



Saskatchewan's Solid Waste Management Strategy

2020 – 2021 Annual Report

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Minister's Message

I am pleased to share the 2020-21 Annual Progress Report for Saskatchewan's *Solid Waste Management Strategy*. This report fulfills Saskatchewan's commitment to track and report on the Solid Waste Management Strategy annually.

Released in January 2020, the Solid Waste Management Strategy strives for a practical, sustainable and integrated solid waste management system that achieves a healthy, resilient environment and protects the well-being of residents and communities.

Since the launch of the Solid Waste Management Strategy, we have made progress on many of the action items, despite challenges over the past year related to COVID-19.

We've recently developed household hazardous waste programs that divert potentially harmful materials from our landfills. Progress also continues on the unique issues faced by northern communities, through the development of regional waste management partnerships that allow First Nations, municipalities and stakeholders to share costs and create efficiencies. Earlier this year, the Lac La Ronge Regional Waste Management Corporation finalized construction of a new engineered landfill cell and expanded its membership, becoming the first northern regional partnership facility.

Another commitment under the Solid Waste Management Strategy was to establish an advisory committee. I am pleased to announce the committee was formally established in May 2021 and held their first meeting. Members will provide ongoing support and oversight as government works to implement the Solid Waste Management Strategy.

These accomplishments and many others are provided in this annual progress report, with many more accomplishments to come. Taking strides to ensure effective waste management in the future is essential to responsible growth. Implementing the Solid Waste Management Strategy contributes to Saskatchewan's Growth Plan, as we set a foundation to support a strong economy, strong communities and strong families - all in an effort to build a stronger Saskatchewan.

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Warren Kaeding
Minister of Environment

Overview

Saskatchewan's Solid Waste Management Strategy was released on January 23, 2020.

Vision

Working together to create a practical, sustainable, integrated solid waste management system that protects the environment and promotes economic development and innovation opportunities.

Target

Reduce the amount of waste generated per person by 30 per cent by 2030 and 50 per cent by 2040, based on 2014 baseline levels.

Goals

The strategy focused on six goals to achieve Saskatchewan's vision for waste management:

- 1) **Enhance education, awareness and technical understanding** of waste management best practices and the risks of improper practices across Saskatchewan.
- 2) **Encourage regional collaboration** to enhance the cost effectiveness of waste management infrastructure.
- 3) **Provide a modern, efficient and effective regulatory system** for waste disposal and management.
- 4) **Enhance waste diversion** across Saskatchewan.
- 5) **Foster innovation and sustainable solutions** to manage waste.
- 6) **Demonstrate government leadership** in waste management.

The majority of waste generated in the province ends up in Saskatchewan's landfills.

Discarding waste in a landfill should always be your last resort. Waste that is not diverted from a landfill leads to the potential for greater risk of water pollution, soil contamination, greenhouse gas emissions and human health impacts.

Progress in 2020-2021

Goal 1: Enhance education, awareness and technical understanding of waste management best practices and the risks of improper practices across Saskatchewan.

Key Actions

The Government of Saskatchewan enhanced education and awareness of solid waste management in the province through presentations to several stakeholder groups including:

- Saskatchewan Chamber of Commerce;
- Saskatchewan Mining Association;
- Saskatchewan Association of Rural Municipalities;
- Saskatchewan Urban Municipalities Association; and
- attendees of the 2021 Saskatchewan Waste Reduction Waste ReForum Conference.

The Ministry of Environment also sponsored two events, one on the costs to landfill and one on waste-to-energy. These events support stakeholder knowledge of waste management issues and opportunities.

A public awareness survey conducted in early 2021 will provide information on Saskatchewan residents' current knowledge of waste management in the province. This information will help highlight areas that government can focus education and awareness activities on.

The ministry committed to engage First Nations communities to better understand challenges related to on-reserve waste management. As First Nations are in the process of exploring regional landfill opportunities, the majority of on-reserve landfills are being closed, decommissioned and replaced with transfer stations. Moving forward, the ministry will focus engagement activities for First Nations communities on increasing education and awareness of waste diversion programs, waste management best practices and the benefits of regional collaboration.

Next Steps

The focus for 2021-2022 will be to develop a comprehensive communications strategy and education campaign in collaboration with stakeholders and stewardship organizations. The communications strategy and education campaign will focus on raising awareness of the Solid Waste Management Strategy, highlighting issues and solutions related to effective waste management and aims to change behaviours relating to the reduction and diversion of waste in Saskatchewan.

