

Frequently Asked Questions

What is Recovery Park?

The City is proposing to expand waste diversion (recycling/reclamation) capabilities at the Saskatoon Regional Waste Management Centre (SRWMC, commonly referred to as the Landfill).

The project - currently named Recovery Park - involves the construction of a comprehensive new public facility that will integrate solid waste diversion and disposal facilities at a single location. Recovery Park will include such features as updated scales & scale house; construction and demolition (C&D) waste recycling; Household Hazardous Waste (HHW) collection; composting; recycling; a gently used item exchange, and solid waste transfer bins, along with facilities related to landfill operation. Opportunities for garbage truck fleet storage may be added in future phases.

What are the overall benefits?

By providing all of these services at the SRWMC, citizens and City operations would have a “one-stop” location where numerous waste diversion and waste disposal needs would be met. Recovery Park effectively becomes the public face of SRWMC by offering integrated and comprehensive waste and recycling services to citizens.

In comparison to operating separate sites, the City will realize cost savings by sharing infrastructure (e.g. scales and scale house) and operational resources (i.e. less staff are needed to manage a single site with multiple services vs. multiple sites with single services). Greater customer service and diversion rates should also be achieved. New revenues or operational savings could potentially be realized through bulking of HHW and sale of recovered recyclable materials.

What are the benefits of waste diversion?

- **Extends the life of the Landfill** - Waste diversion is necessary if Saskatoon wishes to defer or eliminate its need for a new landfill. Recovery Park works towards realizing a landfill optimization plan that the City has been implementing since 2011 to manage the landfill more efficiently. The 2011 plan includes: building steeper landfill slope-sides; expanding waste cells, reclaiming inefficiently filled areas; and maximizing opportunities for waste minimization (waste received by the facility remains or falls below a rate of 130,000 tonnes per year)¹.

If all of the recommended changes from the 2011 plan are realized, and the City achieves its Performance Target to increase the waste diversion rate to 70% by 2023, the Landfill will be likely be available to 2050 or longer.

¹ “Landfill Optimization.” Report to Saskatoon City Council. May 16, 2011. Data refers to XCG Consultants’ “The Saskatoon Waste Management Centre – Integrated Landfill Management Plan.” 2011, p3.

Without Landfill optimization strategies and aggressive diversion, the lifespan of the Landfill was projected to close between 2021 and 2026².

- **Reduced Greenhouse Gas Emissions** - Much of the waste disposed of within landfills breaks down without oxygen resulting in the release of Methane, which is a potent greenhouse gas (GHG), 25 times stronger than carbon dioxide. Waste diverted from the landfill will result in fewer emissions. Less material breaking down also results in less generation of toxic leachate, which pollutes groundwater and surface water or causes increased demands on municipal wastewater treatment systems that may or may not be able to handle the toxins found in the leachate.
- **Saves valuable resources** - Technological advancements in the waste and recycling industries have resulted in numerous ways to divert waste to a useable and often valuable end product. Many cities around the world are turning toward these technologies to solve the increasing demand on landfills and their associated environmental hazards.

How much waste can be diverted through the various initiatives planned for Recovery Park?

Through the operation of Recovery Park as a centralized drop-off location for waste management and waste diversion, it is expected that greater diversion will be achieved over existing programs (e.g. HHW days, recycling depots). Along with the increased participation in existing programs, the introduction of C&D recycling should result in upwards of 10,000 tonnes of waste diverted annually in the initial years³. Tonnages are expected to increase in subsequent years as the community becomes more familiar with the site and recycling opportunities.

Recovery Park is projected to increase Saskatoon's Waste Diversion Rate from 21% to 30% or greater. Saskatoon's Performance Target is to divert 70% of waste from the landfill by 2023, so other initiatives such as organics diversion will be required to augment Recovery Park in order to meet this target.

What is the proposed cost?

