2023 SOLID WASTE SERVICES FINANCIAL AND ASSET MANAGEMENT PLAN

RECOMMENDATION

That the Board approve the Solid Waste Services Financial and Asset Management Plan, 2023-2047.

BACKGROUND

On March 26, 2019, the Board passed the following motion:

It was moved and seconded that when approval is received from the Ministry of Environment for the Solid Waste Management Plan, that staff prepare a financial plan to coincide with the Plan to reduce solid waste.

On March 3, 2020, the Regional District of Nanaimo (RDN) received approval of the Solid Waste Management Plan (SWMP) from the Minister of Environment and Climate Change Strategy, the Honourable George Heyman. Subsequently, on June 23, 2020, the Solid Waste Financial and Asset Management Plan, 2020-2042 (Attachment 1) was adopted by the Board, by consent.

The Solid Waste Financial and Asset Management Plan, 2020-2042 ('the 2020 Plan') was prepared as part of the development of the RDN's corporate Asset Management Planning process, and in response to the Board's direction for a long-term Solid Waste Services financial plan.

The 2020 Plan serves to ensure equitable funding of solid waste operations from tipping fee revenues and from an annual tax requisition prescribed in the approved Solid Waste Management Plan. This predictable tax requisition ensures an annual contribution to the department that funds waste diversion programs, ensuring the success of these programs continues despite declining revenues associated with greater waste diversion.

The 2020 Plan allows Solid Waste Services to plan capital purchases and projects, site maintenance and upgrades, as well as construction and closure projects in an equitable, efficient, and effective manner, supporting the social, economic, and environmental health of the region over the 23-year life of the 2020 Plan. Further, the 2020 Plan allows for accurate forecasting of when the landfill will close while providing for the provincially mandated post-closure funding of the facility.

Financing for the first 10 years of the 2020 Plan is based on services and costs presented to the public in the development of the SWMP. The remaining 13 years of the 2020 Plan forecasted a 2% increase in tipping fees annually, with taxation remaining relatively flat. Tipping fee revenues are directly impacted

by the amount of waste received at the landfill and, as diversion increases, tipping fee revenues are expected to fall. The 2020 Plan was based on achieving an 85% diversion, which, at the time, was considered to be the most likely outcome of existing and new diversion programs. However, recognizing the volatility of the waste and recycling market, the 2020 Plan also included revenue projections based on 80% and 90% diversion as a means to set confidence intervals.

The 2020 Plan was developed with the intent of accurately and fully funding all operational and capital costs over the 23-year life of the plan without the need for borrowing. Annual surpluses, generated from increased waste volumes, were accrued to offset future departmental costs. In doing so, costs were apportioned so that the beneficiaries of the services are also paying their appropriate share of the costs for the services they receive or have benefited from (e.g. current users should be paying their share for progressive landfill closure activities). Ensuring the accuracy of this "user pay" system is one of the guiding principles of the SWMP and consistent with general principles of government collecting revenues.

Regional Waste Analysis

The RDN, like many municipalities and regional districts across British Columbia, saw regional economic growth that can be directly attributed to the COVID-19 pandemic. As a result of population growth population, new construction starts and renovations, and consumer growth, waste volumes in the RDN have increased on average by 6%/yr. over the past 7 years (Figure 1).

Figure 1.

RDN Waste Volumes 2017-2023

	2017	2018	2019	2020	2021	2022	2023 Proj.
■ Tonnage	58414	61607	60689	61075	68923	79019	82000

Regional waste volumes are predicted to decrease in coming years as the strain from heightened inflation and interest rates begins to cool the economy. At this time staff predict that within 2 years waste volumes could decrease by 10-15,000 tonnes annually, with regional waste volumes being equal to approximately 65,000 tonnes annually by 2026. The 2020 Plan forecasted regional waste generation of 60,000 tonnes annually and subsequently decreased as the efficacy of the SWMP programs increased.

As a result of these higher waste volumes over the past two years, the lifespan of the Regional Landfill has been reduced by approximately 2.8 years. Along with short-term higher waste volume projections, this has resulted in the need to construct Phase 6, the final phase of the Regional Landfill, sooner than predicted, to ensure it is ready to receive waste when it is needed. As a direct result of the 2020 Plan, and the Board's direction to create operational and capital reserves that were flexible enough to tackle real-world scenarios, such as those seen during the COVID-19 pandemic, the construction of Phase 6, despite occurring nearly a decade earlier than predicted, is fully funded.

