

**Regional District of
Central Okanagan**

Solid Waste Management Plan

Five-year plan effectiveness review

November 2024

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1. Background

The Environmental Management Act requires that regional districts prepare a Solid Waste Management Plan (SWMP). The Regional District of Central Okanagan (RDCO) adopted its first plan in 1992 and then followed up with a new 10-year plan in 2006.

In 2016 the RDCO began the process of another plan update which included reviewing the current solid waste management system in the region. This assessment helped to inform the current 2020 SWMP. The 2020 plan has the following three key goals:

- The goal is zero waste – all our discards are regarded as resources.
- Citizens are actively engaged in behaviours that reflect the waste management hierarchy (i.e. reduce before reuse before recycle).
- Make it easy for residents and businesses to make the right decisions.

The 2020 plan identifies 24 key initiatives for solid waste management in the region under six key categories; reduction and reuse, recycling, recovery and residual waste management, illegal dumping, wildlife and waste management, and policy and land use planning related to waste management. The Ministry of Environment (MoE), upon approval of the plan included two requirements that the RDCO must complete as follows:

1. The RDCO shall complete a Five-Year Effectiveness Review as recommended under Section C.3.3 of A Guide to Solid Waste Management Planning. A review report should be submitted to the ministry by December 31, 2024.
2. The RDCO shall re-evaluate organic waste diversion opportunities and assess effectiveness of maintaining landfill gas collection and use at the landfill. A report should be submitted to the ministry by December 31, 2030.

The SWMP outlines the following plan targets:

- The RDCO to achieve a waste diversion rate of 50% by 2022.
- The RDCO to achieve an average municipal solid waste disposal rate of 600 kilograms per capita by 2022 (Estimated per capita rate at the time of plan development was 681 kg/person).

2. Plan Area and Demographics

2.1 Population and Growth Estimates

The Regional District of Central Okanagan is located along the shores of the Okanagan Lake in the southern interior of British Columbia. It is made up of 2,904 square kilometers. The regions population is 222,162 (2021 census) and includes eight communities - Electoral Area East, Electoral Area West, four member municipalities (MM); City of Kelowna, City of West Kelowna, District of Lake Country and District of Peachland as well as West Bank First Nations (WFN) and Okanagan Indian Band (OKIB).

Table 1: Populated Areas within the RDCO (per census 2021)

Area	Population
City of Kelowna	144,576
City of West Kelowna	36,078
District of Lake Country	15,817
District of Peachland	5789
Duck Lake IR7	1847
Central Okanagan – East Electoral	4258
Central Okanagan – West Electoral	2897
Tsinstikeptum IR9	9134
Tsinstikeptum IR10	1766
Total	222,162

The Central Okanagan is the fastest growing metropolitan area in Canada with a population increase of 14% from 2016 to 2021. BC's growth was at 7.6% and Canada's at 5.2%. Population projections for the region in 20 years (2044) is estimated to be 365,469¹.

2.2 Housing

There are currently just over 64,500 primarily single-family homes in the region that receive curbside collection however, the regions fast population growth is resulting in a rapidly changing housing mix with more multifamily dwellings being built versus single family homes. For example, the number of people living in an apartment building with 5 or more storeys increased by 52.5% since 2016².

Table 2: Number of Single-Family Homes Served by Curbside Collection

Area	House Count (as of July 2024)
City of Kelowna	42,733
City of West Kelowna	11,962
District of Lake Country	5,456
District of Peachland	2,624
Central Okanagan – East Electoral	1654
Central Okanagan – West Electoral	133
Total	64,562

¹ BC Stats on population projections URL: <https://www2.gov.bc.ca/gov/content/data/statistics/people-population-community/population/population-projections>

² Information from Central Okanagan Economic Development Commission
https://www.investkelowna.com/wp-content/uploads/2022/11/2021_Dwelling_Census_Highlights.pdf

3. RDCO Solid Waste Management System

3.1 System Overview

The Glenmore Regional Landfill is the region's only landfill, and it is owned and operated by the City of Kelowna. Single family homes in the region receive weekly garbage collection, and biweekly recycling and yard waste collection on alternative weeks using fully automated carts. Residents living in multifamily condos and apartments as well as the commercial, industrial and institutional (ICI) sector are serviced by private haulers.

The RDCO has three transfer stations including the Westside Residential Waste and Recycling Centre (Asquith Road) which serves residents in West Kelowna, Peachland and Westbank First Nations as well as Traders Cove Transfer Station and North Westside Transfer Stations that serves residents in Electoral Area West along Westside Road.

The RDCO also operates two regional Recycle BC depots located within the Westside Residential Waste and Recycling Centre and the Glenmore Regional Landfill and two smaller Recycle BC depots inside Traders Cove and North Westside Transfer Station. There are a number of private recycling depots throughout the region that collect various Extended Producer Responsibility (EPR) program items.

3.2 Waste Composition and Trends

Since it's original SWMP in 2006, the RDCO has conducted several waste composition studies (2010, 2013, 2020/2021). A 2024 composition study is currently underway with the spring audit already complete. Data provided by both the spring 2021 study and the spring 2024 study can be compared and review for trends. Both studies focused on garbage (residual waste) from four sources:

- Curbside collection of garbage from residents
- Institutional, Commercial, Industrial (ICI) garbage with samples taken from the large commercial haulers (such as Waste Management, Waste Connections, Supersave, Four Less Disposal etc.). This category also includes multi-family residents living in apartments and condo's who are served by private waste haulers
- Self-haul of garbage to transfer stations and the landfill by residents; and
- Construction and Demolition (C&D) waste

The below figures 1- 4 show waste composition trends from spring 2021 to spring 2024 for residential, ICI, residential self-haul and C&D. Residential waste has not seen a significant change in composition from 2021 to 2024, likely because there were no large residential waste diversion programs implemented in that time period. Compostable organics continues to be the most significant waste type in residential curbside waste (37% in 2024).

There are some larger variations in ICI waste from 2021 to 2024 possibly due to continued periodic shutdowns of businesses as a result of the ongoing COVID-19 pandemic. For example, there was a significant volume of household hygiene material found in ICI waste in 2021 (19%).

Building materials in ICI waste in 2024 (13%) was up compared to 2021 (4%) likely due to things returning to normal after the pandemic and increased housing starts compared to 2021.

The composition of self-hauled material to either transfer stations or directly to the landfill have remained similar in 2024 to 2021 with the exception of an increase in building materials coming to the landfill in 2024 and a reduction in bulky items in 2024. Similarly, the composition of C&D waste going to the landfill in 2024 has more building materials (35%) compared to 2021 (19%).

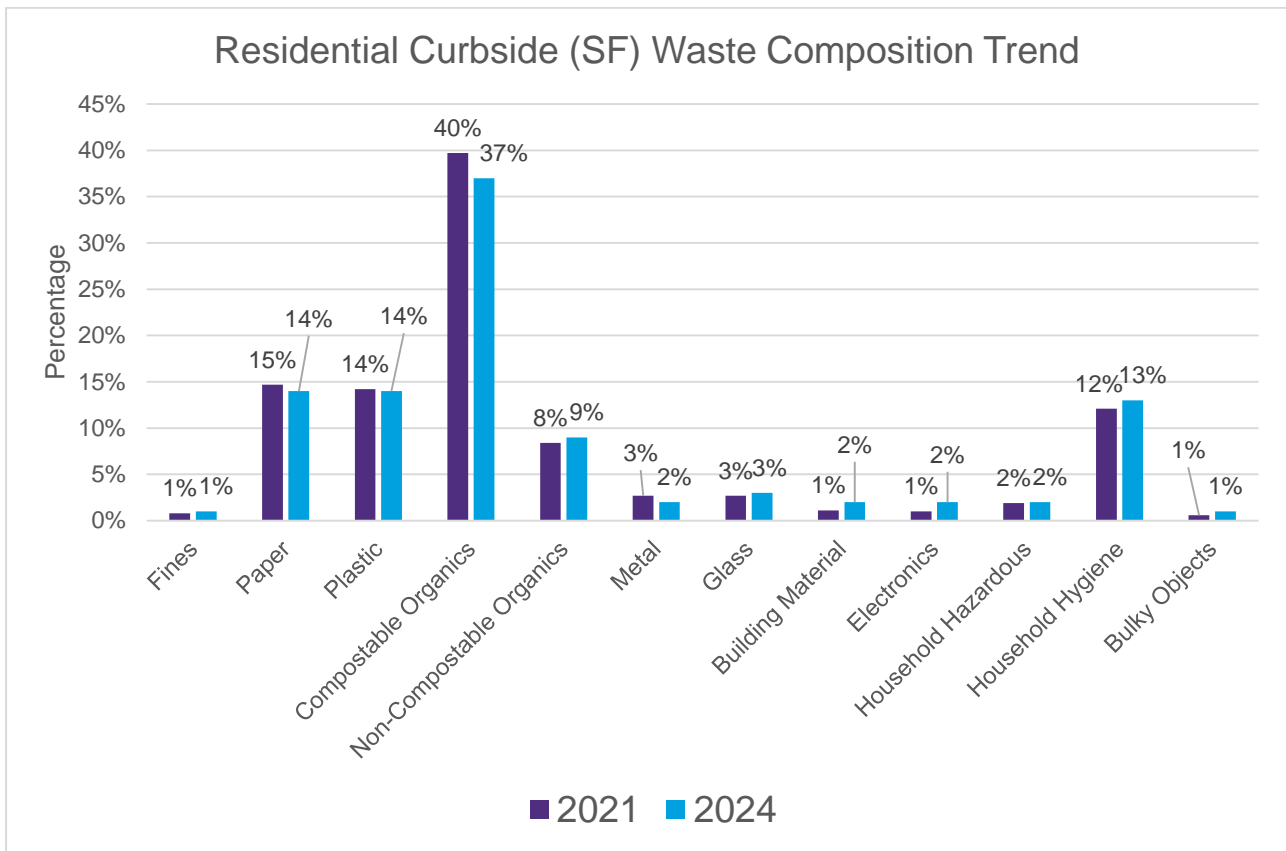


Figure 1 Composition of curbside residential waste going to the Glenmore Regional Landfill

