

Environmental Health Business Line

The Environmental Health Business Line is a collection of various environmental related services including Sustainability, Urban Biological Services, Urban Forestry, Waste Handling Service and Waste Reduction.

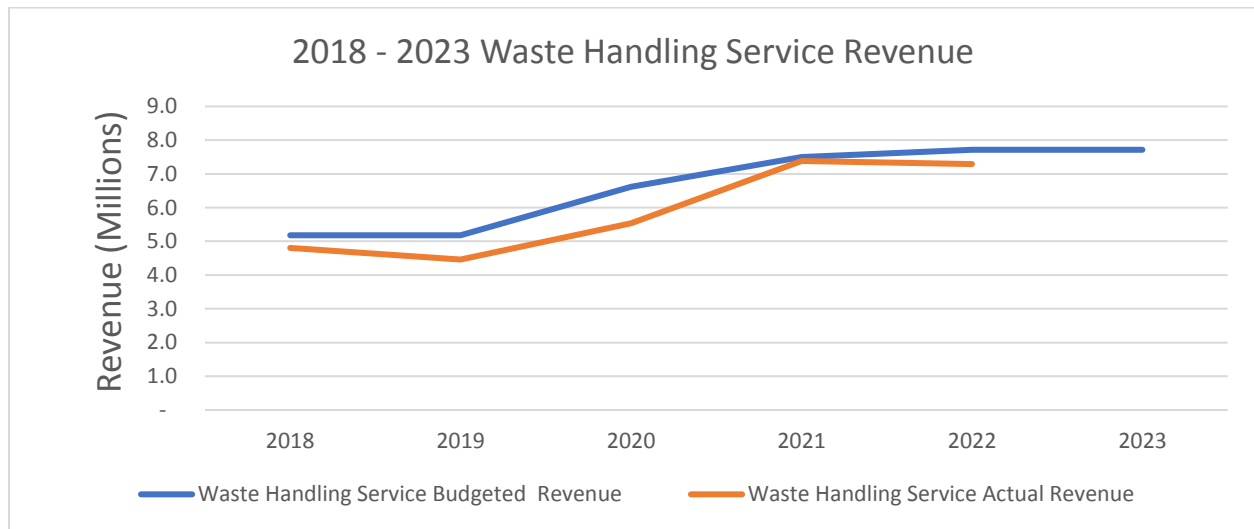
The 2023 Budget for the Environmental Health Business Line included \$25.61 million in expenditures and \$7.78 million in operating revenues. The remaining costs of \$17.83 million are funded by property taxes.

Revenue Overview

In 2023, the Environmental Health Business Line was budgeted to generate \$7.78 million in operating revenue; \$7.71 million comes from the Waste Handling Service line, which is approximately 99% of all operating revenue in this Business Line. A full breakdown of operating revenue can be seen below.

Service Line	2023 Operating Revenue (in millions)	% of Overall Operating Revenue
Urban Biological Services	\$0.00	0.03%
Waste Handling Service	\$7.71	99.07%
Waste Reduction	\$0.07	0.90%
Environmental Health Business Line	\$7.78	100.00%

Revenues consist of landfill fees, commercial garbage collection and compost sales. Although 2020 saw the greatest variance between actual to budget, this service line has remained stable with slight increases to both budget and actuals over the past five years.



2020 showed an unfavorable variance from budget in landfill revenues specifically which was due to decreased activity because of pandemic closures as well as ongoing

structural budget issues. Garbage collection revenues were also under budget as a result of customers shifting to private industry and decreased demand for services due to pandemic closures. The variance in 2021 was close to budgeted levels and 2022 saw a small negative variance as the Landfill's tonnages slightly decreased from expected levels.

