite during critical milestones throughout the construction project to ensure the construction is installer per the design. The original design budget contemplated a 1 year installation of all capital improvements for Cell 4, 5 & 6 projects. However, logistics and filling plans required phasing of the projects over a number of years which stretches the QA/QC budget over a longer period. The funds are to allow all travel, coordination meetings, onsite QA/QC field review, design

Project Number 25-08 **Capital Project Title** RNG Optimization Projects **Capital Project Description** RNG Optimization Projects

Project Rationale Scope change to include additional cost and scope that were not originally contemplated in the original RNG project. Improvements include new transformer, Lock Block retaining wall, tie-in and relocation of existing infrastructure that interfere with the new facility and other improvement projects required to enhance the safety, operation and profitability of the facility.

Project Number 25-09 **Capital Project Title** Hartland North - Willis P Driveway Upgrades **Capital Project Description** Hartland North - Willis P Driveway Upgrades

Project Rationale The project includes all design and construction work to ensure there is sufficient passing room for large trucks to turn off Willis Point (WP) road onto the Hartland North Driveway and safely pass large trucks leaving the facility at the same time. Improvements include driveway widening, paving, realignment of fencing/gates, culvert extensions, lighting, signage, Overhead electrical improvements (if required), pavement markings, delineators and any other improvements needed to ensure the safety of the public, contractors and employees accessing the site.

Project Number 25-10 **Capital Project Title** Hartland North Electrical **Capital Project Description** Hartland North Electrical

Project Rationale The electrical power for the new scale Building at Hartland North is fed from a temporary system from the RTF. Additional loads are required to accommodate the relocation of the contractor shop, new truck wash, kitchen scrap transfer station, thermal pilot plant etc. There is no formal agreement or capacity for the RTF to provide power for the growing power demands at Hartland North. This project entails all electrical design and construction to service the power requirements needed for Hartland North (aformentioned projects), including power poles/lines, transformers and underground conduit/cabling. The scope also includes a backup power generator to ensure business continuity for the scale building during frequent power outages.

Service: 1.521 Environmental Resource Management

Project Number 25-11 **Capital Project Title** Hartland Environmental Monitoring and Containment Projects **Capital Project Description** Hartland Environmental Monitoring and Containment Projects

Project Rationale To ensure compliance with BC Ministry of Environment regulations, an active review of current and future environmental controls is necessary. This project accounts for consultant studies, contractor environmental mitigation controls required to review and enhance the current environmental monitoring program at the Hartland landfill and ensure compliance with MOE regulations.

Project Number 26-01 **Capital Project Title** Cell 4& 5 Bottom Lift Gas Wells / Leachate Drain **Capital Project Description** Cell 4& 5 Bottom Lift Gas Wells / Leachate Drain

Project Rationale To meet BC Ministry of Environment regulations, gas wells and leachate collectors are installed in each lift of refuse and have to be connected to the existing collection systems to collect methane gas. Well heads, valves, condensation traps, monitoring points, and piping has to be installed to each combination gas well and leachate collector. The leachate is then conveyed to the lined storage lagoons and then discharged into the municipal sewer. Estimate is derived from historical costs.

Project Number 26-02 **Capital Project Title** Hartland 5 year DOCP update **Capital Project Description** Hartland 5 year DOCP update

Project Rationale Hartland's Operating Certificate (OC) issued by the BC Ministry of Environment requires adherence to the BC Landfilling criteria which requires updates to the Landfill DOCP every 5 years. The last DOCP was finalized and submitted to the MOE on May 2022. A new update is required by May 2027. The project includes the procurement of a consultant to complete the DOCP to meet submission requirement.

Project Number 26-03 **Capital Project Title** ERM Land Acquisition **Capital Project Description** ERM Land Acquisition

Project Rationale ERM's long term plan to maximize recycling and diversion opportunities for the region requires the acquisition of land/facilities to accommodate the growing needs of the region. This project includes those activities needed to secure land or facilities for future diversion, recycling or waste management requirements of the region.

