

Regional District of Okanagan-Similkameen Solid Waste Management Plan



PRESENTED TO
Regional District of Okanagan-Similkameen

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EXECUTIVE SUMMARY

The Regional District of Okanagan-Similkameen (RDOS) Solid Waste Management Plan (SWMP) provides a 10-year framework to reduce environmental impacts, improve service efficiency, and strengthen financial sustainability of solid waste services across the regional district. The plan replaces the 2011 SWMP and follows the pollution-prevention hierarchy and circular-economy principles.

By implementing the SWMP, the RDOS aims to:

1. Explore and support local waste reduction, reuse, and repair initiatives across the region.
2. Increase diversion of organics, recyclable materials, construction, demolition, and renovation waste materials to achieve a regional solid waste disposal target of 450 kg/capita per year by 2036.
3. Reduce improper disposal and waste management practices, including illegal dumping and contamination of waste diversion streams.
4. Optimize disposal efficiency across the regional district with a focus on financial sustainability of solid waste services.
5. Increase collaboration with community partners and member municipalities to support development of local solutions.

The SWMP outlines 47 initiatives to achieve these goals categorized into five groups:

- **Reduction, Reuse, and Repair:** Strengthening public education, collaboration with member municipalities, and supporting local initiatives and local organizations to reduce waste.
- **Organics, Recycling and Construction and Demolition (C&D) Diversion:** Expanding organics collection, recycling access, and C&D diversion pathways to capture high-volume materials.
- **Waste Management Practice Improvement:** Minimize contamination and illegal dumping through compliance promotion, improved facility practices, and targeted enforcement/education.
- **Disposal System Efficiency and Financial Resilience:** Harmonizing tipping fees and service levels, evaluating fee and utility models, diversifying revenue streams, and optimizing long-term cost management.
- **Planned Infrastructure and Program Supports:** Invest in and/or upgrade transfer stations, organics processing capacity, recycling and C&D sorting facilities, and regional program supports (e.g., education platforms, repair hubs, and contractor partnerships) to enable diversion and operational goals.

Successful implementation will lower per-capita disposal, increase diversion of priority waste streams, reduce contamination and illegal disposal, enhance recovery after extreme events, and create a more efficient and financially resilient regional solid waste system.

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APPENDICES

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ACRONYMS & ABBREVIATIONS

| Acronyms/Abbreviations | Definition |
|------------------------|--|
| ACM | Asbestos Containing Materials |
| BC | British Columbia |
| C&D | Construction, Demolition, and Renovation |
| C&D MRF | Demolition, Renovation and Construction Waste Sorting Facility |
| EPR | Extended Producer Responsibility |
| GHG | Greenhouse Gas |
| ICI | Industrial, Commercial, and Institutional |
| LSIB | Lower Similkameen Indian Band |
| MF | Multi-family |
| MRF | Material Recovery Facility |
| MSW | Municipal Solid Waste |
| OC | Operational Certificate |
| OIB | Osoyoos Indian Band |
| OMRR | Organic Matter Recycling Regulation |
| ONA | Okanagan Nation Alliance |
| PAC | Public Advisory Committee |
| PACE | The Penticton and Area Cooperative Enterprises |
| PIB | Penticton Indian Band |
| PMAC | Plan Monitoring Advisory Committee |
| RAPP | Report All Poachers and Polluters |
| RDOS | Regional District of Okanagan-Similkameen |
| RFPs | Requests for Proposals |
| SF | Single Family |
| SWMP | Solid Waste Management Plan |
| TAC | Technical Advisory Committee |
| Tetra Tech | Tetra Tech Canada Inc. |
| The Guide | The Guide to Solid Waste Management Planning |
| WDA | Waste Disposal Application |
| WTE | Waste-to-Energy |

1.0 INTRODUCTION

The Regional District of Okanagan-Similkameen (RDOS) has prepared this Solid Waste Management Plan (SWMP) to provide a framework and guidance for managing municipal solid waste (MSW) for the next 10-year planning horizon. This SWMP, if approved by the Ministry of Environment, would replace the 2011 SWMP.

In British Columbia (BC), regional districts are required to prepare and develop SWMPs under the provincial *Environmental Management Act*. The *Guide to Solid Waste Management Planning*¹ (the Guide) recommends that a SWMP should recognize the current solid waste management practices while keeping in mind local circumstances, community goals, disposal capacity, environmental protection, community support, operational capacity, and financial sustainability.

The RDOS initiated its SWMP process in 2024. The proposed process and timeline to review, evaluate, and select options for the SWMP is illustrated on Figure 1-1.



Figure 1-1: Timeline of the SWMP Process

1.1 Guiding Principles

As described by the Guide, SWMPs should include guiding principles that are locally relevant and provide clear direction on how the regional district would achieve its solid waste management goals. The RDOS guiding principles should also be consistent with the province’s guiding principles, which are outlined in Part A.2.2 of the Guide.

The Public Advisory Committee (PAC) and the Technical Advisory Committee (TAC) reviewed the guiding principles provided by the province as well as those included in plans from other regional districts. The PAC and TAC selected the guiding principles for inclusion in the SWMP.

¹ A Guide to Solid Waste Management Planning was published by the British Columbia Ministry of Environment in 2016 and is available through the province’s website at <https://www2.gov.bc.ca/gov/content/environment/waste-management/garbage/municipal-waste-management-plans>.

Through the development of the SWMP, the RDOS seeks to:

- Prevent organics and recyclables from going into the garbage (and subsequently landfill sites) whenever practical.
- Promote zero waste approaches and support a circular economy.
- Support polluter and user-pay approaches and manage incentives to maximize behaviour outcomes.
- Optimize cost over time, while considering short- and long- term financial aspects.
- Develop collaborative partnerships with interested parties to achieve regional targets.
- Collaborate with other regional districts and the province whenever practical.
- Maximize beneficial use of waste materials and manage residuals appropriately.

1.2 Pollution Prevention Hierarchy

This SWMP was developed and organized according to the pollution prevention hierarchy² (Figure 1-2).



Figure 1-2: Pollution Prevention Hierarchy

² BC Ministry of Environment and Parks. September 2016. "5 R Pollution Prevention Hierarchy", from *A Guide to Solid Waste Management Planning*.

1.3 Solid Waste Management Goals and Targets

Through implementation of the SWMP, the RDOS aims to:

1. Explore and support local waste reduction, reuse, and repair initiatives across the region.
2. Increase diversion of organics, recyclable materials, and construction, demolition, and renovation waste materials to achieve a regional solid waste disposal target of 450 kg per capita per year by 2036.
3. Reduce improper disposal and waste management practices, including illegal dumping and contamination of waste diversion streams.
4. Optimize disposal efficiency across the regional district with a focus on financial sustainability of solid waste services.
5. Increase collaboration with community partners and member municipalities to support development of local solutions.

The RDOS's annual solid waste disposal rate (calculated in 2018) is 585 kg/capita per year. The RDOS is committed to working towards achieving the Province's solid waste disposal target; however, the target for this SWMP is 450 kg/capita per year. The RDOS has developed the following strategies that target diverting materials from disposal in the short-, medium-, and long-term.

Short-term: Focus on improving single family (SF), multi-family (MF), and industrial, commercial, and institutional (ICI) programs. Programs implemented in the short-term are expected to yield higher waste diversion rates and these rates are expected to continue rising as they mature over the medium- and long-term timeframes. Early programs and service offerings will reduce the amount of organics and recyclable materials sent to landfills for disposal by the SF, MF, and ICI sectors.

Medium-term: Focus on improving waste diversion in the construction, demolition, and renovation (C&D) sector. Most medium-term initiatives are education programs which may take several years to result in measurable waste diversion. Increases in waste diversion are anticipated to come from reduced C&D material disposal and continued increases in diversion of organics for the SF, MF, and ICI sectors.

Long-term: Refine all programs so that increased diversion is realized in all sectors. New extended producer responsibility (EPR) programs may be implemented within this timeframe. The long-term diversion potential is expected to increase from the medium-term due to slight improvements in all sectors due to program refinement and optimization.

The short-term, medium-term, and long-term disposal targets are summarized in Table 1-1. These disposal targets are based on the RDOS's waste composition results and potential diversion from new programs.

Table 1-1: Recommended Targets

| | Short-Term Goal (3 years) | Medium-Term Goal (5 years) | Long-Term Aspirational Goal (10+ years) |
|---------------------------------|---|---|---|
| Targeted Sectors | <ul style="list-style-type: none"> ▪ SF ▪ MF ▪ ICI | <ul style="list-style-type: none"> ▪ C&D | <ul style="list-style-type: none"> ▪ Refine programs to increase performance for all sectors |
| Disposal Target (kg per capita) | 540 | 500 | 450 |

2.0 BACKGROUND

2.1 Solid Waste Management Plan History

The RDOS developed its first SWMP in 1995. The SWMP was then updated in 2011, and this 2011 version represents the current framework for solid waste management in the RDOS. Table 2-1 lists the initiatives of the 2011 SWMP and their status.

Table 2-1: 2011 SWMP Initiatives and Implementation Status

| Category | Key Initiatives | Status |
|--|---|---|
| Education and Promotion | <ul style="list-style-type: none"> Implement a Business Technical Assistance Program. | <ul style="list-style-type: none"> Toolkits, How-to-Guides, and videos were prepared in 2019. |
| | <ul style="list-style-type: none"> Develop and deliver a Master Composter and Recycler Program. | <ul style="list-style-type: none"> Guidelines and videos for composting were prepared in 2019. |
| | <ul style="list-style-type: none"> Establish more compost demonstration sites. | <ul style="list-style-type: none"> Demonstration sites are no longer required as composting facilities were constructed at the Oliver Landfill, Osoyoos Landfill, Summerland Landfill, and Campbell Mountain Landfill and the RDOS is planning construction of a regional organics processing facility. |
| | <ul style="list-style-type: none"> Develop a compost marketing strategy. | <ul style="list-style-type: none"> Compost market study was initiated in 2016 but should be updated for implementation of an RDOS-operated regional organics processing facility. |
| | <ul style="list-style-type: none"> Implement the Agricultural Waste Composting Assistance program. | <ul style="list-style-type: none"> BC On-Farm Composting Handbook posted on RDOS website. |
| | <ul style="list-style-type: none"> Develop a 3Rs education program for the construction, demolition, and renovation industry. | <ul style="list-style-type: none"> Implemented in 2014. |
| Residential Services – Single Family (SF) Collection | <ul style="list-style-type: none"> Establish a garbage and recycling depot for Apex Alpine Ski Area. | <ul style="list-style-type: none"> Apex Mountain Waste Transfer Station opened in January 2020 after an amendment to the SWMP in 2019. |
| | <ul style="list-style-type: none"> Prepare for curbside food waste collection. | <ul style="list-style-type: none"> In progress (pending completion of regional composting facility). |
| | <ul style="list-style-type: none"> Implement curbside food waste collection. | <ul style="list-style-type: none"> Education programs (i.e., open houses, advertisements, press releases) on food waste collection will be carried out in support of a future food waste collection program when initiated. Region-wide implementation of food waste collection is on hold pending completion of regional composting facility. |
| MF, ICI | <ul style="list-style-type: none"> Develop a template for mandating waste management space requirements in all new MF and commercial developments. | <ul style="list-style-type: none"> Toolkits, How-To Guides, and How-To Videos prepared in 2019. |
| | <ul style="list-style-type: none"> Begin implementation of mandatory recycling at all MF, ICI buildings. | <ul style="list-style-type: none"> Not developed. |

| Category | Key Initiatives | Status |
|--------------------------------|--|---|
| Organics Waste Management | <ul style="list-style-type: none"> Undertake a siting study for regional composting facility/multi-purpose waste management site. | <ul style="list-style-type: none"> Completed 2012. |
| | <ul style="list-style-type: none"> Acquire land for regional composting site in Penticton. | <ul style="list-style-type: none"> Completed 2020. |
| | <ul style="list-style-type: none"> Summerland compost facility construction. | <ul style="list-style-type: none"> Completed 2023. |
| | <ul style="list-style-type: none"> Oliver compost facility construction. | <ul style="list-style-type: none"> Completed 2023. |
| | <ul style="list-style-type: none"> Construction and site development for the regional composting facility in Penticton. | <ul style="list-style-type: none"> In progress. |
| | <ul style="list-style-type: none"> Summerland food scraps collection program. | <ul style="list-style-type: none"> Commenced April 2024. |
| | <ul style="list-style-type: none"> Residential food scraps collection in RDOS. | <ul style="list-style-type: none"> No action (pending completion of regional composting facility). |
| | <ul style="list-style-type: none"> Require large generators of food waste to source-separate food waste. | <ul style="list-style-type: none"> No action (pending completion of regional composting facility). |
| Bear-Human Conflict Management | <ul style="list-style-type: none"> Implement a Bear-Human conflict management program. | <ul style="list-style-type: none"> Bear aware education program implemented in 2012. |
| Disaster Debris Management | <ul style="list-style-type: none"> Develop a disaster debris management plan. | <ul style="list-style-type: none"> No action. |
| Plan Monitoring and Evaluation | <ul style="list-style-type: none"> Undertake a waste composition study at local landfills in advance of the next SWMP. | <ul style="list-style-type: none"> A two-season waste composition study was conducted from 2020 to 2021. |

Of the new facilities that were identified in the 2011 SWMP, the Apex Mountain Waste Transfer Station has been completed and composting facilities for food scraps for Summerland Landfill and Oliver Landfill have been completed. The regional composting facility that would support the City of Penticton has not been established and is awaiting siting approval. As a result of the continuing delays developing a regional composting facility, some key initiatives have not been implemented (e.g., curbside organics collection, requiring large generators of food waste to source-separate food waste) with the exception of the District of Summerland.

A bear aware education program and a waste composition study have been completed, as noted in the 2011 SWMP. With the exception of 3Rs education program for the construction, demolition, and renovation industry, there has been no action on the key initiatives related to education and promotion, MF and ICI service levels, and disaster debris management planning.

The 2011 SWMP projected that full implementation of the solid waste initiatives should result in an annual per capita disposal rate of 430 kg per capita from a disposal rate of 790 kg per capita in 2009. With only partial implementation of the organic waste management initiative, the annual per capita disposal rate target was not realized.

2.2 Plan Area

The RDOS is comprised of six municipalities, nine electoral areas (A through I) and four First Nation Indian Bands. The most populous municipalities are the City of Penticton and the District of Summerland. There are three towns which include the Town of Osoyoos, the Town of Oliver, and the Town of Princeton. The smallest municipalities are the Village of Keremeos and the incorporated municipality of Okanagan Falls. RDOS also has several unincorporated communities that are part of regional district's electoral areas.

The four First Nations Indian Bands located within the RDOS are snpink'tn (Penticton), Osoyoos, Lower Similkameen, and Upper Similkameen Indian Bands.

Each First Nations Indian Band has its own governance and is also represented through the Okanagan Nation Alliance (ONA). The ONA was established in 1981 as the inaugural First Nations government in the Okanagan and includes the Nations listed above. The ONA supports its member communities through a range of cultural, environmental, and social initiatives aimed at preserving the Okanagan (Syilx) culture and fostering community well-being.

2.2.1 Geography

The RDOS is in the Southern Interior of BC spanning across the southern Okanagan and Similkameen valleys. The RDOS is bordered by the Regional Districts of Central Okanagan, Fraser Valley, Thompson-Nicola, Kootenay-Boundary, and the United States border to the south. The RDOS has an area of 10,400 km² which represents 1.2% of the province's land area. A map of the RDOS showing municipal and electoral area boundaries is provided as Figure 2-1.

RDOS typically experiences warm, dry summers and mild winters, averaging 2,000 hours of sunlight and approximately 176 mm of precipitation annually. The terrain consists of forests, mountains, fertile valleys, large lakes, and small to medium sized rivers. The hospitable climate is conducive for orchard and winery operations, retirement communities, vacation properties, and year-round living.

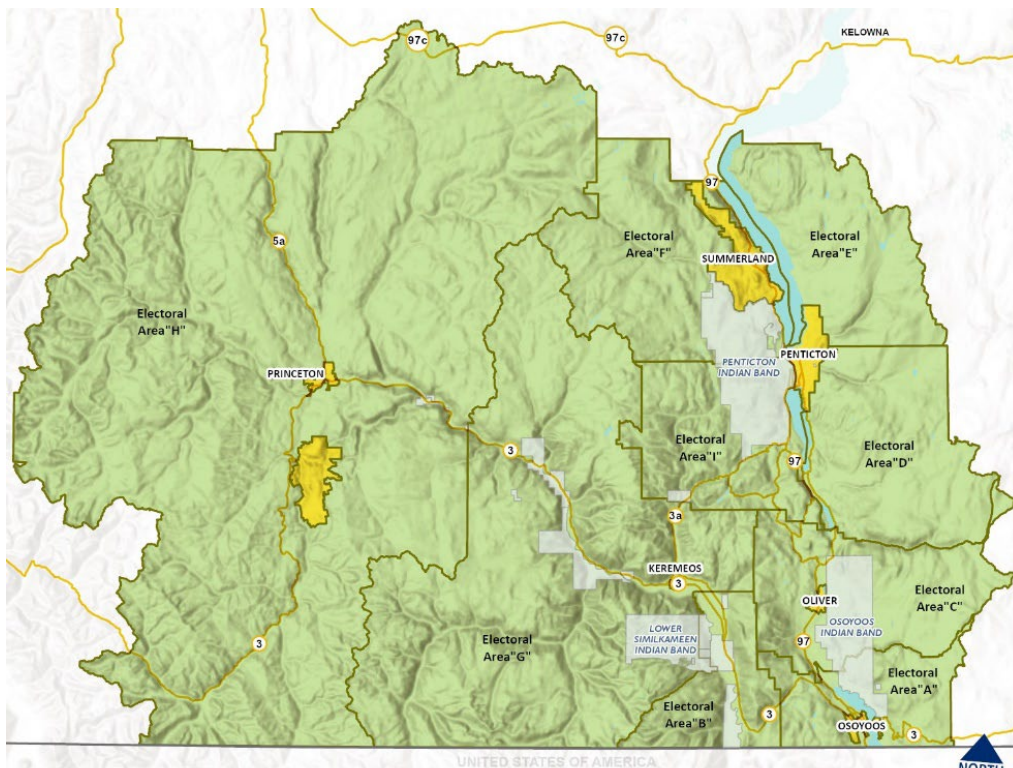


Figure 2-1: RDOS Municipalities and Electoral Areas

2.2.2 Demographics

As of the 2021 federal Census, the RDOS had a population of 90,178 residents. Of these residents, approximately 71% reside within municipalities, 25% reside within the Electoral Areas, and 4% live on First Nations reserves. The RDOS's largest population centres are Penticton (36,885) and Summerland (12,042). Demographic information for the RDOS is presented in Table 2-2.