Expenditure Overview

The two service lines with the largest expenditures are Waste Handling Services (\$16.83 million) and Urban Forestry (\$4.30 million), which make up 82.5% of all expenditures within this Business Line. An overview of all the service lines 2023 operating expenditures can be seen below:

Service Line	2023 Operating Expenditures (in millions)	% of Overall Operating Expenditures
Sustainability	\$2.43	9.49%
Urban Biological Services	\$1.11	4.33%
Urban Forestry	\$4.30	16.79%
Waste Handling Service	\$16.83	65.72%
Waste Reduction	\$0.94	3.67%
Environmental Health Business Line	\$25.61	100.00%

Another way to look at this information is by Budget Category. As seen below, 84% of expenditures in the Environmental Health Business Line are for Contracted and General Services (45%) and Wages and Benefits (39%).

Budget Category	2023 Budget (in millions)	% of Overall Expenses
Wages & Benefits	\$10.11	39.48%
Contracted & General Services	\$11.41	44.55%
Utilities	\$0.19	0.74%
Donations, Grants, Subsidies	\$0.23	0.90%
Materials Goods & Supplies	\$1.18	4.60%
Finance Charges	\$0.63	2.46%
Transfers to Reserve/Capital	\$4.23	16.52%
Transfers to Other Operating	(\$1.42)	-5.54%
Cost Recoveries	(\$0.95)	-3.71%
Environmental Health Business Line	\$25.61	100.00%

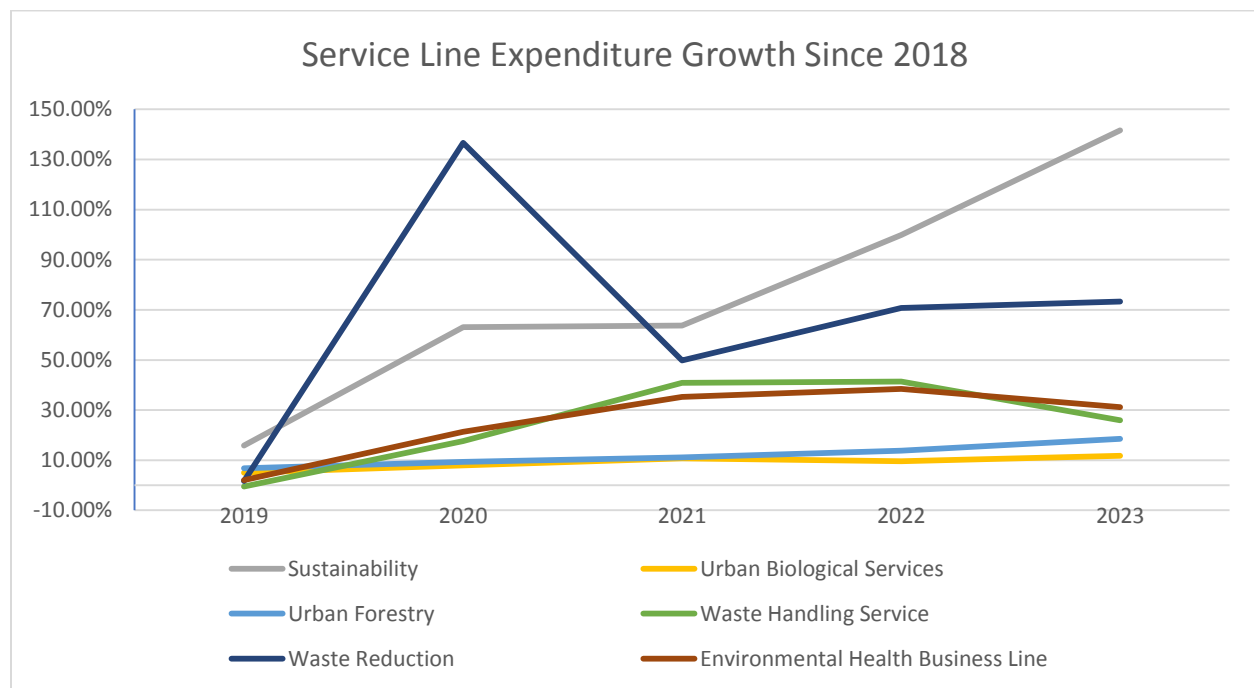
Of the Budget Category breakdown for this Business Line presented above, Waste Handling Service Line incurs the most expenditures:

- 50% of all wages and benefits for the Environmental Health Business Line relate to Waste Handling Service. In 2023, there are a total of 113.01 FTEs approved within this business line and include 12.20 FTEs in Sustainability, 11.96 FTEs in

Urban Biological Services, 26.65 FTEs in Urban Forestry, 56.50 FTEs in Waste Handling Service and 5.70 FTEs in Waste Reduction.