Project Number 26-04 **Capital Project Title** RTF Biogas Tie-In to RNG **Capital Project Description** RTF Biogas Tie-In to RNG

Project Rationale The Residual Solids Treatment facility currently reuses the biogas produced during operation to minimize energy requirements for the facility. However there remains an excess of biogas that is currently flared and contributes to the CRD's carbon footprint. There is opportunity to divert the unused gas to Hartland's newly constructed Renewal Natural Gas plant for to purify the gas and sell it to Fortis over its 20 year sale agreement with the CRD. This project includes the design, procurement and installation of all infrastructure needed to take advantage of this opportunity.

1.521 Environmental Resource Management
 Capital Reserve Fund Schedule - ERM
 2025 - 2029 Financial Plan

Capital Reserve Fund Schedule - ERM

Capital Reserve Fund ERM - Landfill Closure Portion, Capital Reserve Portion, and Recycling Depots Portion

Capital Reserve Fund Schedule

Bylaw 2164 established a Solid Waste Refuse Disposal Reserve Fund for the ERM Service (was called Solid Waste Service). There are three portions in the Reserve Fund: Landfill Closure, restricted funds to cover the liability of closing Phase 2 - 3 and post-closure maintenance. Capital Reserve is working capital and not restricted.

	Estimate	Budget				
	2024	2025	2026	2027	2028	2029
Landfill Closure Portion						
Fund: 1020 Fund Centre: 101363						
Beginning Balance	13,670,125	14,227,150	14,691,373	9,164,880	5,647,857	6,140,493
Planned Capital Expenditure (Based on Capital Plan)	-		(6,000,000)	(4,000,000)		
Transfer to/from Ops Budget	455,120	464,222	473,507	482,977	492,637	502,489
Interest Income*	101,905	-	-	-	-	-
Ending Balance \$	14,227,150	14,691,373	9,164,880	5,647,857	6,140,493	6,642,982

Assumptions/Background:
 Liability reserve to fund closure of Phase 2-3 and post closure maintenance.

* 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.

Capital Reserve Fund Schedule

Capital Reserve Portion Fund: 1020 Fund Centre: 101364	Estimate	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	12,211,415	9,267,416	8,797,406	5,617,406	3,487,406	2,207,406
Planned Capital Expenditure (Based on Capital Plan)	(5,750,000)	(4,250,000)	(3,650,000)	(2,600,000)	(1,750,000)	(1,600,000)
Transfer to/from Ops Budget	2,450,950	3,779,990	470,000	470,000	470,000	470,000
Interest Income*	355,051	-	-	-	-	-
Ending Balance \$	9,267,416	8,797,406	5,617,406	3,487,406	2,207,406	1,077,406

Assumptions/Background:

* 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.

Capital Reserve Fund Schedule

Recycling Depots/Compost Center Reserve Portion Fund: 1020 Fund Centre: 102102	Estimate	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	15,918	19,918	23,918	27,918	31,918	35,918
Planned Capital Expenditure		-	-	-	-	-
Transfer to/from Ops Budget	4,000	4,000	4,000	4,000	4,000	4,000
Ending Balance \$	19,918	23,918	27,918	31,918	35,918	39,918

Assumptions/Background:

Reimburse operating budget for capital expenditures spent by Compost Center.

**1.521 Environmental Resource Management
 Operating Reserve Summary
 2025 - 2029 Financial Plan**

Profile

Environmental Resource Management

Bylaw 3867 - established Operating Reserve for the ERM Service to be used by the service for: mitigating fluctuations in tipping fee revenue and for covering operational expenditures as required, including debt servicing.