Table 2-2: Regional Demographic Information³

| Area | Population (2021) | Population (2016) | Population Rate of Growth, 2016 to 2021 | Population Density per km ² (2021) | Land Area in km ² |
|---------------------------------------|-------------------|-------------------|---|---|------------------------------|
| City of Penticton | 36,885 | 33,761 | 9.3% | 857.2 | 43.03 |
| District of Summerland | 12,042 | 11,615 | 3.7% | 162.6 | 74.04 |
| Town of Osoyoos | 5,556 | 5,050 | 10.0% | 660.6 | 8.41 |
| Town of Oliver | 5,094 | 4,928 | 3.4% | 927.9 | 5.49 |
| Town of Princeton | 2,894 | 2,828 | 2.3% | 48.8 | 59.28 |
| Village of Keremeos | 1,608 | 1,502 | 7.1% | 769.4 | 2.09 |
| Subtotal Municipalities | 64,079 | 59,684 | 7.4% | 333.2 | 192.34 |
| Electoral Area A | 2,139 | 1,858 | 15.1% | 8.3 | 258.04 |
| Electoral Area B | 1,151 | 1,047 | 9.9% | 4.8 | 238.78 |
| Electoral Area C | 3,986 | 3,557 | 12.1% | 9.0 | 444.75 |
| Electoral Area D | 4,016 | 3,757 | 6.9% | 6.9 | 583.93 |
| Electoral Area E | 2,015 | 1,903 | 5.9% | 4.1 | 491.90 |
| Electoral Area F | 2,092 | 2,014 | 3.9% | 3.7 | 568.86 |
| Electoral Area G | 2,298 | 2,134 | 7.7% | 1.1 | 2,110.68 |
| Electoral Area H | 2,232 | 1,933 | 15.5% | 0.5 | 4,757.22 |
| Electoral Area I | 2,307 | 2,219 | 4.0% | 6.7 | 344.36 |
| Subtotal Electoral Areas | 22,236 | 20,422 | 8.9% | 2.3 | 9,798.52 |
| Alexis 9, Indian Reserve | 10 | 10 | 0.0% | 5.3 | 1.88 |
| Ashnola 10, Indian Reserve | 58 | 83 | -30.1% | 1.6 | 35.91 |
| Blind Creek 6, Indian Reserve | 26 | 26 | 0.0% | 16.5 | 1.58 |
| Chopaka 7 & 8, Indian Reserve | 86 | 81 | 6.2% | 5.1 | 16.98 |
| Chuchuwayha 2, Indian Reserve | 86 | 58 | 48.3% | 4.0 | 21.38 |
| Lower Similkameen 2, Indian Reserve | 76 | 58 | 31.0% | 5.9 | 12.98 |
| Lulu 5, Indian Reserve | 15 | 20 | -25.0% | 71.4 | 0.21 |
| Osoyoos 1, Indian Reserve | 1,426 | 762 | 87.1% | 10.9 | 130.34 |
| Penticton 1, Indian Reserve | 2,080 | 1,783 | 16.7% | 10.7 | 194.55 |
| Subtotal First Nation Reserves | 3,863 | 2,881 | 34.1% | 9.3 | 415.81 |
| RDOS Total | 90,178 | 83,022 | 8.6% | 8.7 | 10,406.64 |

³ Statistics Canada. 2023. Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023.

The average population density in the RDOS is approximately 8.7 persons per square kilometre; however, population density varies greatly between communities. Oliver has the highest population density at 927.9 persons per square kilometre, while Electoral Area H has the lowest population density at 0.5 persons per square kilometre. Most RDOS residents live in the Okanagan Valley along Highway 97.

In the five years between 2016 and 2021, the regional population grew by 8.6%, which is more than the provincial average of 7.6%. The First Nations reserves had the greatest population growth at 34.1% while municipal populations grew by 7.4%. BC Stats projects that the RDOS population (excluding First Nations) will shrink by approximately 0.03% from 2026 to 2036⁴. The South Okanagan Regional Growth Strategy⁵ in 2016 suggested that the RDOS population could grow by approximately 0.6% per year.

The average household size in the region is 2.1 persons per household⁶. Approximately 23% of residences in the RDOS live in MF residences, most of which are in Penticton. Dwelling information in the RDOS is summarized in Table 2-3.

Table 2-3: Regional Dwelling Information

| Type of Dwelling | Number of Dwellings in 2021 |
|--|-----------------------------|
| Single-detached house | 24,070 |
| Semi-detached house | 1,180 |
| Row house | 2,985 |
| Apartment or flat in a duplex | 1,510 |
| Apartment in a building that has fewer than five stories | 6,760 |
| Apartment in a building that has five or more stories | 1,230 |
| Other single-attached house | 200 |
| Movable dwelling | 3,040 |
| Total Dwellings | 40,980 |

2.2.3 Economy

According to the 2021 Census⁶, the main employment sectors in the region are in the service and construction sectors. These include healthcare and social assistance (14%), retail trade (13%), and construction (10%). Accommodation and food services (8%) and manufacturing (7%) are other major sectors. While traditionally more dominant, agriculture, forestry, fishing, and hunting now only make up 6% of employment.

The RDOS has some of the best agricultural land in BC and has many vineyards and orchards. The region is also a popular destination for vacation goers and retirees due to its favourable climate and recreation opportunities. The population is expected to continue to age, which is increasing the need for public transit and assisted living facilities, as well as increasing expectations for increased levels of public service. The cost of housing remains a concern, as it is expected to continue to increase faster than the economy.

⁴ Province of British Columbia. 2023. Population Estimates & Projections for British Columbia. BC Stats. Retrieved from <https://bcstats.shinyapps.io/popApp/>

⁵ Regional District of Okanagan-Similkameen. 2018. South Okanagan Regional Growth Strategy (Bylaw 2770, 2017). Retrieved from <https://www.rdos.bc.ca/development-services/regional-growth-strategy/what-we-do-7/>

⁶ Statistics Canada. 2023. Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023.

2.2.4 Regional Growth Strategy and Climate Action

The South Okanagan Regional Growth Strategy (Bylaw 2770, 2017)⁷ includes the municipalities of Osoyoos, Oliver, Penticton, and Summerland, as well as Electoral Areas A, C, D, E, F, and I. The Regional Growth Strategy lays out a vision, goals, and strategic actions that were derived from comprehensive public consultation. One key element of the regional vision is to maximize opportunities to reduce and recycle waste. Actions that promote waste diversion and reduction will support several of the goals and metrics laid out in the Regional Growth Strategy, including reducing solid waste generation to support the goal of having more efficient and effective infrastructure services, and monitoring the average tonnes of daily waste landfilled per person to support the goal of protecting the health and biodiversity of ecosystems.

The municipalities and Electoral Areas have amended their Official Community Plans to adopt emission reduction targets and associated policies. As signatories to the Provincial Climate Action Charter, RDOS partakes in Provincial Climate Action reporting to chart progress towards voluntary commitments to reduce greenhouse gas (GHG) emissions in local government operations⁸.

Among the GHG emission sources identified in the RDOS's Community Climate Action Plan, solid waste accounted for 10% of emissions in 2007. Key actions to reduce emissions included reducing and diverting waste from landfills through a combination of education, incentives, policy, and pricing mechanisms⁹. There are also climate action initiatives at the municipal level that support organics diversion.

- Penticton's [Community Climate Action Plan \(2021\)](#) identifies that waste accounts for 14% of community generated GHG emissions (2018) for an annual estimated total of 32,511 tonnes carbon dioxide equivalent¹⁰. A key pillar of the Penticton Community Climate Action Plan (2021) is the implementation of an organics diversion program (includes collection and processing); diverting construction, demolition, agricultural and industrial waste; and developing a comprehensive zero-waste outreach program.
- Summerland developed a Community Energy and Emissions Reduction Plan in 2020 with a goal to work toward its GHG reduction targets of 18% (below 2007 levels) by 2025 and 80% by 2050. Enhancing organics diversion and recycling is a priority of the plan¹¹.

2.3 Waste Generation and Current Waste Management Practices

The following is a high-level overview of the current solid waste management system in the region. RDOS's waste management system is made up of five wastesheds. Wastesheds are areas where recyclables, compostables, and waste disposed are generated from homes, businesses, and institutions (generators). Waste generated in the RDOS is managed in several ways:

- Collected by private or public sector haulers who take the materials to a transfer station, compost facility, landfill, or other waste management facilities;

⁷ Regional District of Okanagan Similkameen. 2018. South Okanagan Regional Growth Strategy – Bylaw 2770, 2017. Retrieved from <https://www.rdos.bc.ca/assets/bylaws/planning/AreaX/2770.pdf>

⁸ RDOS. 2024. Climate Action Reporting. <https://www.rdos.bc.ca/community-services/climate-action-resources/climate-action-reporting/>

⁹ Stantec Consulting. 2011. Regional District of Okanagan Similkameen Community Climate Action Plan. Retrieved from <https://www.rdos.bc.ca/assets/COMMUNITY-SERVICES/ClimateAction/FINAL-2011/5-Regional-CommunityCAP-FINAL.pdf>

¹⁰ City of Penticton. 2021. Penticton Community Climate Action. <https://www.penticton.ca/sites/default/files/docs/our-community/environment/2021%20Community%20Climate%20Action%20Plan.pdf>

¹¹ District of Summerland. 2020. Community Energy and Emissions Reduction Plan. https://www.summerland.ca/docs/default-source/climate-action/20_02_17_ceerp-report-final-b.pdf?sfvrsn=b9ddf1fb_0

- Hauled by the generator to retail locations (for some EPR products); or
- Hauled by the generator to recycling depots, transfer stations, compost facilities, landfills, or other waste management facilities.

Materials generated from the RDOS’s five wastesheds feed into five primary landfill sites with adjacent recycling depots. Two transfer stations, in the Village of Keremeos and Apex Mountain Resort, transfer garbage for disposal at the Campbell Mountain Landfill. Table 2-4 summarizes facilities by wasteshed, and the communities served by each.

Table 2-4: Facilities and Communities Served by Wasteshed

| Landfill Serving Wasteshed | Municipality | Electoral Area | First Nations |
|----------------------------|--|------------------|---|
| Campbell Mountain | City of Penticton Village of Keremeos | B, D, E, F, G, I | Penticton Indian Band (PIB), and Lower Similkameen Indian Band (LSIB) |
| Summerland | District of Summerland | F ¹ | - |
| Oliver | Town of Oliver | C | Osoyoos Indian Band (OIB) |
| Osoyoos | Town of Osoyoos | A | OIB |
| Princeton | Town of Princeton | H | - |

Notes:

Electoral Area F does not have a formal access agreement, but materials are accepted by the District of Summerland.

2.3.1 Existing Facilities

MSW in the region can be directed for management to any authorized site or facility identified in the plan. Authorized sites or facilities are shown on Figure 2-2 and include: (list)

- The facilities included in this solid waste management plan that require an authorization under the *Environmental Management Act* are listed in Appendix A (Table A-1).
- The facilities that are outside of regional districts control but contribute to MSW management are listed in Appendix A (Table A-2).

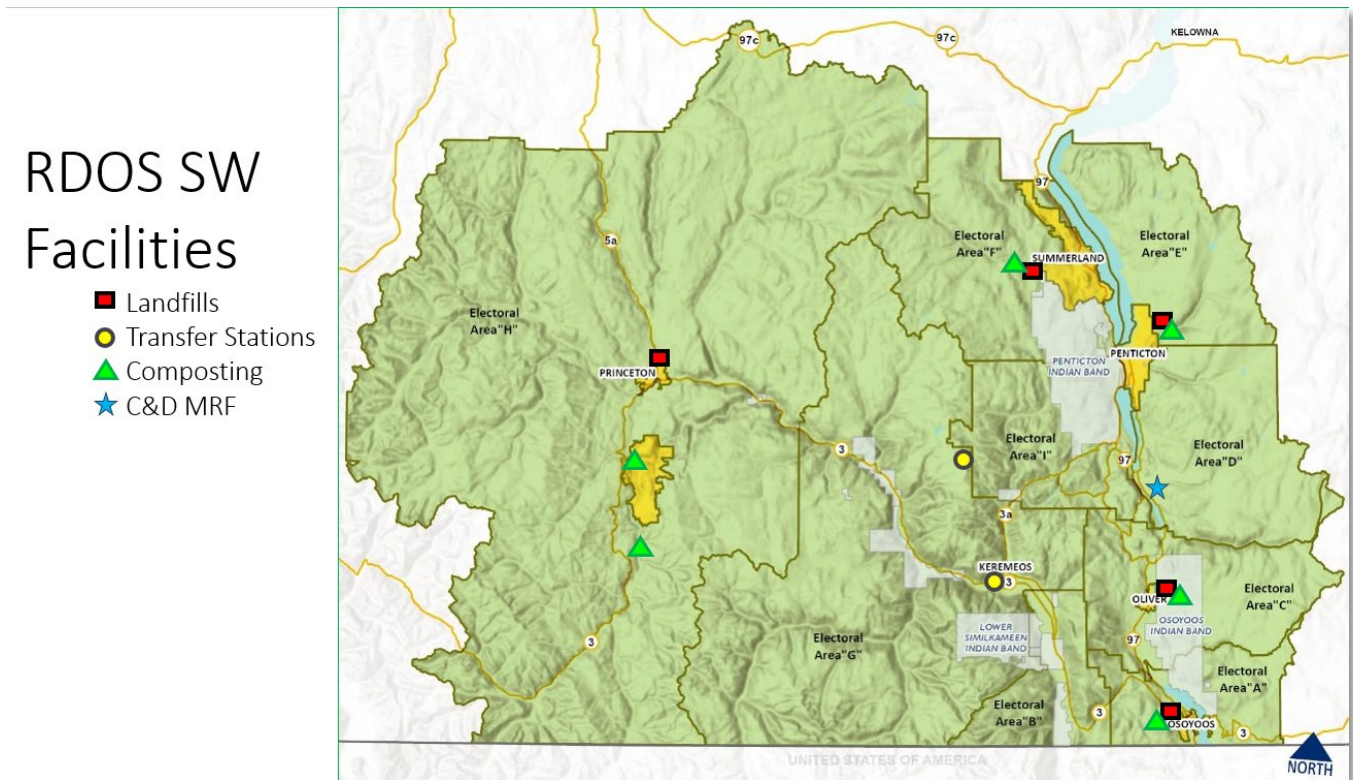


Figure 2-2: Map Illustrating the Location of Solid Waste Facilities in the RDOS

2.3.2 Solid Waste Management System Elements

Within each watershed, there is a waste management system that consists of five elements: waste generation source; collection approach; transfer of waste; processing to divert waste from disposal; and ultimate endpoint for the diverted or discarded materials. Figure 2-3 illustrates the five elements and how MSW flows through the solid waste management system.



Figure 2-3: Illustration of Solid Waste Management System Elements

The solid waste management system consists of the following elements:

- **Source:** sectors that generate MSW in the RDOS. This includes SF and MF residences, ICI establishments, and C&D activities.
- **Collection:** method of collecting discarded materials from the sources noted above. This can be performed by public and private sector waste haulers or can be a drop off facility such as a bottle return depot.
- **Transfer:** some waste management systems employ a transfer station if delivering solid waste directly to a processing or end-point facility is not feasible or practical. Transfer stations are used to collect and aggregate discarded materials before being delivered to a processing or disposal facility.
- **Processing:** operations such as composting and material recovery facilities (MRFs) where solid waste materials are separated or transformed to divert discarded materials from disposal.
- **End point:** can be an end-market for the sale of materials or a disposal site where the discarded materials end up.

2.3.3 Collection

In the RDOS, waste collection is provided by private sector waste haulers either through local government contracted services or open market contracts. The following subsections discuss how the various waste sources are collected.

2.3.3.1 Single Family Residential Collection

Most SF residents in the RDOS receive curbside collection service. This is a mandatory service for municipalities and most rural residences (not within a municipality) in Electoral Areas A, B, C, D, E, F, G, and I. The collection services offered typically consist of weekly garbage collection, every other week recycling collection, and seasonal yard and garden waste collection. Specifics of these collection services are discussed below. First Nations communities also have curbside waste collection services. The level of collection service varies from community to community.

Garbage Collection: Garbage is collected weekly or bi-weekly (depending on community) and is moving towards an automated collection system.

Recycling Collection: Recycling collection occurs once every two weeks. Recyclables are comingled and collected in carts (in Penticton 120 L carts are standard with 240 L or 360 L options available).

Yard and Garden Waste Collection: In areas with automated collection service, residents are provided a cart for yard and garden waste collection. Collection is conducted bi-weekly between March and December.

Food Scraps Collection: The District of Summerland and Town of Oliver have implemented weekly residential food scraps collection with their residential yard and garden waste collection program. Residential garbage collection in these communities have shifted to every other week with no changes to recycling collection.

Large Item Collection and Residential Drop Off: Some local authorities provide a collection service for large and bulky items (typically items that cannot fit into a garbage cart or container) once per year, typically in April.

2.3.3.2 Multi-Family Residential Collection

Presently, the City of Penticton, Town of Oliver, and Town of Princeton provide recycling collection for MF developments including apartments. MF developments outside these municipalities are required to provide their own commercial recycling or require residents to bring their recycling to depots. In the District of Summerland, per Bylaw 2018-018, MF buildings may voluntarily sign up for municipally provided recycling service or provide their own through a selected contractor.

2.3.3.3 Industrial, Commercial, and Institutional Sector Waste Collection

Like MF waste collection, ICI property owners and/or managers must make arrangements with private sector waste haulers to collect their discarded materials and provide adequate space and storage for discarded materials. Each collection contract is specific to the property owner or manager's needs. Although waste diversion options are encouraged by the RDOS, buildings are not required to separate materials and pay for collection. Some landfills in the region accept ICI cardboard for recycling for a fee.

2.3.3.4 C&D Waste

C&D waste is collected by private sector waste haulers on a project-by-project basis in the RDOS. The RDOS encourages demolition waste to go to the Okanagan Falls Landfill to be sorted at a demolition, renovation, and construction waste sorting facility (C&D MRF) where materials are separated and diverted. To encourage waste haulers to go to the Okanagan Falls C&D MRF, RDOS landfills apply a surcharge to the tipping fee for demolition waste disposal.

Sorted C&D waste materials (i.e., waste with divertible materials removed) are accepted at landfills throughout the region. Lower tipping fees and shorter hauling distances for sorted C&D waste is meant to incentivize onsite sorting and diversion.

The RDOS also has a process that encourages contractors to divert hazardous construction materials from landfills if they have special handling requirements under WorkSafeBC regulations. By inspecting loads when they enter the landfills, facilities can limit the risk of accepting hazardous materials from entering landfills. Loads that have not been inspected are charged a higher tipping fee which is currently double the regular tipping fee. Loads containing hazardous materials are charged a much higher fee due to the potential hazards. Most hazardous materials must be disposed as garbage.