- 64% of all Contracted and General Services for the Environmental Health Business Line are for Waste Handling Service which includes vehicle and equipment rentals and tipping fees.
- 85% of the transfers to Reserve and Capital relate to Waste Handling Service which include annual transfers to the Landfill Replacement Reserve and Garbage Container Replacement Reserve.

The expenditures in the Environmental Health Business Line have grown by 31.14% over the past five years for an average of 6.23% per year. For context, Saskatoon's population growth ([Per Stats Canada Table 17-10-0142-01](#)) plus Consumer Price Index Inflation ([Per Stats Canada Table 18-10-0005-01](#)) over this same period was 26.69% or 5.34% per year. A graphical overview of each service lines expenditure growth can be seen below:



The service lines that have seen the largest expenditure growth over the past five years (greater than 20%) include:

- 141.63% increase overall from 2018 in Sustainability expenditures, increasing from a \$1.01M budget in 2018 to \$2.43M in 2023.
 - This Service Line has seen its expenditures steadily increasing over the last five years with average annual growth of 31.45%. The largest dollar increases of \$0.48M occurred in 2020. This increase is due to interest and principal repayments on an internal loan withdrawn to fund the Energy Performance capital work, with repayments based on utility savings. The increase in the budget within this service line is offset by reductions to utility budgets in other service lines, thereby resulting in no mill rate impact.

Additional funding to establish the Sustainability Reserve and contract costs for programs such as Household Hazardous Waste also contribute to recent increases in this service line.

- Other items contributing to this overall five-year increase occurred in 2023 when expenses increased by \$0.42M. This was due to funding allocated to the Climate Adaptation program and the Green Infrastructure program, as well for further increased contract costs associated to an increased service level for Household Hazardous Waste.
- 73.25% increase overall from 2018 in Waste Reduction, increasing from a \$0.54M budget in 2018 to \$0.94M in 2023.
 - Although the Waste Reduction service line experienced minimal increases in expenditures from 2018 – 2019, it saw a one-time increase of \$0.74M (137%) in 2020. This was largely due to the Compost depot program being transferred from the Waste Services Utility Services Line.
 - 2021 saw a decrease in budgeted expenses of \$0.47M (37%). Most of the reduction was due to a change in the Multi-Material Stewardship Western (MMSW) funding structure.

Service Level Overview

Service levels are a key driver for the City’s expenditure requirements. The following section provides an overview of key service levels for each. Of note some of the biggest service levels that are driving costs within the City’s Environmental Health Business Line are Landfill Operations and Garbage Collections.

Sustainability		
Service	Sub-Service	2023 Service Level
Student Action for a Sustainable Future	Participating classes and teachers receive in-class audits, teaching sustainability and climate science lessons, PD events and individual support for teachers, and an annual Student Showcase event to support their environmental action projects.	12 classes per year
Healthy Yards and Compost Coaches	In-person education (events, classes, workshops) on composting, water conservation, pesticide-free, and other environmentally friendly yard and garden maintenance.	80 events per year
	Rain Barrels and Compost Bin Rebates.	200 rebates available per year
	Compost coach home visits/inquiries including workshops, community garden on-site compost program, compost hotline and home visits, compost coach training and volunteer coordination.	200 visits/inquiries per year

