



**RDOS Area “D” Governance Study
Fact Sheets
January 2016**

SEWER & WASTE WATER SERVICES

➤ **What service is provided?**

Sewer and waste water services provided by RDOS in Area “D” include:

- operation of a sewer collection and treatment system in the Okanagan Falls area;
- liquid waste management planning;
- septic disposal services.

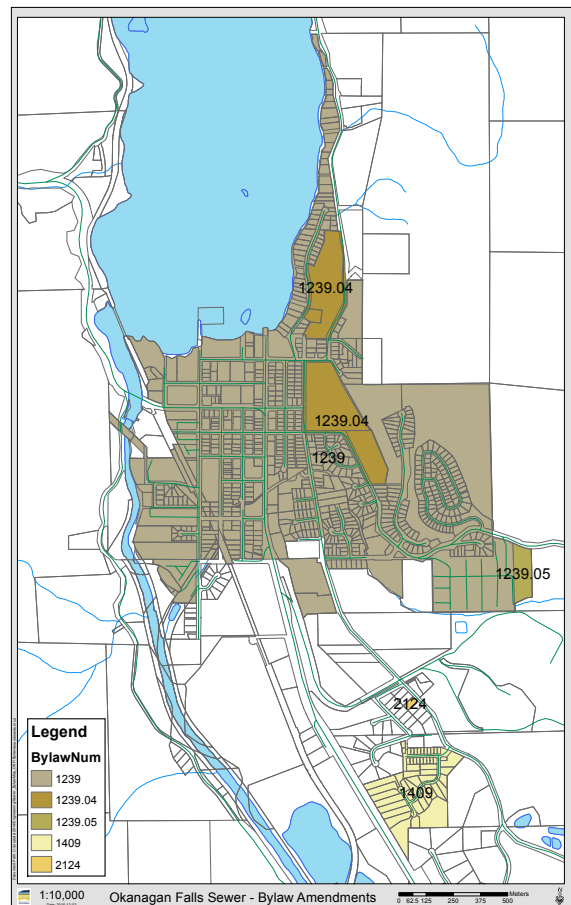
There are other sewer systems with multiple connections within Area “D,” including at Apex, St. Andrews, Twin Lakes Golf Course, Banbury Green RV Camping Resort and at the Dominion Radio Astrophysical Observatory. These sewer systems are privately owned and operated, and are not provided by the RDOS.

Okanagan Falls Sewer

The Okanagan Falls Sewage collection, treatment, and disposal works were originally built in the late 70's. In 2009, a federal/provincial infrastructure grant assisted in funding the construction of a new Wastewater Treatment Plant (WWTP) downstream from the original treatment plant. In addition to the new WWTP, the system includes 3 pump stations, pressurized and gravity sewer mains that service approximately 750 properties. The sewer service includes all the shaded areas shown in Figure 1.

The new WWTP removes the organics and nutrients from the wastewater through biological nutrient removal before the effluent is released into Okanagan River Channel. The treated effluent is used for water maintenance functions, in toilets at the plant, and for landscape irrigation. The heating and cooling system uses the treated effluent in various ways to provide up to 95 percent of the heating/cooling requirements for the building. The plant was built to handle expansion to the Kaleden Lakeshore and Skaha Estates communities.

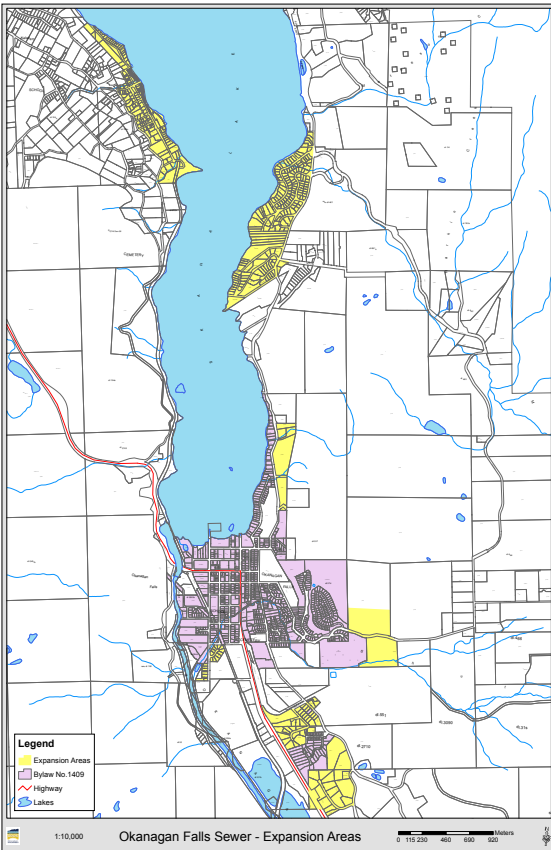
Figure 1: Okanagan Falls Sewer Area



Options to service parts of these communities (see Figure 2) are currently being pursued.

A Sewer Steering Committee has been created, and preliminary design for expansion of the service to Kaleden and Skaha Estates proposed (Figure 2). Next steps include securing infrastructure grant funding. A 2015 grant application was not successful, so the RDOS will investigate options for grants in 2016.

Figure 2: Proposed Okanagan Falls Sewer Expansion Area



Liquid Waste Management Planning

The RDOS has the authority to provide liquid waste management planning for all 8 electoral areas. A Liquid Waste Management Plan (LWMP) generally references existing circumstances, researches viable alternatives and improvements and recommends the most financially, socially, and environmentally acceptable solutions for moving forward. LWMPs are encouraged by the Province, but not required. The plans provide benefits such as authorization to borrow for capital works. Several LWMPs were initiated through grant funding back in the 80s.

