Solid Waste Services

The Solid Waste Services Sheet was developed for presentation to the Okanagan Falls Incorporation Study Committee at its meeting on February 5, 2024. The sheet was prepared using information available at the time of writing. Changes will be made if new information becomes available.

Information presented on the Okanagan Falls Incorporation scenario is based on the following assumptions:

> *That an Okanagan Falls municipality would continue to participate in each of the existing RDOS solid waste services*

THE PRESENT

➤ What service is provided?

For the purpose of this *Service Sheet*, solid waste management consists of curbside collection of garbage and recycling, refuse disposal/landfill operations, a solid waste management planning service and an illegal dumping clean-up service.

Curbside Garbage/Recycling
The Regional District provides curbside recycling and garbage collection to residences in all the electoral areas except Area H. In Area "D" it is provided through two separate services — Recycling/Garbage OK Falls, and Recycling/Garbage Area D/E/F/I. The Okanagan Falls service consists of four main programs for single-family homes:

- Weekly garbage collection,
- Every other week recycling collection,
- Seasonal yard waste pickups, and
- Yearly pickup (one date) of two large bulky items.

Residents can place two cans or bags (max 95 L can or 25 kg weight) at the curb and unlimited recycling. One (1) 240 litre rolling cart is also acceptable for garbage collection. Additional garbage can be collected using "tag-a-bag" stickers.

Yard waste (grass clippings, trimmings, etc.) is collected every other week, with the exceptions of only one pick-up in December and February, and no collection in January. Unlimited amounts of properly packaged yard waste is accepted on collection days.

There is also one day annually where no more than two large items (appliances, furniture) are collected.

Multi-family (anything over four units) residential and non-residential uses must contract their own garbage and recycling service separately; this service is not through the RDOS.

Solid Waste Management
The RDOS provides a Solid Waste Management Service that includes long-term planning for solid waste management for the entire regional district. Solid waste planning includes preparation and update of the region's solid waste plan (adopted in 2012 and amended in 2019 to include the Apex Mountain Transfer Station). The plan provides a long-term vision for solid waste management, including waste diversion targets and disposal plans. The province requires most regional districts to prepare waste management plans for the entire region. A contract to update the plan was awarded in May 2023, at a cost of $120,000, funded through the Community Works Fund. The update is still underway.

The service also includes public education, waste reduction coordination, annual reporting, preparation of new waste facility sites, and other works or services as required by the plan.

Landfill Operations

There are 7 sanitary landfills within the RDOS to manage the region's solid waste; the regional district operates 4 of them, and 3 are operated by municipalities. One landfill is located within Area "D" — Okanagan Falls Sanitary Landfill. That landfill is located just beyond the eastern Incorporation Study Area boundary. The landfill does not accept household garbage; instead it is a regional centre for demolition, land clearing and construction waste (wood, yard waste, metals, propane tanks, tires and lead acid batteries). The waste collected in Okanagan Falls through the curbside collection program, commercial collection or multi-family collection is disposed at the Campbell Mountain Landfill, located in Penticton. Residents and businesses in Okanagan Falls can also take garbage to the Campbell Mountain Sanitary Landfill (CMSL).

The RDOS recently approved a new organics composting facility adjacent to the Campbell Mountain Sanitary Landfill (CMSL) to process food and yard waste. The RDOS *Solid Waste Management Plan* has identified composting as one of the best means to divert waste entering local landfills. The new operation will be designed to accommodate up to 35,000 tonnes of organic materials per year and would include odour controls and paving the site to contain leachate. The facility is expected to be up and running by end of March 2025.

The RDOS commissioned updates to the master plans for both the CMSL and OK Falls landfill in 2021. The results of the updates were then used to update the Design, Operations and Closure Plans, which are required by the Ministry of Environment every 5 years.

Illegal Dumping

RDOS also provides a regional illegal dumping education and control service that includes reporting of illegal dumping within the region, collection and support of community clean-up efforts. The service is provided region wide – all electoral areas and municipalities participate in this service.

➤ Who makes decisions?

The RDOS has authority for providing solid waste collection services to residents of 8 electoral areas as well as the Village of Keremeos. Although there are different curbside collection areas, all curbside collection is through one service provider. Operational decisions are made by all the service participants, and budget decisions are made by the full Board.

The RDOS's Board of Directors makes decisions for the region-wide solid waste management planning function, including decisions on the service budget. The participants make operational decisions regarding the landfill operations for Campbell Mountain and Okanagan Falls (Penticton and Electoral Areas D, E, F and I).

Figure 1: Service Decision-making

SERVICE	DECISION-MAKERS
Garbage/Recycling Collection	Operational decisions made by the service participants (8 electoral areas + Village of Keremeos)
Solid Waste Management	Decisions made by the entire RDOS Board because it is a regional service
Landfill Operations	Operational decisions made by the service participants (Electoral Areas D, E, F and I + City of Penticton)
Illegal Dumping	Decisions made by the entire RDOS Board because it is a regional service

➤ Who delivers the service?