In November 2016, \$7M funding for a portion of the project was identified from various civic sources.⁴ This funding was approved in the 2017 Capital Budget. Throughout 2017, work has been carried out to scope and consolidate the Landfill expansion work with Recovery Park, resulting in a total value of work at \$23.4M. Of this approximately \$7.4M is attributable to Recovery Park and \$16M to the Landfill capital project⁵.

² Ibid. "Landfill Optimization. Page 1.

³ "Recovery Park Next Steps". Administrative Report. November 2016. Page 6.

⁴ Capital Project #2187 - US Composting Facility, Capital Project #2050 – C&D Waste Management Centre, and Capital Project #1482 – SW Recycling Depots. From "Recovery Park Next Steps". Administrative Report. November 2016. Page 5.

⁵ "Recovery Park: Capital Update". Report for EU&CS. November 2017. Page 1.

What is the expected cost of building a new Landfill?

Calculating the cost of a new Landfill is difficult as it depends on the City's ability to acquire a significant land parcel that is likely to be outside of the City limits. Community acceptance of this land-use could also delay the acquisition. Further consideration would be the time impact and challenges in achieving regulatory approval for a new site.

Estimating the capital cost of a new Landfill is very preliminary, and further work to refine this estimate is underway. The current cost assumptions are:

Close out the existing Landfill footprint (2021) ⁶	\$26M ⁷
Land	\$3.5-5M ⁸
New Site Preparation and Permitting Costs	\$95M ⁹
TOTAL CAPITAL COSTS	\$124.5-\$126M

Annual operating costs should also be considered in a holistic view of this option. It is likely that should a site for a new landfill become available, it would not be within close proximity to the city limits. Trip durations of 30 minutes or more are anticipated, and this would significantly impact the City's annual operating costs for collections due to additional trucks and increased travel time. Currently, the Landfill generates approximately \$4M of revenues from tipping fees, which has helped the City dispose of residential waste with no mill rate budgeted impact. A new Landfill further from the City could result in a reduction of Landfill revenue, as customers may chose commercial sites that are more easily accessed. Alternately, a transfer station may be considered to minimize trips to the new landfill.

Environmental impacts to land and water would also be considered in disturbing a green field site.

Will the expansion of the recovery/reclamation services at the SRWMC cost more to operate in the future?

The current operations planning forecasts that Recovery Park can replace or augment the operations of the following existing waste management programs: Waste transfer station; Community recycling depots; and Household Hazardous Waste Days. Existing compost depots are not proposed to be moved to Recovery Park at this time. Administration is currently working through an operation plan, including assignment of service levels and costs associated with the new diversion program. Detailed operating information will be presented to Council in Q2 2018.

⁶ The purpose of the Landfill Replacement Reserve is to fund the eventual closure of the Landfill, as well as capital improvement costs and costs to meet requirements of the Ministry of the Environment Permit to Operate. These costs are not currently covered and the LRR is in a deficit position.

⁷ "Landfill Replacement Reserve." Administrative Report. Resolution at 2016 Preliminary Business Plan and Budget meeting. November 30 and December 1 2015. Page 4.

⁸ Land cost estimate provided by City of Saskatoon Real Estate Manager. Estimate of 1 section (640 acres) at \$3,500 per acre.

⁹ Ibid. "Landfill Replacement Reserve." Page 2.

What is the Landfill Replacement Reserve and can the Reserve fund these improvements?

The Landfill Optimization report outlined a 10-year plan for funding for the landfill improvements for a landfill development, including recommended tipping fees and +/- 50% proportion of the revenue to be allocated to capital projects. The plan recommends that the project proceeds ahead of reserve sufficiency, and that the City carry the project and recover the capital costs with interest when the reserve is sufficiently funded. The 2011 report projects that by 2016, \$6M would be available for the new cell and other landfill optimization

In order to attempt to address decreasing landfill revenues and the impact on the mill rate, 2015 capital contribution rates (of \$45 per tonne) were maintained into 2016. The Optimization report projected 2011-2016 capital contributions needed rise to \$60 per tonne in order to accumulate capital funding, but the tipping fee projection proved to be too aggressive. Actuals revenues fell significantly below these planned projections and resulted in no capital funding accumulation in the LRR through to 2017.

