Agenda – Council – December 12, 2019

Report – Standing Policy Committee on Water and Waste, Riverbank Management and the Environment – November 28, 2019

Item No. 3 Source Separated Organics Pilot Project – Residential Food Waste Collection

STANDING COMMITTEE RECOMMENDATION:

On December 3, 2019, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment and submitted the following to Council:

1. That the 2020 capital project, CIWMS – Source Separated Organics, Curbside Pilot, of $1,800,000 as outlined in the capital detail sheet included in Appendix A, to be funded by Waste Diversion Reserve – Account Distribution No. 445 181000 200753 2065000920, be approved.

2. Subject to the approval of Recommendation 1, that expenditures of up to $1,800,000 be authorized in 2019 or prior to the adoption of the 2020 Capital Budget, as a first charge against the Solid Waste Fund, in accordance with Subsection 288(2) of the City of Winnipeg Charter, in order to procure contracts for the pilot project.

3. That the Public Service implement a residential food waste collection pilot project and report back to Council with recommendations regarding a city-wide program by 2023.

4. That the Public Service report back to Council in 2020, prior to the start of the pilot project, with an update on the project implementation, including the selected collection routes, and public engagement strategy.

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

Report – Standing Policy Committee on Water and Waste, Riverbank Management and the Environment – November 28, 2019

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On December 3, 2019, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On November 28, 2019, the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

ADMINISTRATIVE REPORT

Title: SOURCE SEPARATED ORGANICS PILOT PROJECT (RESIDENTIAL FOOD WASTE COLLECTION)

Critical Path: Standing Policy Committee on Water and Waste, Riverbank Management and the Environment – Executive Policy Committee – Council

AUTHORIZATION

Author	Department Head	CFO	CAO
M. Gordichuk, CCLP, Manager, Solid Waste Services	M. L. Geer, CPA, CA Director, Water and Waste Department	P. Olafson, Interim CFO	D. Wardrop, Acting Interim CAO

EXECUTIVE SUMMARY

The public service is recommending that Council approve a two-year residential food waste (RFW) collection pilot project (2020-2022). The pilot project will collect food waste (e.g., fruit and vegetable scraps, meat, bones, etc.) from approximately 4,000 homes across five collection routes. The public service will report back to Council in 2023 with the results of the pilot project and recommendations for a potential city-wide residential organics collection program. The budget for the pilot project is $1.8 million and will be funded from the Waste Diversion Reserve. The diversion of organic waste is supported by Council's sustainability goals adopted through the Comprehensive Integrated Waste Management Strategy and Climate Action Plan.

RECOMMENDATIONS

1. That Council authorize the 2020 capital project, CIWMS – Source Separated Organics, Curbside Pilot, of $1,800,000 as outlined in the capital detail sheet included in Appendix A, to be funded by Waste Diversion Reserve – Account Distribution No. 445 181000 200753 2065000920.

2. Subject to the approval of Recommendation 1, that expenditures of up to $1,800,000 be authorized in 2019 or prior to the adoption of the 2020 Capital Budget, as a first charge against the Solid Waste Fund, in accordance with Subsection 288(2) of the City of Winnipeg Charter, in order to procure contracts for the pilot project.

3. That the Public Service implement a residential food waste collection pilot project and report back to Council with recommendations regarding a city-wide program by 2023.

4. That the Public Service report back to Council in 2020, prior to the start of the pilot project, with an update on the project implementation, including the selected collection routes, and public engagement strategy.

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

REASON FOR THE REPORT

On June 20, 2019, Council concurred in the recommendation of the Standing Policy Committee on Water and Waste, Riverbank Management and the Environment and adopted the following:

2) That the Public Service develop a source separated organics pilot program and report back to Council with recommendations for the pilot project

Council approval is required for a first charge for an expenditure of Capital funds prior to the adoption of the 2020 Capital Budget.

IMPLICATIONS OF THE RECOMMENDATIONS

Approximately 4,000 homes will receive weekly collection of food waste in a separate cart for a period of 24 months. The food waste will be composted at the existing composting facility at the Brady Road Resource Management Facility (BRRMF). A Notice of Alteration was submitted to Manitoba Sustainable Development on August 16, 2019.

Funds in the amount of $1,800,000 are included in 2020 Capital Budget submission for the CIWMS – Source Separated Organics Capital Account – Solid Waste, Account Distribution No. 445 181000 200753 2065000920.

HISTORY/DISCUSSION

On October 19, 2011, Council approved the Comprehensive Integrated Waste Management Strategy (CIWMS) which included a waste diversion rate target of 50%. CIWMS was developed through an extensive public engagement process where more than 2,500 people participated over a six-month period. On March 22, 2017, Council directed the Public Service to undertake a review of CIWMS which included additional opportunities to improve the city's waste diversion performance and a source separated organics collection pilot project (to be referred to as Residential Food Waste Collection (RFW) pilot). The review of CIWMS was received by Council on June 20, 2019 and the Public Service was directed to report back to Council with a plan for a RFW collection pilot. In addition to CIWMS, the importance of diverting organic waste to meet Winnipeg's sustainability goals was further affirmed with Council's adoption of Winnipeg's Climate Action Plan in 2018.

