Council Direction:

The Board of Health at its meeting on January 12, 2015 directed staff to provide information on the following:

That the Interdepartmental Food Strategy Steering Team, in conjunction with community partners, explore what actions the City of Hamilton and other stakeholders can take to reduce food waste such as addressing food literacy and lobbying for changes to provincial and federal legislation; with a report back to the Board of Health.” Outstanding Business List (Item C).
The Board of Health at its meeting on June 19, 2017 approved the following:

(a) That a copy of Millgrove Public School’s presentation and business plan respecting a Food Recovery Program from Store and Farmers for the Benefit of the Food Bank be forwarded to Public Health staff for consideration and possible inclusion in their Food Strategy Priority Actions report coming to the December 4, 2017 meeting of the Board of Health, and;

(b) That staff be directed to report to Jennifer Kershaw, Millgrove Public School, with the outcomes of that Food Strategy report. Outstanding Business List (Item CC).

The purpose of this report is to address the questions raised by the Board of Health concerning food waste, and to outline potential methods for food waste reduction in the City of Hamilton. This report fulfils both of the Board of Health’s requests. Outstanding Business List (Item C) and Outstanding Business List (Item CC) can be removed.

**Information:**

**Executive Summary**

Hamilton City Council and staff recognize the importance of food waste reduction to help improve environmental and social factors within Hamilton’s communities. The “Hamilton Food Strategy: A Healthy, Sustainable, and Just Food System for All” includes fourteen recommendations and associated actions, with two recommendations and actions specifically related to food waste management. First, foster innovation to reduce food waste through diversion and composting. And secondly, promote a culture that values healthy, local food to reduce food waste through food literacy. Public Health Services and Public Works are working together to develop a Hamilton Food Waste Reduction Action Plan (Appendix A) that includes diversion and composting, public education and promotion related to food literacy and the green cart program. The plan also includes development and identification of best practice and methods to reduce food waste within City facilities. Staff will report back to the Board of Health in Quarter 2 of 2019.

**Reduce Food Waste through Food Literacy**

An interdepartmental staff team including representatives from Public Health Services and Public Works is reviewing best practices to reduce food waste through increased food literacy. Food literacy education may include tips for storing food properly to preserve freshness, understanding “best before” dates (as suggested by the Millgrove School students), using leftovers, and planned shopping e.g., plan meals, use a list, purchase appropriate amount, etc.
Staff has initiated the development of a Food Waste Reduction Action Plan which will align with the Food Strategy Recommendations and consider the following items:

- Continued support for the City’s green cart program to reduce organic waste sent to landfill. This is currently promoted through the “Green Your Routine” public education campaign;
- Participation on inter-municipal stakeholder groups such as the Ontario Food Collaborative and the Municipal Waste Association’s food waste reduction working group to assist the City to expand knowledge and develop best practices for food waste reduction;
- Identifying methods to reduce edible food from being wasted within the City’s municipal facilities and encouraging participation in the green cart program; and,
- Public education campaign on methods to reduce food waste. This includes development of communication materials for the City’s website, social media, and other community events.

Additional information on the proposed items for the Food Waste Reduction Action Plan is included in Appendix A. Hamilton’s proposed Action Plan will consider studies, policies and regulations being reviewed at the Provincial and Federal level. The development of the Action Plan is supported by staff within the Public Health Department and the Public Works Department. The main activities to support the Food Waste Reduction Action Plan were reviewed by the Interdepartmental Food Strategy Steering Team, Council’s Waste Management Advisory Committee, and the Food Advisory Committee.

Background

There is growing global awareness regarding food loss and food waste and the negative economic and environmental consequences of these losses. The Food and Agriculture Organization (FAO) of the United Nations estimate that at least one-third of all food produced is lost or wasted each year. In Canada, approximately $31 billion or 40% of food produced per year is wasted according to Value Chain Management International¹. Food production requires significant environmental, economic and human resources for growing, processing, transporting and distributing food to consumers. On a global perspective, food loss and waste is a huge resource burden which impacts agricultural land, water consumption, energy requirements, and contributes to greenhouse gasses causing climate change. Food losses generally occur during harvesting, processing, and transport of food to consumers. Food waste refers to food fit for consumption that is discarded by consumers such as spoilage and plate waste. In Canada, food loss and waste occurs within all sectors including on farms, processing, retail, and consumers as indicated in Figure 1².
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Food Waste in Canada