Operating Reserve Schedule

Operating Reserve Schedule Fund: 1500 Fund Center 105509	Estimate	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	22,707,937	8,669,820	8,893,860	8,799,295	7,242,080	5,095,563
Planned Purchase - RNG project	(12,381,000)	(1,000,000)				
Planned Capital Expenditure (Based on Capital Plan)	(3,500,000)					
Transfer to/from Ops Budget	1,011,772	1,224,040	(94,565)	(1,557,215)	(2,146,517)	-
Interest Income*	831,111			-	-	-
Total projected year end balance	8,669,820	8,893,860	8,799,295	7,242,080	5,095,563	5,095,563

Assumptions/Background:

Reserve for rate stabilization

* 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.

**1.521 Environmental Resource Management
ERF Reserve Fund Schedule
2025 - 2029 Financial Plan**

ERF Reserve Fund Schedule

ERF: ERM ERF or PERS Fund for Equipment
--

Equipment Replacement Fund Fund: 1022 Fund Centre: 101447	Estimate	Budget				
	2024	2025	2026	2027	2028	2029
Beginning Balance	2,285,782	2,115,744	1,864,744	1,683,744	1,502,744	1,071,744
Planned Purchase (Based on Capital Plan)	(285,166)	(455,000)	(385,000)	(385,000)	(635,000)	(385,000)
Transfer to/from Ops Budget	115,128	204,000	204,000	204,000	204,000	204,000
Interest Income*		-	-	-	-	-
Ending Balance \$	2,115,744	1,864,744	1,683,744	1,502,744	1,071,744	890,744

Assumptions/Background: ERF Reserve to fund replacement of computer equipment and for PERS (Priority Equipment Replacement) type equipment that lasts less than 15 years
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* 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.

Environmental Resource Management 2025 Operating and Capital Budget

Presentation

Environmental Services Committee

September 25, 2024



Environmental Resource Management Service Areas



Waste Diversion



Landfilling

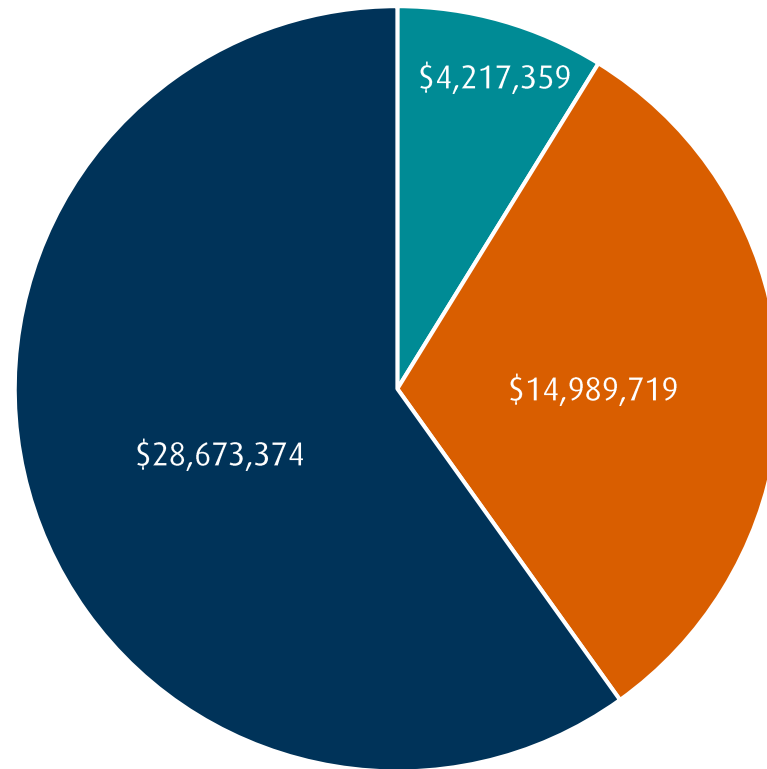


Energy Recovery



2025 Operating Budget Expenses

\$47,880,452



■ Energy Recovery Services ■ Landfilling Services ■ Diversion Services

Environmental Resource Management

Service Areas

2025 Operating Budget



Waste Diversion (\$28.6 million)