Recognizing the accuracy of the 2020 Plan will decrease as a result of these and other factors, staff began the work of reviewing and updating the 2020 Plan in early 2023.

Solid Waste Financial and Asset Management Plan, 2023-2047

The 2023 Solid Waste Financial and Asset Management Plan ('the 2023 Plan') (Attachment 2) continues to ensure the full funding of all operational and capital costs over the life of the plan, without the need to borrow funds and includes all the metrics and considerations found in the 2020 Plan in an updated format that is easier to interface with. The 2023 Plan also conforms to the RDN's Asset Management Plan framework.

Additionally, the 2023 Plan includes an increased ability to inform the data sets based on real-world factors such as inflation, waste volumes received, and the achieved landfill compaction rate. Waste shredding, currently in its third and final trial, shows the potential of increasing landfill compaction density by 30 -35%, which could increase the landfill's operational life significantly. The 2023 Plan goes into greater detail with respect to staffing levels, and capital projects, with the ability to model scenarios to better assess risk from internal and external factors, such as natural disasters.

The 2023 Plan forecasts achieving higher diversion later than initially anticipated, as the Ministry of Environment and Climate Change Strategy and Ministry of Municipal Affairs were delayed in approving the Mandatory Waste Source Separation and Waste Hauler Licensing Bylaws.

The 2023 Plan currently forecasts the closure of the Regional Landfill, at current compaction rates and with waste volumes relative to the current diversion percentage achieved (65-68%), as occurring in 2047. Higher waste diversion and a waste shredding operation will likely push the closure of the Regional Landfill out proportionally.

Summary:

The 2020 AMP has proven to be an accurate tool in the management of Solid Waste Services while ensuring the provision of service despite internal and external factors that are beyond the RDN's control. The updated Solid Waste Services Financial and Asset Management Plan, 2023-2047 builds on the success of the 2020 Plan, while adding functionality based on the lessons learned to ensure the continued fully funded pursuit of the RDN's zero waste goals.

FINANCIAL IMPLICATIONS

The 2023 Plan continues to be based on the foundation of seeking to fully fund all operational and capital costs over the life of the plan, without the need for borrowing. This includes the accrual of reserves to offset future departmental costs and corresponding to actual material volumes received relative to the regional population and diversion percentage achieved.

The Regional Landfill should continue to be viewed as a finite resource with a prescribed volume of airspace. It is the daily goal of Solid Waste staff to maximize airspace consumption by increasing compaction density and ensuring the diversion of all divertible materials. The 2023 Plan, like the 2020 Plan, allows for accurate valuing of this airspace when it is consumed, which in turn ensures accurate cost recovery and program funding. Tipping fees are calculated yearly to ensure enough revenue is generated to fund current and future operations, capital purchases, and projects while allowing for the funding of increased waste diversion.

The financial projections of the 2023 Plan are based on an adjusted SWMP implementation timeline, and waste diversion increases, for the first 10 years (2024-2033) and reasonable forecasts for the remaining life of the plan. Future projections, beyond 15 years, are subject to factors some of which are unknown at this time and will become accurate as real-world conditions as those time horizons are approached. As such, the 2023 AMP will be updated annually and monitored quarterly, to ensure accuracy and proactive decision-making in real-time, with regular updates to the Board.

STRATEGIC PLAN ALIGNMENT

Ensuring fiscal accuracy ensures the goals of the current SWMP, namely 90% diversion, are achievable, without negatively impacting the ability to operate RDN Solid Waste Facilities, thereby ensuring the provision of service in an equitable and efficient manner.

Environmental Stewardship - Achieve the 90% waste diversion target as per the Solid Waste Management Plan.

REVIEWED BY:

- P. Mahadeo, Asset Manager
- E. Tian, General Manager, Regional and Community Utilities
- T. Moore, Chief Financial Officer
- D. Holmes, Chief Administrative Officer

ATTACHMENTS

1. Solid Waste Financial and Asset Management Plan, 2020-2042
2. Solid Waste Financial and Asset Management Plan, 2023-2047