Residential garbage and recycling collection services are delivered by Waste Connections of Canada on contract with RDOS. The current contract began in July 2018 and is scheduled to end in the middle of 2025. Waste Connections delivers the service to 8 electoral areas and the Village of Keremeos.

The RDOS provides regional solid waste planning to the entire region. The Region is required to complete and update its regional *Solid Waste Management Plan*, and to undertake long-term solid waste facility planning on behalf of the region. Consulting services are used to support staff in delivering the service. A total of 1.03 FTE are involved in the region-wide service.

The operation of the 4 regional landfills is currently provided by RDOS. A landfill operations agreement for CMSL was signed with GFL Environmental Inc. and began in June 2022. The contract expires in May 2027. The RDOS also uses some consultants and contractors to assist with landfill operations. RDOS recently requested proposals for the ongoing training, collection, transportation and disposal functions of the household hazardous waste facility at CMSL.

The illegal dumping service encourages and supports community clean-ups and collection through the use of fee waivers that pay for the disposal of the items. The service does also rely on some contract services. RDOS staff administer the waivers. A total of 0.2 FTE area associated with the service as a whole.

➤ What is spent by the RDOS on the services?

The total cost of solid waste management services that impact Okanagan Falls can be broken down into:

- the 2023 budgeted cost of garbage collection and recycling services
- the 2023 budgeted cost of the RDOS solid waste management planning service
- the 2023 budgeted cost of operating the Campbell Mountain and Okanagan Falls landfills
- the 2023 budgeted cost of illegal dumping service

The amounts in Figure 2 represent the total cost of these services, and not the portion that Okanagan Falls residences pay for through user fees or taxes.

Figure 2: Service Operating Costs (2023)

SERVICE	COST[1]	TAX REQ
Garbage/Recycling	$357,197	n/a
Waste Management	$528,326	$271,240
Landfill Operations	$4,503,623	n/a
Illegal Dumping	$39,275	$34,950
Total	**$5,428,421**	**$306,190**

1 Cost and tax requisition figures are from RDOS 2023 budget for entire service area (not just OK Falls or Area D). Administration allocation is not included for services recovered through taxes

Most services have operational reserves in place, and the landfill facilities also have capital reserves and closure reserves. It is useful to consider the amounts that the region has set aside for future expenditures. Reserve totals are included in Figure 3.

Figure 3: Service Reserves (2022)

SERVICE/RESERVE	TOTAL[1]
Garbage/Recycling (OK Falls) Operating	$84,134
Solid Waste Management Operating	$209,011
Refuse Disposal (Penticton & Area) Oper	$579,755
Illegal Dumping Operating	$98,139
Ok Falls Landfill (Capital)	$1,104,852
Campbell Mt. Landfill (Closure)	$5,355,686
Campbell Mt. Landfill (Capital)	$1,923,718
Campbell Mt. (Env. Improvement)	$2,325,927
Total	**$11,681,222**

[1] *Reserve totals are as at the end of 2022*

Notably, the Campbell Mountain landfill has multiple reserves. Closure costs must cover the costs of closing the landfill, as well as post-closure care for an estimated 30 years. The total estimate of closure costs, estimated in 2016, is about $9 million, plus another $4.9 million on post-closure. The earliest closure date is estimated at 2104 (80 years).

The OK Falls landfill is estimated to have 38 more years, with a tentative closure date of 2062. Closure costs

were estimated in the 2021 Closure Plan at $1.3 million, not including $815,500 to conduct monitoring required to the year 2112.

In addition to the organics composting facility, which represents the most significant capital item planned for 2024, the CMLF and OK Falls landfill have several capital projects planned or underway. Capital expenditures planned in 2023 include leachate management, entrance upgrades and scales, biocover and some security improvements. The majority of capital items were funded from the Community Works Fund (gas tax), but the RDOS also used existing reserve funds and a $1.2 million grant from the province. The capital plan items for the landfills in 2023 and 2024 are summarized in Figure 4. The total cost of the Organics Facility is estimated at $19 million, with partial funding from a $10.8 million grant.

Figure 4: Landfills Capital Plan (2023 and 2024)

LANDFILL	CAPITAL ITEM	COST
CMLF	Upgrade to entrance and scales	$50,000 (2023) $300,000 (2024)
CMLF	Organics Composting Facility	$1.22 million (2023) $19 million (2024)
CMLF	Leachate management	$349,972 (2023) $200,000 (2024)
CMLF	Biocover	$80,000 (2023) $500,000 (2024)
CMLF/OKF	Completion of master plan designs and updates	$70,000 (2023)
CMLF/OKF	Security improvements	$22,000 (2023)
CMLF	Financial Plan cell design and geotech	$150,000 (2024)
OKF	Drainage	$30,000 (2023) $20,000 (2024)
OKF	Buffer Purchase	$150,000 (2024)

➤ How are the costs recovered?

Curbside collection of garbage and recycling in Okanagan Falls is paid for primarily through user fees, as well as a contribution from Recycle BC, a non-profit industry-funded group that manages packaging and paper recycling. In 2023, user fees were $135 in Okanagan Falls. That fee is a flat rate per residence, and does not fluctuate with the value of a home. Rates are reviewed and revised annually based on costs of the contract, tipping fees and administrative costs. RDOS does have the option to raise revenues through taxation on improvements only, but historically the RDOS has not used this option.