2.3.3.5 Drop-Off Facilities

The RDOS provides multiple opportunities to recycle a wide variety of items. As part of the ongoing commitment to increase diversion, the list of acceptable items continues to grow as new recycling opportunities present themselves within the region. There are also several private recycling centres such as bottle depots and scrap metal yards available for drop off. As of 2025, the known recycle or diversion facilities are:

- Public Sector:
 - Campbell Mountain Landfill;
 - Oliver Landfill;
 - Osoyoos Landfill;
 - Princeton Landfill; and
 - Summerland Landfill.
- Private Sector:
 - T2 Market Recycle Depot/Bottle Depot (Oliver);
 - J&C Bottle Depot (Penticton);
 - London Drugs (Penticton);
 - Penticton Area Cooperative Enterprises (PACE);
 - Osoyoos Bottle Depot;
 - Return-It Express & Go (Penticton and Keremeos);
 - Summerland Bottle Depot; and
 - Habitat for Humanity ReStore.

The *Metal Dealers and Recyclers Act (SBC 2011)* and *Metal Dealers Recyclers Regulation (BC Reg. 61/2022)* require that scrap metal dealers and recyclers who purchase regulated metals (including most non-ferrous metal and scrap metal) must register with the province. As of December 2025, there was one facility registered in RDOS:

- Action Steel Sales (Okanagan) Ltd. In Penticton.
- Additional metal recycling and salvage operations may be operating within the RDOS including one facility in Penticton and one facility in Oliver.

2.3.4 Transfer

The RDOS has two waste transfer stations where waste is collected and stored until it can be transported to a landfill for disposal. The Keremeos Waste Transfer Station services the Village of Keremeos and Electoral Area G. The Apex Waste Transfer Station services the Apex Mountain Resort. Waste from these two transfer stations is taken to the Campbell Mountain Landfill.

2.3.5 Processing

The RDOS has several processing facilities within its boundaries. This includes a C&D MRF and several composting facilities. An overview of these facilities is discussed below.

2.3.5.1 C&D Material Recovery Facility

The RDOS operates a C&D waste sorting facility at the Okanagan Falls waste management facility. This facility accepts non-hazardous C&D materials and other divertible materials such as metal, cardboard, batteries, electronics, yard waste, propane tanks, etc. Non-hazardous C&D waste consists of C&D waste that is demonstrated to not include materials such as asbestos.

Once the site has accumulated sufficient quantities of C&D materials, Wildstone Construction (the contracted operator) brings in workers to manually sort the C&D waste and place divertible materials into their respective bins. Divertible materials include wood, concrete, plastics, and metal. Any residuals that cannot be separated and marketed are landfilled at the site. The C&D MRF diverts up to 50% of the C&D stream it processes and as a result between 1,400 and 4,000 tonnes of C&D materials are placed in landfills each year from this sector.

2.3.5.2 Recyclables Material Recovery Facility

There are no MRFs for 'blue box' recyclable materials in the RDOS. Mixed ICI recycling is generally shipped to a MRF in Kelowna. Recycle BC is responsible for collecting, processing, and marketing of residential recyclable materials. The RDOS and local authorities collect residential recyclables on behalf of Recycle BC. The collected recyclables are brought to a transfer station where they are then transported to a MRF in the Lower Mainland to be sorted, baled, and marketed.

2.3.5.3 Existing Composting Operations

Most of the public sector solid waste management facilities have some form of composting on site. In addition to these seven sites where composting takes place, RDOS has access to two private sector compost facilities south of Princeton, Arrow Environmental and Net Zero Waste Eastgate. The RDOS currently does not have any contracts with private facilities to process organics. The RDOS is currently working towards developing a Regional Organics Processing Facility adjacent to the Campbell Mountain Landfill. Table 2-5 summarizes the composting activities, accepted feedstock, and the processing method used for each site.

Table 2-5: Composting Facilities Within The RDOS

| Facility | Operator | Feedstock | Method | Annual Tonnage |
|--|------------------------|---|--------------------------------------|----------------|
| Municipal Facilities | | | | |
| Campbell Mountain Landfill | City of Penticton | Biosolids, Yard Waste, Wood Waste | Aerated Static Pile | 5,000 |
| Summerland Landfill | District of Summerland | Leaf and Yard Waste, Wood Waste, Biosolids, Food Waste | Aerated Static Pile | 5,000 |
| Oliver Landfill | RDOS | Leaf and Yard Waste, Food Waste | Aerated Static Pile | 4,000 |
| Osoyoos Landfill | Town of Osoyoos | Leaf and Yard Waste, Orchard Waste | Turned Windrow | 1,000 |
| Private Facilities | | | | |
| Arrow Environmental Ingerbelle Composting Facility | Private | Leaf and Yard Waste, Wood Waste, Biosolids, Food Waste and Organics from Commercial Sources | Aerated Static Pile | 100,000 |
| Net Zero Waste Eastgate Composting Facility | Private | Leaf and Yard Waste, Food Waste and Organics from Commercial Sources | Membrane Covered Aerated Static Pile | 80,000 |

2.3.6 Regional Organics Processing

The 2011 SWMP identified the need for regional organics processing capacity to support additional waste diversion in the region. The RDOS has undertaken several actions toward developing a regional organics processing facility including:

- Developing a Regional Organic Waste Management Strategy¹²;
 - The strategy recommended:
 - Implementation of expanded leaf and yard waste collection and centralized biosolids composting in the Penticton area; or
 - Implementation of leaf and yard waste and source separated organics collection along with biosolids and leaf and yard waste / source separated organics processing at a Penticton area facility.
- Assessing options for development of organics infrastructure¹³:
 - Assessing the potential to develop organics infrastructure in the RDOS;
 - Developing the strategy “Development of Organic Infrastructure”; and
 - Drafting a bylaw and policy for Waste Stream Management Licenses for Composting Facilities.

¹² CH2MHill. 2010. Regional Organic Waste Management Strategy. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹³ RDOS. 2013. RDOS Administrative Report to the Environment and Infrastructure Committee “Waste Stream Management Licenses”. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

- Assessing feasibility of developing organics processing facilities at existing publicly owned properties throughout the RDOS:
 - Recommended developing regional composting facilities to manage multiple organic waste streams from several communities to understand resource requirements and realize economies of scale available for larger facilities¹⁴.
 - Modeling potential odour generation from conceptual organics processing facilities to understand impacts to surrounding properties¹⁵.
- Assessing the potential for co-digestion of food waste and biosolids at the Penticton Advanced Wastewater Treatment Plant¹⁶.
- Options Development¹⁷ and Triple Bottom Line¹⁸ analysis of options for managing organic wastes in the RDOS providing additional comparison and sensitivity analysis.

In 2017, following the extensive option development, analysis and comparison listed above, the RDOS completed a series of open houses related to siting compost facilities and transitioning to carts in residential collection programs¹⁹. The list of open houses completed in 2017 is summarized in Figure 2-4.

Since 2018, the RDOS developed a conceptual design for the construction of a regional composting facility to be located adjacent to the Campbell Mountain Landfill. The facility would process collected leaf and yard waste, food scraps and biosolids from several communities. The property acquired for the regional composting facility is partially located within the Agricultural Land Reserve.

| Open Houses (2017) | | |
|-----------------------------|--|---|
| DATE AND TIME | LOCATION | 7:00 PM PRESENTATION TOPICS |
| April 24th, 6pm - 8:45pm | Penticton Library Auditorium, 785 Main Street, Penticton | Campbell Mountain Landfill, Organics |
| April 26th, 6:30pm - 8:45pm | Osoyoos Sonora Centre, 8505 68 Ave, Osoyoos | Organics, Carts |
| April 27th, 6:30pm - 8:45pm | Okanagan Falls Community Centre, 1141 Cedar St, Okanagan Falls | Organics, Carts |
| May 1st, 6:30pm - 8:45pm | Oliver Community Hall, 6359 Park Dr, Oliver | Oliver Landfill, Organics, Carts |
| May 2nd, 6:30pm - 8:45pm | West Bench Elementary, 1604 West Bench Drive | Organics, Carts |
| May 3rd, 6:30pm - 8:45pm | Naramata Elementary Gym, 3660 8th Street, Naramata | Organics, Carts |
| May 4th, 6:30pm - 8:45pm | Keremeos Victory Hall, 427 - 7th Ave Keremeos | Organics, Carts |
| May 10th, 6:30pm - 9:30pm | Kaleden Community Hall, 320 Lakehill Rd, Kaleden | Marron Valley Road Compost Facility, Organics, Carts |
| May 17th, 6:30pm - 9:30pm | Odd Fellows/Rebekah Hall, 9536 Main St, Summerland | Summerland Landfill Compost Facility, Organics, Carts |

Figure 2-4: RDOS Open Houses Completed in 2017 (from RDOS Webpage)

¹⁴ Tetra Tech EBA Inc. 2015. Organic Management Consultant Task 2 – Feasibility Assessment. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹⁵ Tetra Tech EBA Inc. 2015. Organic Management Consultant Task 3 – Odour Mapping. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹⁶ AECOM. 2016. City of Penticton AWWTP – Co-Digestion Feasibility Assessment. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹⁷ SLR global environmental solutions. 2016. Organic Waste Management Strategy Task 2 – Collection Options Memo. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹⁸ SLR global environmental solutions. 2016. Organic Waste Management Strategy Task 8 – Triple Bottom Line Analysis Memo. Retrieved from <https://www.rdos.bc.ca/solid-waste/composting-and-natural-yard-care/organic-management-facilities/>.

¹⁹ RDOS. 2017. “Public Consultations”. Retrieved from <https://www.rdos.bc.ca/solid-waste/public-consultation-organics-carts-landfills/>.

The RDOS has applied to the Agricultural Land Commission for approval to construct parts of the composting facility on areas that are designated within the reserve. As of January 2026, the RDOS is waiting for a decision from the Agricultural Land Commission.

If the RDOS is unable to construct a regional composting facility, the regional district would consider transporting its organics to private sector composting facilities to process and divert this waste stream. Any private sector services required for organics processing will be procured through an appropriate public process.

2.3.7 Residual Management and Recovery

2.3.7.1 Residual Management Disposal Facilities

There are five MSW landfills and one C&D landfill (Okanagan Falls) in the RDOS. These facilities are owned by the public sector and summarized in Table 2-6. Each landfill has varying capacity and operation costs. These are important considerations for financial sustainability of the solid waste management system over time.

Table 2-6: Summary of Publicly Owned and Operated Landfills in the RDOS

| Landfill | Owner | Materials Landfilled | Available Capacity ¹ |
|----------------------------|------------------------|----------------------|--------------------------------------|
| Campbell Mountain Landfill | RDOS | MSW | 86 years (3,283,697 m ³) |
| Oliver Landfill | RDOS | MSW | 41 years (291,177 m ³) |
| Osoyoos Landfill | Town of Osoyoos | MSW | 21 years (207,641 m ³) |
| Princeton Landfill | Town of Princeton | MSW | 70 years (851,600 m ³) |
| Summerland Landfill | District of Summerland | MSW | 77 years (1,153,217 m ³) |
| Okanagan Falls Landfill | RDOS | C&D Residuals | 35 years (205,846 m ³) |

Notes:

¹ Capacity listed from the most recent Landfill Design Operations and Closure Plan for each facility estimated in 2024/2025.

As stated in the 2011 SWMP, previous studies completed for the RDOS and neighbouring regional districts concluded that landfilling remains the lowest cost residual waste management option over the short term and will likely remain the lowest cost option in the future, provided new landfill disposal capacity can be developed within a reasonable distance from the population centres. The RDOS still has significant landfill capacity as compared to other regional districts in British Columbia, and it is economically prudent to continue to utilize the existing landfill capacity to the greatest extent possible.

Waste-to-energy (WTE) is of interest in the region; however, developing WTE capacity based on existing technologies, total available tonnage within the RDOS and costs makes WTE cost-prohibitive at this time.

The RDOS will continue to manage residual waste by:

- Utilizing existing landfill capacity to the greatest extent possible; and
- Continuing to maintain and upgrade existing landfills in accordance with regulatory requirements.

The following sections provide information on each of the existing landfills the specific actions planned to meet the above objectives are listed in Section 4.5.

2.3.7.1.1 Campbell Mountain Landfill

The Campbell Mountain Landfill is located within the City of Penticton at 1765 Reservoir Road. The land is owned by the City of Penticton and leased to the RDOS to operate the landfill until 2035. The landfill includes waste diversion areas for “blue box” recyclables, appliances, commercial wood waste, yard and garden waste, tree stumps, batteries, propane tanks, tires, e-waste and household hazardous waste. There is also a biosolids composting operation (operated by the City of Penticton) that is within the footprint of the site.

The RDOS contracts out the operation of the site to a private solid waste service provider. The RDOS also works with local social organizations to assist with diversion activities occurring at the landfill, such as debagging yard waste, collecting e-waste, and dismantling mattresses for recycling.

The landfill accepts approximately 27,500 tonnes per year of waste for disposal and services approximately 47,000 people. It is estimated that the landfill has approximately 86 years of remaining life. An assessment of landfill gas generation was completed in 2011 and the assessment estimates that the landfill currently generates approximately 1,400 tonnes of methane per year. The updated Design, Operations, and Closure Plan in 2016 estimates landfill gas generation at 1,250 tonnes of methane per year. Implementation of a biocover is being pursued as the primary method of landfill gas management.

The 2022 annual budget for the Campbell Mountain and Okanagan Falls Landfills was \$3.7 M, of which \$25,000 is allotted to consulting fees.

2.3.7.1.2 Okanagan Falls Landfill (OK Falls Landfill)

The OK Falls Landfill is located approximately 4 km east of Okanagan Falls on Allendale Lake Road. The landfill property is a Crown Lease held by the RDOS. The landfilling operation is undertaken by a contractor, and the scale services are undertaken by RDOS staff. At the entrance of the landfill there is a depot for drop off of residential recyclables. Within the landfill there are locations for drop off of other recyclable items such as appliances, wood, yard / garden waste, tree stumps, batteries, propane tanks, and tires.

The landfill no longer accepts MSW; it is used as a regional C&D waste landfill and accepts approximately 2,600 tonnes of C&D waste per year for disposal. Mixed demolition waste makes up the greatest component of the landfilled waste at approximately 60% (by weight). It is estimated that the landfill has approximately 30 years of remaining life at the current disposal rate.

As noted above, the 2022 annual budget for the Campbell Mountain and Okanagan Falls Landfills was \$3.7M, of which \$25,000 was allotted to consulting fees.

2.3.7.1.3 Keremeos Transfer Station

The Keremeos Transfer Station is located just north of Keremeos in Electoral Area ‘G’ off Keremeos Bypass Road on El Rancho Drive. The transfer station is located on the closed landfill, which closed in 2006. The site is managed under a Crown Lease held by the RDOS. The facility accepts MSW and recyclable materials. There is a soil remediation facility on site which accepts contaminated soil which can be rehabilitated to an Urban Park standard. Plans to complete closure of the landfill is still being pursued.

The current annual budget for the transfer station is \$220,000.

2.3.7.1.4 Apex Mountain Transfer Station

The Apex Mountain Transfer Station services the Apex Mountain Resort at 220 Strayhorse Rd below the 'Barn' located at the back of the main parking lot. The transfer station is self-serve and is always open. The transfer station

was established in 2020 after being identified as a key initiative in the 2011 SWMP. The facility accepts MSW and recyclable materials.

The current annual budget for the transfer station is approximately \$185,000.

2.3.7.1.5 Oliver Landfill

The Oliver Landfill is located approximately 6 km southeast of Oliver in Electoral Area 'C', off Black Sage Road on Sibco Landfill Road. The landfill is a Crown Lease held by the RDOS. Site operations are undertaken by RDOS staff. The site has a depot for residential recyclables and areas within the landfill are provided for other recyclable items such as appliances, wood, yard / garden waste, tree stumps, batteries, propane tanks, tires, and e-waste. The site also has a composting operation that processes food scraps and yard waste.

The landfill accepted approximately 8,000 tonnes per year of waste for disposal and serviced approximately 8,900 people. It is estimated that the landfill has between approximately 41 years of remaining life. An assessment of landfill gas generation was completed in 2018 and the assessment shows that the landfill currently generates approximately 300 tonnes of methane per year. A landfill gas management plan and landfill gas management infrastructure are not required under the regulation. A hydrogeological assessment and a design, operations and closure plan were prepared in 2009 and 2010, respectively.

The 2022 annual budget for the landfill was \$1.13M.

2.3.7.1.6 Summerland Landfill

The Summerland Landfill is located within the District of Summerland at 17202 Bathville Road. The landfill is owned and operated by the District of Summerland. The landfill accepts the following items for recycling: residential recyclables, appliances, e-waste, propane tanks, batteries and yard / garden waste, tires, gypsum, wood, and use motor oil and filters. There is a food scraps, yard waste and biosolids composting operation on the site.

The landfill is partially lined and accepts approximately 5,000 tonnes per year of waste for disposal and services approximately 12,500 people. It is estimated that the landfill has approximately 70 years of remaining capacity. An assessment of landfill gas generation was completed in 2023 and estimated that the landfill would produce approximately 289 tonnes of methane annually. An amended design, operations, and closure plan was prepared in 2023. The plan provides a list of activities that must be completed at the landfill and the associated costs.

The 2024 annual budget for the landfill was \$1.4M.

2.3.7.1.7 Princeton Landfill

The Princeton Landfill is located within the Town of Princeton on Princeton-Summerland Road. The landfill is owned and operated by the Town of Princeton. There is no scale at this landfill, but it is estimated that the landfill accepts approximately 6,400 tonnes per year of waste for disposal and services approximately 4,900 people. Recycling activities on-site include residential recyclables, cardboard, plastics (#1 and 2) and scrap metal. The sorting and baling of the curbside recyclables is undertaken at the landfill site. It is estimated that its remaining lifespan is approximately 70 years.

An operations plan update was prepared in 2009 and included an assessment of landfill gas generation as required by the regulation. A landfill gas generation assessment in 2019 shows that the landfill currently generates less than 300 tonnes of methane per year. A landfill gas management plan and landfill gas management infrastructure is not required under the regulation.

The 2022 operational budget for the landfill was \$780,000.

2.3.7.1.8 Osoyoos Landfill

The Osoyoos Landfill is located approximately 5 km northwest of Osoyoos on 146 Avenue in Electoral Area 'A'. The landfill is owned and operated by the Town of Osoyoos. The landfill accepts items such as household recyclables, appliances, propane tanks, batteries and yard / garden waste for recycling. The landfill accepts approximately 4,000 tonnes per year of waste for disposal and services approximately 5,000 people. It is estimated that the landfill has over 20 years of remaining life.

A design, operations and closure plan for the landfill was prepared in 2018. While the annual tonnage into the landfill is under the threshold of 10,000 tonnes that requires a landfill gas assessment under the regulation, the total tonnage is not known. If the total tonnage in the landfill is over 100,000 tonnes a landfill gas assessment will be required.