- Solid Waste Planning \$1.7 million
- Community Support Programs \$1.4 million
- Hartland Diversion Programs \$12.8 million
- Curbside Recycling \$11.7 million
- Electoral Area Recycling \$1.2 million

Landfilling (\$15 million)

- Heavy Equipment Contract \$5.3 million
- CRD Enviro Programs \$1 million
- CRD Engineering \$700 K
- Corp Allocation \$3 million
- Solid Waste Admin \$1.1 million
- Education \$500 K
- Leachate \$1 million

Energy Recovery (\$4.2 million)

- Contract for Services \$1.4 million
- Electricity \$1 million
- Environmental Resource Management Overhead - \$1.5 million
- CRD Enviro \$100 K

2025 Operating Budget Expenses - \$47.9 million

- \$11.2 million (31%) increase over 2024 Operating Budget

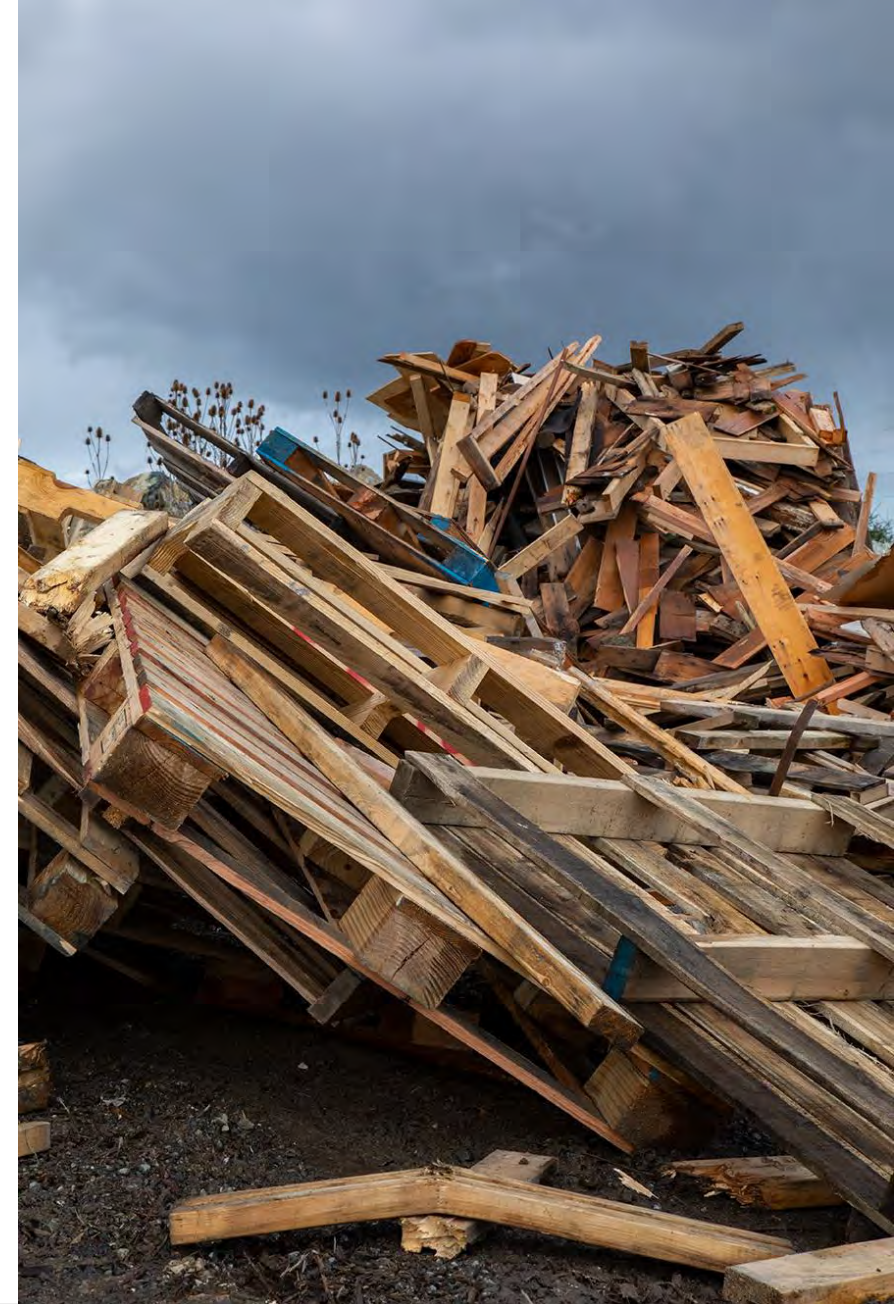


- Waste Diversion increased \$6 million
- Landfilling increased \$2.6 million
- Energy Recovery increased \$2.7 million

2024/2025 Operating Budget – Significant Changes

Waste Diversion (+\$6 million)