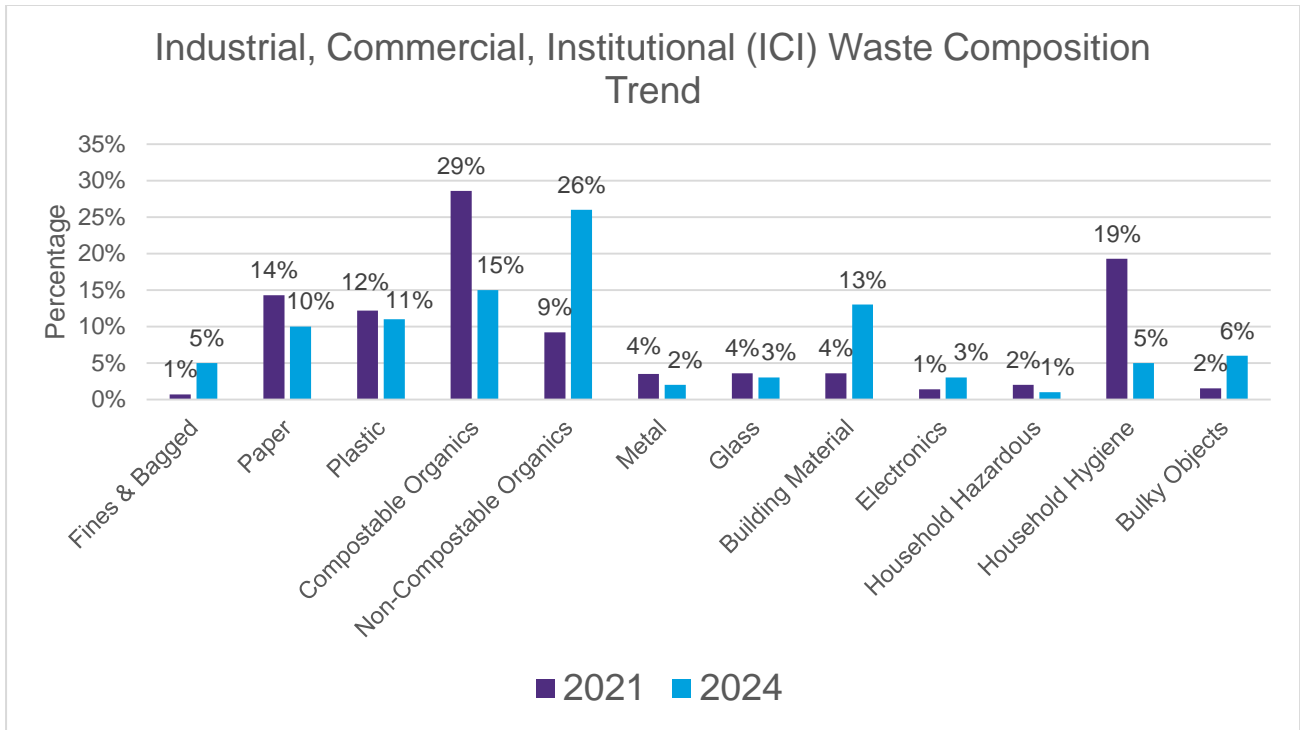


Figure 2 Composition of industrial, commercial, institutional waste going to the Glenmore Regional Landfill

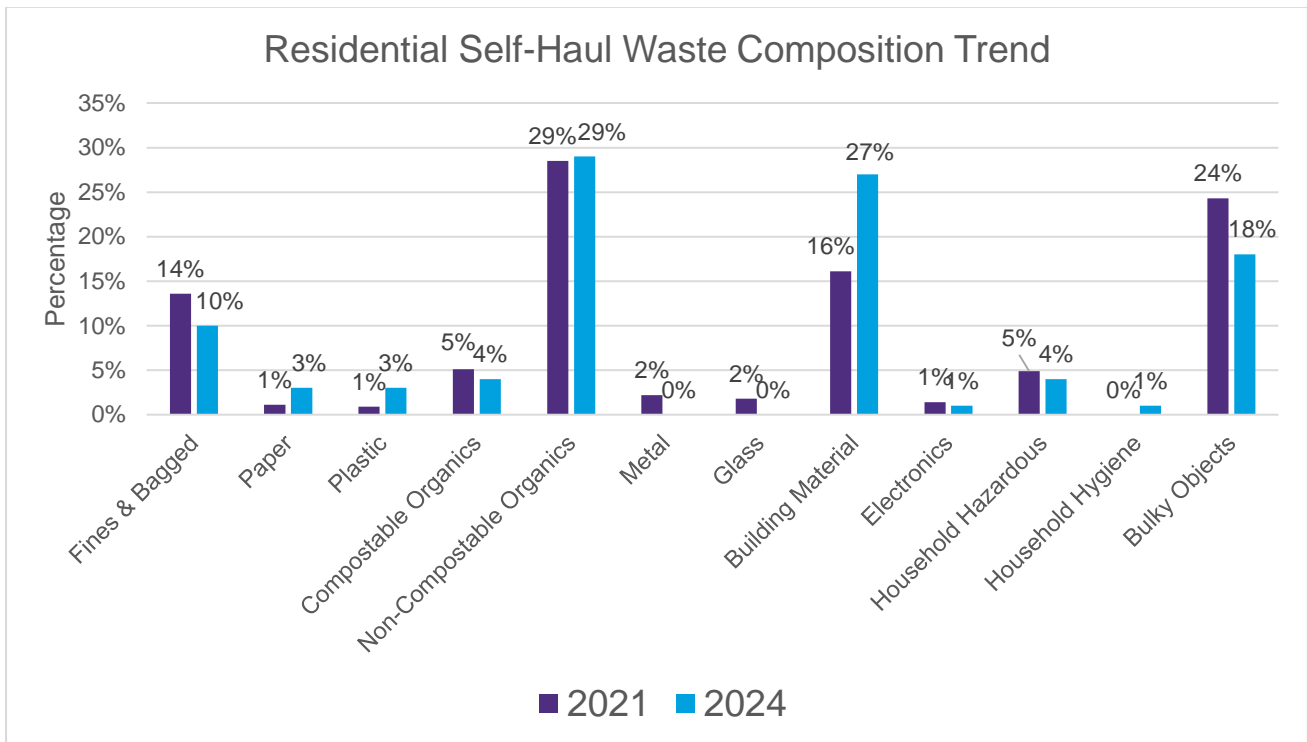


Figure 3 Composition of residential self-haul waste disposed

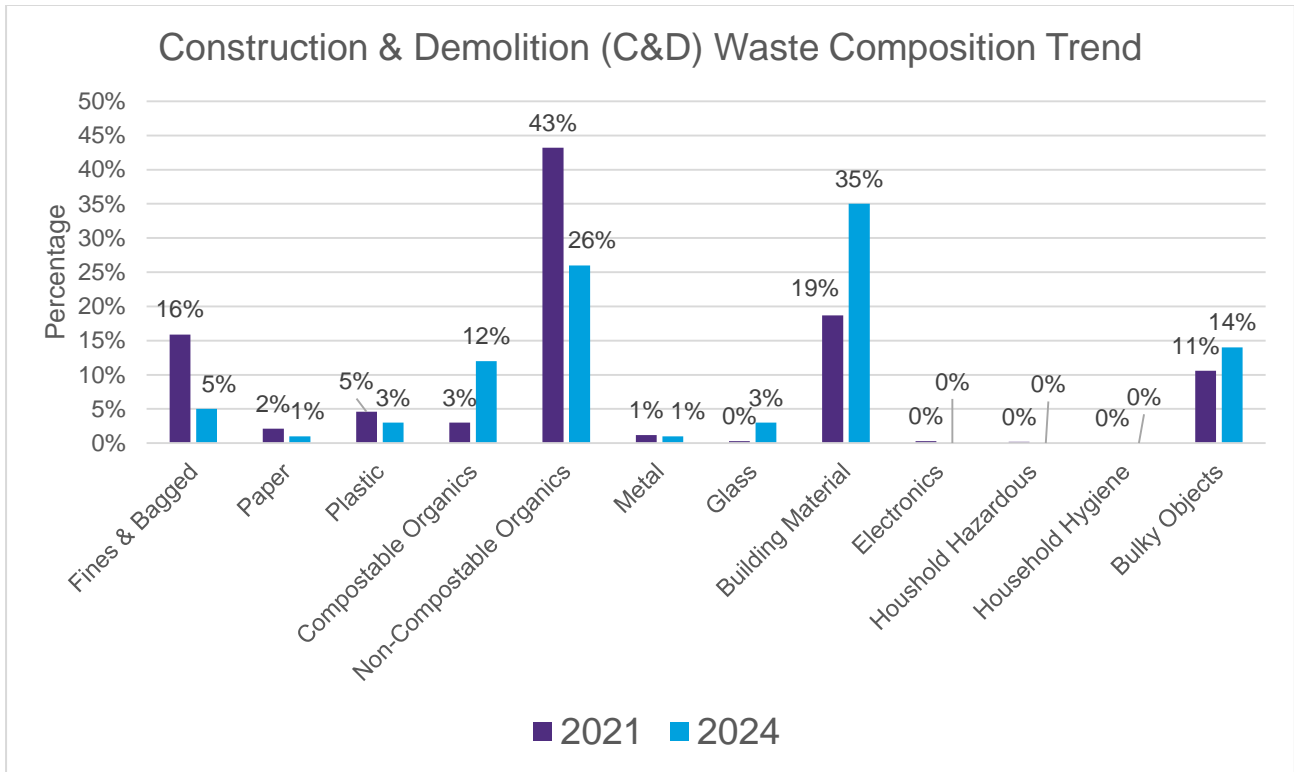


Figure 4 Composition of construction and demolition waste going to the Glenmore Regional Landfill

Waste composition data from both the 2021 study and the 2024 were regrouped to show diversion potential to either existing recycling programs or opportunities for organics diversion. Figures 5-8 show diversion potential by sector studied (curbside residential, ICI, residential self-haul and C&D).