2.3.8 Solid Waste Programs

2.3.8.1 Reduce and Reuse Initiatives

Reduce and reuse initiatives supported by the RDOS include the following:

- Development of campaigns to encourage a reduction behavior (i.e., Echo the Owl, "Give a Hoot") – these campaigns are available on the RDOS website and provide waste reduction tips for consumers.
- Cart limits – all curbside collection programs limit the weekly set out of garbage to one cart per week. Additional garbage collection could be accommodated through the purchase of tags "tag a bag program" to inform the collection truck driver of the additional waste to be collected. The program is meant to standardize the collection of garbage to minimize health and safety considerations as well as encourage the reduction of extra garbage being placed on the curb.
- Some communities such as Naramata, Kaleden, and the District of Summerland encourage reuse periodically through organizing events such as community-wide yard sales.
- In addition to these events, there are thrift stores, social media platforms, auctions, and informal reuse events hosted by private companies, churches, and individuals.

The City of Penticton has several waste reduction and reuse initiatives in place as described on the City's website (www.penticton.ca/recycling):

- Development of numerous recycling educational materials and employment of two Environmental Outreach Ambassadors each year to audit curbside recycling and conduct recycling education.
- Annual educational outreach activities include newsprint, social media, radio, and education at in-person events such as the local Farmer's Market from May to August.
- Golden Quill award for development and implementation of a book recycling program at the Penticton Library.

2.3.8.2 Extended Producer Responsibility

EPR programs are governed under the provincial Recycling Regulation. These programs shift the financial responsibility for end-of-life management of specific products away from local governments and to producers and users of the product. The RDOS supports EPR and has been instrumental in providing locations for collection of EPR products. Private depots for beverage containers are managed separately; residents are encouraged to return beverage containers to depots rather than landfills and transfer stations which do not offer deposit returns.

2.3.8.3 Industrial, Commercial, and Institutional Recycling

There are limited private and not-for-profit recycling operations in the RDOS. The Penticton and Area Cooperative Enterprises (PACE) is working with various municipalities to assist with e-waste and mattress dismantling to support recycling processes.

There is no ICI recycling transfer and processing capacity within the region. The RDOS continues to encourage recycling businesses to locate in the area and offers an online business toolkit and resources for businesses looking to improve their waste diversion.

2.3.8.4 Land Use Planning

Waste management facilities, including recycling, composting, product stewardship, and disposal facilities are essential elements of a sustainable waste management system. The siting and operation of these facilities must be done in conjunction with long-range community planning at municipal and regional levels to protect the environment and minimize the potential for land use conflicts.

The RDOS will work with regional district and municipal planning departments to develop land use planning policies that support / protect waste management infrastructure, including providing and protecting lands that act as a buffer surrounding waste management facilities (existing or planned).

Due to the difficulty in siting and securing property for public waste management infrastructure, a process to identify and secure a site or sites for future solid waste services will be undertaken. The RDOS will seek a site or sites that will have the potential to provide multiple waste management services (e.g., composting, waste-to-energy, recycling drop off, landfill). The site or sites should be protected against future land use conflicts using land use bylaws.

2.3.8.5 Future Facilities

MSW in the region may be directed for management to any new site or facility contemplated by this plan provided the new site or facility follows the process for development as outlined herein.

New sites and facilities specifically contemplated in this plan that have already undergone public consultation include:

- Regional Organics Processing Facility located adjacent to the Campbell Mountain Landfill.

The process for development of new sites and facilities shall include but not be limited to:

- An appropriate procurement process.
- Ensuring that authorizations (including Operational Certificates [OCs], licences, and registration under Organic Matter Recycling Regulation [OMRR]) are obtained as necessary, and that any requirements from other levels of government are also met.
- Environmental assessment, including an assessment of human health risk acceptable to the applicable health authority and public consultation, as may be required by provincial and federal regulations.
- Public consultation on new (or amended) sites or facilities that require authorization under the *Environmental Management Act*.
- Any additional assessment as laid out in the minister's conditions for approval of this plan.

The addition of new sites or facilities not contemplated in this plan will require an amendment to the plan.

2.3.8.6 Construction, Renovation, and Demolition

C&D waste is accepted at all landfill locations in the RDOS. C&D waste consists of materials produced from the construction, renovation, and demolition of buildings, bridges, rail lines, and other structures. The RDOS and Town of Osoyoos employ a charging mechanism which applies lower fees to C&D waste assessed by a Qualified Professional through the Waste Disposal Application (WDA) process. Higher fees are charged for waste that is not assessed prior to delivery to the intended waste facility. The RDOS also categorizes C&D waste by the generator location. A separate charging structure applies lower fees to waste generated within the wasteshed as opposed to C&D from outside its service area. The rules and fees for C&D waste disposed at most RDOS locations are established in RDOS Bylaw No. 3000.01, 2023. The steps and forms related to C&D disposal, burned structures, and more are outlined on the RDOS website.

2.3.8.7 Illegal Dumping

Illegal dumping is an issue in the RDOS and throughout the province. The cost of cleaning up illegal dumping can be substantial depending on the frequency, volume, and materials being inappropriately discarded. Common types of waste being illegally dumped in RDOS include yard waste, household waste, and furniture.

The most common locations for illegal dumping are dead end roads, low traffic roads, and unlit areas. Within RDOS many of these prime locations are within forested areas adjacent to obscure access roads. Illegal dumping is not currently measured in the RDOS but is addressed through the public complaints process. The RDOS will offer grants to volunteer community groups to clean up illegally dumped waste to offset the costs of tipping fees. The public can report occurrences of illegal dumping through:

- Report All Poachers and Polluters (RAPP), BC's Conservation Officer 24-hour toll-free Hotline.
- The B.C. Wildlife Federation's Conservation App. The app applies geo-referencing coordinates and timestamps to photos and/or videos of illegally dumped waste and works both in and out of service. Submitted reports are forwarded to an applicable enforcement agency.
- Contact the RDOS general phone number.

2.3.8.8 Bear-Human Conflict Management

The South Okanagan-Similkameen Human-Bear Conflict Management Plan, completed in 2010 by the SOS Bear Smart Stewardship Committee, was developed to provide a framework to assist communities in developing their own solutions for human-bear conflict management. This plan identifies a range of options and provides suggestions for implementing specific options. The plan's recommendations were considered in the context of updating the Regional Solid Waste Management Plan and consequently, the following actions will be undertaken to reduce the potential for bear-human conflict:

- The RDOS will work with the local Bear Aware Coordinator to provide education to the public on methods for managing garbage, compost, and recyclables and other attractants in a manner that is "Bear Smart".
- The RDOS will facilitate the development of Bear Smart community programs, in concert with a broad range of stakeholders, including agriculturalists and managers of parks and recreation areas.
- The RDOS and municipalities will establish set out times and / or container requirements for waste in their refuse collection bylaws.

- The RDOS and municipalities will install or maintain electric fencing as appropriate around landfills that receive putrescible waste (landfills that receive only construction / demo waste would not require electric fencing) to achieve compliance with applicable regulations.
- Municipal and regional Planning Departments will develop requirements for Bear Smart waste management, storage, and collection systems in new developments.
- The RDOS and municipalities will develop a 'Wildlife Animal Bylaw' to regulate bear and wildlife attractants on all non-agricultural properties. The attractants to be considered for this bylaw include organic and garbage residues or stockpiles, composting, orphan and residential tree fruits and nuts, feeding of dangerous wildlife and storage of anti-freeze and paint.
- In partnership with provincial, federal, and non-governmental organizations, the RDOS will create a regional program to implement the above actions.

3.0 FINANCE AND ADMINISTRATION

Solid waste services are funded through a combination of landfill tipping fees, EPR subsidies, utility fees, property taxes, gas tax grants, and other senior government grant programs. The following sections show how funds are used to pay for solid waste services. As the solid waste system changes, updates will be required to ensure funding continuity.

3.1 Landfill Tipping Fees

Landfill tipping fees provide most of the revenue for landfills throughout RDOS. Other sources of revenue include recycling (subsidies from EPR programs or sale of recyclables) and organics (sale of compost). Most landfills do not accept waste from other wastesheds or charge more than double for waste accepted from other wastesheds. The tipping fees are not consistent across the RDOS. Table 3-1 summarizes tipping fees for some of the commonly accepted items.

The RDOS has differential tipping fees for various classifications of materials. There is a base tipping fee for MSW and other tipping fees are set based on the cost to manage the specific material and / or to act as a financial incentive to source-separate materials for recycling or composting. For example, loads containing recyclable materials (as defined by the RDOS Landfill Regulations Bylaw) are charged a rate double the regular tipping fee and loads of source-separated yard waste and recyclable materials are received for free or charged significantly lower tipping fee. Variable tipping fees will continue to be used to finance disposal and recycling activities at the landfills and will also be reviewed regularly to ensure that they are set at a level that encourages desired waste management behaviour (e.g., source separation for reuse, recycling, and composting).

Table 3-1: Summary of Tipping Fees from the Various Wastesheds in the RDOS (per tonne)

| Item | Campbell Mountain Landfill | Okanagan Falls Landfill | Oliver Landfill | Osoyoos Landfill | Princeton Landfill | Summerland Landfill |
|--|----------------------------|-------------------------|-----------------|------------------|--------------------|---------------------|
| Average Disposal (tonnes /year) | 28,000 | 2,400 | 7,200 | 4,400 | 3,400 | 5,800 |
| MSW – Garbage | \$120 | Not accepted | \$120 | \$115 | \$125 | \$125 |
| Compostable Organics | \$0 to \$60 | \$0 to \$60 | \$0 to \$60 | \$60 | \$125 | \$25 |
| Yard Waste | \$0 to \$75 | \$0 to \$75 | \$0 to \$75 | \$60 | \$125 | \$30 to \$90 |

| Item | Campbell Mountain Landfill | Okanagan Falls Landfill | Oliver Landfill | Osoyoos Landfill | Princeton Landfill | Summerland Landfill |
|---|----------------------------|-------------------------|-----------------|------------------|--------------------|---------------------|
| Urban Wood Waste | \$75 to \$300 | \$75 to \$300 | \$75 to \$300 | | \$125 | \$65 |
| C&D Waste (in Wasteshed) | \$120 | \$120 | \$120 | \$525 to \$730 | \$140 | \$210 to \$525 |
| C&D Waste (outside Wasteshed or contains Asbestos Containing Materials [ACM]) | \$700 | \$700 | \$700 | \$730 | \$570 | \$700 |
| Bulky Items | \$210 | \$210 | \$210 | - | \$10/unit | \$210 |
| Mattresses | \$17.5/unit | \$17.5/unit | \$17.5/unit | \$15/unit | \$10/unit | \$20/unit |
| Gypsum | \$120 | \$120 | \$120 | \$115 | \$570 | \$150 |
| Refrigerators | n/c | n/c | n/c | 15/unit | \$15/unit | |
| Cardboard | \$120 | \$120 | \$120 | - | - | \$120 |
| Ceramics, Masonry, Rocks | \$25 | \$25 | \$25 | - | - | \$65/t |
| Asphalt | \$25/t | \$25/t | \$25/t | - | - | \$25/t |
| Asphalt Shingle | \$70/t | \$70/t | \$70/t | - | - | \$75/t |

Notes:

n/c – no charge.

3.1.1 Waste Shed Agreements

As discussed in the 2011 SWMP, due to the relatively small size of the landfills, tipping fees do not fully fund landfill operations with a portion of operations being subsidized by taxes. Waste shed agreements are used to provide community access to facilities where the full cost of the service is subsidized by taxes.

The RDOS has set up a number of agreements with municipalities and First Nations communities for use of disposal facilities. These agreements primarily set out the financial compensation to be paid to the facility owner.

The RDOS continues to develop agreements to ensure that there is a mechanism in place for the financing of waste management services and waste disposal infrastructure by all users. In particular, agreements will be developed for users of landfills that do not contribute directly through existing taxation mechanisms.

3.2 Extended Producer Responsibility Subsidies

Subsidies from EPR Producer Responsibility Organizations (PROs) are another source of revenue for the RDOS's solid waste management system. As noted above, the purpose of EPR programs is to properly manage the end-of-life materials and to shift that financial responsibility to the producers and users of the EPR materials. Revenues from EPR generally consists of subsidies for collection of that material whether at the disposal facilities or through collection programs such as packaging and printed paper.

Recycle BC is responsible for collection, processing, and marketing of packaging and printed paper. The RDOS has an agreement with Recycle BC to collect these materials on their behalf. Recycle BC sets the requirements for the RDOS to follow.

In addition to the subsidies provided by Recycle BC, service level failure credits (SLFCs) can also be imposed for non-compliance with agreement requirements and/or contamination in the recyclables collected. SLFCs are determined by Recycle BC and are typically in the form of non-payment for collection services performed. The RDOS and its member municipalities have been charged a SLFC for non-compliance in the past.

3.3 Utility Fees

Municipalities and the RDOS perform curbside collection for garbage, recycling, yard, and garden waste. These services are discussed in more detail in this SWMP. These fees consider the collection cost and the tipping fees for the respective material collected. For recyclable materials, Recycle BC provides their subsidy to offset the cost for collecting and processing packaging and printed paper. A portion of solid waste utility fees may sometimes be used to pay for other solid waste programs like illegal dumping clean ups and agricultural waste round ups, which are utilized to discourage open burning of plastic wrap and twine.

3.4 Property Taxes

Property taxes are applied to households that do not have a utility fee system or to supplement other solid waste management program costs. Municipalities that use property taxes use a formula that is based on the assessed value of their property.

The RDOS has established several service areas which allow delivery of sub-regional services paid for by residents in the areas. The 2025 to 2029 RDOS Financial Plan identifies five (5) Refuse Disposal areas and seven (7) Recycling / Garbage areas.

4.0 SOLID WASTE INITIATIVES

This section outlines the solid waste initiatives that the RDOS intends to implement through the next ten years to accomplish the goals stated in Section 1.3. These initiatives build on the 2011 SWMP initiatives and are grouped in the following categories:

1. Reduction, reuse, and repair initiatives.
2. Organics, recycling, and C&D waste diversion initiatives.
3. Waste management practice improvement initiatives.
4. Disposal system efficiency and financial sustainability of solid waste services.
5. Planned infrastructure and program supports.

Table 4-1 summarizes the solid waste initiatives based on the grouping listed above.

Table 4-1: SWMP Initiatives

| Initiative Groupings | | | |
|---|--|---|---|
| Reduction, Reuse, and Repair Initiatives | Organics, Recycling, and C&D Waste Diversion Initiatives | Proper Waste Management Practice Initiatives | Disposal System Efficiency and Financial Sustainability Initiatives |
| <ol style="list-style-type: none"> 1. Implement new waste reduction and prevention campaigns. 2. Activate and enhance existing education packages and toolkits. 3. Promote waste prevention, reduction, and diversion through community events. 4. Work with member municipalities to plan, develop, and deliver waste prevention, reduction, and reuse education. 5. Support advocacy for disassembly and right to repair. 6. Support advocacy for expansion of EPR to include reuse and repair elements in EPR programs. 7. Directly support local reuse opportunities and organizations. 8. Develop partnerships to increase reuse and repair networks and programs. | <ol style="list-style-type: none"> 9. Implement education and behaviour change programs targeting organics diversion. 10. Support use of compost in regional construction and operations. 11. Expand organics collection for the ICI sector. 12. Expand organics collection for the MF sector. 13. Support changes to make recycling depots more accessible to residents. 14. Advocate for expansion of EPR materials. 15. Provide other options for recycling or diversion. 16. Assess options to temporarily manage Fats, Oils, and Grease in emergency situations. 17. Increase C&D waste reduction by updating legislation and permitting requirements. 18. Develop a Deconstruction Bylaw for all pre-1960 structures. 19. Work with member municipalities and the C&D Sector to improve diversion. 20. Assess options for diverting asphalt shingles and gypsum. | <ol style="list-style-type: none"> 21. Optimize residential organics diversion from SF homes. 22. Work with member municipalities to coordinate monitoring and public education in curbside collection programs. 23. Continue to develop methane management systems at landfills. 24. Develop a Disaster Debris Management Plan. 25. Review emerging waste management technologies. 26. Develop annual waste monitoring reports. 27. Complete regular waste composition studies. | <ol style="list-style-type: none"> 28. Engage in a government-to-government partnership with First Nations Indian Bands to identify opportunities to share resources, information, and infrastructure. 29. Optimize and harmonize waste disposal system infrastructure. 30. Develop a long-term TAC. 31. Coordinate with local authorities to provide efficient collection services throughout the region. 32. Develop a SWMP monitoring committee. 33. Complete a five-year SWMP effectiveness review. 34. Review tipping fee structures based on user-pay principles. 35. Support harmonizing fees between landfills in the region. 36. Review the financial sustainability of solid waste revenues and facilities. 37. Strengthen municipal implementation capacity. |

Planned Infrastructure and Program Supports

38. Implement construction of a Regional Organics Processing Facility.
39. If required, construct organic waste transfer stations at existing solid waste facilities.
40. If required, purchase of equipment to operate existing facilities and programs.
41. Implement the planned schedule of activities for the Campbell Mountain Landfill over the next five years.
42. Implement the planned schedule of activities for the Okanagan Falls C&D Landfill over the next five years.
43. Implement the planned schedule of activities for the Keremeos Transfer Station over the next five years.
44. Implement the planned schedule of activities for the Apex Transfer Station over the next five years.
45. Implement the planned schedule of activities for the Oliver Landfill over the next five years.
46. Implement the planned schedule of activities for the Summerland Landfill over the next five years.
47. Implement the planned schedule of activities for the Osoyoos Landfill over the next five years.

4.1 Reduction, Reuse, and Repair

Goal: Explore and support local waste reduction, reuse, and repair initiatives across the region.

Implementation Strategies:

1. Implement new waste reduction and prevention campaigns.
 - a. Work with member municipalities to hold public education events.
 - b. Hold contests for ideas on smarter ways to reuse or recycle materials.
 - c. Promote waste reduction with member municipalities at events (e.g., reducing use of single-use items, proper diversion of food waste).
 - d. Enhance this program by sharing local real-life examples and tips for waste reduction through social and traditional media. Examples include:
 - i. Targeted advertising through local newspapers, radio stations, and online platforms;
 - ii. Create posts, infographics, and videos that showcase real-life examples of waste diversion/recycling, waste reduction and reuse practices and share/post on social media; and
 - iii. Contests with youth and adults for ideas on smarter ways to reuse or recycle materials.
2. Activate and enhance existing education packages and toolkits.
 - a. Implement available campaigns in consultation with member municipalities such as the Love Food Hate Waste campaign or ReTHINK Waste (Regional District of North Okanagan) or similar campaigns.
3. Promote waste prevention, reduction, and diversion through community events.
 - a. Develop or sponsor events such as:
 - i. Programs to repair and sell/donate household items.
 - ii. Programs to repair and sell/donate furniture and other bulky items.
 - iii. Programs to repair and sell/donate used clothing and textiles.
4. Work with member municipalities to plan, develop, and deliver waste prevention, reduction, and reuse education.
 - a. RDOS and member municipalities meet quarterly to review the proposed regional public education program for the following year.
 - b. Promote existing resources and campaigns from other jurisdictions.
5. Support for disassembly and right to repair.
 - a. Support advocacy groups working with provincial and federal governments to adopt legislation and regulations that support disassembly and right to repair.
 - b. Support local initiatives and provide funding where applicable working towards disassembly and right to repair.