- Material Stream Diversion expenses (\$2.7 million)
- Solid Waste Management Plan – increase in programming (\$700,000)
- New Curbside Blue Box 2024 contract (\$2.4 million)
- Healthy Waters – Tod Creek sampling (\$200,000)



2024/2025 Operating Budget - Significant Changes



Landfilling (+\$2.6 million)

- Heavy equipment contract increase - volume / operating costs (\$1.5 million)
- Corporate overhead (\$1 million)

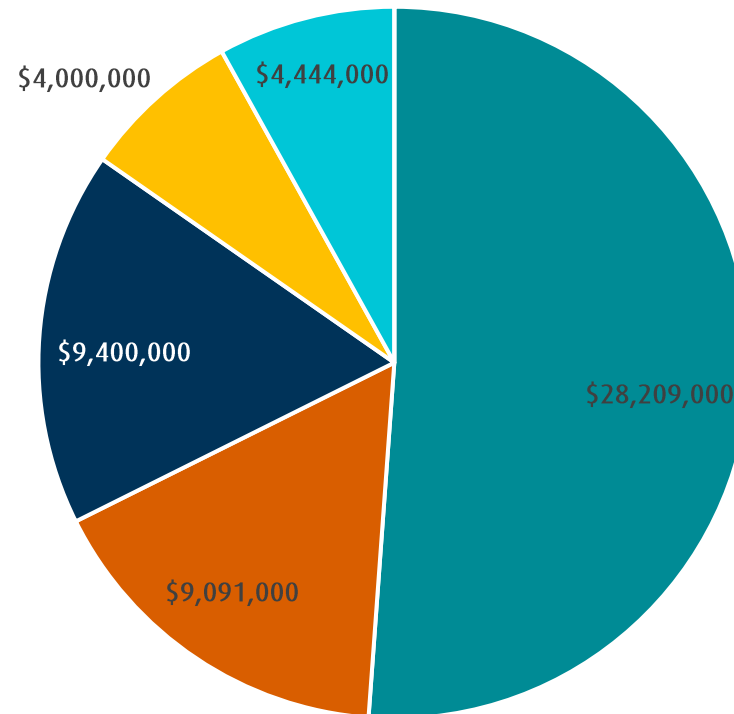
Energy Recovery Services (+\$2.7 million)

- HRRG Operating Contract (\$1.4 million)
- Renewable Natural Gas Plant – Electricity (\$1 million)



2025 Operating Budget Revenues

\$55 million



- Garbage Tipping Fees
- Renewable Natural Gas
- Stewardship Programs
- Diversion Tip Fees
- ERM Operating Reserve Transfer
- Tax Requisition

2024/2025 Operating Budget Revenues

+\$15.5 million - before reserve transfers (\$3.4 million) and debt (\$.08 million) increases

Waste Diversion (+\$2.75 million)