Compostable organics continues to represent the highest diversion potential both in 2021 (48%) and 2024 (44%) in residential garbage. Overall, 75% of waste going to landfill from residents on curbside collection could be diverted into an existing recycling program or captured by a curbside organics program.

The ICI sector has potential to divert 22% of its waste into existing recycling programs and another 20% could be composted according to the 2024 study.

Residents who are self-hauling material directly to transfer stations (Traders Cove, North Westside, Westside Residential Waste and Recycle Centre) or the Glenmore Landfill are doing a good job diverting what they can as the majority of their waste (84% in 2024) is considered residual.

Finally, 86% of construction and demolition material coming into the landfill was residual however a more detail composition study to really refine what is included in the residual category (i.e. opening bags) would need to be completed to get a better understanding of the diversion potential from this sector.

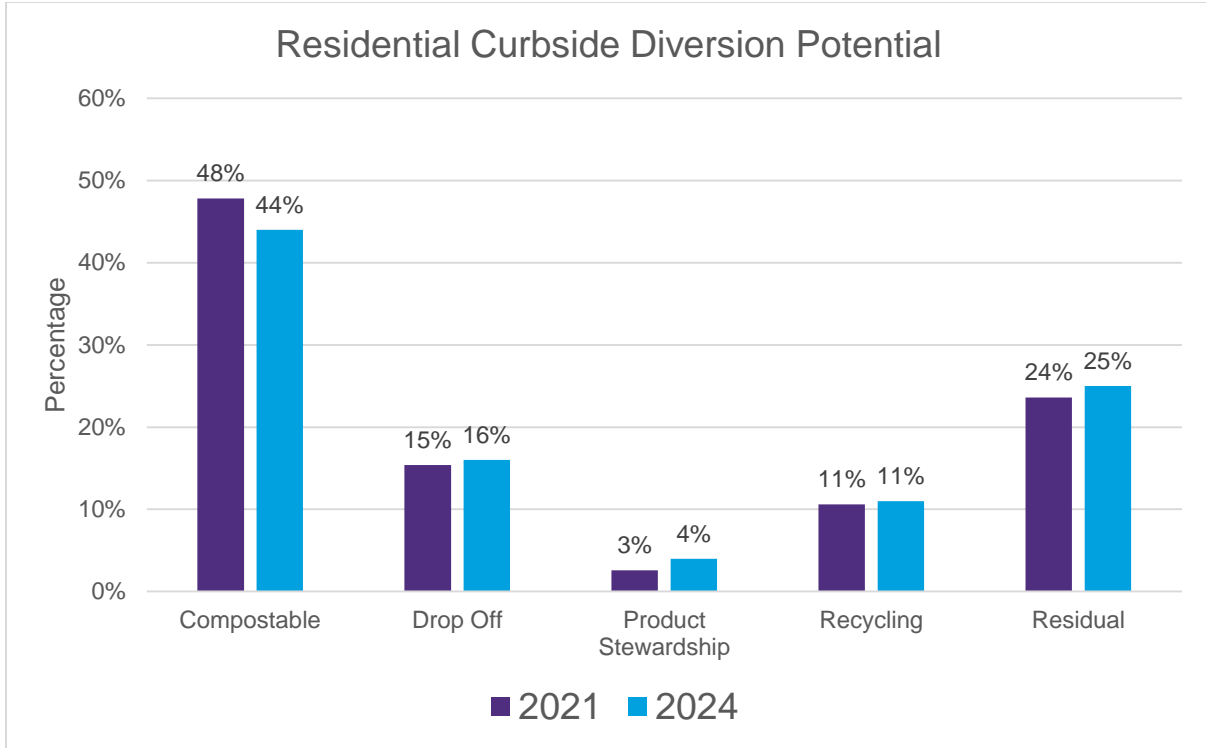


Figure 5 Diversion potential from residential curbside waste

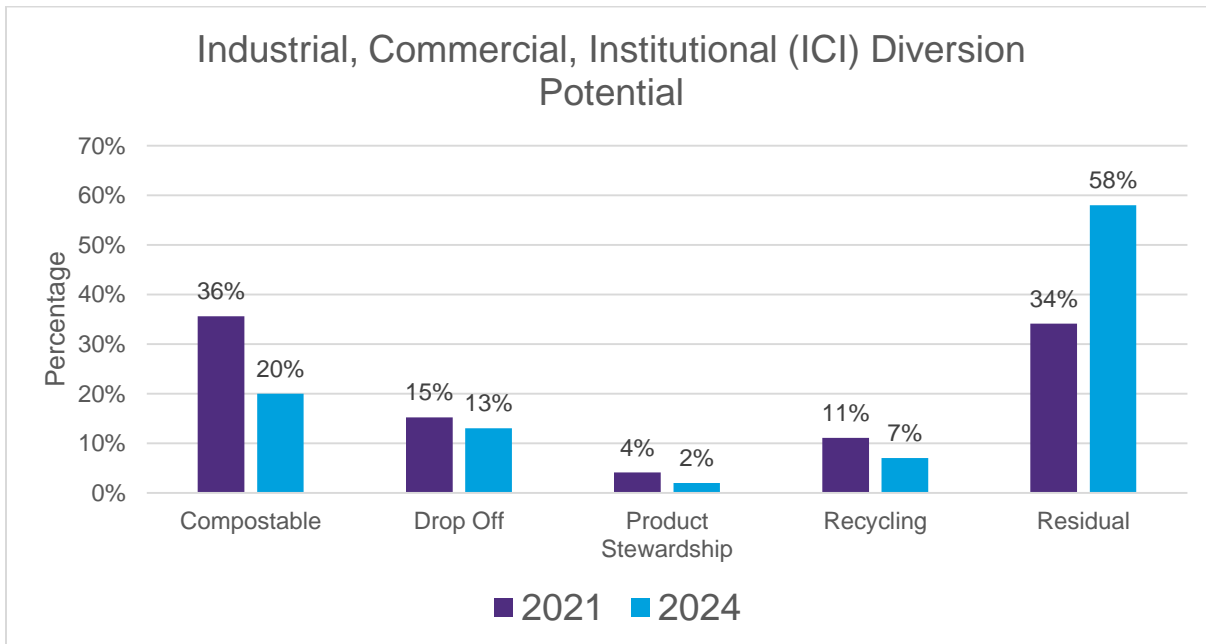


Figure 6 Diversion potential from the ICI sector

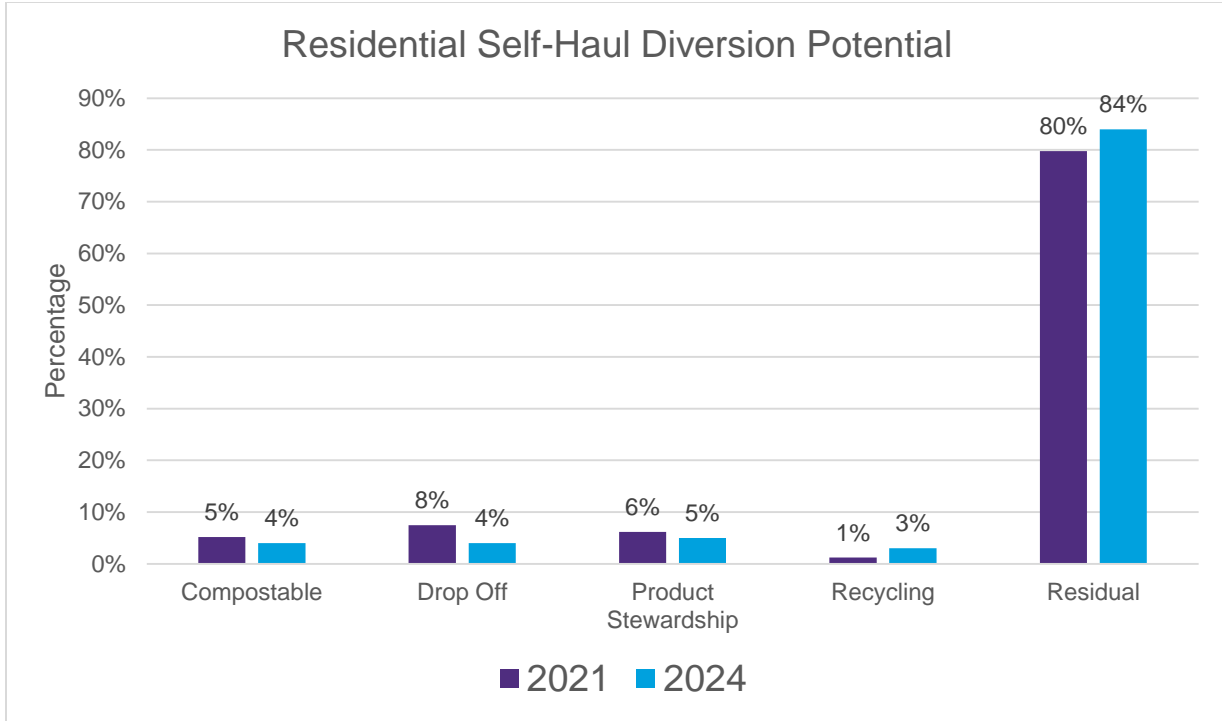


Figure 7 Diversion potential from residents self-hauling directly to transfer stations or landfill