The cost of operating the Campbell Mountain Landfill and Okanagan Falls Landfill is currently recovered through tipping fees and user fees for the landfill. Refuse charges at both the Campbell Mountain and OK Falls are $120 per metric tonne, with a minimum charge of $6, and are paid at the time of drop-off. Other types of waste have specific charges. Yard and garden waste, as well as sorted residential recycling materials are free to drop off, although the Okanagan Falls landfill does not accept food waste. As with the curbside collection, the service does have the ability to raise revenues through taxes on improvements only, but this approach is not currently used.

The cost of both the solid waste management service and illegal dumping services are shared by all jurisdictions in the region, and the costs are raised primarily through property taxes. The cost of these services is allocated to each electoral area and municipality on the basis of converted assessment for land and improvements. Requisition amounts for the services, and associated tax rates are included in Figure 4. The tax contribution toward solid waste management service from all of Okanagan Falls (Incorporation Study Area) in 2023 totalled $7,463 for the solid waste management service, and $980 for the illegal dumping service.

➤ What is the cost to a typical residence?

The net cost of the RDOS solid waste services is recovered from Okanagan Falls taxpayers on the basis of property assessments, as well as through user fees. A residence assessed at $500,000, paid approximately $140 for the solid waste services, as shown in Figure 5 including the garbage user fees and any applicable taxes.

As noted previously, a flat user fee of $135 for garbage is paid by Okanagan Falls residents for garbage and recycling collection (depending on the area), regardless of assessed value or volume of garbage or recycling. The exception is if a resident has more than the permitted amount of garbage, in which case additional "tag-a-bag" stickers can be purchased at $1.50 per sticker.

Landfill operations are paid for through tipping fees (by both commercial and residential users).

Figure 5: Cost Impact on a Typical Residence (2023)

SERVICE	RES RATE	OWING[1]
Garbage/Recycling	n/a	$135.00
Waste Management	0.0072	$3.59
Landfill Operations	n/a	n/a
Illegal Dumping	0.0009	$0.47
	Total	**$139.06**

1 Impact is calculated on a home assessed at $500,000. Amount excludes 5.25% Surveyor of Taxes fee charged in unincorporated areas

INCORPORATION

➤ What impact would incorporation have on these services?

Incorporation would not result in any required changes to the Solid Waste Management services currently provided to Okanagan Falls. A municipality could choose to provide some services currently provided by the RDOS, but there would be no immediate need or requirement to do so.

A newly Incorporated municipality could choose to provide its own garbage and recycling collection services, or could continue the service as currently provided by the regional district. Typically changes would be made at the conclusion of the current service contract, particularly if a different service level is desired. There may be economies of scale achievable by participating in a larger service that provide an incentive to remain as part of the RDOS contract. A municipality would have the authority to determine whether to participate in the regional service, to provide the service through other means, or even to not provide garbage and recycling collection at all.

It is anticipated that a new municipality would continue to participate in the refuse disposal service that provides for the operation of the CMSL and the Okanagan Falls landfill. That service is not funded through tax requisition, so there would not be any impact on residents of the new municipality.

The new municipality would be required to participate in the solid waste management service, which is a mandatory service for the region. There would be no service or cost impacts, as all of Area "D" already participates in, and contributes to, this service.

➤ How would decision-making change?

As noted with all services, there would be a change in governance. Within a municipality, it would be the municipal Council that would have the authority to make decisions regarding the participation in most solid waste collection services, and a municipal director would participate in discussions at the RDOS Board level regarding service levels and cost for regional services.

➤ How would incorporation impact service delivery?

The new municipality, as noted, would have authority and responsibility for the service. The new municipality would not, however, need to deliver the service itself, using municipal staff. Incorporation could provide opportunities for the municipality to deliver its own recycling and solid waste collection service, or deliver it through a separate contract, rather than combining the service with other RDOS electoral areas and municipalities. The most obvious time to make a change would be at the conclusion of the current collection contract, which is in 2025.

➤ How would service costs change?

In the short term, it is anticipated that the municipality would continue to participate in the services provided through the current contract. Delivering the services through a separate contract, or through an in-house model, would not be expected to yield the economies of scale achievable through a joint contract. While a change in the approach could be made by a municipal Council, for the purposes of this analysis, no changes to the current rates have been assumed.

SUMMARY OF TAX IMPACTS

Figure 6 presents the tax impact of the two scenarios – the current situation (RDOS) and incorporation (MUNICIPAL).

Figure 6: Tax Comparison of Regional District and Incorporation Scenarios

SERVICE	RDOS[1]	MUNICIPAL[1]
Garbage/Recycling	$135.00	$135.00
Waste Management	$3.59	$3.59
Landfill Operations	n/a	n/a
Illegal Dumping	$0.47	$0.47
Total	**$139.06**	**$139.06**

1 Impact is calculated on a home assessed at $500,000.