Could the existing funding be used to construct the Landfill infrastructure and Federal funding used for the diversion components?

There are cost efficiencies expected to be realized through use of a single design-bid package as opposed to splitting the work into phases. The \$7M of available capital funding is not sufficient to pay for the approximately \$16M required for Landfill infrastructure. The breakdown of "Diversion" and "Landfill" costs is also approximate. It would also be very difficult, both logistically and financially, to proceed with components identified as "Landfill" ahead of the "Diversion" components as some of the existing diversion services already being provided at the landfill are included in the "Diversion" values. Roads have also been split (e.g. 50/50) in the budget breakdown but could not necessarily be phased in that manner. The projected cost of \$16M is therefore not necessarily representative of the stand-alone cost for the "Landfill" components (actual costs should be anticipated to be more). Additionally, there is a risk that the Landfill Replacement Reserve will not have sufficient balance for the \$8M budgeted in 2021 for the Liner and Leachate System. Details of Federal funding are not expected before March 2018 and at this time it is not believed that the unfunded aspects (i.e. landfill scales and support buildings) of the project would be eligible. This report recommends proceeding in a manner that allows Federal funding requirements to become known such that the Administration can explore the Federal funding potential. Administration notes there is increased schedule risk associated with the approach proposed by this report.

What efficiencies do we expect from this project?

Current waste diversion programs are achieving a waste diversion rate of 21%. In order to begin moving toward the diversion target of 70% by 2023, the City requires a waste facility that can provide greater incentive to residents and businesses for diversion through convenience and affordability.

The Recovery Park concept provides the opportunity to:

- replace or augment six (6) recycling depots across Saskatoon;
- provide options to businesses that will be impacted by policies such as landfill bans;
- replace eight (8) Household Hazardous Waste (HHW) event days each year with a year-round depot where residents can drop-off hazardous items such as aerosols, lightbulbs, household cleaning products, etc.;
- replace and enhance the operation of two (2) seasonal compost depots;
- consolidate other forms of recycling currently located behind the weigh scale at the Landfill such as motor oil, metals, appliances, etc.;
- allow for the drop off of a variety of other recyclable or reusable items not currently offered, such as construction-related materials;
- place diversion options alongside a new garbage transfer station that is safer and more convenient;
- incorporate facilities to support efficient and safe operations, as well as opportunities for interpretation, education and training; and
- provide areas for processing waste materials into valuable commodities¹⁰.

How many years will Recovery Park extend the life of the Landfill?

Recovery Park is part of the Integrated Landfill Management Plan that the City has been implementing since 2011. The 2011 plan includes: building steeper landfill slope-sides; expanding waste cells, reclaiming inefficiently filled areas; and maximizing opportunities for waste minimization (waste received by the facility remains or falls below a rate of 130,000 tonnes per year)¹¹.

If all of the recommended changes from the 2011 plan are realized, and the City achieves its Performance Target to increase the waste diversion rate to 70% by 2023, the Landfill will be likely be available to 2050 or longer.

Why can't the Landfill just expand to the west, on to the proposed Recovery Park site?

The site to the West currently includes major utility routes, including a Saskatoon Light and Power transmission line, Suncor Products pipeline, SaskPower Communication network lines and City of Saskatoon communication network. Relocation of these services to allow for Landfill development would be costly (\$10M or more), before actual construction of the new cell even begins. Further, permitting would likely pose a significant challenge, as the site would be considered an expansion on to new property. Lastly, the configuration of the site relative to the existing landfill mound does not allow for efficiencies in the 'shape' of the mound. The new site would be an appendage to the existing landfill and neither site would help the other have a higher footprint. Because of the shape of the Recovery Park site, the footprint would be inefficient, resulting in what is likely to be a low, flat mound with limited airspace.

¹⁰ Ibid. "Recovery Park Next Steps." Page 2.