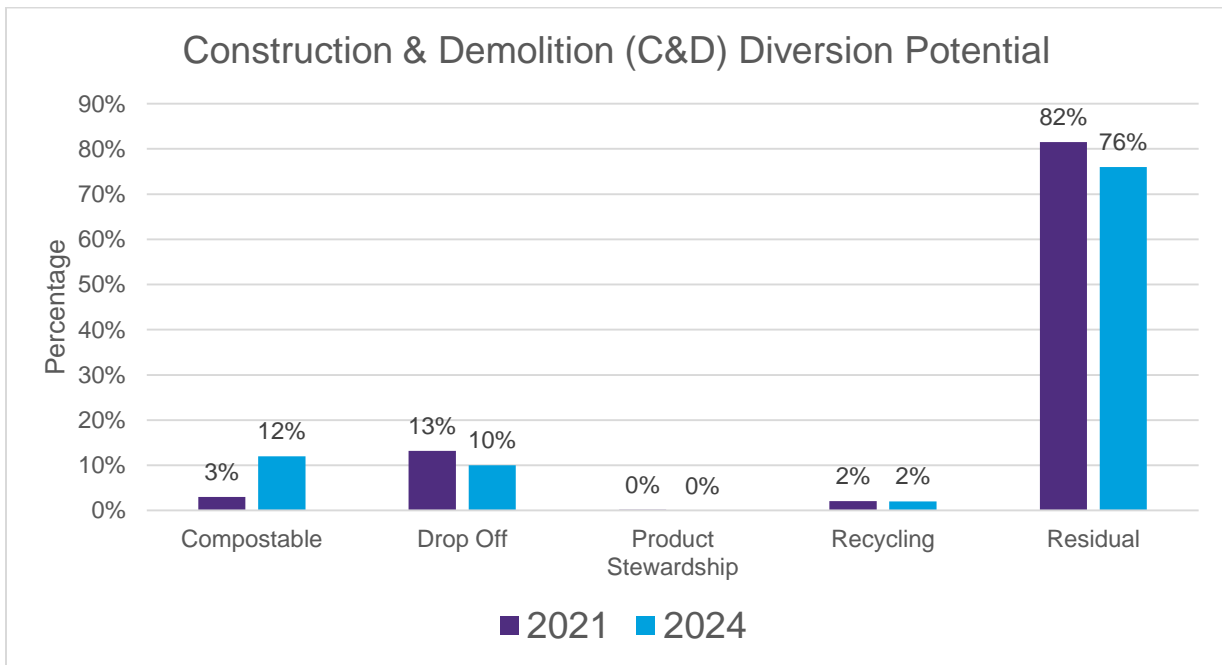


Figure 8 Diversion potential from Construction and Demolition

3.3 Disposal Rate

All waste generated in the region is sent to the Glenmore Regional Landfill, owned and operated by the City of Kelowna. Disposal rates have been calculated using scale information provided by the Glenmore Regional Landfill. Annual tonnage disposed is reported annually to the Ministry of Environment (MoE) and the MoE calculates per person or per capita disposal rates based on BC population stats for the region. The SWMP disposal rate target was set at 600 kg/capita by 2022. The plan also included a waste diversion rate of 50%, however due to difficulty in calculating diversion rates, only disposal rate is used to determine plan effectiveness at the 5-year mark. Figure 9 shows disposal rates per person from 2015 to 2023. The disposal rate for 2022 was 624 kg/person, 4% higher than the plan target of 600 kg/person.

The 2023 disposal rate is 596 kg/person however it should be noted that in 2023 there was a significant wildfire in the region that kept visitors away and or had residents stay away once they were evacuated impacting overall garbage generation for a couple of months. Additionally, during that same period, there was increased waste generated from demolition activities related to removal of partially burnt structures.

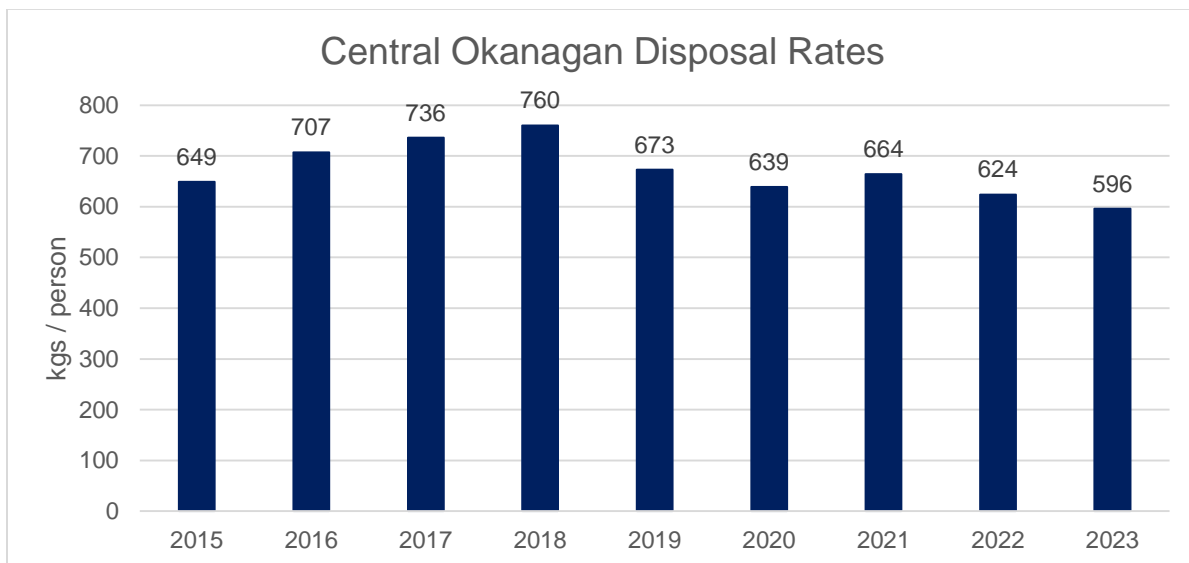


Figure 9 Disposal rate per person in the Central Okanagan

4. Implementation Status

Initiatives laid out in the 2020 SWMP were developed through a series of meetings with the Public Technical Advisory Committee (PTAC). Proposed initiatives were then presented to the public for further comment and engagement before being finalized within the plan. Initiatives were grouped into six categories: reduction and reuse, recycling, recovery and residual waste management, illegal dumping, wildlife and waste management, policy and land use planning in relation to waste management. A total of 24 initiatives make-up the overall 2020 SWMP. Below is a report card showing the status of the initiatives as either complete, in progress or not started. Further details about what has been completed under each initiative can be found in Appendix A.

4.1 Reduction and Reuse

Complete

- Investigate options to support the reuse of items:
 - Support markets for reuse items by identifying partnership organizations.
 - Support the establishment of a re-use-it type facility at the Glenmore Landfill.
- Encourage residents to reuse bags through an awareness campaign and consider banning targeted materials (e.g. single-use plastic bags).
- Investigate collection of EPR materials at RDCO's recycling depots.
- Increase public awareness of existing collection opportunities for EPR products.
 - Improve promotion and education of existing services, for example by providing improved communication, enhancing the website, better signage at recycling depots, etc. to support promotion undertaken by EPR programs.
- Assess options to incentivize backyard composting (residents). The assessment could cover options such as a tax break or reduction in fees for residents that compost in their backyards.

4.2 Recycling

Complete

- Conduct a review of services offered at RDCO's recycling depots, the service review will focus on:
 - Existing hours of operation
 - Materials accepted (e.g. glass)
 - Number and location of recycling depots
- Re-evaluate organic waste diversion opportunities while considering the need to maintain landfill gas collection and use at the landfill. Investigate what additional organics diversion options are feasible in RDCO (these must be cost-effective, socially acceptable, etc.) in the future, if there is sufficient organic waste generated in the region. Options to assess include:
 - Opportunities for businesses and multi-family units (future consideration)
 - An organics curbside collection and processing program, if sufficient quantities are available in the future
 - Submit a report to the Ministry of Environment on organic waste diversion opportunities and effectiveness of maintaining landfill gas collection and use at the landfill by December 31, 2031 (report submission pending).


- Lobby through the BC Product Stewardship Council to influence issues relating to EPR products and programs.

Specific issues that the RDCO proposes to raise include to:

- Consider ways of making recycling easier (e.g. improve accessibility for RDCO residents for all materials).
- Eliminate materials that are hard to recycle (e.g. Styrofoam).
- Express concern with specific EPR programs regarding limited recycling opportunities for businesses (e.g. no packaging and printed paper from businesses are allowed to be accepted at RDCO's recycling centres as per MMBC requirements).
- Encourage MMBC to improve collection of packaging and printed paper in streetscapes.
- Encourage the implementation of a provincial EPR program for furniture and mattresses in accordance with the Canada-wide Action Plan for EPR released by the Canadian Council of Ministers of Environment.

- Improve promotion and education of existing recycling services, for example by providing improved communication, enhancing the website, better signage at recycling depots, etc.
- Before renewing the curbside collection contract, investigate a number of changes to the service to encourage improved waste diversion.

In Progress


-  RDCO to adopt a preferential purchasing policy for green procurement that supports the 3Rs and encourage member municipalities to follow its example.

Green procurement may include requirements to:


- Use a curbside collection contractor that can provide natural-gas/methane powered vehicle fleet.
- Use locally generated compost in internal operations and contractors, wherever applicable (parks, road works, etc.). This can encourage the use of compost from Glenmore Landfill.
- Demand a minimum amount of recycled content in material purchases where the quality required will not be compromised. Examples of common recycled-content products include office paper products (copy paper, file folders, envelopes), toilet paper, paper towels, concrete and plastic benches, curbside collection carts.