Boulevard Garden Program	Maintain guidelines and administer application process.	1 education and communication campaign per year; all applications reviewed; all inquiries followed up on.
Environmental Dashboard		25 indicators updated annually.
Saskatoon Curbside Swap		2 city wide events, support for community events.
Household Hazardous Waste Collection Days	Events	9 collection days per year.
	Acceptable Materials	Aerosols, automotive fluids, batteries, cleaners, cylinders, light bulbs, medications, yard chemicals, vaping products, paint, and other materials.
Climate Reporting	Climate Action Progress Report, GHG inventory, and Climate Budget.	Every-second year progress report which includes a verified Climate Budget chapter included in the multi-year business plan and budget.
Integrated Waste Management Report	Calculate annual waste diversion rate and other waste reduction and diversion program performance data.	1 bi-annual report alternating with 1 bi-annual advertising campaign.
Urban Biological Services		
Service	Sub-Service	2023 Service Level
Mosquito Control		The City conducts mosquito control inside city Limits as a main priority. Up to 10km outside city Limits is conducted as time permits. Mosquito control efforts are highly dependent on precipitation rates. If there are repeated rainfall events, treatment efforts remain focused within City limits. Adult mosquitos are tested for the presence of West Nile Virus, and these results are communicated publicly. In addition, adult mosquito populations are assessed and reported weekly on the City's website.

<p>Tree Insect and Disease Inspection</p>	<p>Dutch Elm Disease, Emerald Ash Borer, Ash Bark Beetle, Forest Tent Caterpillar, European Elm Scale, Cottony Ash Psyllid, Wasps</p> <p>Municipal Dutch Elm Disease (DED) inspectors enforce DED regulations as required by <i>The Forest Resource Management Act</i></p>	<p>City and private trees are inspected as requested, invasive insects are trapped. Requests to inspect city-owned trees are completed within 5 business days.</p> <p>All pests are identified; however no further service is provided for non-detrimental pests.</p> <p>All nursery stock is inspected for invasive insect and diseases. All private and city-owned elm trees are inspected for Dutch Elm Disease twice per year. Wasps on public property are addressed on a complaint basis.</p>
<p>Wildlife Management</p>	<p>Skunks, Raccoons, Crows, Coyotes, Rabbits, Ground Squirrels, and Pocket Gophers</p>	<p>Wildlife management follows a complaint-based model and are prioritized as follows: Injured, trapped, and diseased. Service is focused on unprotected animals (skunks, gophers, racoons, beavers) no larger than a coyote. Skunk Inspection, Trapping and Relocation Service for Private Residential Properties is also provided. Larger animals such as moose, deer, and bear are handled by the Ministry of Environment.</p> <p>Proactive control programs are provided to address areas of ground squirrel and pocket gopher activity.</p>
<p>Hard Surface Weed Control</p>		<p>Weeds are controlled on hard surfaces adjacent to arterial roadways and in tree grates within the business districts in order of priority at least two times per season.</p>

Urban Forestry		
Service	Sub-Service	2023 Service Level
Tree Maintenance	Service Requests	Trees that pose an immediate safety risk are inspected and pruned within 24 hours.
		All other tree maintenance service requests are inspected within 10 days and service, if required is provided by the end of the year.
	Cyclical Pruning	Pruning cycles for street trees are 1:7 years.
		Pruning cycles for park trees are 1:13 years.
Tree Planting	Tree Planting in new communities and industrial areas	All identified planting sites in new communities and industrial areas that meet criteria have a tree planted.
	Tree Replacement	Requests are placed in queue and processed in the order the order received.
Tree Nursery	Tree Production	Provision of a variety of trees for tree planting programs.
Waste Handling Service		
Service	Sub-Service	2023 Service Level
Garbage Collection	Single Family	Bi-weekly collections are year-round starting in 2023.
	Multi-Unit	Weekly collections year-round.
	Commercial	Collections provided under contract with the City.
Landfill Operations	Customer Service	24/7 dedicated customer service call centre. Emails acknowledged within 2 business days.
	Operating Hours	The Landfill is open 7 days a week, year-round with the exception of Christmas Day and New Year's Day Summer hours 7:30 a.m. to 5:30 p.m. Winter hours 7:30 a.m. to 5:00 p.m.
Cart Distribution	Minor Damage	Repaired or replaced within 3 weeks.
	New Homes	Delivered within 3 business days.
	Unusable Carts	Replaced within 3 business days.