Local governments historically have been responsible for managing waste. Policy initiatives to reduce food waste will require support from all levels of government as well as involvement from all sectors including food producers, retailers and consumers. Some notable actions to address food waste that are occurring internationally, nationally, and locally are identified below:

- **International Actions** - In 2012, the European Parliament passed a resolution to reduce food waste by 50% in the European Union by 2025. In 2015, world leaders at the United Nations General Assembly agreed that as part of Global Sustainable Development Goal (SGDs), there must be a 50% reduction of food waste at the retail and consumer level, as well as a reduction of food losses along production and supply chains by 2030. The United States of America federal government also declared a goal of 50% food waste reduction by 2030.

- **National Actions** - Canada’s National Zero Waste Council is a cross-sector leadership initiative which operates in collaboration with the Federation of Canadian Municipalities to promote waste reduction and emerging circular economies that foster environmental sustainability. The National Zero Waste Council has developed a national, multi-year food waste reduction strategy with the objective of dramatically reducing the amount of food waste disposed in landfills while providing benefits for the Canadian economy, the environment, and communities across Canada.

- **Provincial Actions** – On November 16, 2017, the Ontario Government issued the proposed Food and Organic Waste Framework (“Framework”) for public input on the development of the Province’s plan to reduce the amount of food and organic waste being disposed in Ontario. The Framework includes two main components: (1) the Food and Organic Waste Action Plan which includes actions to be taken by the Province; and (2) a policy statement under the Resource Recovery and Circular
Economy Act which provides direction to the Province, municipalities, industries, commercial properties and institutional sectors concerning food and organic waste. The proposed Framework includes a broad range of actions including developing promotional tools to encourage food waste prevention, supporting academic research, expansion of food and organic waste recovery programs, and addressing the requirements to increase organic waste processing capacity in Ontario. Additional information on the Framework was provided to City Council through Information Update ES18001 (dated January 5, 2018).

- Ontario Municipal Actions – Several Ontario municipalities including Region of Peel and York Region have developed public education campaigns that focus on reducing household food waste by changing consumer food related behaviours through food literacy.

In 2014, the Ontario Food Collaborative (OFC) was established which includes representation from municipalities, the Ontario Government, post-secondary institutions, and non-governmental food networks. The OFC’s mission is to use a food systems approach to reduce consumer food waste while promoting healthy eating attitudes and behaviours. City of Hamilton staff recently joined the OFC as part of the development of the City’s food waste reduction action plan.

Food Waste in Hamilton Households

The quantity and cost of “avoidable” food waste being disposed by Hamilton households is substantial when examining data from residential waste audits and food cost surveys. The City conducts waste audits to analyse the type and quantity of waste materials being disposed through the City’s waste collection programs. Recent waste audits have examined the quantity of “avoidable” food waste being disposed by Hamilton’s households. Avoidable food waste includes whole food, leftover food, or food which may have been allowed to spoil. Residential waste audits completed in 2016 and 2017 indicate that on average, single-family homes dispose of approximately 1.8 kilograms of avoidable food waste per week. On average, households are losing approximately $720 per year based on the 2017 food prices\(^3\) from Statistics Canada surveys and the quantity of avoidable food waste being disposed as reported through the City’s waste audits. The estimated value of avoidable food waste from households across the City is more than $150 Million per year. This does not include the costs associated with avoidable food waste generated by other sectors such as grocery stores, businesses, restaurants, and institutions. Information on the amount of food waste and the associated cost from the commercial and institutional sectors in Hamilton is not available since most of these properties have private waste collection services.
Hamilton’s Food Waste Reduction Action Plan

Hamilton City Council and staff recognize the importance of reducing food waste to improve economic, environmental and social factors within Hamilton’s communities. The "Hamilton Food Strategy: A Healthy, Sustainable, and Just Food System for All" provides direction to guide decision making about food related issues for the City and community. The Food Strategy has fourteen recommendations, including two recommendations and associated actions to address food waste management:

Recommendation #13 – Foster innovation to reduce food waste through diversion and composting.
13.1 - Expand programs to increase the use of composting in all settings.
13.2 - Explore the feasibility of food recovery programs to divert edible food from being wasted.
13.3 - Investigate the feasibility of innovative ways to deal with food waste to ensure our environment is sustainable.