 Investigate policy options to encourage recycling. Assess options to:


- Implement mandatory recycling for multi-family and the ICI sectors through using private providers; and/or
- Incorporate waste management provisions into land use bylaws and development guidelines (e.g. mandatory space allocation, accessibility).

 Encourage recycling and waste minimization at events.


- The RDCO, with support from member municipalities, may provide guidelines for waste diversion at events and/or provide loaner equipment (e.g. flags, bin lids with clear signage).

 Establish a mechanism for sharing knowledge with other stakeholder and interest groups within the region in order to improve waste diversion opportunities.


- The RDCO can facilitate the sharing of knowledge (through meetings, social media, etc.) with other stakeholder groups, such as First Nation communities and the ICI sector.

 Investigate facilitating waste audits to educate businesses/organizations on what is in their waste stream and to initiate discussion on diversion options.

- The RDCO may wish to collaborate with member municipalities to support the facilitation of waste audits for the ICI sector. The program may include the development and sharing of reduction, reuse and recycling material, guidance and access to auditors/ training sessions for waste auditing. The RDCO will investigate the program design.

 Investigate opportunities to process and recycle C&D materials. The RDCO will look at opportunities to support or partner with providers of existing facilities that accept and recycle C&D materials. For example, this may mean that specific C&D materials can be accepted at the recycling depots and Glenmore Landfill in order to be picked-up by a private sector partner that has the ability to recycle the material.

Not Started

 Investigate requiring all contractors for construction and demolition (C&D) projects to develop waste management plans to meet specified recycling target

- Collaborate with member municipalities to investigate a practical and cost-effective solution to be implemented. For a project with a waste management plan, the application may be fast tracked or municipalities may be able to lower the cost of permits for the projects.

4.3 Recovery and Residual Waste Management

Complete

<input checked="" type="checkbox"/>	<p>Investigate opportunities to process and recover energy from C&D materials.</p> <ul style="list-style-type: none"> This initiative aims to target energy recovery of C&D materials. RDCO will investigate opportunities provide woody waste for use as fuel by local partners such as the University of British Columbia (Okanagan campus).
<input checked="" type="checkbox"/>	<p>Develop Glenmore Landfill in accordance with proposed fill plan.</p> <ul style="list-style-type: none"> City of Kelowna (with support from the RDCO) proposes to develop the landfill in accordance with the proposed fill plan which will secure landfill capacity for up to 100 years. The current interim plan gives the landfill 75 years of capacity assuming no changes to the footprint. The new “Peak” fill plan gives the landfill 90-100 years capacity by blending the crest of the landfill with the top of Tutt Mountain. The revised final topography plan will result in an ultimate crest height of approximately 532 m, roughly 20 m higher than the previous final topography plan.
<input checked="" type="checkbox"/>	<p>Review tipping fees over the next 2-3 years as part of the development of Glenmore Landfill design, operation and closure plan.</p> <ul style="list-style-type: none"> As part of developing the design, operation and closure plan for Glenmore Landfill, the City of Kelowna will review and adjust tipping fees to ensure adequate funding.
<input checked="" type="checkbox"/>	<p>Conduct feasibility studies to review overall services at transfer stations and potential improvements. The RDCO will collaborate with relevant member municipalities to conduct a service review with focus on:</p> <ul style="list-style-type: none"> the location of the transfer station within the City of West Kelowna and the possibility of moving it to an industrial zone within the City of West Kelowna Operating hours at transfer stations Number and location of transfer stations (e.g. need for transfer station/recycling depots in Lake Country, Peachland and The Mission in Kelowna)

4.4 Illegal Dumping

Complete

<input checked="" type="checkbox"/>	<p>Investigate the success in other regions to mitigate illegal dumping by providing curbside collection of bulky items.</p> <ul style="list-style-type: none"> RDCO will assess the feasibility of providing curbside collection of bulky items (e.g. of furniture, mattresses) to residents.
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4.5 Wildlife and Waste Management

Complete

- When renewing the curbside collection contract, assess the option to incorporate bear-proof locks on the garbage carts for residents that report issues with wildlife.

4.6 Policy and Land Use Planning in Relation to Waste Management

Complete

- Work with municipal and RDCO planning departments to ensure that long-range planning tools identify and preserve lands for future waste management facilities.
 - The RDCO and member municipalities will ensure that land use planning tools such as zoning do not jeopardize existing or planned waste management facilities. This includes recycling depots and transfer stations.
 - The RDCO and the City of Kelowna will collaborate to ensure that the City's Official Community Plan (OCP) specifically acknowledges nuisances identified in relation to Glenmore Landfill (refer to Section 4.9.2).

Section 4.9.2:

The landfill is expected to create nuisances such as dusty, noise, odour, and litter. The City of Kelowna is expecting development in the immediate vicinity around the Glenmore Landfill. To avoid conflict with the landfill, the City of Kelowna should prescribe land uses near the landfill in its Official Community Plan (OCP) and use zoning to minimize potential land use conflicts. This will be important for protecting the landfill as a regional asset and for protecting its citizens.

The RDCO has made significant progress on the SWMP and currently, seventeen (17) of the twenty-four (24) initiatives are considered complete. There are six (6) initiatives in progress with most of them at least 50% complete. One initiative has not yet started.

The most significant initiative complete in the last five years is the decision and supporting work by the RDCO and all member municipalities to turn recycling over to Recycle BC for direct service to residents. This transition will not only ensure municipalities no longer face penalties for contamination in recycling carts, but it will also ensure producers pay full cost for residential paper and packaging. It will also be an opportunity for single family residents to gain access to expanded curbside collection services such as glass and flexible plastics.

RDCO staff, over the past five years, have been primarily focused on recycling education and contamination reduction. This work has helped the region meet several targets in the SWMP, including increasing public awareness of recycling opportunities both curbside and at depots, and reviewing depot services across the region.

Key initiatives that are in progress including investigating policies to encourage recycling for Multifamily and ICI sectors. Two reports have been completed including the Multifamily Recycling Study and the Construction, Renovation & Demolition (CRD) Market Capacity Assessment. Some recommendations from these studies have been implemented including producing a multifamily recycling tool kit, however policies or bylaws requiring multifamily buildings to provide recycling and proper space allocation have not been implemented and no recommendations have been implemented around the CRD Market Capacity Assessment.

Re-evaluating organic waste diversion opportunities, specifically source separated food waste is a significant initiative that is currently in progress. In 2022 the RDCO conducted a Feasibility Assessment of Food Waste Collection and Processing which evaluated four options against predetermined criteria such as environment, financial, social and policy & adaptability. Adding food waste to existing curbside yard waste carts was ranked the highest option for managing curbside food waste in the region. Following the feasibility study, the RDCO board added implementing a curbside organics (food waste) program to their 2023-2026 strategic priorities. In 2023 and 2024 staff have been doing extensive public engagement around implementing a curbside food waste program. The 2021 waste composition study showing over 47% of curbside waste was compostable and new composting processors nearby precipitated beginning this initiative sooner rather than later.

There is one SWMP initiative yet to be started and that is requiring all contractors for C&D project to develop waste management plans to meet specific recycling targets.

5. External Factors Impacting Plan Implementation

The RDCO has several external factors that impact solid waste volumes in the region including significant population growth, housing densification requirements by the province and natural disasters such as wildfires and flooding.

As mentioned in section 2.1, the region's population growth is 14% resulting in extensive waste generated in from the C&D and ICI sector related to building. Additionally, impact from wildfires and flooding resulting in damaged or lost homes has resulted in an increase in not only demolition debris, but the waste related to rebuilding. Wildfires and other natural disasters are anticipated to continue and will result in challenges to waste management. Finally, provincial requirements for municipalities to densify will result in removal of single-family homes for multi unit buildings to go up in their place. It is estimated that for every single-family home that is taken down it results in 150 mT of waste.

While the Glenmore Regional Landfill still has and estimated 100 years of air space according to the 2024 landfill Design Operations and Closure Plan (DOCP), it is important to understand the impacts population and natural disaster pressures will have on waste volumes generated in the near future.

6. Solid Waste System Financials

Solid Waste Management Plans are required to identify funding and or cost recovery mechanisms for diversion programs and residual management contained within the plan. The 2020 plan provided estimated annual operating costs for initiatives identified. Costs relating to

the on-going operation and development of the Glenmore Regional Landfill are carried by the City of Kelowna.

Cost estimated to carry out the initiatives outlined in the 2020 plan totalled \$392,000 over five years. There is only one outstanding initiative that have not been started and the cost estimated for that initiative is as follows:

- \$20,000 to investigate requiring all contractors for C&D projects to develop waste management plans to meet specified recycling targets.

Additional work that needs to be completed for two initiatives in progress with financial implications also include:

- \$25,000 to encourage recycling and waste minimization at events.
- \$40,000 to investigate opportunities to process and recycle C&D materials.

\$40,000 was earmarked to re-evaluate organics diversion which has been used towards a feasibility study and public engagement. The Regional Board has earmarked \$450,000 towards implementation of a regional food waste collection service from the Green Communities Fund, with more funding required if land purchases or capital infrastructure is required.

7. Opportunities for Improvement and Review of Strengths

The RDCO’s per capita disposal rate continues to be above the provincial average despite having improved throughout the plans implementation. The below figure shows how the RDCO compares to neighbouring regional districts and the BC-wide average.