Goal 2: Encourage regional collaboration to enhance the cost effectiveness of waste management infrastructure.

Key Actions

Municipalities are eligible to apply for federal and provincial funding to close and decommission unsustainable landfills, or for projects that divert waste from landfill, through an Integrated Bilateral Agreement for the federal Investing in Canada Infrastructure Program (ICIP).

- Nineteen projects were approved for provincial funding in the spring 2020 application intake and now need to be approved under ICIP. These projects would see the closure of 31 landfills across Saskatchewan.
- An additional 28 applications have been received by the province and are under provincial and federal review.

In 2020, a solid waste management project was approved under the Ministry of Government Relations Targeted Sector Support cost-shared grant.

- The approved *Southwest Regional Landfill Feasibility Study* by the City of Swift Current and other communities in the region is ongoing.

The Ministry of Government Relations continues to work with Indigenous Services Canada to develop integrated, regional waste management services for Indigenous and non-Indigenous communities across Saskatchewan through the *First Nations Waste Management Initiative*.

Next Steps

The focus for 2021-2022 will be to finalize the review and assessment of barriers to regional solutions. The ministry will share its findings by fall 2021.

Many municipalities and First Nations communities are working together to form regional waste management authorities to share the costs of waste management.

This has resulted in the closure of many unsustainable, stand-alone landfills that pose significant financial, environmental and human health risks and liabilities.

Goal 3: Provide a modern, efficient and effective regulatory system for waste disposal and management.

Key Actions

Government completed a red-tape review of *The Municipal Refuse Management Regulations* in 2019. Recommendations from the review are complete or underway:

- Sewage hauler requirements were removed from *The Municipal Refuse Management Regulations* and placed in *The Environmental Management and Protection Act, 2010*; and
- Work on Saskatchewan Environmental Code Chapters for transfer stations and composting facilities is underway.

All waste management guidelines were updated and published in 2020 along with a new guidance document for composting facilities.

A Solid Waste Management Advisory Committee has been established, with representation from key client groups. The committee will provide ongoing support and oversight of the Solid Waste Management Strategy's implementation. Establishment of the Advisory Committee fulfills a key recommendation made by the advisory committee that informed the development of the strategy.

The ministry reviewed personnel and technical capacity requirements for waste management programs, to ensure efficient and effective oversight and delivery of landfill regulations and programs. Review of personnel and technical capacity is built into government operations and will continue in the future.

Next Steps

Work will continue in 2021-2022 to develop and finalize two Saskatchewan Environmental Code Chapters for transfer stations and composting facilities. Implementation of these chapters is scheduled for 2022-23.

Government will initiate this work with the newly established Solid Waste Management Advisory committee in 2021-2022.

Consistent enforcement and application of rules and regulations for landfill management will ensure effective and efficient waste disposal and management in Saskatchewan.

Goal 4: Enhance waste diversion across Saskatchewan.

Key Actions

The ministry implemented two provincial stewardship programs in 2021 for material identified in *The Household Hazardous Waste Products Stewardship Regulations*. Under these regulations, two new recycling programs were launched:

- The product stewardship program for consumer batteries was launched by Call2Recycle in January 2021 and includes battery collection at all SARCAN depots and many other locations. In the first eight weeks of the regulated program there has been a 24 per cent increase in volumes compared to this time last year under the voluntary program.
- The program for waste household hazardous material and domestic pesticides launched on April 1, 2021, and in its first year is offering household hazardous waste events scheduled in 35 host municipalities. While offering household hazardous waste events, the operator will be working to establish between 12 to 19 permanent depots across the province.

The ministry initiated review of the Multi-Material Recycling Program and *The Household Packaging and Paper Stewardship Program Regulations* in March 2021. Broad stakeholder engagement on the program took place in spring 2021, with results to be communicated in the coming months in a What We Heard document.

Research and development of a baseline report are underway on the state of organic waste management in Saskatchewan. The report will focus on three components:

- municipal organic waste reduction and composting;
- food waste reduction by retailers and the food service industry; and
- a jurisdictional scan of initiatives and policies in other provinces.

Next Steps

In 2021-2022, the ministry will begin engagement with stakeholders to explore options for reducing organic and food waste. The ministry will also continue supporting Recycle Saskatchewan and its efforts to identify opportunities for increased accessibility to waste diversion options in northern and remote regions.

Goal 5: Foster innovative and sustainable solutions to manage waste.

Key Actions

The ministry's Climate Change Branch is advancing greenhouse gas (GHG) offset projects in support of Prairie Resilience, the province's climate change strategy.