6. Support advocacy for expansion of EPR to include reuse and repair elements in EPR programs.
 - a. Support advocacy groups working with senior government to include reuse and repair targets and support requirements in EPR programs and regulations.
7. Directly support local reuse opportunities and organizations.
 - a. Establish a grant program to offset the cost of tipping fees incurred by volunteer organizations and events for initiatives such as:
 - i. Repair Cafes.
 - ii. Tool Lending Library.
 - iii. Maker Spaces.
 - iv. Parts Library for Electronics.
8. Develop partnerships to increase reuse and repair networks and programs.
 - a. Promote organizations and programs that encourage reuse and repair, such as: Thrift stores, Buy Nothing' style online networks, free material trading networks, bike refurbishing programs (e.g., Bike Pound), and community swap events.
 - b. Partner with not-for-profit organizations to provide support. If requested, provide space at solid waste or public works facilities for residents to donate select high-value goods that can be repaired for resale (e.g., Bicycles, Windows).

4.2 Recycling, Organics, and C&D Diversion

Goal: Increase diversion of organics, recyclable materials, and C&D waste materials to achieve a regional solid waste disposal target of 450 kg/capita per year.

Implementation Strategies:

9. Implement education and behaviour change programs targeting organics diversion.
 - a. Provide resources that identify and address common barriers that residents face to participate in organics diversion. Share educational and behaviour change resources with member municipalities and local authorities to promote a common message throughout the region.
10. Support use of compost in regional construction and operations.
 - a. As a component of the regional approach to organics processing, identify opportunities to use compost produced in the RDOS.
 - b. Update standard specifications, contract requirements, and internal policies to encourage use of compost in capital projects and ongoing regional operations.
 - c. Share best practices with member municipalities and local authorities.

11. Expand organics collection for the ICI sector²⁰.

- a. Provide educational support and inter-municipal coordination for:
 - i. Bylaw changes mandating three-stream waste collection from businesses.
 - ii. Explore options to allow businesses and agricultural operations to purchase add-on service to municipal organics collection if approved by municipalities and electoral areas.
- b. Provide technical support for implementation of three-stream separation including assistance with signage, implementation challenges, and technical barriers.
- c. Support access to organics processing capacity:
 - i. Accept small-load organics at a regional organic processing facility.
 - ii. Establish ICI rates for any regional organics processing.

12. Expand organics collection for the MF sector.

- a. Provide educational support and inter-municipal coordination for:
 - i. Bylaw changes mandating three-stream waste collection from businesses.
 - ii. Options to allow businesses and agricultural operations to purchase add-on service to municipal organics collection.
 - iii. Options to conduct pilot studies to assess approaches to deliver organics collection in MF buildings.
- b. Create incentives and support programs for MF residential buildings to effectively implement recycling and/or composting programs.
- c. Provide free educational materials and signage to be used by facilities.
- d. Implement disposal bans on materials that can be readily diverted.
- e. Require organics collection from all MF units.

13. Support changes to make recycling depots more accessible to residents.

- a. Provide technical assistance to recycling depots including researching and sharing best practices with depot owners.
- b. Support municipalities in aligning bylaw requirements to allow for recycle depots and bottle depots to be included as an authorized commercial as well as industrial land-use to facilitate better access for community members.
- c. Support siting of recycling depots, identifying needs in certain areas and examining options to address community needs.

²⁰ Expanding organics diversion from SF, MF, and ICI sectors is dependant on establishing regional organics processing capacity. The RDOS is currently awaiting a decision from the Agricultural Land Commission that will determine whether a regional facility can be constructed next to the Campbell Mountain Landfill.

14. Advocate for expansion of EPR materials.
 - a. Advocate to the Provincial government to expand the list of EPR materials including:
 - i. Hard-to-recycle materials like Agricultural plastic (i.e., irrigation pipes).
 - ii. Materials listed in the province's five-year EPR Action Plan²¹.
15. Provide other options for recycling or diversion.
 - a. Explore options to make large item pickups more accessible and more frequent.
 - b. Organize community depot/pick-up events for materials that are not regularly accepted in smaller community depots.
16. Assess options to temporarily manage Fats, Oils, and Grease in emergency situations.
 - a. Identify options to temporarily manage Fats, Oils, and Grease during emergency situations when access to processing facilities is cut off.
17. Increase C&D waste reduction by updating legislation and permitting requirements.
 - a. Work with local jurisdictions to review and change building codes and permit requirements that do not support relocation, disassembly, and deconstruction;
 - b. Work with local jurisdictions and utilities to identify and address barriers and challenges to house relocation such as roadway access and overhead utilities; and
 - c. Utilize social media, the RDOS website, and other communication resources to improve public awareness about the options available and benefits of house deconstruction and relocation.
18. Develop a Deconstruction Bylaw for all pre-1960 structures.
 - a. Create incentives for deconstruction through building permits, utility connection, and other local government services (e.g., accelerated building permits or hook-ups if deconstruction and salvage is included).
 - b. Create policies at municipal and regional district levels to require deconstruction of these pre-1960 structures if government-owned.
 - c. Create a bylaw requiring deconstruction for all pre-1950s structures and support member municipalities to develop and implement similar bylaws.
19. Work with member municipalities and the C&D sector to improve diversion.
 - a. Mandate deposits within the building permit system to incentivize owners to achieve a minimum diversion rate for C&D projects.
 - b. Mandate multi-stream bins on sites.
 - c. Increase tipping fees on target materials to support a market for material recycling (e.g., concrete).

²¹ BC Government. 2023. EPR Five Year Action Plan.
https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/extended_producer_five_year_action_plan.pdf

- d. Reduce waste of construction material by supporting programs to increase recovery and reuse.
 - i. Support repurposing of Summerland pier.
 - ii. Expand the chipping program in Oliver.
 - iii. Build on RV/trailer deconstruction program at Okanagan Falls to manage other bulky items.
 - iv. Support creation of centralized salvaged material hubs.
 - v. Support local infrastructure for reprocessing construction waste.
 - vi. Develop programs for reuse of materials discarded from construction or renovation projects (e.g., kitchen cabinets, doors).
 - vii. Allow targeted salvaging at solid waste facilities.

20. Assess options for diverting asphalt shingles and gypsum.

- a. Assess costs and feasibility of hauling and processing options for materials consolidated at one or two sites.

4.3 Waste Management Practice Improvements

Goal: Reduce improper disposal and waste management practices, including illegal dumping and contamination of resource streams.

Implementation Strategies:

21. Work with member municipalities and local authorities to optimize residential organics diversion from SF homes. This may include the following:

- a. Implement a Compost Coach program.
- b. Implement a Healthy Yard program.
- c. Develop educational campaigns for grass-cycling, backyard composting, bear smart, and alternative landscaping techniques.
- d. Consider suitability of food dehydrators.

22. Work with member municipalities to coordinate monitoring and public education in curbside collection programs.

- a. Expand on Ambassador program that checks for contamination in curbside recycling and green bins.
- b. Implement truck-based contamination monitoring.
- c. Use public education and behaviour-change campaigns to encourage proper sorting and use of the programs.

23. Continue to develop methane management systems at landfills.

- a. Implement landfill gas collection and management infrastructure such as flares.
- b. Evaluate alternate closure techniques to manage methane such as biocovers.

24. Develop a Disaster Debris Management Plan.
 - a. Develop a plan with input from the member municipalities.
25. Review emerging waste management technologies.
 - a. Develop a policy for responding to unsolicited technology proposals.
 - b. Review the feasibility of waste management technologies to confirm that any proposed technology has demonstrated financial and technical feasibility in ongoing operations in Canada for local or regional governments.
26. Develop annual waste monitoring reports.
 - a. Work with member municipalities to develop an annual monitoring program so that waste management practices can be assessed throughout the region.
27. Complete regular waste composition studies.
 - a. Conduct at least two waste composition studies over the 10-year plan timeframe to quantify the types and amounts of materials found in the waste stream. Additional targeted studies may be warranted to inform specific infrastructure design or education, and behaviour change programs.

4.4 Disposal System Efficiency & Financial Sustainability

Goal: Optimize disposal efficiency across the solid waste system and financial sustainability of solid waste services.

Implementation Strategies:

28. Engage in a government-to-government partnership with First Nations Indian Bands to identify opportunities to share resources, information, and infrastructure.
 - a. Develop funding agreements and curbside collection partnerships with Indian Bands.
 - i. Consider working with Indian Bands to create landfill funding agreements for example for the Keremeos Transfer Station and Campbell Mountain Landfill to ensure that communities can access facilities.
 - ii. Consider consolidating curbside collection programs to achieve cost efficiencies.
29. Optimize and harmonize waste disposal system infrastructure.
 - a. Conduct a study to rationalize waste disposal infrastructure by consolidating landfill services and closing or transitioning some of the existing facilities to transfer stations.
 - i. This study will include an operational & ownership modelling study to determine which public sector organization(s) is best suited to manage ongoing landfill operations. Details for this study are included in Appendix B.
30. Develop a long-term TAC.
 - a. Convene a committee composed of technical staff from member municipalities, representatives from Indian Bands, and as appropriate private sector representatives. The TAC should meet at least

two times per year and be focused on addressing technical issues and coordination between local authorities.

31. Coordinate with member municipalities and local authorities to provide efficient collection services throughout the region.
 - a. Work with member municipalities and local authorities to identify opportunities to expand waste collection service areas to cover unserved populations.
 - b. Coordinate future collection service Requests for Proposals (RFPs) with member municipalities possibly considering delivering services using municipal or regional forces and resources. All or some of the RDOS and member municipalities may collaborate on future RFPs and a fair assessment of public and private options for service delivery.
32. Develop a SWMP Monitoring Committee.
 - a. Develop a SWMP Monitoring Committee that may include the TAC but should also include invitations to residents from all areas of the RDOS, First Nations, and key parties interested in solid waste management in the region.
33. Complete a five-year SWMP effectiveness review.
 - a. Review of the implementation of the SWMP and effectiveness of the programs and services in achieving the SWMP's goals.
34. Review tipping fee structures based on user-pay principles.
 - a. Review tipping fees across the region to identify opportunities to better align tipping and other fees with the principle of user-pay and prioritize waste diversion.
35. Support harmonizing fees between landfills in the region.
 - a. Use available industry resources and data sources to complete a comparison of tipping fees across the RDOS and nearby facilities. Encourage alignment of tipping fees across the region to avoid "fee-shopping" by haulers and residents.
36. Review the financial sustainability of solid waste revenues and facilities.
 - a. Work with member municipalities to review the funding model for solid waste facilities and services as new waste diversion programs and services are implemented.
37. Strengthen municipal implementation capacity.
 - a. The City of Penticton will establish a City of Penticton Solid Waste Coordinator to lead municipal implementation of SWMP initiatives, coordinate with RDOS committees (TAC/PMAC), and accelerate organics and recycling outcomes through education, contamination monitoring, and bylaw alignment.

4.5 Planned Infrastructure and Program Supports

To effectively implement the solid waste initiatives listed in the SWMP, the RDOS will be required to complete previously planned infrastructure and continue to operate existing facilities and programs which are essential to manage solid waste.

38. Implement construction of a Regional Organics Processing Facility.
- a. Construct the planned Regional Organics Processing Facility adjacent to the Campbell Mountain Landfill.
 - b. Develop and implement operating plans, contracts, and procedures required to effectively operate the facility.
39. If required, construct organic waste transfer infrastructure at existing solid waste facilities and coordinate access to organics processing capacity.
- a. If a Regional Organics Processing Facility cannot be constructed, seek approval to reallocate existing grants and budget to design and construct organic waste transfer infrastructure.
 - b. Work with member municipalities to identify the organic waste and biosolids transfer infrastructure required to service the region.
 - c. Work with member municipalities to establish access to organics processing capacity through an appropriate public procurement process.
 - d. Construct organic waste and biosolids transfer infrastructure.
40. If required, purchase the equipment necessary to operate essential services.
- a. Purchase or lease of equipment if it becomes necessary for the RDOS or member municipality to operate any existing solid waste facilities or collection programs considered essential to the proper management of solid waste in the region. The RDOS and member municipalities may borrow up to the equivalent of \$8 Million²² adjusted for inflation to purchase or lease necessary equipment to support the SWMP. Borrowing will be limited to the necessary amount and only if it represents the best value for the community, in response to a business case, or in response to the loss of a contractor. The solid waste facilities and programs considered essential are:
 - i. Operation by the RDOS of the Campbell Mountain Landfill and Recycle Depot; Oliver Landfill, Recycle Depot, and Compost Facility; Okanagan Falls Landfill and C&D MRF; Keremeos Transfer Station; Apex Mountain Transfer Station.
 - ii. Operation by the City of Penticton of the Compost Facility at the Campbell Mountain Landfill.
 - iii. Operation by the Town of Osoyoos of the Osoyoos Landfill and Compost Facility.
 - iv. Operation by the Town of Princeton of the Princeton Landfill and Recycle Depot.
 - v. Operation by the District of Summerland of the Summerland Landfill, Recycle Depot, and Compost Facility.
 - vi. Curbside garbage, yard waste, and recycling collection by the RDOS and member municipalities.
 - vii. Waste hauling between regional transfer stations and landfills.

²² Presented in 2025 dollars.

41. Implement the planned schedule of activities for the Campbell Mountain Landfill over the next five years.
 - a. Continue to operate the facility including general operations and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Assess landfill gas generation rate under the Landfill Gas Management Regulation and applicable federal regulations and submit required reporting. If required, implement programs to monitoring and mitigate emissions.
 - ii. Update the design, operations, and closure plan as required. Update the stormwater management plan.
 - iii. Implement planned landfill capital works including cell construction, closures, and other site improvements identified in the site design, operations, and closure plan.
 - iv. Implement the recommended reviews and planning activities described in the site design, operations, and closure plan.

42. Implement the planned schedule of activities for the Okanagan Falls C&D Landfill over the next five years.
 - a. Continue to operate the facility including general operations and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Assess landfill gas generation rate under the Landfill Gas Management Regulation and applicable federal regulations and submit required reporting. If required, implement programs to monitor and mitigate emissions.
 - ii. Update the design, operations, and closure plan as required.
 - iii. Implement planned landfill capital works including cell construction, closures, and other site improvements identified in the site design, operations, and closure plan,

43. Implement the recommended reviews and planning activities described in the site design, operations, and closure plan. Implement the planned schedule of activities for the Keremeos Transfer Station over the next five years.
 - a. Continue to operate the facility including general operations and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Implement the 2017 Keremeos Landfill Closure Plan.
 - ii. Complete site updates required to support transfer station operations including replacement of the scalehouse and improvements to site layout.

44. Implement the planned schedule of activities for the Apex Transfer Station over the next five years.
 - a. Continue to operate the facility including general operations and typical small-scale capital improvements.

- b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Implement site improvements as required to facilitate effective operations.
45. Implement the planned schedule of activities for the Oliver Landfill over the next five years.
- a. Continue to operate the facility including general operations and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Establish and implement an environmental monitoring program for the site.
 - ii. Assess landfill gas generation rate under the Landfill Gas Management Regulation and applicable federal regulations and submit required reporting. If required, implement programs to monitor and mitigate emissions.
 - iii. Update the design, operations, and closure plan as required.
 - iv. Implement planned landfill capital works including cell construction, closures, and other site improvements identified in the site design, operations, and closure plan.
 - v. Implement the recommended reviews and planning activities described in the site design, operations, and closure plan.
46. Implement the planned schedule of activities for the Summerland Landfill over the next five years.
- a. Continue to operate the facility including general operations, and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Assess landfill gas generation rate under the Landfill Gas Management Regulation and applicable federal regulations and submit required reporting. If required, implement programs to monitor and mitigate emissions.
 - ii. Update the design, operations, and closure plan as required.
 - iii. Implement planned landfill capital works including cell construction, closures, and other site improvements identified in the site design, operations, and closure plan.
 - iv. Implement the recommended reviews and planning activities described in the site design, operations, and closure plan.
47. Implement the planned schedule of activities for the Osoyoos Landfill over the next five years.
- a. Continue to operate the facility including general operations and typical small-scale capital improvements.
 - b. Implement activities that are outside of the scope of general operations and small-scale improvements.
 - i. Assess landfill gas generation rate under the Landfill Gas Management Regulation and applicable federal regulations and submit required reporting. If required, implement programs to monitor and mitigate emissions.
 - ii. Update the design, operations, and closure plan as required.

- iii. Implement planned landfill capital works including cell construction, closures, and other site improvements identified in the site design, operations, and closure plan.
- iv. Implement the recommended reviews and planning activities described in the site design, operations, and closure plan.

5.0 PLAN IMPACTS

The RDOS SWMP should improve the overall sustainability of the solid waste management system. The environmental, social, and economic impacts of the SWMP include:

- Through the expansion of reuse and repair initiatives for materials within the region, provide residents with the opportunity to extend the life of products, avoiding the environmental impacts of landfilling and financial costs for replacement products.
- Expand solid waste service levels so that most of the RDOS population have access to organics diversion including food waste.
- Reduce GHG emissions and landfill disposal rates by expanding and improving recycling programs.
- Reduce GHG emissions and landfill disposal rates by capturing organics from the waste stream and avoiding anaerobic decomposition and methane generation at regional landfills.
- Reduce the annual disposal rate to 450 kg per capita.
- Reduce financial expenditure by harmonizing solid waste disposal services in the region and streamlining the disposal system across the region.
- Strengthen financial resiliency by diversifying funding sources for solid waste services and monitoring financial sustainability of facilities.
- Improve region-wide disaster recovery and management by developing a plan to manage debris under the increasing threat of extreme weather events.

6.0 PLAN IMPLEMENTATION

6.1 Implementation Schedule

A timeframe for implementing each initiative and action is included in Appendix C. This schedule summarizes the timeline, staffing allocation, as well as the capital and operational resourcing required. Planned capital projects listed in Appendix D.

The SWMP's implementation schedule may be updated from time to time based on the availability of technologies that may arise over time, as well as the potential changes in regional issues and priorities. The implementation schedule takes into account the financial priorities of the RDOS, its member municipalities and other partners. Additional considerations include the availability of funding to undertake plan activities, and the availability of contractors and service providers.

6.2 Bylaws

Existing or proposed bylaws are discussed in Section 8.1.

6.3 Plan Monitoring

A Plan Monitoring Advisory Committee (PMAC) will monitor the implementation of the plan and make recommendations to increase its effectiveness.

The PMAC can consist of up to 15 voting members, all of whom will apply through an application process to be part of the working group. The application process can be used to ensure the selected members represent a diverse cross-section of the region. This can include:

- Private sector waste management industry service providers;
- Private sector solid waste facility representatives;
- Non-profit group(s) with an interest in solid waste management (e.g., reuse organization);
- Large institutional solid waste generator(s);
- Business representatives, including one focused on the 3Rs;
- Members at large from the community (e.g., community association, youth, seniors); and
- Members representing both urban and rural areas and interests. The PAC represents individuals and organizations interested in solid waste management.