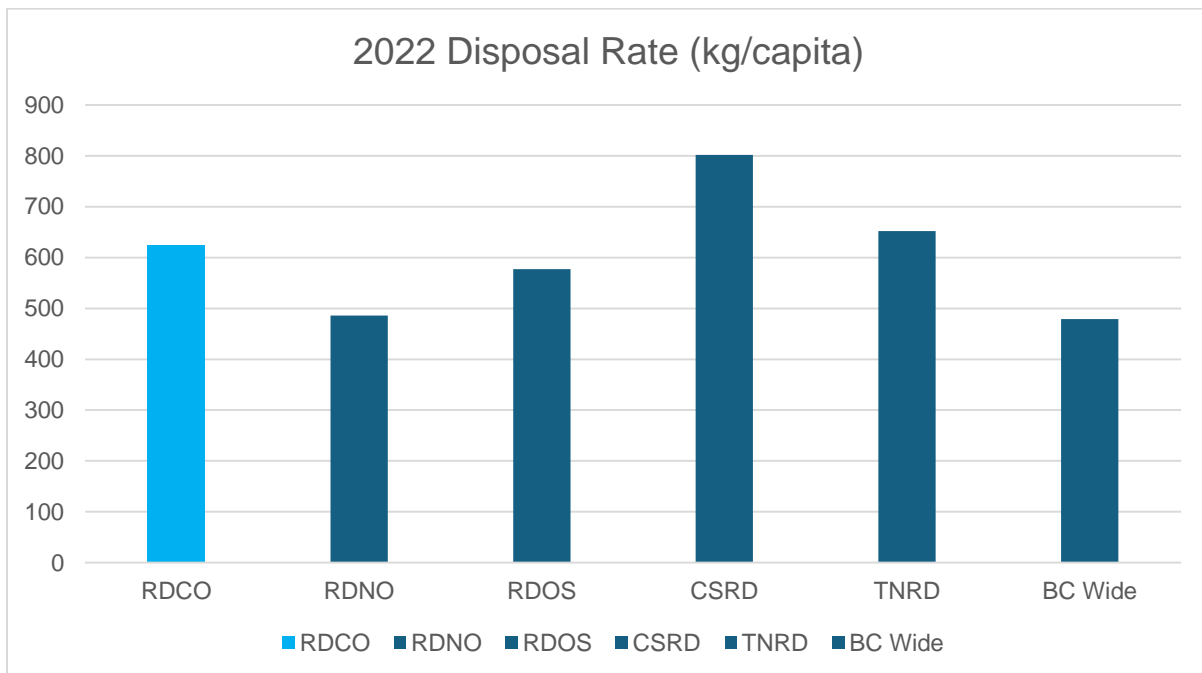


Figure 10 per capita disposal rates of RDCO and neighbouring regions

A number of factors affect disposal rates from one region to the next, including population density, economic activity, tourism, and diversion systems and infrastructure in place.

7.1 Recycle BC

The RDCO and member municipalities are above average in their recycling efforts, recycling 10,877 mT of residential paper and packaging in 2023. Figure 11 below shows a comparison to nearby regions. The region does however continue to struggle with meeting Recycle BC contamination targets. As a result, \$60,000 in penalties were applied to communities in 2022 and \$37,500 in penalties were applied in 2023. The RDCO continues to find new and innovative ways to reach residents and reduce contamination including testing artificial intelligence on trucks in 2023/2024 to identify contamination and hosting 16 pop of depots in the under-served communities of Lake Country and Peachland in 2024. A book recycling program was also brought into the region in 2024 to provide residents with a means to recycle books and not include them in their curbside carts.

Multi-family residents who are serviced by private haulers are not part of the Recycle BC program and therefore at the mercy of what private haulers will collect. Bringing multi-family under the Recycle BC umbrella is a future opportunity to expand services for residents living in condos and apartments.

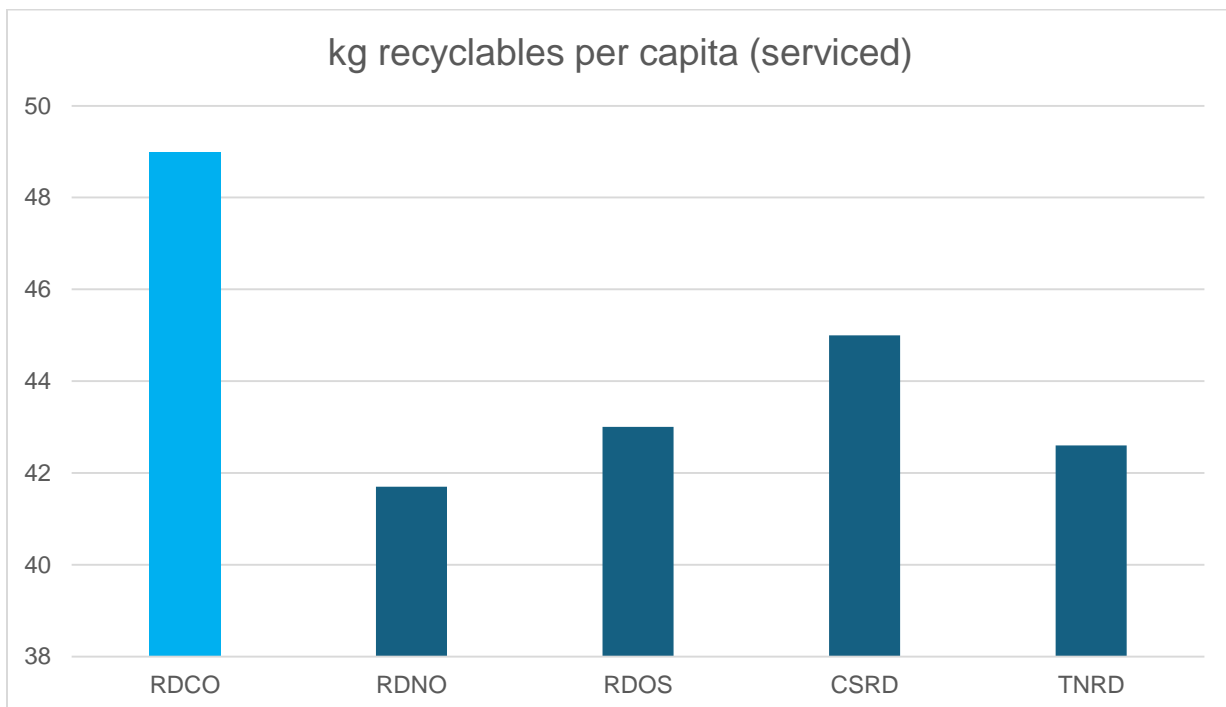


Figure 11 per capita recycling rate of residential paper and packaging (curbside and depots)

7.2 Construction and Demolition Waste

The Central Okanagan continues to be challenged by rapid population growth that results in increased construction and building. Additionally, densification and provincial requirements to allow for duplex, fourplex, and up to sixplex buildings on existing single family lots has resulted in demolition of homes and an increase in demolition material heading for landfill. Additionally, extreme wildfire seasons in 2022 and 2023 have resulted in additional demolition material for partially burned structures and an increase in construction waste as residents rebuild. The recommendations laid out in the Construction, Renovation & Demolition (CRD) Market Capacity Assessment is a future opportunity to reduce C&D waste in the region.

7.3 Upcoming Regulator Changes in BC

In September 2021, the MoE announced that new products would be added to the Recycling Regulation and be covered by EPR programs. Items identified include mattresses, single-use fuel canisters, fire extinguishers, electric vehicle batteries and expansion of electronic products such as e-cigarettes and solar panel. These items should be eligible for province-wide recycling in the next couple of years.

Since adoption of the SWMP, a number of new items were added to the Provinces recycling regulation including milk and milk-alternative containers being added to the deposit-refund system in February 2022 and packaging like single use items were added in 2023. ICI packaging and paper recovery improvements continue to be delayed. Challenging materials not included in the MoE's EPR action plans include clothing and textiles and furniture.

In June 2022, the Government of Canada published the Single-use Plastics Prohibition Regulations which bans the manufacture, import, sale and export of several single-use items, including plastic bags. The Province of BC also introduced the Single-Use and Plastic Waste Prevention Regulation, therefore the RDCO did not pursue initiative two which involved banning single-use plastic bags.

7.4 Collaboration with First Nations Communities

Currently, Westbank First Nations participate in some regional services such as the Westside Residential Waste and Disposal Centre. However, they do not participate in curbside collection services. The RDCO is actively committed to reconciliation with the sylix / Okanagan people within the Central Okanagan. The RDCO strives for collaboration through a meaningful and ethical government-to-government working relationship with the sylix / Okanagan people. It is important to ensure that SWMP updates and renewals include all First Nation communities within the region.

8. Next Steps

The MoE recommend that regional districts renew their solid waste management plans every 10 years and therefore the RDCO is required to submit a full plan renewal before December 31, 2030. Given that only one initiative in the plan has yet to be started and more than half of the initiatives are currently considered complete, it is recommended that a plan renewal take place after full implementation of the curbside food waste program.