- Blue box revenue increase from Recycle BC (\$2.75 million)



Landfilling (+\$4.25 million)

- Revenue from Material Stream Diversion policy changes

Energy Recovery (+\$8.5 million)

- Revenue from new Renewable Natural Gas facility, Q1 start-up

2025 – Capital Budget

\$15.7million



Ongoing capital (\$4.23 million)

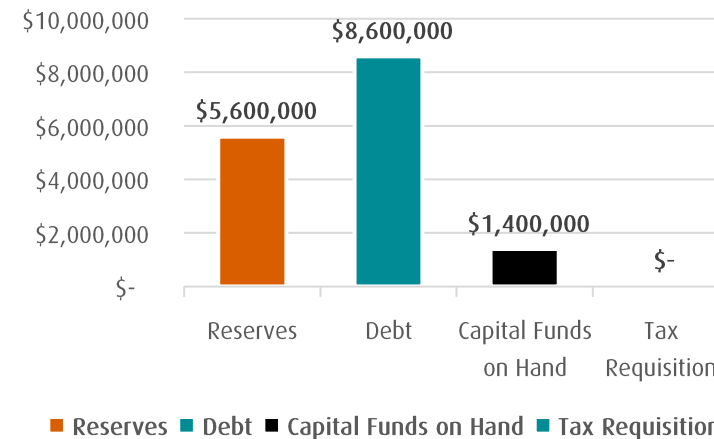
- Aggregate production, progressive closure, electrical, Operating Certificate

Preparing Cells 4, 5, 6 (\$9.7 million)

- Design / install new liner, truck wheel wash, relocate shop...

Renewable Natural Gas (\$1.83 million)

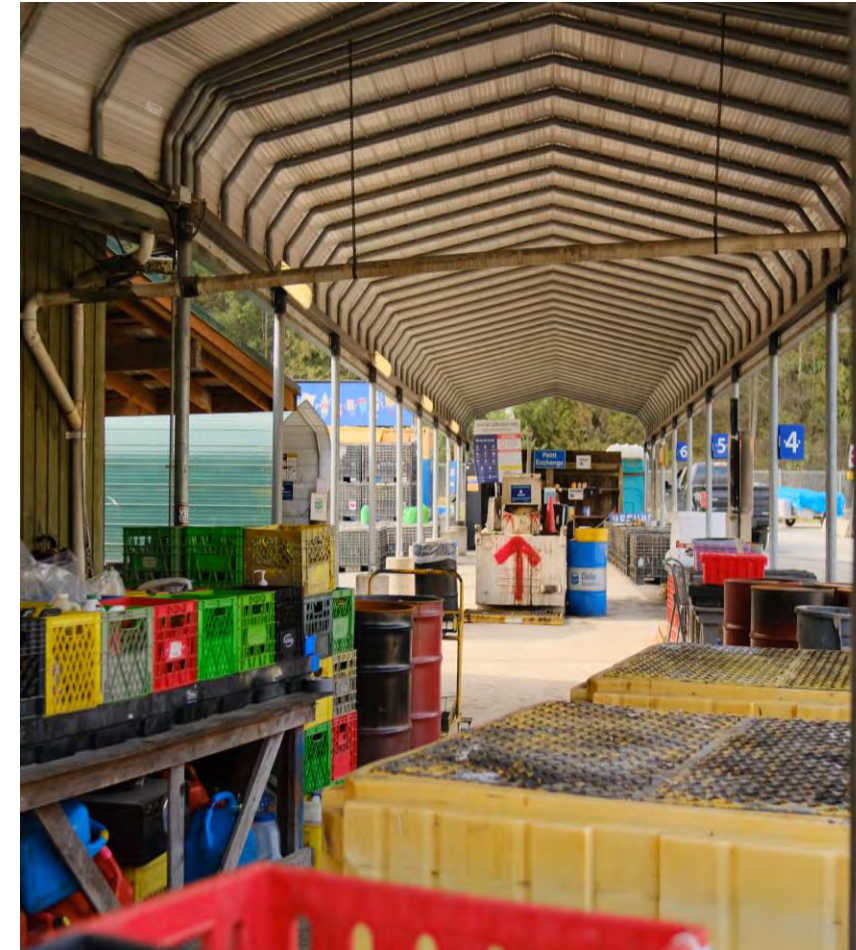
- Completion of Renewable Natural Gas capital project