The review of CIWMS was completed in 2019 and identified that the waste diversion rate target of 50% could not be achieved without a RFW collection program and other investments in Winnipeg's waste management system. The 50% waste diversion target was deferred by Council on June 20, 2019 until recommendations could be brought forward through the completion of a RFW collection pilot project and a ten-year financial plan for the solid waste utility.

The RFW collection pilot project will help to determine residents' support for a city-wide program. The pilot will also gather the data necessary to successfully define a Winnipeg program and implement it city-wide should Council direct the Public Service to do so.

The potential cost of a city-wide RFW program, estimated in 2018 dollars, includes $17 million for implementation (supply and delivery of carts, kitchen catchers, communication materials, etc.), $25 to $58 million (+/- 35%) for a composting facility, and annual operating of $4.6 million for collection from single-family homes and $5 million for operation of the composting facility. These costs were noted at the Council meeting on June 20, 2019, in the Comprehensive Integrated Waste Management Strategy Five-Year Review report, Appendix B, pages 12 and 13. The cost estimates provided are based on the implementation costs for another Canadian municipality and general industry costs for similar composting facilities. The total capital investment could be in the range of $42 to 75 million (in 2018 dollars), and is generally consistent with an AACE Class 5 estimate. The Class 5 estimate is representative of projects that are at the conceptual stage and is not sufficient for budget authorization purposes. The annual operating costs would be in the order of $10 million per year.

Should Council approve the RFW collection pilot, funds will be requested in the 2021 Capital Budget to validate the business case and develop a Class 3 estimate for a large scale composting facility. Data from the pilot will help, in part, to determine the type and scope of the composting facility needed. The cost for collection will be refined based on data collected during the pilot, including identifying opportunities to reduce collection costs by co-collecting material in the same vehicle or reducing the level of service for garbage collection. The availability of funding from other levels of government to support the construction of the composting facility and overall program would be thoroughly explored.

Results of the pilot project, business case for the composting facility, and recommendations regarding a potential city-wide RFW collection program, including a user fee structure to fund the program, will be presented to Council in 2023.

RFW Collection Pilot Project Details:

- Project planning and procurement: 9 months (January 2020 – September 2020)
- Public engagement and data collection: approximately 24 months (Q3 2020 – Q3 2022)
- Duration of collection: approximately 24 months (October 2020 – September 2022)
- Number of households: approximately 4,000 households across five routes
- Collection frequency: Weekly, same day as garbage and recycling
- Containers: Automated cart (approximately half the size of standard garbage and recycling carts)
- Collection method: automated or semi-automated collection

Project Delivery

The majority of the pilot activities will be procured by a consultant through a request for proposal, including route selection, data collection and ongoing pilot evaluation, assistance with public engagement, as well as, education/communication and support for participating residents. Curbside collection of RFW will be negotiated with the current collection contractors (GFL Environmental Inc. and Miller Waste System Inc.) as the existing contract (RFP No. 302-2016) has a provision to support the RFW collection pilot project. The supply of collection containers and other supporting material would be procured through a separate tendering process.

Route Selection
Five pilot routes will be selected to represent a broad range of Winnipeg households. Selection criteria will consider a variety of demographic and geographic measures such as: collection day, front street/back alley collection, age of neighbourhood, household income, and household size.

Collection
Participating residents will receive a curbside cart, a kitchen container, and educational material delivered to their homes. Collection of residential food waste will take place on the same day as residents' regular garbage and recycling collection. Each of the five routes will be collected on a different day of the week (Monday to Friday). No initial changes to garbage collection will be made in order to track the effect of RFW collection on the garbage stream. The potential to test changes to garbage collection will be evaluated based on the information received during the pilot.

Composting
Material collected from the pilot will be processed at the BRRMF composting facility. The acceptance of residential food waste (including bones) requires approval of a Notice of Alteration to the Environment Act Licence for the BRRMF. It is anticipated that the relatively small amount of RFW collected during the pilot can be managed at the existing composting facility.

Public Engagement, Communication, Education, and Data Gathering
The Department is working with Corporate Communications and specifically with the Office of Public Engagement.

The public engagement during the pilot will be used to inform recommendations towards a city-wide program. Opportunities for engagement include:

- understanding support, satisfaction, and participation for a potential city-wide program;
- studying the effectiveness of collection containers, kitchen pails/liners, promotion and education material, and other supports; and
- identifying other barriers and challenges.

Communication, Education, and Data Gathering activities may include:

- printed education material and collection calendars;
- measuring the composition and amount of garbage and recycling set out for collection;
- surveys; and
- customer support resources for residents with questions.