Appendix A: RDCO's SWMP Implementation Status

Table 1: Current Status of 2020 SWMP Recommendations for Reduction and Reuse

Strategy	Status
<p>1. Investigate options to support the reuse of items:</p> <ul style="list-style-type: none"> • Support markets for reuse items by identifying partnership organizations. • Support the establishment of a re-use-it type facility at the Glenmore Landfill. 	<p>Complete</p> <p>RDCO hosted two Trunk Sales annually from 2010 to 2020 (COVID). It was decided to discontinue hosting Trunk Sales as many similar events were being taken on by the community and therefore the final event was held in 2022.</p> <p>RDCO hosted Repair Café's until 2020 (COVID) after which time it was decided to discontinue these events.</p> <p>It was determined that hosting a re-use-it facility at the Glenmore Landfill was not feasible. As an alternative, local charities have been given space for donation bins. However, due to vandalism and illegal dumping around these bins they have been removed as of November 2024.</p>
<p>2. Encourage Residents to reuse bags through an awareness campaign and consider banning targeted materials (e.g. single-use plastic bags)</p>	<p>Complete</p> <p>The RDCO in conjunction with the SWTAC, decided not to pursue this initiative.</p> <p>The federal government's ban on six types of single-use plastics, including checkout bags, cutlery and straws, came into effect in 2022 as part of an effort to achieve zero plastic waste by 2030. Although the ban was struck down in Federal Court, the federal government appealed that decision and while the matter is before the courts, the ban remains.</p> <p>B.C.'s single-use plastic regulations came into effect on July 15, 2024, with all plastic shopping bags banned from being offered at stores across the province.</p>
<p>3. Investigate collection of EPR materials at RDCO's recycling depots</p>	<p>Complete</p> <p>In the past the RDCO has left it to the private sector to provide the services to collect</p>

	<p>EPR materials. RDCO has made the decision to continue to encourage residents to take EPR materials to existing private depots with some exceptions including residential paper and packaging, tires, large appliances and batteries which are collected at the Westside Transfer Station and Glenmore Landfill.</p>
<p>4. Increase public awareness of existing collection opportunities for EPR products.</p> <ul style="list-style-type: none"> Improve promotion and education of existing services, for example by providing improved communication, enhancing the website, better signage at recycling depots, etc. to support promotion undertaken by EPR programs. 	<p>Complete</p> <p>RDCO continues to promote all recycling opportunities through the RDCO website, Recycle Coach APP, social media and recycling guides.</p> <p>Waste Ambassador program was established in 2016 which involves recycling cart inspections, attending events, decaling curbside carts and hosting pop up depots.</p>
<p>5. Assess options to incentivize backyard composting (residents). The assessment could cover options such as a tax break or reduction in fees for residents that compost in their backyards.</p>	<p>Complete</p> <p>The RDCO continues to subsidize backyard composters to all residents selling between 300 – 400 composters annually.</p> <p>No additional incentives have been implemented.</p>

Table 2: Current Status of 2020 SWMP Recommendations for Recycling

Strategy	Status
<p>6. Conduct a review of services offered at RDCO’s recycling depots. The service review will focus on:</p> <ul style="list-style-type: none"> Existing hours of operation Materials accepted (e.g. glass) Number and location of recycling depots (e.g. review the need for depots in Lake Country, Peachland and The Mission in Kelowna) 	<p>Complete</p> <p>A transfer station review was completed in 2019 for Traders Cove and North Westside Transfer Station (NWSTS). Hours were expanded for NWSTS and household hazardous waste round up was added to Trader’s Cove Transfer Station in 2024.</p> <p>Peachland continues to be under-served with no recycling depot. Lake Country has a private depot that takes some EPR items but is underserved with regards to paper and packaging.</p> <p>In 2021 the RDCO hosted pop-up depots in both Peachland and Lake Country to fill these</p>

	<p>gaps. In 2024, 8 pop up depots have been hosted in Peachland and 8 in Lake Country. Paper and packaging, electronics, small appliances, household batteries, light bulbs and fixtures are all collected at these events and sent to a private depot.</p>
<p>7. Re-evaluate organic waste diversion opportunities while considering the need to maintain landfill gas collection and use at the landfill.</p> <ul style="list-style-type: none"> Investigate what additional organics diversion options are feasible in RDCO (these must be cost-effective, socially acceptable, etc.) in the future, if there is sufficient organic waste generated in the region. <p>Options to assess include:</p> <ul style="list-style-type: none"> Opportunities for businesses and multi-family units; and An organics curbside collection and processing program, if sufficient quantities are available in the future. Submit a report to the Ministry of Environment on organic waste diversion opportunities and effectiveness of maintaining landfill gas collection and use at the landfill by December 31, 2031 	<p>Complete</p> <p>Based on 2021 waste composition studies, 41% of waste going to landfill from the curbside is divertible food waste and soiled paper.</p> <p>In 2022, the RDCO conducted a feasibility study to determine the best method of managing food waste in the region. Comingling food waste with existing yard waste was shown to be the preferred option. This report has not been submitted to the MoE yet.</p> <p>In 2023 -2024 extensive public engagement took place and it was determined that there was public support for a curbside food waste program.</p> <p>The Regional Board is committed to implementing a curbside food waste program as part of its 2023-2026 strategic priorities.</p> <p>Final processor location is yet to be determined.</p> <p>The RDCO is well ahead of schedule on re-evaluating organic waste diversion in the region.</p>
<p>8. RDCO to adopt a preferential purchasing policy for green procurement that supports the 3Rs and encourage member municipalities to follow its example.</p> <p>Green procurement may include requirements to:</p> <ul style="list-style-type: none"> Use a curbside collection contractor that can provide natural-gas/methane powered vehicle fleet. 	<p>In Progress – 66% complete</p> <p>The region’s curbside contractor, as of 2019, operates using a fleet of natural gas-powered vehicles.</p> <p>The RDCO purchasing policy No. 7.2 includes the RDCO Green Vehicle and Equipment Policy Implementation Plan. The plan objectives include:</p> <ul style="list-style-type: none"> Where applicable, include low emission criteria and/or energy use

<ul style="list-style-type: none"> • Use locally generated compost in internal operations and contractors, wherever applicable (parks, road works, etc.). This can encourage the use of compost from Glenmore Landfill. • Demand a minimum amount of recycled content in material purchases where the quality required will not be compromised. Examples of common recycled-content products include office paper products (copy paper, file folders, envelopes), toilet paper, paper towels, concrete and plastic benches, curbside collection carts. 	<p>alternatives in Vehicle and Equipment Procurement Processes for vehicles.</p> <ul style="list-style-type: none"> • Include a preference for low GHG emission and low energy use alternatives in all facility and process related equipment purchases (I.e. HVAC systems, pumps, and WWTP process equipment) <p>A formal purchasing policy regarding recycled content in materials purchased has not been developed at this point.</p> <p>While not a formal policy, regional parks services utilize locally generated compost.</p>
<p>9. Lobby through the BC Product Stewardship Council to influence issues relating to EPR products and programs</p> <p>Specific issues that the RDCO proposes to raise include to:</p> <ul style="list-style-type: none"> • Consider ways of making recycling easier (e.g. improve accessibility for RDCO residents for all materials); • Eliminate materials that are hard to recycle (e.g. Styrofoam); • Express concern with specific EPR programs regarding limited recycling opportunities for businesses (e.g. no packaging and printed paper from businesses are allowed to be accepted at RDCO’s recycling centres as per MMBC requirements); • Encourage MMBC to improve collection of packaging and printed paper in streetscapes; and • Encourage the implementation of a provincial EPR program for furniture and mattresses in 	<p>Complete and ongoing</p> <p>Staff from RDCO continue to participate in the BC Product Stewardship Council and engage in comments and recommendations on EPR plan updates as well as opportunities for engagement with the Province on new EPR programs and recycling regulation updates.</p> <p>The recycling regulation, which includes paper and packaging, continues to result in producers looking at reduction of hard to recycle items including Styrofoam. Federal and Provincial regulations on single-use items are also seeing a reduction in hard to recycle items.</p> <p>The RDCO continues to be engaged with the Province on expanding the recycling regulation. This is done through the BC Product Stewardship Council as well as providing direct feedback on the 2020 Recycling Regulation – Policy Intentions Paper. The Policy Intentions paper included Clean BC evaluating adding mattresses, additional hazardous products, and expanding paper and packaging beyond residential sources (i.e. commercial).</p>

<p>accordance with the Canada-wide Action Plan for EPR released by the Canadian Council of Ministers of Environment.</p>	
<p>10. Investigate policy options to encourage recycling. Assess options to:</p> <ul style="list-style-type: none"> • Implement mandatory recycling for multi-family and the ICI sectors through using private providers; and/or • Incorporate waste management provisions into land use bylaws and development guidelines (e.g. mandatory space allocation, accessibility). 	<p>In progress – 25% complete</p> <p>The 2020 Multifamily Study identified barriers to recycling in apartment and condo buildings and provided recommendations that would further support this initiative however many of these recommendations have yet to be implemented including recommendations for policy and bylaw changes.</p>
<p>11. Investigate requiring all contractors for construction and demolition (C&D) projects to develop waste management plans to meet specified recycling target.</p> <ul style="list-style-type: none"> • Collaborate with member municipalities to investigate a practical and cost-effective solution to be implemented. For a project with a waste management plan, the application may be fast tracked or municipalities may be able to lower the cost of permits for the projects. 	<p>Not started</p> <p>The RDCO and member municipalities do not currently require waste management plans for C&D projects.</p>
<p>12. Encourage recycling and waste minimization at events.</p> <ul style="list-style-type: none"> • The RDCO, with support from member municipalities, may provide guidelines for waste diversion at events and/or provide loaner equipment (e.g. flags, bin lids with clear signage). 	<p>In Progress – 50% complete</p> <p>While the RDCO does not have formal guidelines or provide waste reduction equipment for waste reduction at events, staff are available to advise and facilitate waste reduction options for local events.</p> <p>Events held by RDCO aim to be zero waste events whenever possible.</p>
<p>13. Establish a mechanism for sharing knowledge with other stakeholder and interest groups within the region in order to improve waste diversion opportunities.</p>	<p>In progress – 50% complete</p> <p>The Waste Reduction office regularly attends annual SIWMA conferences, monthly Recycle BC collectors group meetings, and some</p>