Members will be selected based on geography, demographics, interests, and perspectives. Recommended members will be approved by the RDOS Board of Directors. Members of the advisory committee shall be appointed for an initial two (2) year term which commences after the SWMP is approved by the Minister of Environment and Parks. It is anticipated that annual review meetings will be conducted at least once every year, or at the call of the Chair. A description of the PMAC tasks and make up are included in the PMAC Terms of Reference in Appendix E.

6.4 Compliance Promotion Strategy

Many parties contribute to the achievement of the plan goals and objectives. The strategy outlined below for promoting compliance with the plan takes into consideration the roles and responsibilities of both those providing the compliance actions and those receiving the compliance actions.

- RDOS, member municipalities, haulers, EPR representatives and agencies will provide generator targeted education regarding materials restricted from disposal facilities.
- RDOS and member municipalities operating landfills can levy fines on contaminated loads at disposal facilities.
- RDOS can develop voluntary agreements with haulers and municipalities to develop comprehensive disposal data for the region.
- RDOS and member municipalities can enforce bylaws.

6.5 Annual Reporting

The RDOS will provide annual reporting of waste disposal information to the BC Ministry of Environment and Parks via the Ministry's MSW disposal calculator. In addition, the RDOS will prepare an annual report approved by the Regional District Board and provide links on the RDOS website to reports provided to the Board in relation to the plan. Topics that will be included in annual reporting include:

- Programs delivered each year and how they support the waste management hierarchy, especially reduce, reuse, and recycle;
- Economic development related to solid waste management in the region;
- Challenges or opportunities identified by the PMAC; and
- A summary of relevant information and recommendations regarding solid waste facilities in the region, for RDOS facilities this may include key information from annual landfill operations reports.

6.6 Five-Year Effectiveness Review

The RDOS will carry out a review and report on the plan's implementation and effectiveness five years from the approval of the plan by the RDOS Board. A link to the report will be provided on the RDOS website. The review will be conducted in-house or by a third party and will include:

- Overview of all programs or actions undertaken in first five years to support the plan goals and objectives including the status (started, progress, complete) and actual budget for each;
- Description of all programs or actions not yet started and reason and the budget allocated for each;
- Five-year trend information for waste disposal per person;
- Five-year summary of economic development related to plan implementation;
- Five-year trend of landfill gas management;
- Summary of any compliance activities taken, spills, leaks and leachate collected at facilities, and wildlife incidences over the past five years;
- Any significant changes related to the regional growth strategy or changes to large industry and businesses operating in the area that might impact the solid waste management system over the next five years;
- Based on the plan data from the first five years, an analysis of what is working well and challenges to meeting plan goals and targets; and
- Based on the analysis, any recommended changes that the regional district would like to make to the plan and next steps regarding seeking those changes including consultation and minister approval.

6.7 Plan Amendments

This SWMP represents the current understanding and approach to the solid waste management challenges being faced by the RDOS. The plan is a "living document" that may be amended to reflect new considerations, technologies, and issues as they arise. Due to changing circumstances and priorities that may evolve over time, all major actions identified in the plan will be reviewed for appropriateness before implementation with the input of the

PMAC and interested parties. This will generally occur on an annual basis and may result in changes to the implementation schedule and timelines of the SWMP initiatives.

The plan amendment procedure applies to major changes to the solid waste management system which would include:

- The opening (or changes to the location or status) of a site or facility:
 - That is included in this regional district’s SWMP and requires an authorization under the *Environmental Management Act*;
 - Or any other facility that could have an adverse impact to human health or the environment;
- Waste import/export options which would significantly impact the RDOS’s or neighbouring solid waste systems, or not conform to provincial legislation, goals or targets;
- Changing disposal targets or reductions in programs supporting the first three Rs in the pollution prevention hierarchy;
- A change in the boundary of the plan, which would significantly change the amount of solid waste to be managed under the plan or significantly change the population of the plan area;
- The addition, deletion, or revision of policies or strategies related to the conditions outlined in the Minister’s approval letter; and
- Major financial changes that warrant seeking elector assent.

If a SWMP amendment becomes necessary, the RDOS will undertake a public consultation process and submit an amended SWMP to the Minister of Environment and Parks for approval, along with a detailed consultation report. The schedules identified as part of this plan contain information that is not considered a major change listed above but could change during the 10-year lifespan of the plan. Each schedule includes a process for engaging the public, ranging from notification to a robust public consultation process. Schedule amendments may require approval from the minister but may not require submission of the entire plan for review and approval. Schedules that contain purely administrative provisions are identified as not forming a part of the plan and updates to these provisions do not require minister approval.

6.7.1 Anticipated Amendments

The RDOS anticipates that SWMP amendments may be required within the first five years of the plan. These may include:

- Changes to the planned development of a Regional Organics Processing Facility currently planned for a site adjacent to the Campbell Mountain Landfill. If the location of the facility changes, a major SWMP amendment will be initiated.
- Closure and consolidation of waste disposal services based on the results of the study to rationalize waste disposal infrastructure.

7.0 PLAN SCHEDULES

The attached schedules are considered part of the SWMP.

- Closed and Active Site Inventory (Appendix A);
- SWMP Implementation Schedule (Appendix C);
- Capital Projects Schedule (Appendix D);
- Plan Monitoring Advisory Committee Terms of Reference (Appendix E); and
- Plan Dispute Resolution Procedures (Appendix F).

8.0 NON-PLAN SCHEDULES

Solid waste management is continually evolving with trends that influence best practices for waste reduction and overall systems management. Below are some recent trends of note.

8.1 Solid Waste Bylaws and Tipping Fees

The following RDOS and municipal bylaws related to waste management in the area have been developed in accordance with requirements in the *Environmental Management Act*, *Local Government Act*, and *Community Charter*. Any amendments to these bylaws for the purposes of implementing this plan will follow the requirements for public consultation contained in legislation and including minister's approval as required. The following bylaws define tipping fees, services, and regulations related to solid waste management throughout the region:

- RDOS Bylaws²³
 - Bylaw No. 2190, 2003 Solid Waste Collection and Drop-Off Service Establishment Bylaw – Establishes solid waste and recyclable materials collection and drop-off services in the whole of the Village of Keremeos and Electoral Areas “A”, “B” and “G” and parts of Electoral Areas “C”, “D”, “E”, and “F”.
 - Bylaw No. 2796, 2018 Waste Management Service Regulatory Bylaw.
 - Bylaw No. 2819, 2018 Solid Waste Collection Regulation Bylaw – Requires and regulates the use of the Solid Waste Collection and Drop-off Services.
 - Bylaw No. 2864, 2019 Apex Mountain Waste Transfer Station Regulation Bylaw – Regulates the use of the Apex Mountain Waste Transfer Station.
 - Bylaw No. 2925, 2021 RDOS Administered Landfills Regulatory Bylaw – Establishes regulations for waste disposal at RDOS administered landfills: Campbell Mountain, Okanagan Falls, Oliver and Keremeos Landfills.
- Village of Keremeos Bylaws²⁴
 - Bylaw No. 701, 2005 Sewer Rates and Regulation Bylaw – Sets requirements for Fats, Oils, and Grease and food waste with respect to the sanitary and stormwater sewer systems.

²³ RDOS Bylaws available at <https://www.rdos.bc.ca/regional-government/regional-bylaws/>.

²⁴ Village of Keremeos Bylaws available at <https://www.keremeos.ca/bylaws>.

- Town of Oliver Bylaws²⁵
 - Bylaw No. 1292 Solid Waste Services Consolidated Bylaw – Establishes and sets regulations for services to collect solid waste materials within the Town of Oliver.
 - Bylaw No. 1383 Fees and Charges Bylaw – Establishes fees and charges for municipal services and information.
- Town of Osoyoos Bylaws²⁶
 - Bylaw No. 1370, 2020 Waste Management Service and Regulations Bylaw – Establishes and sets regulations for services to collect and dispose of solid waste and recyclable materials within the Town of Osoyoos.
- City of Penticton Bylaws²⁷
 - Bylaw No. 2016-29 Solid Waste Collection and Recyclable Materials Disposal – Regulates and governs the collection, removal, and disposal of solid waste and recyclable materials within the City of Penticton.
- Town of Princeton Bylaws²⁸
 - Bylaw No. 1026, 2022 Fees and Charges Bylaw Schedule J Landfill Regulatory and Tipping Fees – Establish fees and charges for services at the Princeton Landfill.
- District of Summerland Bylaws²⁹
 - Bylaw No. 2018-018 Solid Waste Management Bylaw – Regulates the Management of Solid Waste within the District of Summerland.

8.2 Plan Alignment

The SWMP aligns with several provincial and federal initiatives and regulations. This list will be updated when the RDOS is made aware of changes to these initiatives and the RDOS will note updates in its discussions with the PMAC and Annual Reporting. The following initiatives are supported by the plan.

- BC Climate Leadership Plan;
- BC Energy Plan;
- BC air quality objectives;
- Product stewardship programs under the Recycling Regulation;
- BC Organic Matter Recycling Regulation;
- BC Reviewable Projects Regulation;
- BC Landfill Gas Management Regulation;

²⁵ Town of Oliver Bylaws available at <https://www.oliver.ca/bylaw-enforcement>.

²⁶ Town of Osoyoos Bylaws available at <https://www.osoyoos.ca/council/bylaws>.

²⁷ City of Penticton Bylaws available at <https://www.penticton.ca/city-hall/bylaw-directory>.

²⁸ Town of Princeton Bylaws available at <https://www.princeton.ca/p/bylaw-services>.

²⁹ District of Summerland Bylaws available at <https://www.summerland.ca/your-city-hall/bylaws-policies/bylaws>.

- BC Landfill Criteria;
- Resources from Waste: A Guide to Integrated Resource Recovery;
- BC A Guide to Green Choices – Ideas and Practical Advice for Land Use Decisions in BC Communities;
- RDOS Regional Growth Strategy and Official Community Plans for member municipalities;
- RDOS Corporate Community Climate Action Plan and plans of member municipalities;
 - City of Penticton Community Climate Action Plan and Corporate Energy and Emissions Plan;
 - District of Summerland Community Energy & Emissions Reduction Plan and Corporate Energy & Emissions Management Plan; and
- RDOS Strategic Plan and member municipality strategic plans.

8.3 Solid Waste Management Trends

8.3.1 Circular Economy

By reducing waste, RDOS has an opportunity to support a broader shift from a linear take-make-use-waste economy towards recycling and ultimately a circular economy model where products can be designed and used for a longer period incorporating reuse and repair, as shown on Figure 8-1.

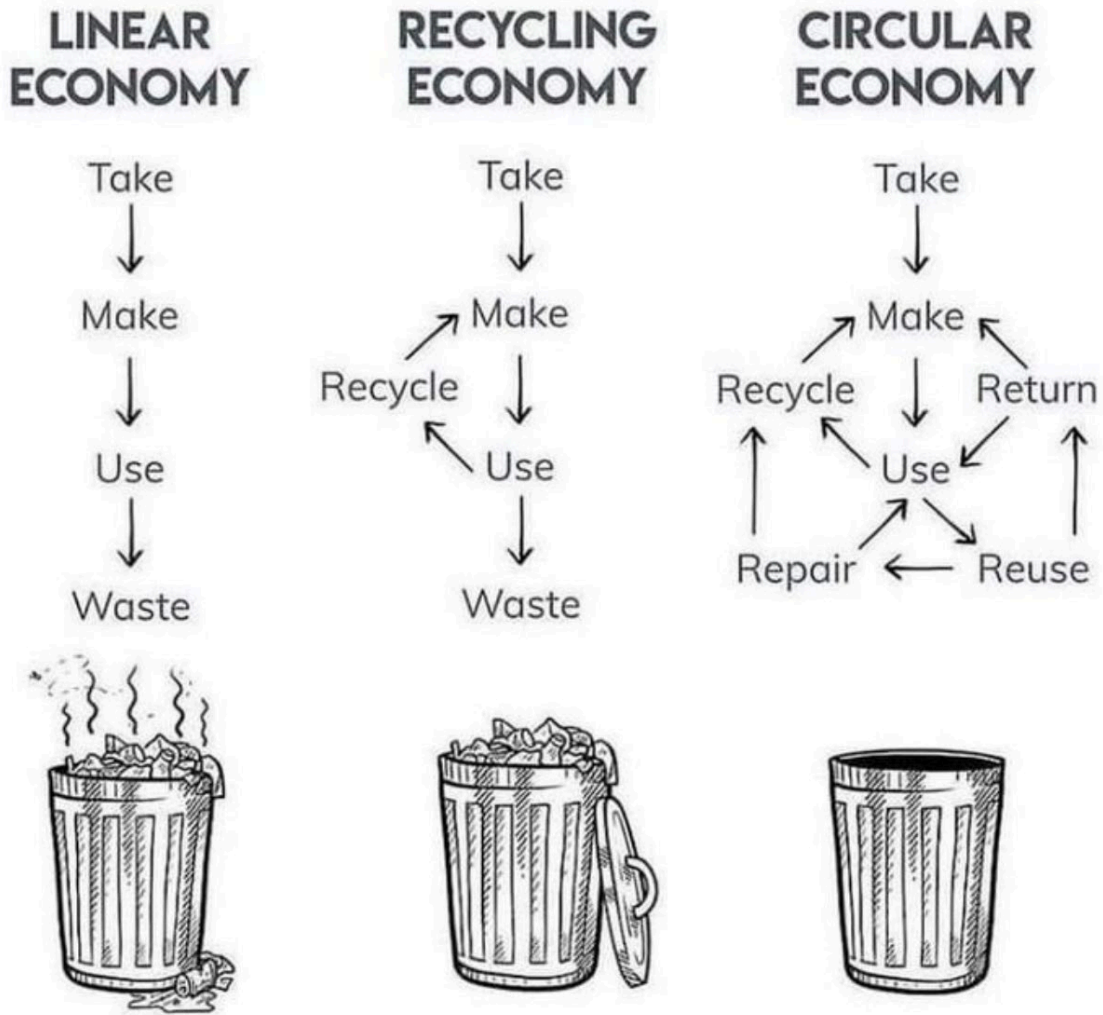
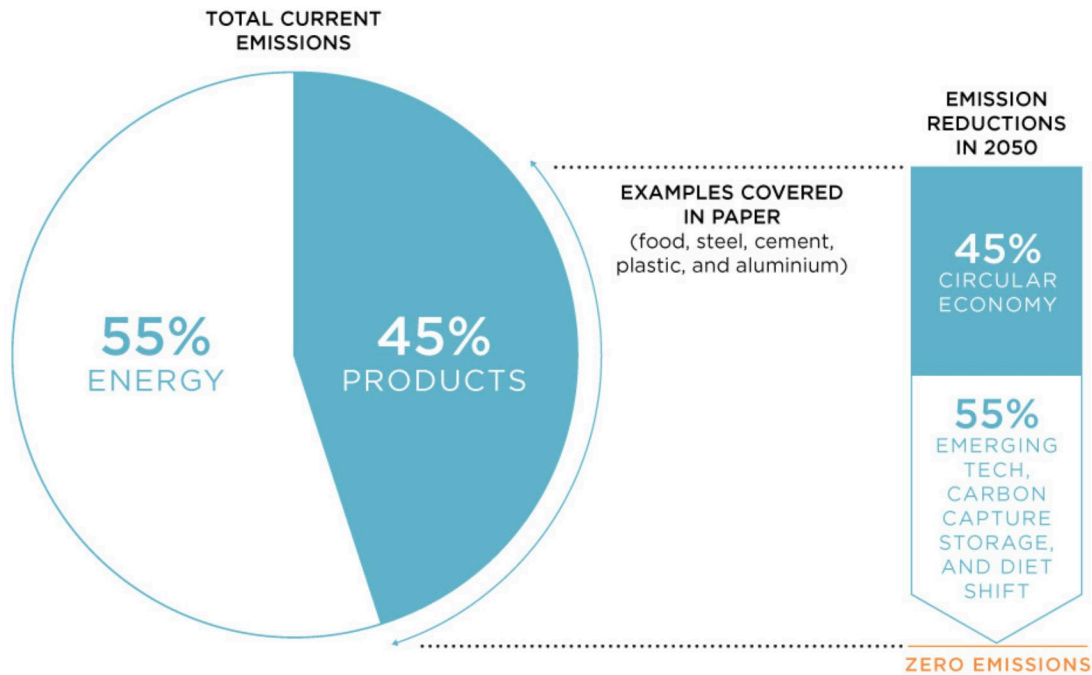


Figure 8-1: Shifting from Linear to Circular Economy
Source: Final Straw, n.d.³⁰

³⁰ The R Collective. 2019. Circular Economy vs Linear Economy. <https://thercollective.com/blogs/r-stories/circular-economy-vs-linear-economy>

8.3.2 Climate Change Connections

This approach of using our resources wisely and extending product lifespan has the added benefit of supporting GHG emission reduction, since 45% of our total post-consumer emissions comes from the way our goods are made and used, and how we produce food, as shown on Figure 8-2.



Underpinned by a transition towards renewable energy, a circular economy can help tackle the overlooked 45% of emissions by transforming the way goods are made and used.

Figure 8-2: How the Circular Economy Tackles Climate Change
Source: Ellen MacArthur Foundation 2019³¹

8.3.3 Three-Stream Residential Collection

Research has consistently shown that where three-stream residential collection is established with weekly organics, every other week garbage, and every other week recycling, garbage tonnage reduces by approximately 40% or more. This trend has been consistent for other residential curbside roll outs in BC including within the RDOS and can continue to be an option for consideration as viable. In current contracts, up to two commodities per week can be collected (e.g., organics and garbage, organics and recycling).

³¹ Ellen MacArthur Foundation. 2019. Completing the picture: how the circular economy tackles climate change. <https://www.ellenmacarthurfoundation.org/completing-the-picture>

8.3.4 Legislation to Promote Waste Reduction and Diversion

8.3.4.1 Extended Producer Responsibility

The province of BC continues to add new products to its Recycling Regulation, which requires manufacturers and brand owners to be responsible for end-of-life management of products entering the BC marketplace. It is intended to support the stages of EPR outlined on Figure 8-3. As stated in the BC Government’s five-year action plan³², new items to be incorporated into the Recycling Regulation include mattresses, compressed canisters, fire extinguishers, medical sharps, hybrid and electric batteries, as well as a policy approach for ICI packaging and paper product. However, implementation delays are common due to political, technical, and/or financial influences. A 2024 Provincial Discussion Paper notes that, while over 99% of British Columbians have access to recycling at home or depot, recycling opportunities are not as consistent at locations outside of the home (i.e., locations such as offices, retail stores, restaurants, schools).