Waste Reduction		
Service	Sub-Service	2023 Service Level
Recycling Depots	City Operated Locations	3 Recycling Depot Locations.
	Acceptable Materials	All paper, cardboard, plastics (symbol 1 - 7), aluminum foil, tin cans, milk jugs, cartons, beverage containers, glass bottles and jars.
Compost Depots	City Operated Locations	2 Compost Depot Locations.
	Acceptable Materials	Leaves, Grass, Sod, Topsoil, Garden refuse, Halloween pumpkins and non-elm branches, stumps and tree trimmings.
Christmas Tree Recycling	Recycling	Free drop off program once per year.

Pandemic Challenges

This Business Line is no longer largely impacted by the Pandemic as any impacted services such as Landfill, Commercial Garbage Collection and Household Hazardous Waste days have all returned to historical activity levels.

2024/2025 Pressures Included in the Budget Status Update

While the Administration is still in the process of quantifying the exact pressures that this Business Line is expected to experience in 2024 and 2025, some of the known pressures today include:

- The opening of Material Recovery Centre (Recovery Park) in 2023 brings increased operating costs of \$1.11 million in 2024. This includes 11.0 new FTEs for a combination of both full time and seasonal staff as well as operating costs that are partially offset by revenue for diverted materials. Total operating costs have been partially offset by transfers from other operating programs including Household Hazardous Waste days.
- The Urban Biological Services and Urban Forestry Service Lines include increases of \$68,200 in 2024 and \$79,400 in 2025 required to maintain the trees within the 18.87 hectares of new greenspace in 2024 and 16.98 hectares in 2025. Also included in the Urban Forestry Service Line is \$27,500 (2.5% increase) in each of 2024 and 2025, due to inflationary increases in contracted services.
- The creation of the Black Cart Utility program results in a net transfer from this Business Line to the Utility of \$7.36 million.
- Decreased tonnages caused by diversion and competition impact both Landfill sales and Commercial collections, resulting in lower revenues of \$648,000 (14.2% decrease).
- Remaining expenditures within the Environmental Health Business Line largely relate to increased fuel, contractor costs, maintenance and miscellaneous inflationary increases.

Additional 2024/2025 Pressures Not Included in the Budget Status Update

The Budget Status Update presented is Administration's estimate on the costs to maintain existing services when considering growth, inflation, and base budget adjustments. The previous section outlined some of the significant pressures included in that estimate; however, it is important to note there are additional pressures required to move towards achieving the City's Strategic Priorities, address growing service level expectations such as asset management funding gaps and respond to everchanging community needs that were not included. These options will be quantified and presented in a future report which will give City Council the option to discuss and potentially add these items to the 2024/2025 budget. For the purpose of this report, a high-level contextual overview of some of these key pressures not included in the budget status update can be seen below:

- \$250,000 per year increased contribution to the Urban Forestry and Pest Management Capital Reserve to support the City's current and future responses to large scale tree threats such as Emerald Ash Borer, Cottony Ash Psyllid and Dutch elm disease. The increased contributions in 2024 and 2025 would raise the total annual contribution to the reserve to \$850,000 in 2025. The targeted annual contribution to this reserve is \$1M annually. For context over \$2M was required to respond to the psyllid insect that affected approximately 7,000 trees beginning in 2018.
- \$130,000 for a Triple Bottom Line Specialist to support the City of Saskatoon's approach to integrate social, environment, economic, and good governance principles in all activities and decision-making.
- \$170,000 for a Civic Commissioning and High-Performance Building Program to support the High-Performance Civic Building Policy and provide dedicated resources for the ongoing commissioning and analytics withing civic buildings.