<ul style="list-style-type: none"> • The RDCO can facilitate the sharing of knowledge (through meetings, social media, etc.) with other stakeholder groups, such as First Nation communities and the ICI sector. 	<p>workshops presented by Coast Waste Management Association. While not always focused on knowledge sharing within region, these meetings help form program improvements provided by the Waste Reduction Office.</p> <p>More work needs to be done to facilitate knowledge sharing with regional partners and the ICI sector.</p>
<p>14. Improve promotion and education of existing recycling services, for example by providing improved communication, enhancing the website, better signage at recycling depots, etc.</p>	<p>Complete and on-going</p> <p>The RDCO updated its website in 2021 allowing for easier navigation to important waste reduction information. Staff has worked with member municipalities to provide recommendations on waste management information on their perspective websites.</p> <p>Education material is constantly reviewed and updated as required.</p> <p>All signage at recycling depots have been updated to Recycle BC provided signs or to include the most up to date Recycle BC information.</p> <p>The recycling cart checking program provides residents with direct feedback on what is acceptable in their recycling carts through tags left behind and a decal placed on carts.</p> <p>The Recycle Coach app continues to provide up to date scheduling and what goes where information for residents. Alternatively, physical posters, brochures, and calendars are still made available to residents.</p>
<p>15. Investigate facilitating waste audits to educate businesses/organizations on what is in their waste stream and to initiate discussion on diversion options</p> <ul style="list-style-type: none"> • The RDCO may wish to collaborate with member municipalities to support the facilitation of waste audits for the ICI sector. The program may include the development and sharing of 	<p>In progress – 50% complete</p> <p>In the RDCO, the multifamily sector is managed by private haulers who also collect ICI material therefore multifamily waste is labelled as ICI when it arrives at the Glenmore Landfill. Work on this initiative to date has been focused on the multifamily sector.</p>

<p>reduction, reuse and recycling material, guidance and access to auditors/ training sessions for waste auditing. The RDCO will investigate the program design.</p>	<p>GreenStep was hired in 2020 to conduct a multifamily study to assist with identifying multifamily barriers to recycling more. The study included auditing 30 buildings within the region.</p> <p>Additionally, a multifamily toolkit was developed to support waste diversion in multifamily buildings.</p> <p>The Waste Reduction office continues to implement the overall Commercial Diversion Program which involved monitoring waste going to landfill for mandatory recyclables.</p> <p>More work needs to be done directly with businesses and organizations.</p>
<p>16. Before renewing the curbside collection contract, investigate a number of changes to the service to encourage improved waste diversion. The RDCO in collaboration with member municipalities will investigate and implement the following changes to the current curbside collection service:</p> <ul style="list-style-type: none"> • Weekly recycling collection Assess feasibility of increasing service level by providing a weekly collection of recyclables. • User pay (pay per cart tip) Each household receiving the curbside collection service would be charged a rate based on how much waste is placed at the curb. The carts are already equipped with the required ID tags. • Reduce size of garbage bins. This initiative encourages less garbage disposal. • Increase yard waste collection Assess feasibility of increasing the service level for yard and garden waste (i.e. larger cart or providing 	<p>Complete</p> <p>A new curbside contract was negotiated in 2019, while waiting for the SWMP final approval. Some of the proposed changes were incorporated into the curbside RFP including increasing yard waste service to include an additional month of collection.</p> <p>Weekly recycling collection, user pay, reducing the size of garbage bins and expanding curbside recycling were not considered in the last curbside contract RFP.</p> <p>In 2021 the RDCO and its member municipalities agreed to turn over curbside recycling directly to Recycle BC effective May 1, 2026. Collection of glass and flexible plastics will be added to residential curbside collection at that time.</p>

<p>service during more weeks of the year).</p> <ul style="list-style-type: none"> • Inclusion of glass, Styrofoam, and/or plastic bags that are currently only collected at recycling centres. • The option of handing over responsibility of curbside recycling to MMBC will also be given consideration. • For all potential changes costs and benefits will be considered as part of the overall decision-making process. 	
<p>17. Investigate opportunities to process and recycle C&D materials.</p> <p>The RDCO will look at opportunities to support or partner with providers of existing facilities that accept and recycle C&D materials. For example, this may mean that specific C&D materials can be accepted at the recycling depots and Glenmore Landfill in order to be picked-up by a private sector partner that has the ability to recycle the material.</p>	<p>In progress – 25% complete</p> <p>In 2023 the City of Kelowna and the RDCO commissioned a feasibility study to explore increasing the reuse and recycling of building materials in the region. The Construction, Renovation & Demolition (CRD) Market Capacity Assessment involved a market scan of the Central Okanagan, an estimation of volumes of CRD material in the region, an estimation of carbon emissions associated with waste and examples of successful CRD diversion programs in other regions.</p> <p>The report has provided a number of recommendations that have not yet been implemented.</p>

Table 3: Current Status of 2020 SWMP Recommendations for Recovery and Residual Waste Management

Strategy	Status
<p>18. Investigate opportunities to process and recover energy from C&D materials.</p> <ul style="list-style-type: none"> • RDCO will investigate opportunities to provide woody waste for use as fuel by local partners such as the University of 	<p>Complete</p> <p>In 2021, the Okanagan Biomass Inventory was completed in partnership with RDCO and the Okanagan Sustainability Leadership Council. The study included construction material such as clean and white wood.</p>

<p>British Columbia (Okanagan campus).</p>	
<p>19. Develop Glenmore Landfill in accordance with proposed fill plan.</p> <p>City of Kelowna (with support from the RDCO) proposes to develop the landfill in accordance with the proposed fill plan which will secure landfill capacity for up to 100 years. The current interim plan gives the landfill 75 years of capacity assuming no changes to the footprint. The new “Peak” fill plan gives the landfill 90-100 years capacity by blending the crest of the landfill with the top of Tutt Mountain. The revised final topography plan will result in an ultimate crest height of approximately 532 m, roughly 20 m higher than the previous final topography plan.</p>	<p>Complete</p> <p>The City of Kelowna continues to operate the Glenmore Landfill in accordance with its Design Operation and Closure Plan (DOCP).</p> <p>The 2024 DOCP has estimated the landfill has 100 years of capacity.</p>
<p>20. Review tipping fees over the next 2-3 years as part of the development of Glenmore Landfill design, operation and closure plan.</p> <ul style="list-style-type: none"> • As part of developing the design, operation and closure plan for Glenmore Landfill, the City of Kelowna will review and adjust tipping fees to ensure adequate funding. 	<p>Complete</p> <p>The City of Kelowna continues to review tipping fees and adjust rates to ensure adequate funding for the sites is achieved as well as encouraging waste diversion through tipping fee rates.</p>
<p>21. Conduct feasibility studies to review overall services at transfer stations and potential improvements.</p> <p>In close connection to item 6, the RDCO will collaborate with relevant member municipalities to conduct a service review with focus on:</p> <ul style="list-style-type: none"> • the location of the transfer station within the City of West Kelowna and the possibility of moving it to an industrial zone within the City. • Operating hours at transfer stations, and 	<p>Complete</p> <p>It has been confirmed with the City of West Kelowna that the Westside Residential Waste and Recycling Centre will continue to operate at its existing location into the future. There are no plans to move the site to the industrial zone within the City.</p> <p>There is a gap in recycling services that has been identified in the District of Lake Country and the District of Peachland. Pop up depots have been in place for two years in order to fill this gap.</p>

<ul style="list-style-type: none"> • Number and location of transfer stations (e.g. need for transfer station/recycling depots in Lake Country, Peachland and The Mission in Kelowna). 	<p>There has been no review of other depot locations in The Mission area of Kelowna.</p>
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Table 4: Current Status of 2020 SWMP Recommendations for Illegal Dumping

Strategy	Status
<p>22. Investigate the success in other regions to mitigate illegal dumping by providing curbside collection of bulky items.</p> <ul style="list-style-type: none"> • RDCO will assess the feasibility of providing curbside collection of bulky items (e.g. of furniture, mattresses) to residents. 	<p>Complete</p> <p>The RDCO conducted a bulky collection pilot in 2017, prior to SWMP final approval. 18% of the pilot area participated. It was determined that such a program was cost prohibitive and that residents are served well by private hauling companies.</p> <p>To support residents served by the North Westside Transfer Station, two bulky collection events are held annually on a cost for service basis.</p>

Table 5: Current Status of 2020 SWMP Recommendations for Wildlife and Waste Management

Strategy	Status
<p>23. When renewing the curbside collection contract, assess the option to incorporate bear-proof locks on the garbage carts for residents that report issues with wildlife</p>	<p>Complete</p> <p>Option to include bear resistant carts are in the current curbside contract.</p> <p>The RDCO conducted wildlife resistant cart pilots in 2020 and 2021 including a final request for qualification process to find a certified 120 L bear resistant cart. In 2022 the RDCO purchased a limited supply (100) bear resistant carts for highly motivated residents to purchase for \$75.</p> <p>Staff continue to search for solutions through other communities around the province.</p>

Table 6: Current Status of 2020 SWMP Recommendations for Policy and Land use Planning

Strategy	Status
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<p>24. Work with municipal and RDCO planning departments to ensure that that long-range planning tools identify and preserve lands for future waste management facilities.</p> <ul style="list-style-type: none"> • The RDCO and member municipalities will ensure that land use planning tools such as zoning do not jeopardize existing or planned waste management facilities. This includes recycling depots and transfer stations. • The RDCO and the City of Kelowna will collaborate to ensure that the City’s Official Community Plan (OCP) specifically acknowledges nuisances identified in relation to Glenmore Landfill (refer to Section 4.9.2). <p>Section 4.9.2: The landfill is expected to create nuisances such as dusty, noise, odour and litter. The City of Kelowna is expecting development in the immediate vicinity around the Glenmore Landfill. In order to avoid conflict with the landfill, the City of Kelowna should prescribe land uses near the landfill in its Official Community Plan (OCP) and use zoning to minimize potential land use conflicts. This will be important for protecting the landfill as a regional asset and for protecting its citizens.</p>	<p>Complete</p> <p>As per the City of Kelowna’s Official Community Plan, Policy 13.7.3 ensures a landfill nuisance buffer is established that prohibits development of urban residential uses within the buffer area surround the Regional Landfill.</p> <p>City of West Kelowna has also included solid waste objectives and policies in it’s Official Community Plan.</p>
<p>Ministry Requirement:</p> <p>The RDCO shall complete a Five-Year Effectiveness Review as recommended under Section C.3.3 of A guide to Solid Waste Management Planning.</p> <p>A review report will be submitted to the ministry by December 31, 2024.</p>	<p>Complete</p>