The Okanagan Falls Area Liquid Waste Management Plan was approved in 2010 and precipitated the construction of the new wastewater treatment plant. The plan also identified potential sewer areas in Kaleden and Skaha Estates, including a potential sewer layout.

Septage Disposal

The RDOS helps fund the disposal facility for septic waste located at the Penticton sewage

treatment plant. The plant serves the City of Penticton as well as residents of RDOS.

➤ **Who makes decisions?**

Okanagan Falls Sewer

The entire RDOS Board makes decisions regarding the Okanagan Falls sewer service, due to the fact that one Electoral Area Director cannot make decisions on a service alone. Decisions are made on the advice of staff, and in accordance with the approved Liquid Waste Management Plan. In addition, there is a Sewer Steering Committee that has been created to provide advice to the Board on the sewer expansion process.

Liquid Waste Management Planning

All Electoral Area Directors make decisions on the liquid waste management planning service, when it is provided. That service was set up initially when funds were available for liquid waste planning for each of the electoral areas. More recently the Okanagan Falls LWMP was funded through gas tax funding in the Rural Projects budget, and not this service. The Rural Projects budget is referenced in the *Administration Fact Sheet*.

Septage Disposal

Only the directors from the 3 participating areas – Area “D,” “E,” and “F” – make decisions regarding the septic disposal facility, with the exception of budget decisions, which are made by the full Board.

➤ **Who delivers the service?**

The RDOS operates and manages the Okanagan Falls sewer system and treatment plant, as well as delivering the liquid waste management planning service. RDOS has a Manager of Public Works that oversees the water/waste water department. That department includes 3 system operators, 1 labourer and 1 environmental technician as well as an administration assistant. In addition, consultants are hired to assist in the preparation of liquid waste management plans and updates as required.

The septic disposal facility at the City of Penticton’s wastewater treatment plant is operated by the City of Penticton. The RDOS has a 22-year contract with the City to deliver the service to RDOS that ends in July 2027.

➤ **What is spent by RDOS on the service?**

Okanagan Falls Sewer

Annually, the Okanagan Falls sewer service costs just over \$1 million, including debt financing for the construction of the treatment plant. Funding for the \$11.7 million wastewater treatment facility came from different sources. The project received \$6.2 million in federal-provincial grant funding through the Canada-British Columbia Building Canada Fund, in 2010. The remaining contribution is from the RDOS.

Septage Disposal

The amount for the septage disposal service in Figure 3 represents the total cost of the service, and not the portion that Area “D” residences pay for through taxes.

Service Component	Cost ¹
OK Falls Sewer	\$1,054,548
Septage Disposal ²	\$18,625
Liquid Waste Management Planning ³	\$0
Total	\$1,073,173

1 Cost estimates are from adopted 2015 budget figures
2 This is the cost of the service provided to Electoral Areas D, E and F
3 This is the cost of the service provided to all Electoral Areas. No costs were recorded in 2015, or are anticipated over the next 5 years.

In addition to the annual service costs, there are also operating and capital reserve accounts created for the Okanagan Falls sewer service. The DCC Reserve account must be used for DCC projects only. It is useful to consider the amounts that the

Service	Reserve Total ¹
OK Falls Sewer	\$16,552
OK Falls Sewer DCC Reserve	\$326,413
OK Falls Sewer - Future Capital	\$153,279
OK Falls Sewage Disposal Operating	\$31,840

1 Reserve totals are as at the end of 2014.

region has set aside for future expenditures. Reserve totals are included in Figure 4.

➤ **How are the costs recovered?**

Okanagan Falls Sewer

The cost of the Okanagan Falls sewer is recovered through user fees, as well as extension, installation and connection fees. User fees pay for 68% of the service costs.

The RDOS also has a development cost charge (DCC) for the Okanagan Falls area, which is paid by anyone constructing new residential or non-residential buildings or creating new residential lots through a subdivision. A DCC allows growth to contribute to the capital costs of the sewer system that provide growth capacity. The DCC for every new single-family lot created in the sewer area is \$9,500. Multi-family units pay \$6,800 per unit, whereas commercial and industrial development pays \$30 per square metre of gross floor area. The DCCs accrue in a reserve account and are used to contribute to capital projects that relate to growth.

Liquid Waste Management Planning

When this service is used, cost recovery is through grants (when available) and property taxes.

Septage Disposal

The regional portion of the septic disposal service is entirely covered by property taxes levied on the assessed values of land and buildings for all properties in Areas “D” and “E,” and a portion of properties within Area “F.” All properties contribute to the septage disposal service regardless of whether they are connected to a community sewer system or have a septic disposal system. Residents who use the Penticton facility for septic disposal are also subject to a tipping fee of \$33.50 per m³ at the time of disposal.

➤ **What is the cost to a typical residence?**

The cost of the Okanagan Falls sewer service is recovered from Area “D” taxpayers that are connected to the sewer system through a \$653 user fee. A residence assessed at \$325,000 in Area “D” that is connected to the Okanagan Falls sewer therefore paid a combined amount of \$655.49 in

user fees and property taxes for sewer related services. Properties not serviced by the sewer system paid \$2.49 toward the septage disposal service (plus tipping fees associated with disposal), as shown in Figure 5.

Figure 5			
Cost Impact on Typical Residence			
2015			
Service	Tax Req.¹	Res. Rate	Owing²
OK Falls Sewer	n/a	n/a	\$653.00
Septage Disposal	\$18,625	0.008	\$2.49
Liquid Waste Mgt Planning	\$0	0	\$0.00
Total			\$655.49

1 Tax requisition amount excludes 5.25% Surveyor of Taxes fee
 2 Impact is calculated on a home assessed at \$325,000