There is a risk that Multi-Material Stewardship Western (MMSW) funding may change in 2024 or 2025. MMSW funding is available since the City operates residential recycling programs in alignment with *The Household Packaging and Paper Stewardship Program Regulations* and has an agreement with MMSW, the current producer responsibility organization. These regulations were updated in March 2023 and key changes include:

- shifting to a program fully funded and operated by producers;
- adding packaging-like products to the list of designated materials;
- requiring performance targets; and
- phasing in the program over multiple years.

The program plan from the producer responsibility organization(s) is due to the Ministry of Environment on or before September 27, 2023. Engagement with municipalities is currently underway. After the plan has been approved by the Ministry, the producer responsibility organization will begin its phased-in implementation of the updated product stewardship program. Until a new program plan is approved, the existing agreement with MMSW remains in place. The full implications on the City's residential recycling programs and funding remain unknown.

Potential Options:

If all of the options, presented in this report along with the options previously presented in the [2024/2025 Budget Inflationary & Phase-in Decisions](#) report, were approved it would reduce the Environmental Health Business Line by the following:

Environmental Health 2024/2025 Budget Options Impact		
	2024	2025
Options from the 2024/2025 Budget Inflationary & Phase-in Decisions Report	-	-
Options Included in this report	\$676,600	\$72,000
Total Options	\$676,600	\$72,000

An overview of all recommended options as well as options that could further reduce the funding gap are provided below:

Recommended Options

Option 1 - Closure of East Compost Depot

A closure of the East Compost Depot could result in an annual cost savings of \$142,000. With the introduction of the residential curbside organics program, there is capacity for residents to use their green cart for smaller amounts of yard waste.

The East Compost Depot provides an efficient central east side location for private contractors, residents and the Parks Department to drop off larger amounts or oversized branches, leaves, grass clippings, shrub trimmings and stumps for processing. Upon closure these groups will incur additional cost associated with the transport of the material to the West Compost Depot. Additional transport and chipping costs for the Parks Department, estimated at \$10,000, would partially offset identified savings. Commercial haulers are already required to use the West Compost Depot.

Option 2 - Adjustment of operating hours at the Landfill and the Material Recovery Centre (MRC)

The Landfill and MRC operate 363 days per year with current operating hours of 7:30am to 5:30pm in the summer and 7:30am to 5:00pm in the winter. Any adjustments to hours of operation will reduce expenditures and may reduce revenues if customers choose to dispose of materials at other landfills in the region. In addition, a reduction in hours of operation may result in more illegal dumping.

A reduction in overall operating hours at the Landfill and the MRC would result in approximately \$415 per hourly reduction each day. Therefore, reducing operations by one hour per day year-round could result in savings of \$150,000, which may be partially offset by a reduction in revenues.

Option 3 – Eliminate Skunk Inspection, Trapping and Relocation Service for Private Residential Properties

Urban Biological Services Program currently offers a skunk inspection trapping and relocation service for those residents that identify skunk activity in their yard. The Urban Biological Services program provides skunk inspection services to 50-100 private

residential properties per year including trapping and relocation services to approximately 40 locations annually. The elimination of this service would provide approximately \$25,000 of savings annually through salary, vehicle, and material and supply reductions. If the trapping service was eliminated, information about skunks including private contracted options for skunk trapping and relocation services would be provided to residents upon request. A potential impact of eliminating this service would be having an increasing number of skunks in the city due to residents choosing not to trap and relocate skunks from their property due to the cost associated with a private service and the potential of having delayed skunk and other wildlife response times in the winter months.

Option 4 – Reduce Mosquito Control Treatment Area

Urban Biological Services Program provides mosquito monitoring and control treatment services to small bodies of water within an area of approximately 945 square kilometers, which includes the entire city of Saskatoon and a 5 to 10 km buffer around the city. If the area of control treatment was reduced to an area that includes Saskatoon and a 1 to 2 km buffer around the city limits, \$30,000 of savings that includes salary, vehicle and chemical reductions would be realized. The potential impact of reducing the area of mosquito treatment would be increased mosquito populations impacting the quality of life for residents and increased risk of mosquito borne diseases such as West Nile.