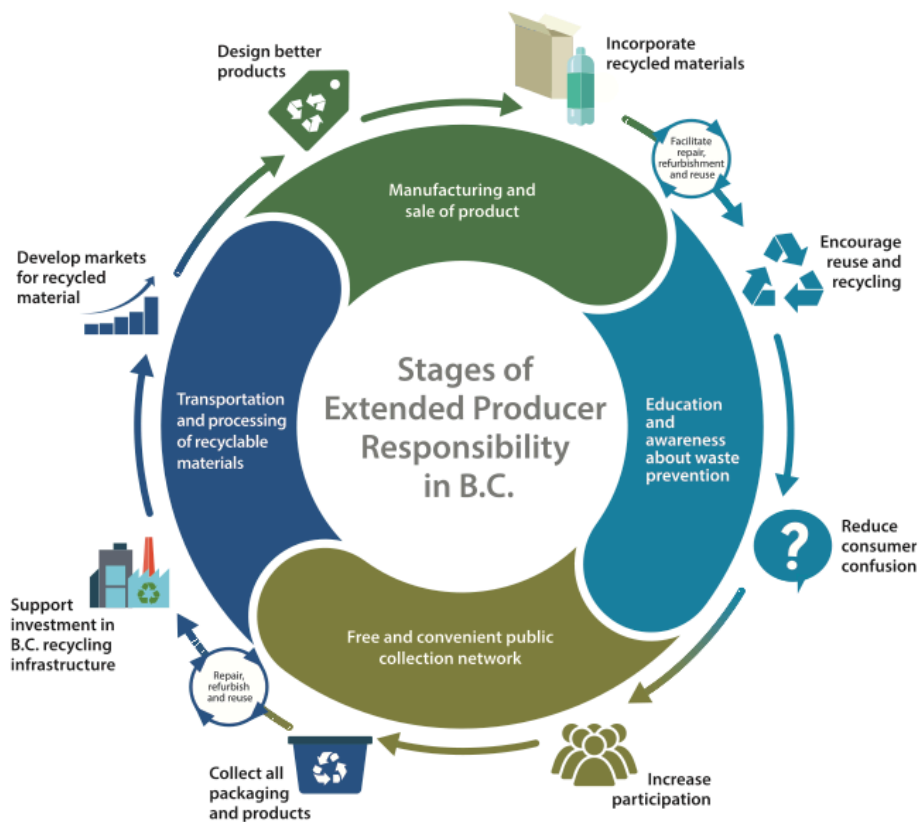


Figure 8-3: Stages of Extended Producer Responsibility in BC
 Source: BC Government 2023³³

³² BC Government. 2023. EPR Five Year Action Plan.
https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/extended_producer_five_year_action_plan.pdf

³³ BC Government. 2023. EPR Five Year Action Plan.
https://www2.gov.bc.ca/assets/gov/environment/waste-management/recycling/recycle/extended_producer_five_year_action_plan.pdf

8.3.4.2 Single-Use Plastics Reduction Legislation

Provincial and federal legislation to reduce the use of single-use plastics will be phased in from late 2023 through 2030 as shown on Figure 8-4. Collectively, they are phasing out the use of plastics single-use items including shopping bags; cutlery and stir sticks; straws; ring carriers; food service ware; and oxo-biodegradable plastics³⁴.

BRITISH COLUMBIA SINGLE-USE & PLASTIC WASTE PREVENTION REGULATION

Provincial Phase Out of Single-Use and Plastic Items

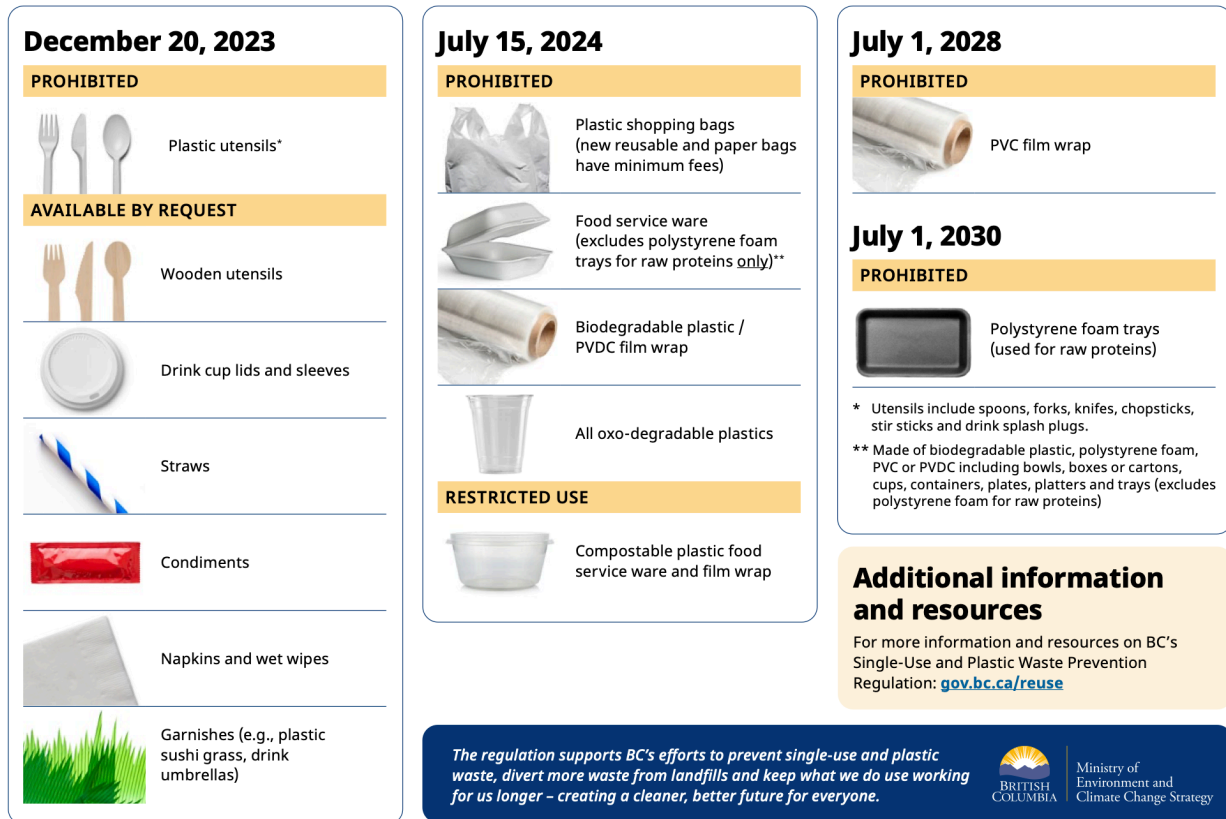


Figure 8-4: Provincial Phase Out of Single-Use and Plastic Items
 Source: BC Government 2024

³⁴ BC Government. 2024. Single-Use Plastics. <https://gov.bc.ca/reuse>

8.3.5 Visitor Campaigns Linking to Waste Management

There are opportunities to encourage waste reduction and appropriate waste management for visitors to the region. One example is the newer BC Don't Love it to Death campaign as shown on Figure 8-5.

Explore British Columbia and enjoy everything this magnificent province has to offer. *Just...* **DON'T LOVE IT TO DEATH**

Have you noticed any of these negative impacts? And more importantly, did your behaviour cause any of them? Learn more about the challenges facing our communities and find out how you can be part of the solution.



Figure 8-5: Don't Love it to Death Campaign
Source: Don't Love it to Death 2023³⁵

³⁵ Don't Love it to Death. 2023. <https://dontlovetodeath.com>

APPENDIX A

SITE INVENTORY OF CLOSED AND OPERATIONAL FACILITIES

Table A-1 and Table A-2 summarize the solid waste facilities operating in the Regional District of Okanagan-Similkameen (RDOS). No other close landfills or historical dump sites have been identified in the region. The RDOS notes that the Private Sector facilities operating in the RDOS are likely to change over the period of the SWMP. Changes in Private Sector facilities will generally not trigger a Solid Waste Management Plan (SWMP) amendment.

Table A-1: Inventory of Public Sector Solid Waste Facilities in RDOS

| Public Sector Solid Waste Facilities | Facility Type(s) | Landfill Status | Operational Certificate |
|--------------------------------------|--|---------------------------------|-------------------------|
| Campbell Mountain Landfill | Landfill, Compost Facility (Biosolids, Yard Waste), Recycle Depot | Operational | 15274 |
| Oliver Landfill | Landfill, Compost Facility (Yard Waste, Food Waste), Recycle Depot | Operational | 15280 |
| Osoyoos Landfill | Landfill, Compost Facility (Yard and Garden Waste), Recycle Depot | Operational | 15273 |
| Princeton Landfill | Landfill, Recycle Depot | Operational | 15276 |
| Summerland Landfill | Landfill (Yard Waste, Biosolids, Food Waste), Recycle Depot | Operational | 15275 |
| Okanagan Falls Landfill | Landfill, C&D MRF | Operational (C&D Disposal Only) | 15279 |
| Keremeos Landfill/Transfer Station | Transfer Station, Recycle Depot | No Active Waste Disposal | 15278 |
| Apex Mountain Transfer Station | Transfer Station, Recycle Depot | Apex Mountain Ski Resort | |

Table A-2: Inventory of Private Sector Solid Waste Facilities in RDOS

| Private Sector Solid Waste Facilities | Facility Type(s) | Location |
|---|---|--------------------------|
| Arrow Environmental Ingerbelle Compost Facility | Compost Facility (Food Waste, Yard and Garden Waste, Biosolids, Agricultural Waste) | 16 km South of Princeton |
| Net Zero Waste Eastgate Compost Facility | Compost Facility (Food Waste, Yard and Garden Waste, Biosolids, Agricultural Waste) | 30 km South of Princeton |
| London Drugs | Recycle Depot | Penticton |
| T2 Market | Recycle Depot, Bottle Depot | Oliver |
| J&C Bottle Depot | Bottle Depot | Penticton |
| Osoyoos Bottle Depot | Bottle Depot | Osoyoos |
| Return-It Express & Go Penticton | Bottle Depot | Penticton |
| Return-It Express & Go Keremeos | Bottle Depot | Keremeos |
| Summerland Bottle Depot | Bottle Depot | Summerland |

APPENDIX B

WASTE DISPOSAL SYSTEM INFRASTRUCTURE STUDY

The following represents a starting point for the Regional District of Okanagan-Similkameen (RDOS) and its member municipalities to consider as the terms of reference when retaining a consultant to conduct a disposal system infrastructure assessment study. The purpose of this study is to determine whether there are operational, financial, and systematic efficiencies that can be realized and examine ownership models. Key considerations for this study should include the following:

1. Overview of the entire waste disposal system in terms of the following:
 - a. Amount of waste disposed annually;
 - b. Number of visits per year;
 - c. Customers served by sector; and
 - d. Tipping fees.
2. Detailed analysis of each disposal facility, including:
 - a. Ownership of the landfill;
 - b. Who the facility services (e.g., population base, number of businesses, industries, First Nation communities, etc.);
 - c. Landfill life/capacity remaining;
 - d. Potential for landfill expansion;
 - e. Disposal rates (e.g., annually, monthly, peaks and lows);
 - f. Services offered (e.g., disposal and waste diversion options);
 - g. Number of customers/visits (e.g., annually, monthly, weekly);
 - h. Whether the visits are for disposal, waste diversion, or both;
 - i. Number of residential and commercial loads;
 - j. Cost to operate landfill (e.g., annually, monthly, cost per tonne);
 - k. Operational and financial resources for each landfill;
 - l. Financial model for each landfill (tipping fees, subsidies, sales, general revenue, etc.);
 - m. Design, Operations, and Closure Plan (DOCP), including when the DOCP was completed and when it should be updated;
 - n. Cell construction costs and timing;
 - o. Long-term operational and financial feasibility considerations;
 - p. Description of political will or sentiment for maintaining or closing the landfill; and
 - q. Areas of environmental and social concerns.
3. A model of the waste disposal system that summarizes the following:
 - a. Map showing waste sheds and the communities/customers that feed into that disposal facility/landfill.
 - b. Ability for sensitivity analysis if disposal facilities close and where the waste would go.

- c. Ability to describe how operational and financial resources would change for the landfill based on disposal system scenarios. Considerations for this analysis include the following:
 - i. Effects of disposal rate and service population changes on landfill capacity (i.e., years of operation); and
 - ii. Implications of affected waste shed customers from closed facilities (e.g., new transfer station costs, added operation and transportation costs).
 - d. Changes in greenhouse gas emissions (e.g., due to transportation and/or methane gas management).
4. Liabilities associated with each landfill, including:
- a. List of current and potential areas of environmental concern; and
 - b. Financial reserves for closure, and post-closure monitoring and management.
5. Recommendations for optimization and harmonization of the waste disposal system and identifying the advantages and disadvantages of the various scenarios.

APPENDIX C

SWMP IMPLEMENTATION SCHEDULE

Table C-1: SWMP Implementation Schedule

| | | Plan Year | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--|---|-----------|------|------|------|------|------|------|------|------|------|------|------|
| | | Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
| Strategy | | | | | | | | | | | | | |
| Reduction, Reuse, and Repair | | | | | | | | | | | | | |
| 1 | Implement new waste reduction and prevention campaigns. | | | | | | | | | | | | |
| 2 | Activate and enhance existing education packages and toolkits. | | | | | | | | | | | | |
| 3 | Promote waste prevention, reduction, and diversion through community events. | | | | | | | | | | | | |
| 4 | Work with member municipalities to plan, develop, and deliver waste prevention, reduction, and reuse education. | | | | | | | | | | | | |
| 5 | Support for disassembly and right to repair. | | | | | | | | | | | | |
| 6 | Support advocacy for expansion of EPR to include reuse and repair elements in EPR programs. | | | | | | | | | | | | |
| 7 | Directly support local reuse opportunities and organizations. | | | | | | | | | | | | |
| 8 | Develop partnerships to increase reuse and repair networks and programs. | | | | | | | | | | | | |
| Organics, Recycling and Construction & Demolition (C&D) Waste Diversion | | | | | | | | | | | | | |
| 9 | Implement education and behaviour change programs targeting organics diversion. | | | | | | | | | | | | |
| 10 | Support use of compost in regional construction and operations | | | | | | | | | | | | |
| 11 | Expand organics collection for the ICI sector. | | | | | | | | | | | | |
| 12 | Expand organics collection for the MF sector. | | | | | | | | | | | | |
| 13 | Support changes to make recycling depots more accessible to residents. | | | | | | | | | | | | |
| 14 | Advocate for expansion of EPR materials. | | | | | | | | | | | | |
| 15 | Provide other options for recycling or diversion. | | | | | | | | | | | | |
| 16 | Assess options to temporarily manage Fats, Oils, and Grease in emergency situations. | | | | | | | | | | | | |
| 17 | Increase C&D waste reduction by updating legislation and permitting requirements. | | | | | | | | | | | | |
| 18 | Develop a Deconstruction Bylaw for all pre-1960 structures. | | | | | | | | | | | | |
| 19 | Work with member municipalities and the C&D Sector to improve diversion. | | | | | | | | | | | | |
| 20 | Assess options for diverting asphalt shingles and gypsum. | | | | | | | | | | | | |
| Proper Waste Management Practice | | | | | | | | | | | | | |
| 21 | Work with member municipalities and local authorities to optimize residential organics diversion from SF homes. | | | | | | | | | | | | |
| 22 | Work with member municipalities to coordinate monitoring and public education in curbside collection programs. | | | | | | | | | | | | |
| 23 | Continue to develop methane management systems at landfills. | | | | | | | | | | | | |
| 24 | Develop a Disaster Debris Management Plan. | | | | | | | | | | | | |
| 25 | Review emerging waste management technologies. | | | | | | | | | | | | |
| 26 | Develop annual waste monitoring reports. | | | | | | | | | | | | |
| 27 | Complete regular waste composition studies. | | | | | | | | | | | | |
| Disposal System Efficiency and Financial Sustainability | | | | | | | | | | | | | |
| 28 | Engage in a government-to-government partnership with First Nations Indian Bands to identify opportunities to share resources, information, and infrastructure. | | | | | | | | | | | | |
| 29 | Optimize and harmonize waste disposal system infrastructure. | | | | | | | | | | | | |
| 30 | Develop a long-term TAC. | | | | | | | | | | | | |
| 31 | Coordinate with member municipalities and local authorities to provide efficient collection services throughout the region | | | | | | | | | | | | |
| 32 | Develop a SWMP Monitoring Committee | | | | | | | | | | | | |
| 33 | Complete a five-year SWMP effectiveness review. | | | | | | | | | | | | |
| 34 | Review tipping fee structures based on user-pay principles. | | | | | | | | | | | | |
| 35 | Support harmonizing fees between landfills in the region. | | | | | | | | | | | | |
| 36 | Review the financial sustainability of solid waste revenues and facilities. | | | | | | | | | | | | |
| 37 | Strengthen municipal implementation capacity. | | | | | | | | | | | | |
| Planned Infrastructure and Program Supports | | | | | | | | | | | | | |
| 38 | Implement construction of a Regional Organics Processing Facility. | | | | | | | | | | | | |
| 39 | If required, construct organic waste transfer infrastructure at existing solid waste facilities and coordinate access to organics processing capacity. | | | | | | | | | | | | |
| 40 | If required, purchase the equipment necessary to operate essential services. | | | | | | | | | | | | |
| 41 | Implement the planned schedule of activities for the Campbell Mountain Landfill over the next five years. | | | | | | | | | | | | |
| 42 | Implement the planned schedule of activities for the Okanagan Falls C&D Landfill over the next five years. | | | | | | | | | | | | |
| 43 | Implement the planned schedule of activities for the Keremeos Transfer Station over the next five years. | | | | | | | | | | | | |
| 44 | Implement the planned schedule of activities for the Apex Transfer Station over the next five years. | | | | | | | | | | | | |
| 45 | Implement the planned schedule of activities for the Oliver Landfill over the next five years. | | | | | | | | | | | | |
| 46 | Implement the planned schedule of activities for the Summerland Landfill over the next five years. | | | | | | | | | | | | |
| 47 | Implement the planned schedule of activities for the Osoyoos Landfill over the next five years. | | | | | | | | | | | | |