- Stakeholder engagement on offset protocols for landfill gas capture and aerobic composting facilities took place in March 2021.

Government continues to support innovation for waste management.

- In 2019, Prairie Robotics won a grant through Saskatchewan's Innovation Challenge to develop SightScale. This artificial intelligence technology captures data in real time to estimate the weight of waste entering landfills. In 2020, Prairie Robotics developed StreamSight, another innovative technology that works by outfitting collection vehicles with cameras and using machine-learning to identify individual items in waste and recycling streams. Work is currently underway to integrate this technology in Saskatchewan and identify opportunities for improved waste diversion and education on sorting practices.
- In 2020, the Ministry of Agriculture awarded funding to four research and development projects on crop residues. Funding is available through the Ministry of Agriculture for research and development on value-added processing of bio-related products such as unused crop residues, oilseed waste, animal waste and cooking oil/fat wastes.

Next Steps

Offset protocols for landfill gas capture and aerobic composting facilities are under development and scheduled for completion by fall 2021. Development of a program standard will continue through 2021-2022, with engagement to take place in fall 2021.

Waste disposal and diversion present a challenge that requires creative new ideas, while providing added benefits to the economy.

Goal 6: Demonstrate government leadership in waste management.

Key Actions

The Ministry of Government Relations offers funding for solid waste management initiatives to municipalities participating in the Gas Tax program through the Gas Tax Fund.

- Since 2014, 24 solid waste management projects which received funding are now finalized, 24 are awaiting finalization, and an additional project is currently under review. These projects focus on landfill decommissioning, transfer station development and constructing new or expanded landfills.

The Ministry of SaskBuilds and Procurement is responsible for conducting waste audits at major facilities across government to improve the amount of waste diverted from audited buildings. In 2020, waste audits were conducted at eight buildings. Ten more waste audits are scheduled for 2021, with four already completed.

Under the *First Nations Waste Management Initiative*, the Ministry of Government Relations and Indigenous Services Canada are providing support to establish northern regional landfills and transfer stations. The regional landfills will be set up to accept recyclables and have diversion programs in place.

The Ministry of Parks, Culture and Sport have decommissioned all but two landfills on provincial park land. The last two landfills on provincial park land are slated to be decommissioned in 2021-22 and 2022-23.

The Ministry of Parks, Culture and Sport also has a pilot initiative in place for 2021 to enhance recycling capacity at three provincial parks. Results of the 2021 pilot will inform potential expansion of the recycling initiative into additional provincial parks.

Next Steps

In 2021-22, the Ministry of SaskBuilds and Procurement will be assisting in the design of a comprehensive pilot waste disposal program at the Ministry of Environment's main building in Regina. The pilot program could potentially include organic collection and disposal.

The province will continue to work with federal, provincial and territorial partners through the Canadian Council of Ministers of Environment to implement actions in the Zero Plastic Waste Strategy. Saskatchewan is co-leading work on facilitating consistent Extended Producer Responsibility Programs for plastics and development of a roadmap to address priority single-use and disposable plastics most commonly released into the environment.

Monitoring and Reporting

Performance measures are used to monitor progress on commitments within the Solid Waste Management Strategy.

Amount of waste generated in kilograms per capita

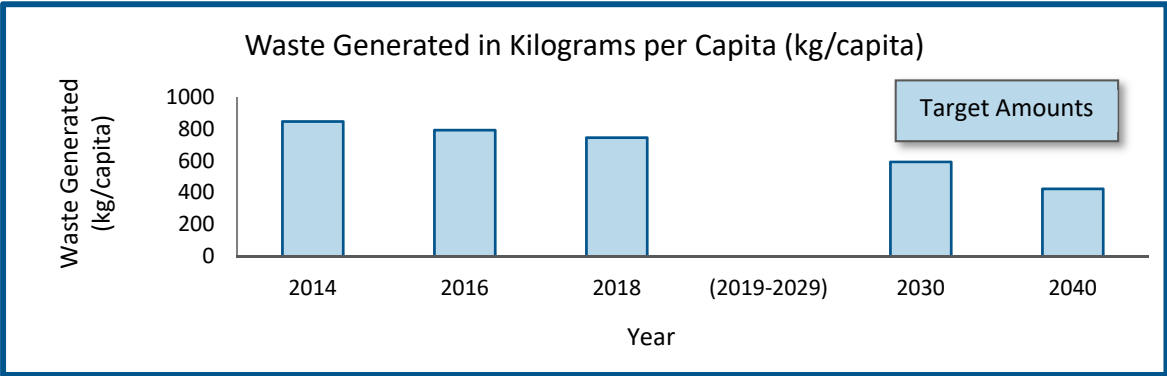
Target:
Reduce the amount of waste generated per person by 30 per cent by 2030 and 50 per cent by 2040, based on 2014 baseline levels.