Options that Could Further Reduce the Funding Gap

Option 5 – Discontinue Christmas Tree Drop-Off Sites

The City provides five drop-off locations for natural Christmas trees to be recycled. An annual savings of about \$25,000 could be achieved if this service was no longer offered. Residents could bring their Christmas trees to the (MRC) at the Landfill.

Option 6 – Further Adjustments of operating hours at the Landfill and the MRC

The Landfill and MRC operate 363 days per year with current operating hours of 7:30am to 5:30pm in the summer and 7:30am to 5:00pm in the winter. Any adjustments to hours of operation will reduce expenditures and may reduce revenues if customers choose to dispose of materials at other landfills in the region. In addition, a reduction in hours of operation may result in more illegal dumping.

Further options to adjust these hours are as follows:

- Closure of the Landfill and the MRC on Sundays – estimated \$100.0 K savings, which is a net of lost revenue and reduced staff time. Impact on staff would require shifting staff from full time to part time or potentially eliminating 4.5 FTEs.
- Closure of the Landfill and MRC on statutory holidays - \$32.0 K of potential savings but also may divert revenue to competition and have a negative impact on curbside residential waste collections.

Option 7 – Reduced Tree Planting

On average the Urban Forestry operating budget supports the planting of approximately 700 trees through the plant by request and urban reforestation programs. These tree planting programs are being leveraged in 2023 and 2024 through federal funding to

accelerate the City's tree planting activities. Contracted tree planting activities could be reduced to plant 30 fewer trees and realize annual savings of \$21K. The negative consequences associated with planting fewer trees would include, the City falling behind on its tree canopy and tree replacement targets, and the amount of Federal Natural Infrastructure Funding available to accelerate tree planting programs would be reduced.

Option 8 – Extension of Tree Pruning Cycle

Urban Forestry applies an industry best practice of one in seven-year pruning cycle to maintain the City's street trees. The one in seven-year cycle provides a cost-effective proactive approach to tree maintenance (tree pruning and tree removal) by minimizing the need for reactive responses that include residential clearance requirements, storm damage, general tree failure and solicitor claims. The extension of the street tree pruning cycle to one in ten years would realize annual savings of approximately \$90,000. Negative consequences associated with an extension of the pruning cycle would include:

- Potentially having to address a greater number of reactive tree maintenance responses offsetting the realized savings;
- Potentially an increased amount of deadwood in the elm population providing additional elm bark beetle habitat putting the Urban Forest at increased risk of Dutch elm disease outbreaks; and
- Increased safety concerns associated with standing dead trees remaining in neighborhoods for a longer period.

Option 9 – Eliminate GHG Management Software

Do not continue with the Greenhouse Gas Management Software platform (used for greenhouse gas inventories and Low Emissions Community Plan action tracking and visualization) beyond the pilot period – annual savings \$20K. If eliminated, GHG inventories and climate action progress reports would continue to be calculated manually every-second year, requiring staff time costing up to \$50,000 each time.

Option 10 – Eliminate Healthy Yards and Boulevard Garden Program Advertising and Support

Eliminate annual communications for Healthy Yards program and end support for the Boulevard Garden Program including application intake, guideline maintenance, and educations/communications – annual savings \$11,600. The elimination of these services is likely to decrease uptake of Healthy Yards programs and result in increased complaints to bylaw compliance about boulevard gardens that has previously been addressed through education. Permitting new gardens on boulevards may end if there is a significant increase in issues and complaints.

Option 11 – End Student Action for a Sustainable Future program contribution

End sponsorship of the Student Action for a Sustainable Future program starting in the 2024-2025 school year. This program has recently expanded through a co-sponsorship with Nutrien to grow from 12 classes per year to up to 24 per year. It is unknown if Nutrien's sponsorship of the program would change if the City withdrew its support.

Since the City is already in an agreement for the 2023-2024 school year, savings in 2024 are estimated to be \$40,000. Starting in 2025, annual savings are estimated to be \$72,000 per year.