Recommendation #14 – Promote a culture that values healthy, local food to reduce food waste through food literacy.
14.1 - Enhance marketing and education programs to reduce food waste at home, work, school, and other public facilities.

Reduce Food Waste through Diversion and Composting

Food recovery initiatives are one way to prevent surplus edible food from being wasted. Some food recovery methods include donations of surplus food from farmers, grocery stores, and food processors for use by not-for-profit organizations or other groups. Successful food recovery initiatives must ensure that surplus food is desired and able to be used by the receiving organization, and that the food products are safe for human or animal consumption. Food safety can be jeopardized if the donated food is improperly stored or handled, for example, food must be maintained at the appropriate temperature when being transported from the donor to the final destination. While there are liability risks with food donation, donor protection is typically cited through the Ontario Donation of Food Act, 1994. In some cases, food donation may support community food programming, for example social enterprises to repurpose donated foods; however, food donation is not a solution to household food insecurity which evidence overwhelming indicates requires an income, and not a food, solution.

Policies concerning food recovery initiatives require further development across Canada. As part of the National Food Waste Reduction Strategy, the Zero Waste Council indicates that collaboration with health authorities is necessary to create provincial guidelines to govern food safety and food donor protection. As part of the
Ontario Government’s draft Framework, the Province is proposing to develop guidelines to promote the safe donation of surplus food. In addition to this, the Ontario Government has also identified the need to address the key issues causing personal and household food insecurity. As stated in the draft Framework, the Province is developing a food security strategy with the goal that “every person has dignified access to high-quality, safe, nutritious and culturally appropriate food, to support them in leading healthy and active lives.”⁴ As well, the Province has committed funding to support the development of an app that aims to connect businesses with excess food to other agencies are able to use the food in existing food programs.

At the Board of Health’s meeting on June 19, 2017, Millgrove Public School presented their proposal for a “Food Recovery Program from Store and Farmers for the Benefit of the Food Bank”. Students proposed that diverting perishable foods just past their ‘sell by/best before’ dates from retail grocery stores to local food banks should be considered as one possible action to reduce food waste. Although most perishable foods remain safe to eat for a period of time after their sell by/best before dates (depending on the type of food and how it is stored), an alternative approach for grocers or alternative retailers to consider is to offer perishable foods near to sell by dates (eg 1-2 days away) at reduced prices available to all. Food donation guidelines from BC Centre for Disease Control and Food Banks Canada indicate that “Food Distribution Organizations (FDOs) may receive food past the best before date (BBD) if the product has been frozen prior to the BBD and the FDO is assured the donor used proper conditions to maintain and assure product safety.”⁵

Hamilton, like other jurisdictions, has existing food recovery programs that enable food processors and retailers to distribute excess perishable foods to non-profit agencies for further processing or distribution as long as appropriate food safety requirements are met. In 2017, the Hamilton Emergency Food Network and Hamilton Food Share collected and distributed 3.3 million pounds/1.5 million kg of food from various sources including grocery stores. The Emergency Food Network has indicated that in the future, the Network and Hamilton Food Share will develop a data collection tool to enable them to track and report monthly on food recovery initiatives.

Public Health Services’ staff have been in contact with the students from Millgrove Public School. We have reported back to the teacher (who has moved to another school) and the Millgrove students and parent including the information regarding Hamilton Food Share and Emergency Food Network’s existing food recovery. Staff also highlighted the recommendations and actions pertaining to food waste above that are in the Hamilton Food Strategy. Each of the above were informed of the date that this report was scheduled for the Board of Health and staff will attend the school to meet with students in person in March.
Appendices/Schedules Attached

Appendix A to Report BOH13001(h) – Hamilton Food Waste Reduction Action Plan

References

2 The Cost of Canada’s Annual Food Waste. VCM International, 2014
3 Statistics Canada Food and other selected item, average retail price, 2017 (only food prices were included in the calculation) http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/econ155a-eng.htm, accessed Oct 24 2017
4 Proposed Food and Organic Waste Framework, Ontario Ministry of the Environment and Climate Change, November 2017
5 Providing Nutritious and Safe Food: Guidelines for Food Distribution Organizations with Grocery or Meal Programs, BC Centre for Disease Control, 2016