Budget
The cost of the pilot is estimated at $1.8 million and it will be funded from the Waste Diversion Reserve. The Waste Diversion Reserve was established by Council in 2011 as part of CIWMS and its purpose is to fund waste diversion programs. Residents in the pilot areas will receive the RFW collection service at no charge for the length of the pilot. The recommendations to Council for a city-wide program will include recommendations for a user fee to fund the program. RFW collection service will cease at the end of the pilot project.

The budget for the pilot includes the cost of purchasing organic collection carts and kitchen pails, weekly collection service, composting operations, public engagement, data gathering, education/communication material, and customer service support for participants.

The total project budget of $1.8 million includes all components of the two-year pilot project. The CIWMS Five-Year Review identified a project budget of $1.1 million for contracted services, but did not include the cost of consultant services to deliver public engagement, data collection, communication/education and resident support, annual inflation, and a project contingency.

Next Steps

The Public Service will report back to Council with an update on the pilot project design once the pilot parameters are in place.

FINANCIAL IMPACT

Financial Impact Statement

Date: November 5, 2019

Project Name: **First Year of Program** **2020**

SOURCE SEPARATED ORGANICS PILOT PROJECT (RESIDENTIAL FOOD WASTE COLLECTION)

	2020	2021	2022	2023	2024
Capital					
Capital Expenditures Required	$ 660,000	$ 650,000	$ 490,000	$ -	$ -
Less: Existing Budgeted Costs	660,000	650,000	490,000	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments: Funds for this project are included in the 2020 CIWMS – Source Separated Organics Capital Account - Solid Waste, Account Distribution No. 445 181000 200753 2065000920. This project is financed by the Waste Diversion Reserve.

"Original signed by L. Szkwarek, CPA, CGA"

Lucy Szkwarek, CPA, CGA
Manager of Finance and Administration

CONSULTATION

This Report has been prepared in consultation with:

N/A

OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg policies through

OurWinnipeg Reference: 02-2 Environment

WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This pilot would align with the Strategic Opportunity #6 Waste Reduction and Diversion found on page 50 of the Climate Action Plan approved by Council on September 20, 2018.

Key Direction and Actions 6.1 Reduce Consumption and Increase Waste Diversion from Residential, Commercial and Industry:

- Implement direction from the Comprehensive Integrated Waste Management Strategy to advance the priority of organic material diversion from the landfill. (Short Term 2018-2022)
- Continue to invest in educational and awareness programming to help maximize waste diversion (i.e. recycling and organics). (Short Term 2018-2022)
- Advance strategies and pilot projects to diver and utilize biomass resources for energy production. (Medium Term 2022-2026)
- Explore feasibility of rationalizing waste management facilities and services with regional partners to better manage waste, reduce emissions and increase diversion. (Medium Term 2022-2026)

SUBMITTED BY

Department: Water and Waste Department
Division: Solid Waste Services Division
Prepared by: Justin Lee, MCIP, RPP; Ash Raichura, P. Eng.
Date: November 5, 2019
File No.: G-261

Attachments

Appendix A – Capital Budget Detail Sheet

Appendix A – Capital Budget Detail Sheet

Water and Waste - Solid Waste Disposal Fund

Project Name:	**Source Separated Organics**		
Standing Policy	Water and Waste, Riverbank Management and the Environment		
Dept ID:	200753	Investment Driver:	Enhance
Department:	Water and Waste	Service:	Recycling and Waste Diversion
Project:	2065000920	**OurWinnipeg:**	Environment

AUTHORIZATION	Previous Budgets	2020 Estimate	FORECAST 2021	2022	2023	2024	2025	Five-Year Forecast Total	Six-Year Total
Project Costs ($000's)	-	1,800	-	-	-	-	-	-	1,800
Financed by:									
Waste Diversion Reserve									
Waste Diversion Reserve		1,800						-	1,800

CASH FLOW	2020	2021	2022	2023	2024	2025	Beyond 2025	Total
Project Costs ($000's)	1,800	-	-	-	-	-	-	1,800
Financed by:								
Waste Diversion Reserve								
Waste Diversion Reserve	1,800							1,800

NET OPERATING IMPACT ($000's)	2020	2021	2022	2023	2024	2025
Operating costs						
Debt and finance charges						
Transfer to General Capital Fund						
Total Direct Costs	-	-	-	-	-	-
Less: Incremental Revenue/Recovery						
Net Cost/(Benefit)	-	-	-	-	-	-

Incremental Full Time Equivalent Positions	-	-	-	-	-	-

Class Estimate: 5

A Source Separated Organics (SSO) pilot project will be initiated in some Winnipeg neighbourhoods. The purpose of the pilot is to gauge homeowner interest and participation in a program that diverts and collects organic waste separately from the traditional waste stream. Information obtained from this project will determine the feasibility of, and develop a business case for, the implementation of a full city-wide program.

A report requesting a first charge of up to $1,800,000 in 2019, or prior to the adoption of the 2020 Capital Budget, for Source Separated Organics contract procurement for a curbside pilot project will be submitted to Council in October 2019.

A class 3 estimate will be developed prior to pilot project implementation.