Sustainable Waste Strategy 2025-2035

Presented To:	City Council
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Type:	Presentations
Prepared by:	Renée Brownlee Environmental Services
Recommended by:	General Manager of Growth and Infrastructure

Report Summary

This presentation and report provide recommendations for a 10-year Solid Waste Management Master Plan for adoption by City Council.

Resolution

THAT the City of Greater Sudbury adopt the 2025-2035 Solid Waste Management Master Plan named the Sustainable Waste Strategy to guide the City's long term plan for waste service delivery and management from 2025 to 2035 as detailed in the consultant's report attached as Appendix 1 and as outlined in the report entitled "Sustainable Waste Strategy 2025-2035" from the General Manager of Growth and Infrastructure presented at the City Council meeting on October 22, 2024.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This presentation refers to Asset Management and Service Excellence as well as Climate Change goals as outlined in the 2019-2027 Strategic Plan.

This presentation supports progress towards Council's Community Energy & Emission Plan goal of achieving 90% solid waste diversion by 2050 and contributes to progressing the overall goal of net zero emissions.

Financial Implications

There are no financial implications associated with this report. If the Sustainable Waste Strategy is adopted by Council, Staff will present individual implementation plans and business cases for the recommended actions for Council's consideration as part of future budget development processes.

Background

Dillon Consulting has been retained for the purpose of updating the Solid Waste Management Master Plan which has been named the Sustainable Waste Strategy (SWS). The plan development was divided into four phases:

1) Assess the current state - completed
2) Envision the future state - completed
3) Determine how to move from the current to future state – Options, goals and performance measurement - completed
4) Development of a 10-year Solid Waste Management Master Plan – completion pending Council adoption of the plan

The plan recommended by Dillon Consulting is attached as Appendix 1 and supports the presentation delivered to Council. The report provides a consolidated summary of:

- the plan development, and internal and public consultation;
- the assessment of the City's current waste management systems and their achievements to date;
- 18 recommended actions that involve changes for the low and high density residential sector, the non-residential sector, municipal facilities, and public spaces as well as improvements to waste management systems and assets;
- the recommended implementation timeline and an estimate financial impact for each action; and
- the impacts and achievements that the plan will have in supporting the City's strategic plans and progressing Community Energy and Emissions Plan goals.

On September 9, 2024, the Operations Committee passed Resolution OP2024-21-A1 directing Staff as follows:

"THEREFORE IT BE RESOLVED that staff are directed to provide additional information in the presentation of the Master Plan to Council on October 22, 2024 regarding means to enforce additional diversion throughout the City of Greater Sudbury to address the lack of adequate and effective diversion within the sectors other than low density, including its own facilities.

AND IT BE FURTHER RESOLVED that the report includes enforcement recommendations on how non-residents of the City of Greater Sudbury can be prevented from using City landfills."

The plan responds to the above noted Resolution in section 2.1.1 of the Sustainable Waste Strategy attached to this report as Appendix 1.

Next Steps

To achieve the waste and emissions reduction targets, Staff recommend beginning the planning and implementation (if applicable) of the 2025 actions recommended in the SWS strategy timeline (Figure 1). The 2025 actions and the rational for planning and implementation in 2025 are listed below:

1) **Recovery of Waste Management Costs** - plan and implement – Approximate cost $47,000 one-time cost

   This recommended action could impact how services are delivered and how they are funded. Based on decisions made by Council when considering these options, there could be specifications that would be valuable to include at the time of bidding in the upcoming re-tendering of multi-year (7 to 10 years) landfill and waste collection contracts. Some waste services benefit the user more than the entire population. Should Council decide to recover costs for certain services though user fees rather than increasing the tax levy, these options could be included in future year budgets. This action may also impact the future development of the organics expansion plan to the high density residential and non-residential sectors.

2) **Clear bag program** (community wide) – plan and implement – Approximate cost $70,000 one-time cost

The clear bag program is an opportunity to encourage waste separation habits while the City operates a manual roadside collection program. The SWS suggests considering an automated cart collection system in the next waste collection tender. This tender expires in February 2028 (or 2029 if extended by one year) leaving a limited window of opportunity to shift habits should Council decide to implement an automated cart collection system. The clear bag program will educate low density residential households and households in multi -residential properties who have a roadside waste collection agreement on how to properly separate waste into garbage, recycling and organics streams prior to expanding organics to the non-residential sector where there is less accountability from the users of waste containers and contamination could discourage participation or put additional pressure on the City's processing system. For the high density residential and all non-residential sectors, the clear bag program encourages higher rates of Blue Box recycling diversion upon its immediate implementation and is intended to include organics once the program is expanded to these sectors. Of all the recommended actions in the SWS, the clear bag program is expected to provide the highest return in increased diversion, decreased waste and reduction of greenhouse gases.