2025 Environmental Resource Management Operating & Capital Budget Summary



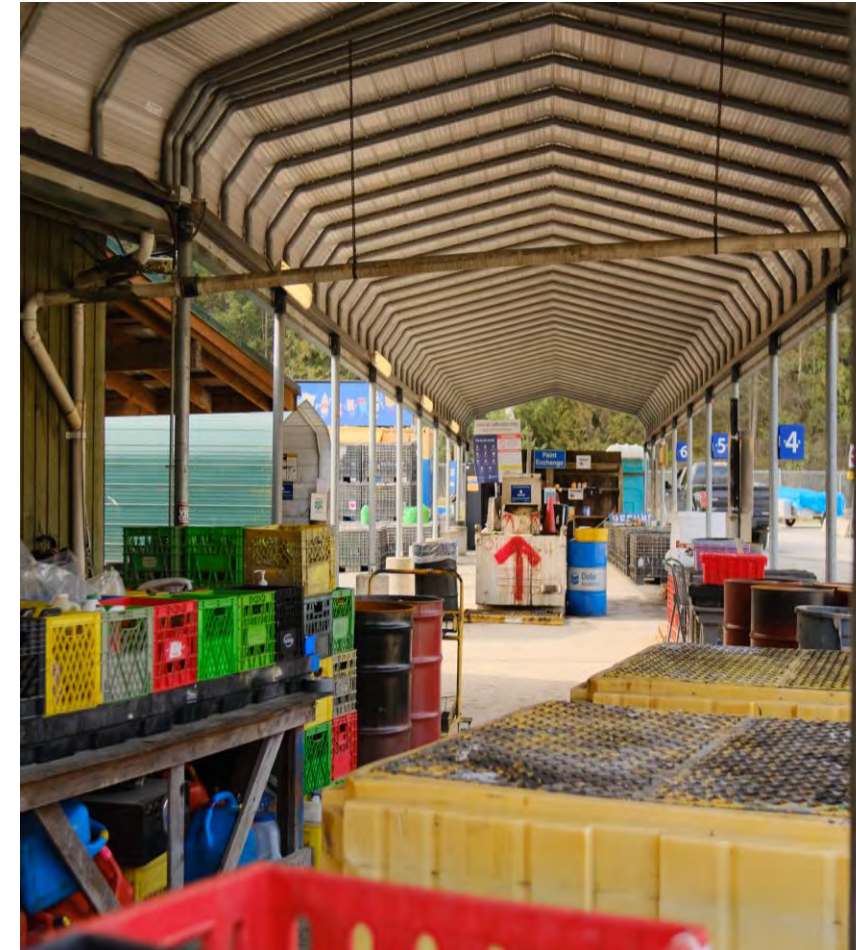
- 2024/25 Operating expenses +\$11.2 million
- 2024/25 ERM Revenues +\$15.5 million
- 2025 Capital Budget (\$15.7 million)
- 2025 Capital Funding with ERM Reserves and Debt
- No tax requisition required to fund ERM budget



2025 Environmental Resource Management Funding Summary – new FTEs



- 4.5 new FTEs funded by ERM (2025)
 - 1.0 Landfill Attendant (term to FTE)
 - 1.0 Landfill Maintenance Worker
 - 1.0 Solid Waste Analyst
 - 0.5 Bylaw Administration (Planning & Protective Services)
 - 1.0 Manager, Innovative Projects (new CRD work unit)





Thank you

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Capital Regional District



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