For this performance measure, waste generated is referring to the amount of waste going to landfills.

Since 2014, waste generated in Saskatchewan has decreased from 845 kg/capita in 2014 to 791 kg/capita in 2016, and 744 kg/capita in 2018. A significant and decreasing trend has been observed since 2010.

The above data comes from a Statistics Canada survey published every two years. Results for 2020 are not yet available, as data can take two to three years to be published. The ministry is currently looking at alternative measures to complement this data.

Why does this measure matter?
Reducing the amount of generated waste going to landfill increases the longevity of landfills and reduces some of the negative impacts landfilling has on the environment. This may help to protect human health and the environment.



Percentage of population served by a regional landfill model.

As of 2020, at least 13.5 per cent of Saskatchewan's population is being served by a regional landfill. This number comes from the Association of Regional Waste Management Authority (ARWMAS), which represents the majority of regional landfill authorities in the province.

The ministry is gathering data on regional landfill authorities not represented under ARWMAS. This will allow more accurate reporting on the percentage of population being served by a regional landfill in Saskatchewan in the coming years.

Why does this measure matter?

Regional landfills can allow rural communities to share the costs, risks and liability associated with landfills.

Increasing the percentage of population served by a regional landfill makes waste management more affordable and efficient in the province.

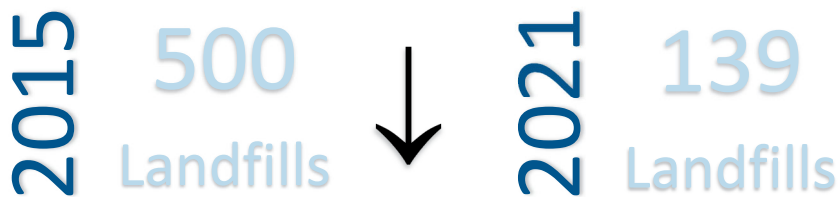
Why does this measure matter?

Managing compliant landfills is costly. Reducing the number of operating landfills in the province enables development of regional landfills and cost sharing to manage compliant landfills.

Number of landfills closed and decommissioned

The number of operating landfills in the province continues to decrease. There were approximately 500 municipal landfills operating in 2015. In 2021, there are 139 operating municipal landfills.

This decrease is a result of landfill closures, landfill decommissioning and an increase in the number of regional landfills in the province.



Percentage of population aware of provincial waste reduction and recycling programs

Results from the public awareness survey will inform this measure beginning in the 2021-2022 annual report.

Why does this measure matter?

The potential use of provincial waste reduction and recycling programs increases as more of the population becomes aware of their waste reduction and recycling options.

New investment to reduce, manage and divert solid waste from landfills

The province is working on developing a target metric for funds invested in waste management in the province. Information for this metric will be collected from existing Statistics Canada data and included in future reporting.

Why does this measure matter?

Tracking investment in waste management systems may indicate improvements in diversion technology.

The most recent data from Statistics Canada reports that in 2016, there were 1,624 people employed in the waste management sector in the province. Changes to employment in the waste management sector can indicate increases or decreases to investment in this industry.

Why does this measure matter?

Requiring all landfill operators to be certified will improve the health and safety of the province's waste management facilities. Having more landfill operators certificated may also increase ownership in overall stewardship, leading to better landfill compliance.

Number of landfill operators with landfill operator certification

The strategy commits to requiring all landfill operators to be certified by 2025. Work is underway to implement a Saskatchewan-specific Landfill Operator Certification Program. Once the program is in place, reporting on this measure will begin.

Percentage of population with access to recycling programs

The ministry currently receives data on residential access to recycling programs from some stewardship program operators, in a range of formats. Work is underway to develop a standardized metric that can be used to better understand access to all provincially regulated recycling programs.

Why does this measure matter?

Understanding the reach of recycling programs in the province allows government to focus on increasing access to recycling programs in areas with limited access including rural and remote northern areas.

More Info?

More information about the Solid Waste Management Strategy is available at <https://www.saskatchewan.ca/residents/environment-public-health-and-safety/saskatchewan-waste-management/solid-waste-management-strategy>