3) **Bulk wase collection program review** – plan – Approximate cost $40,000 one-time cost

Council should decide how it would like to deliver bulk (i.e. furniture, appliances and electronics) collection in the future. Changing the collection approach or implementing user fees should be determined prior to issuing the next waste collection contract. The current waste collection contract expires in February 2028 (or 2029 if extended by one year). A new successful bidder should be chosen two years in prior to the new tender commencement date to leave bidders substantial time to procure the appropriate equipment and trucks. This means that the new tender needs to be released in 2026 (or 2027 if the existing contract is extended by one year). Therefore, specification to include in the collection contract need to be determined in 2025.

4) **Preferred collection system** – plan – Approximate cost $90,000 one-time cost

This action will provide options for roadside collection via automated cart collection, and partial or full user pay models. The current waste collection contract expires in February 2028 (or 2029 if extended by one year). A new successful bidder should be chosen two years in prior to the new tender commencement date to leave bidders substantial time to procure the appropriate equipment and trucks. This means that the new tender needs to be released in 2026 (or 2027 if the existing contract is extended by one year). Therefore, specification to include in the collection contract need to be determined in 2025.

5) **Conduct waste composition studies** – plan and implement – Approximate cost $50,000 on-going annual operational cost

The Blue Box program is set to transition in April 2025 and producers will take full responsibility for the program effective January 1, 2026. Waste audits for all sectors are recommended prior to full producer responsibility. This will gauge the effectiveness of the program because municipalities have a vested interest in ensuring that landfill space is not used up with waste that should be diverted. In addition, waste audits will provide a better understanding of the composition of waste in all sectors (low and high density residential, and non-residential). This will create a baseline upon which progress can be measured and improvements can be focused.

6) **Review leaf and yard collection program** – plan – Approximate cost $20,000 one-time cost

This action will review the unsustainable practice of collecting and composting grass clippings to reduce the amount of waste being handled. It will also provide options to consider adjusting leaf and yard collection service levels to match the seasonality of this waste type. Both considerations could impact the future waste collection contract. The current waste collection contract expires in February 2028 (or 2029 if extended by one year). A new successful bidder should be chosen two years in prior to the new

tender commencement date to leave bidders substantial time to procure the appropriate equipment and trucks. This means that the new tender needs to be released in 2026 (or 2027 if the existing contract is extended by one year). Therefore, specification to include in the collection contract need to be determined in 2025.

7) **Organic Waste processing capacity and funding** – plan – Approximate cost $85,000 one-time cost

This action is necessary to facilitate the future expansion of the organic diversion program to the high density residential and non-residential sectors. The current organics processing capacity is reserved primarily for the low density residential sector where there is already an approved service level for the collection and processing of organics. To determine any necessary investment to obtain additional processing capacity, a study must be undertaken to select the preferred organics processing method/system that could include aerobic systems, anerobic digestion, shipping to another processing facility or partnerships.

8) **Landfill compaction equipment** – plan – Approximate cost $100,000 one-time cost and $3,500 on-going annual operational cost

Waste compaction is an essential operating requirement in landfill management. Higher compaction rates equate to more waste filling per area. Landfill owners strive to reach the highest compaction rates possible to increase asset life. Technology now exists to monitor the landfill operator's compaction rates throughout each day. This information is invaluable for contract management and asset maintenance. It also allows the City to set the highest reasonable operating standards within its contract specifications. The landfill contract is expiring in May 2026 and the new contract specifications are currently being drafted. Moving forward with this recommended action will allow staff to include specifications in the contract terms.

Figure 1

Implementation Timeline of SWS Actions	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Reduce											
Create local circular economy opportunities		P	I	M							
Recycle											
Recovery of waste management costs	P&I	M			I	M					
Clear garbage bag program	P&I	M									
Enhance roadside collection		P	I	M							
Bulky waste collection program review	P	I	M								
Preferred future collection system	P	I	M								
Enhance diversion at municipal facilities		P&I	M								
Conduct waste composition studies	P&I	M									
Enhance customer service delivery through technology			P	I	M						
Create diversion tool kits for apartments, condos and the non-residential sector		P&I	M								
Recover											
Review leaf and yard trimming collection program	P	I	M								
Organic waste processing and funding	P		I	M							
Increase organics collection from non-residential sector				P		I	M				
Increase organics collection from apartment buildings				P		I	M				
Dispose											
Pilot separate dog waste collection				P	I	M					
Litter and illegal dumping strategy			P&I	M							
Landfill operations enhancements:											
Compaction equipment	P	I	M								
Scale software		P	I	M							
Traffic flow			P&I	I	M						
Reduce greenhouse gas emissions at landfills				P		I	M				

The 2025 actions set the stage for the remainder of the actions to take place and/or are prioritized over the lower impact actions. Moving forward from 2026 to 2034, Staff will continue the process of planning and implementation (if applicable) of the recommended actions in alignment with the timeline in Figure 1.

Conclusion

The Sustainable Waste Strategy as presented in Appendix 1 of this report is recommended by Staff for Council adoption. The Sustainable Waste Strategy provides fiscally responsible options to make progress towards City Councils goals and its strategic mission vision and values. Together its actions will increase waste diversion, reduces greenhouse gas emissions, aims to improve customer service, and delays the need to allocate significant financial resources to additional disposal capacity in the form of a new landfill or incineration.