¹¹ Ibid. "Landfill Optimization." Page 3.

What are the risks of not proceeding with this project?

The largest risk resulting from not proceeding with the project is that it is likely that the landfill will reach the end of its useful life estimated at 2021-2026¹².

How does this relate to the proposed City-wide organics program? Is the City planning to handle compost processing at the SRWMC?

Recovery Park is planned to include a transfer area for Organics within the unscaled/free portion of the site. As a separate initiative, the Master Organics Plan is under development by the City, and it is intended to establish a city-wide mandatory organics program for single-family homes¹³. In planning for the operation of the Organics program, inclusion of the materials gathered at the Recovery Park site will be considered.

This Organics initiative has been identified to have the greatest diversion potential for single-family households¹⁴, and along with Recovery Park will contribute toward the City's implementation of the Landfill Optimization and the Strategic Direction to divert 70% of waste from the landfill by 2023.

Why does the City want to divert Organics from the Landfill?

An Organics Program is essential if considering the life cycle cost of the landfill as it is a critical component to deferring or eliminating the need for a new landfill, instead of passing on this environmental and financial burden to future generations. Landfill life is estimated to be extended by at least 8 years with organics diversion.

An Organics Program also reduces the environmental and financial burden we pass on to future generations and contributes to positive steps in climate change mitigation. Diverting 78,000 tonnes of food and yard waste from landfills is estimated to reduce between 85,000¹⁵ and 120,600¹⁶ tonnes of carbon dioxide equivalents.

Why does the City want to divert Construction & Demolition (C&D) waste from the Landfill?

C&D waste is often inert, dry, bulky material. This waste takes up a significant amount of space at landfills as it cannot be compacted well. The City receives approximately 10,000 tonnes of C&D waste each year. This material consumes approximately 17,000 cubic-meters of landfill space, having an asset value of \$1.5M.

Through technological advancements and innovation in C&D processing and reuse, C&D waste is being used within roadways, landscaping, new construction, composting, and waste to energy projects.

¹² Ibid. "Landfill Optimization." Page 1.

¹³ Organic Opportunities, Council Report August 28, 2017

¹⁴ Organic Opportunities, Council Report August 28, 2017

¹⁵ Source: Waste GHG Calculator (Environment Canada); Note that the results of calculations from this calculator are not intended for quantifying emission reductions, they serve only as a common basis for comparison.

¹⁶ School Canyon Model used for the City of Saskatoon GHG inventory.

Why does the City want to divert Household Hazardous Waste (HHW) from the Landfill?

HHW includes a variety of common substances used in and around homes, which can pose serious environmental and human health concerns if not managed properly. Many of these substances contain corrosive, toxic, flammable or reactive ingredients that require special handling during use and disposal. Improper containment or disposal can ultimately lead to contamination of our air, land, and water resources. The City's Landfill is not a hazardous waste facility and therefore should not receive these materials.

How will the project be communicated?

A multi-channel communications approach will focus on building awareness and understanding of the expanded recycling/reclamation services offered at the SRWMC. The first phase of communications could include signage at the site which illustrates a rendering of the new facility. A handbill will also be distributed to existing SRWMC customers. The second phase, six months prior to opening the facility, will focus on building widespread awareness through activities such as the city's website, billboards, social media, radio advertising, utility insert and more. After the opening of the new facility, communications will be needed to educate users of existing programs which are closing, such as Household Hazardous Waste and the West Compost Drop-off.

How does this support the City of Saskatoon's Strategic Directions

This project supports the Strategic Goal of Environmental Leadership. C&D recycling and composting programs respond directly to the four-year priorities to promote and facilitate city-wide composting and recycling and eliminate the need for a new landfill by diverting waste for re-use. The expansion of services also supports the 10-year strategies to improve the quality and reduce the quantity of storm water run-off going to the river, reduce greenhouse gas (GHG) emissions, and address soil-quality issues on City-owned properties. Recovery Park will also support the Performance Target of diverting 70% of waste from the landfill by 2023.