Legend:
 Project Implementation
 Ongoing Program Implementation

Table C-2: SWMP Implementation Costs and Staffing

| Strategy | Program/Funding Type | Staff Required (Project Hours) | Staff Required (Annual Hours) | Plan Year | | 0 | | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | | | |
|--|---|--------------------------------|-------------------------------|----------------------------|------------|-------------------|-------------|----------------|-------------|-----------------|-------------|-----------------|-------------|-------------------|-------------|------------------|-------------|-----------------|------------|-----------------|------------|------------------|-------------|------------------|-------------|-----------------|----------|----------|----------|
| | | | | Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 |
| | | | | Non-Staff Operational Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing | Cost | Staffing |
| Reduction, Reuse, and Repair | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Implement new waste reduction and prevention campaigns. | RDOS Regional | 780 | | \$ 5,000 | 60 | | 180 | \$ 5,000 | | | | | | 180 | \$ 5,000 | | | | | 180 | \$ 5,000 | | | | | 180 | \$ 5,000 | |
| 2 | Activate and enhance existing education packages and toolkits. | RDOS Regional | 180 | | \$ - | 60 | \$ - | | | 180 | \$ - | | | | | 180 | \$ - | | | | 180 | \$ - | | | | | 180 | \$ - | |
| 3 | Promote waste prevention, reduction, and diversion through community events. | RDOS Regional | | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | | 50 | \$ 5,000 | 50 | | 50 | \$ 5,000 | 50 | | 50 | \$ 5,000 | 50 | | 50 | \$ 5,000 | 50 | | 50 | \$ 5,000 | | |
| 4 | Work with member municipalities to plan, develop, and deliver waste prevention, reduction, and reuse education. | RDOS Regional | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 5 | Support for disassembly and right to repair. | RDOS Regional | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 6 | Support advocacy for expansion of EPR to include reuse and repair elements in EPR programs. | RDOS Regional | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 7 | Directly support local reuse opportunities and organizations. | RDOS Regional | | 50 | \$ 5,000 | | | | | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | 50 | \$ 5,000 | | |
| 8 | Develop partnerships to increase reuse and repair networks and programs. | RDOS Regional | | 50 | \$ - | | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | | |
| Organics, Recycling and Construction & Demolition (C&D) Waste Diversion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Implement education and behaviour change programs targeting organics diversion. | RDOS / Member Municipalities | 1240 | 50 | \$ - | | | 1000 | | 240 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | | |
| 10 | Support use of compost in regional construction and operations. | RDOS Regional | | 10 | \$ - | | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 11 | Expand organics collection for the ICI sector. | RDOS / Member Municipalities | 1100 | 50 | \$ - | | | | | | | 550 | | 550 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | | |
| 12 | Expand organics collection for the MF sector. | RDOS / Member Municipalities | 360 | 50 | \$ - | | | | | 360 | | 360 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | 50 | | | |
| 13 | Support changes to make recycling depots more accessible to residents. | RDOS / Member Municipalities | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 14 | Advocate for expansion of EPR materials. | RDOS / Member Municipalities | | 20 | \$ - | | | 20 | | | | 20 | | 20 | | | | 20 | | | | 20 | | | | 20 | | | |
| 15 | Provide other options for recycling or diversion. | RDOS / Member Municipalities | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 16 | Assess options to temporarily manage Fats, Oils, and Grease in emergency situations. | RDOS Regional | 40 | | \$ - | | | | | | | | | | | | | 40 | | | | | | | | | | | |
| 17 | Increase C&D waste reduction by updating legislation and permitting requirements. | RDOS / Member Municipalities | 550 | | \$ - | | | | | | | 240 | | 180 | | 130 | | | | | | | | | | | | | |
| 18 | Develop a Deconstruction Bylaw for all pre-1960 structures. | RDOS / Member Municipalities | 360 | | \$ 5,000 | | | | | | | | | | | | | | | | | | | | | 360 | \$ 5,000 | | |
| 19 | Work with member municipalities and the C&D Sector to improve diversion. | RDOS / Member Municipalities | 180 | | \$ - | 90 | | 90 | | | | | | | | | | | | | | | | | | | | | |
| 20 | Assess options for diverting asphalt shingles and gypsum. | RDOS Regional | | 10 | \$ - | | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| Proper Waste Management Practice | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Work with member municipalities and local authorities to optimize residential organics diversion from SF homes. | RDOS / Member Municipalities | 540 | | \$ - | | | | | | | 180 | | | | | | 180 | | | | | | | | 180 | | | |
| 22 | Work with member municipalities to coordinate monitoring and public education in curbside collection programs. | RDOS / Member Municipalities | | 20 | \$ - | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | | |
| 23 | Continue to develop methane management systems at landfills. | RDOS / Member Municipalities | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 24 | Develop a Disaster Debris Management Plan. | RDOS / Member Municipalities | 400 | | \$ 100,000 | | | | | | | | | 200 | \$ 50,000 | 200 | \$ 50,000 | | | | | | | | | | | | |
| 25 | Review emerging waste management technologies. | RDOS Regional | | 20 | \$ - | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | | |
| 26 | Develop annual waste monitoring reports. | RDOS Regional | | 120/80 | \$ - | | | 120 | | 80 | | 80 | | 80 | | 80 | | 80 | | 80 | | 80 | | 80 | | 80 | | | |
| 27 | Complete regular waste composition studies. | RDOS / Member Municipalities | 180 | | \$ 90,000 | | | | | | | 90 | \$ 90,000 | | | | | | | | | | | 90 | \$ 90,000 | | | | |
| Disposal System Efficiency and Financial Sustainability | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 28 | Engage in a government-to-government partnership with First Nations Indian Bands to identify opportunities to share resources, information, and infrastructure. | RDOS Regional | | 20 | \$ - | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | 20 | | | |
| 29 | Optimize and harmonize waste disposal system infrastructure. | RDOS / Member Municipalities | 500 | | \$ 300,000 | | | | | | | 100 | \$ 60,000 | 300 | \$ 180,000 | 100 | \$ 60,000 | | | | | | | | | | | | |
| 30 | Develop a long-term TAC. | RDOS / Member Municipalities | 100 | | \$ - | | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | 100 | | | |
| 31 | Coordinate with member municipalities and local authorities to provide efficient collection services throughout the region. | RDOS / Member Municipalities | 550 | | \$ - | | | | | 275 | | 275 | | | | | | | | | | | | | | | | | |
| 32 | Develop a SWMP Monitoring Committee. | RDOS Regional | | 120 | \$ 1,000 | | | 120 | | 120 | | 120 | | 120 | | 120 | | 120 | | 120 | | 120 | | 120 | | 120 | | | |
| 33 | Complete a five-year SWMP effectiveness review. | RDOS Regional | 50 | | \$ 20,000 | | | | | | | | | | | 50 | \$ 20,000 | | | | | | | | | | | | |
| 34 | Review tipping fee structures based on user-pay principles. | RDOS Regional | 160 | | \$ - | 80 | | | | | | | | | | | | 80 | | | | | | | | | | | |
| 35 | Support harmonizing fees between landfills in the region. | RDOS / Member Municipalities | | 10 | \$ - | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | 10 | | | |
| 36 | Review the financial sustainability of solid waste revenues and facilities. | RDOS / Member Municipalities | 80 | | \$ 30,000 | | | | | | | | | | | | | 80 | \$ 30,000 | | | | | | | | | | |
| 37 | Strengthen municipal implementation capacity. | City of Penticton | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| Planned Infrastructure and Program Supports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 38 | Implement construction of a Regional Organics Processing Facility. | RDOS Regional | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | If required, construct organic waste transfer infrastructure at existing solid waste facilities and coordinate access to organics processing capacity. | RDOS / Member Municipalities | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | If required, purchase the equipment necessary to operate essential services. | RDOS / Member Municipalities | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 41 | Implement the planned schedule of activities for the Campbell Mountain Landfill over the next five years. | RDOS Service Area | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 42 | Implement the planned schedule of activities for the Okanagan Falls C&D Landfill over the next five years. | RDOS Service Area | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 43 | Implement the planned schedule of activities for the Keremeos Transfer Station over the next five years. | RDOS Service Area | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 44 | Implement the planned schedule of activities for the Apex Transfer Station over the next five years. | RDOS Service Area | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | Implement the planned schedule of activities for the Oliver Landfill over the next five years. | RDOS Service Area | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 46 | Implement the planned schedule of activities for the Summerland Landfill over the next five years. | District of Summerland | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| 47 | Implement the planned schedule of activities for the Osoyoos Landfill over the next five years. | Town of Osoyoos | | | | No new resources. | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Total (Annual) | 480 | \$5,000 | 1880 | \$5,000 | 1655 | \$10,000 | 2355 | \$65,000 | 2220 | \$ 335,000 | 1410 | \$135,000 | 1090 | \$40,000 | 990 | \$10,000 | 930 | \$ 10,000 | 1020 | \$ 95,000 | 1310 | \$20,000 | | | |

Note: Most of the activities listed in this solid waste management plan will be undertaken by the current staff (highlighted in peach). However, some new initiatives may require additional staff, which may be fulfilled through the hiring of new staff, contracted staff and / or consultants

APPENDIX D

CAPITAL PROJECTS SCHEDULE

Appendix D: List of Planned Capital Projects to Be Completed by the RDOS and Member Municipalities During the SWMP

| Facility | Year Estimated | Estimated Cost | Year | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
|---|----------------|----------------|-----------|--------------|--------------|--------------|--------------|--------------|------------|------|--------------|--------------|--------------|------|
| | | | Plan Year | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| RDOS Facilities | | | | | | | | | | | | | | |
| Campbell Mountain Landfill | | | | | | | | | | | | | | |
| Leachate Management | 2025 | \$ 200,000 | | \$ 200,000 | | | | | | | | | | |
| Bio Cover | 2025 | \$ 4,145,112 | | \$ 1,600,000 | \$ 2,000,000 | \$ 300,000 | \$ 150,000 | \$ 95,112 | | | | | | |
| Design, Operations, and Closure Plan (DOCP) | 2025 | \$ 65,000 | | \$ 40,000 | | | \$ 25,000 | | | | | | | |
| Cell Design and Geotech | 2016 | \$ 1,757,500 | | | | \$ 220,000 | \$ 1,537,500 | | | | | | | |
| Phase 3 Expansion | 2016 | \$ 4,650,431 | | | | \$ 4,650,431 | | | | | | | | |
| Phase 4 Expansion | 2016 | \$ 4,248,608 | | | | | | | | | | \$ 4,248,608 | | |
| Phase 1 Closure | 2026 | \$ 750,000 | | \$ 750,000 | | | | | | | | | | |
| Phase 2 Closure | 2016 | \$ 7,079,877 | | | | | | \$ 7,079,877 | | | | | | |
| Phase 3 Closure | 2016 | \$ 4,371,458 | | | | | | | | | | | \$ 4,371,458 | |
| Okanagan Falls Waste Management Facility | | | | | | | | | | | | | | |
| Phase 2 Expansion Design | 2025 | \$ 100,000 | | \$ 100,000 | | | | | | | | | | |
| Phase 2 Expansion Construction | 2025 | \$ 1,400,000 | | \$ 1,400,000 | | | | | | | | | | |
| Phase 1 Closure | 2021 | \$ 527,619 | | | | \$ 527,619 | | | | | | | | |
| Oliver Landfill | | | | | | | | | | | | | | |
| Leachate Pond Design and Construction | 2025 | \$ 225,000 | | \$ 225,000 | | | | | | | | | | |
| Phase 3 Expansion (incl. Leachate Management) | 2022 | \$ 4,198,832 | | | | | \$ 150,000 | \$ 4,048,832 | | | | | | |
| Phase 2 Closure | 2022 | \$ 369,696 | | | | | | | \$ 369,696 | | | | | |
| Keremeos Landfill / Transfer Station | | | | | | | | | | | | | | |
| Closure Plan and Closure Work | 2025 | \$ 650,000 | | \$ 550,000 | \$ 50,000 | \$ 50,000 | | | | | | | | |
| Replacement of Scale House | 2025 | \$ 125,000 | | \$ 125,000 | | | | | | | | | | |
| Site Layout, Design and Construction | 2025 | \$ 250,000 | | | \$ 50,000 | \$ 200,000 | | | | | | | | |
| Regional Organics Processing Facility | | | | | | | | | | | | | | |
| Facility Construction and Commissioning | 2025 | \$ 19,000,000 | | | | | | | | | | | | |
| Municipal Capital Budgets | | | | | | | | | | | | | | |
| Summerland Landfill | | | | | | | | | | | | | | |
| Water Supply Well | 2022 | \$ 30,000 | | \$ 30,000 | | | | | | | | | | |
| Groundwater Monitoring Wells | 2022 | \$ 30,000 | | \$ 30,000 | | | | | | | | | | |
| Office Trailer | 2022 | \$ 50,000 | | | | | \$ 50,000 | | | | | | | |
| Phase 1, Cell 3A Liner Construction | 2022 | \$ 1,014,513 | | \$ 1,014,513 | | | | | | | | | | |
| Phase 1, Cell 3B Liner Construction | 2022 | \$ 1,612,269 | | | | | | | | | \$ 1,612,269 | | | |
| Phase 1, Area A Progressive Closure | 2022 | \$ 962,018 | | | | | | \$ 962,018 | | | | | | |
| Phase 1, Area A Temporary Cover | 2022 | \$ 557,997 | | | | \$ 557,997 | | | | | | | | |
| Stormwater System Improvements | 2022 | \$ 260,500 | | | | | | \$ 260,500 | | | | | | |
| Final Closure | 2022 | \$ 3,309,600 | | | | | | | | | | | | |
| Osoyoos Landfill | | | | | | | | | | | | | | |
| Final Closure | 2018 | \$ 546,000 | | | | | | | | | | | | |
| Princeton Landfill | | | | | | | | | | | | | | |
| Final Closure | 2022 | \$ 4,892,000 | | | | | | | | | | | | |

APPENDIX E

PLAN MONITORING ACTION COMMITTEE TERMS OF REFERENCE

PLAN MONITORING ACTION COMMITTEE TERMS OF REFERENCE

1.0 Purpose and Scope

The Regional District of Okanagan-Similkameen (RDOS) has completed its Solid Waste Management Plan (SWMP). The purpose of the Plan Monitoring Advisory Committee (committee) is to provide review from a variety of perspectives on the implementation of SWMP. In accordance with the Ministry of Environment's Guide to the Preparation of Regional Solid Waste Management Plans, Plan Monitoring Advisory Committee will provide advice to the Regional District on solid waste management matters.

2.0 Roles and Responsibilities

The role of the committee is to:

1. Represent the balance of community interests.
2. Review guiding principles, plan goals and targets, and information provided by staff and consultants regarding RDOS solid waste program implementation.
3. Review program implementation against goals and targets outlined in the SWMP.
4. Provide feedback in meetings and reports to the RDOS.
5. Ensure that proposed programs and policies are in the best interests of all residents of the region, balancing both community and industry needs and technical requirements

3.0 Authority

The Public Advisory Committee will make recommendations on the proposed plan to RDOS Board via SWMP Public Advisory Committee. The committee will make recommendations on the proposed plan to RDOS Board. The Board is the final decision-making authority.

4.0 Appointment and Term

The committee will be formed and maintained for at least 10 years until the development of the next SWMP. Committee members should be prepared to participate for at least a two-year term. The Committee will conclude its work when the development of the next SWMP has been approved by the RDOS Board. The RDOS Board may, at any time, remove any member of the committee and any member of the committee may resign at any time upon sending written notice to the Chair of the committee. In the event of a vacancy occurring during the regular term of office, the vacancy may be filled for the remainder of the term by an alternate nominated by the committee and approved by the RDOS Board. No members of the committee shall receive any remuneration for their service; however, members of the committee shall be entitled to be reimbursed expenses in accordance with any applicable Regional District remuneration bylaw.

5.0 Meeting Procedures – Quorum, Voting & Conduct

1. Meetings will be held approximately one to two times each year.
2. The elected official appointed by the Board shall be the Chair of the meetings.
3. If the Chair is absent from a meeting of the committee, those members present at the meeting shall appoint an Acting Chair who shall fulfill the duties of the position at the meeting.
4. The meeting dates and times will be determined by the Chair in consultation with RDOS staff and committee members.
5. RDOS staff will provide support to the committee including preparing agendas and reports, recording minutes of all meetings and ensuring committee agendas and minutes are forwarded electronically for circulation to all members.
6. The committee members will provide advance written notice to RDOS staff if they are unable to attend a meeting.
7. The committee shall follow Regional District of Okanagan – Similkameen Board Procedure Bylaw where applicable.
8. The committee members will follow the RDOS Code of Conduct and ensure a respectful meeting environment.
9. The meetings will be structured to encourage dialogue and collaboration on relevant issues within the constraints of the planned agendas.
10. Meetings will be held virtually or in person at 101 Martin Street, Penticton.
11. The committee may invite groups and subject matter experts to present and provide advice and feedback on specific agenda items, at the discretion of the Chair and Vice-Chair.
12. It is expected that at no time would the meeting or part of a meeting be authorized to be closed to the public under the Community Charter. All meetings of the committee must be open to the public unless specific circumstances require a closed meeting.
13. A quorum of the committee shall be three voting members.
14. All questions before the committee at the meetings shall be decided by a majority vote.

6.0 Reporting

Regional District staff will provide advice and professional assistance to the committee including drafting correspondence and reports.

APPENDIX F

PLAN DISPUTE RESOLUTION PROCEDURES

PLAN DISPUTE RESOLUTION PROCEDURES

This dispute resolution procedure may apply during plan development as well as to the following types of conflicts that could arise during plan implementation:

- Administrative decisions made by regional district staff
- Interpretation of a statement, bylaw, policy or provision in the plan
- Any other matter not related to a proposed change to the wording of the plan or an OC.

The following principles will be followed:

- i. The parties will make all reasonable efforts to attempt to resolve the dispute in an amicable manner without outside intervention
- ii. Disputes will be attempted to be resolved as early and at the lowest administrative level as possible; every effort will be made to avoid disputes requiring a formal resolution process
- iii. The formal process is not intended to deal with inconsequential or frivolous disputes
- iv. The cost of mediation or adjudication will be shared by the parties to the dispute
- v. Information or data related to the dispute will be shared by the parties
- vi. Rules of confidentiality and freedom of information will apply

Disputes will be settled using the following procedure:

Negotiation

- Parties involved in the dispute shall make every effort to resolve the dispute on their own through non-facilitated communication. If necessary, the parties will provide each other with a written summary of their position and any relevant supporting documentation
- Parties may agree to make use of a facilitator

If this is unsuccessful

Plan Monitoring Advisory Committee (if appropriate)

- Parties involved in the dispute will have opportunity to speak to the Committee
- Committee will review, consider and provide recommendations to the Board

If this is unsuccessful

RDOS Board of Directors (Board)

- Parties involved in the dispute will have opportunity to speak to the Board
- Board will receive recommendations from the Committee and settle the dispute; or, recommend mediation

If the board is unable to settle the dispute

Mediation

- A neutral, impartial third-party facilitator who is acceptable to all the parties to the dispute will be selected. Using appropriate mediation techniques, the facilitator will attempt to develop a solution which satisfies all parties. The facilitator has no decision-making authority. If the parties cannot agree on a mediator, the matter shall be referred to the BC Mediation Roster Society or equivalent roster organization for selection of a mediator.
- All efforts will be made to reach an agreement through mediation
- Costs for mediation will be shared by the parties in dispute

If this is unsuccessful

**Independent
Arbitrator**

- If the dispute cannot be resolved by a mediator, the matter will be referred to arbitration and the dispute will be arbitrated in accordance with any applicable legislation. A neutral, impartial third-party arbitrator who is acceptable to all the parties to the dispute will be selected. The arbitrator hears each party's evidence and arguments and renders a final, binding decision.
- Costs for arbitration shall be apportioned at the discretion of the arbitrator