

# Report to Council



**Date:** November 22, 2021  
**To:** Council  
**From:** City Manager  
**Subject:** Kelowna Septic System Elimination and Sewer Connection Project Grant  
**Department:** Utility Services

---

## **Recommendation:**

THAT Council receives for information, the report from infrastructure Engineering dated November 22, 2021, regarding the Kelowna Septic System Elimination and Sewer Connection Project Grant.

## **Purpose:**

To inform Council that the City has received a \$9.034M grant from the Investing in Canada Infrastructure Program (ICIP) - Green Infrastructure Environmental Quality Program to install new sanitary sewer in areas currently using septic.

## **Background:**

On March 26, 2020, Council authorized the application for a grant to the ICIP – Green Infrastructure – Environmental Quality Sub-Stream for the Kelowna Septic System Elimination and Sewer Connection Project. The City originally applied for a \$12.44M grant, representing 73% percent of the anticipated total budget of \$17M to complete sewer installation in Central Rutland, Rio/Terrace and St. Amand/Chamberlain Sanitary Sewer Connection Areas, and selected areas in the Okaview and Hall Road areas.

In August 2021, the City received a conditional approval for \$9,034,256. Staff had been asked prior to this to amend their application and work plan for this figure. The scope modifications required the removal of the Okaview and St. Amand/Chamberlain components to meet the total project cost obligation of \$12,320,000. A summary breakdown of costs is provided in Table 1.

**Table 1. Cost allocation based on revised scope**

Sub-Project Area	Eligible Capital Works	Eligible Grant	Required Reserves
Central Rutland	\$10,750,000	\$7,888,156	\$2,902,500
Rio/Terrace	\$670,000	\$489,100	\$180,900
Hall Road	\$900,000	\$657,000	\$243,000
Total	\$12,320,000	\$9,034,256	\$3,285,744

The amended scope of work includes:

1. Sewer Connection Area No. 22 - Central Rutland: Installation of new sewer mains to service all remaining properties on private septic systems in this connection area.
2. Sewer Connection Area No. 16 - Rio/Terrace: Installation of new sewer mains to service all remaining properties on private septic systems on Rodondo Place, Rialto Drive and Terrace Drive.
3. Sewer Connection Area No. 27 - Hall Road: Construction of a sewer main to crossing over Mission Creek.

The project will provide new sanitary sewer to service over 630 existing properties on septic, with design and construction completed by qualified private consultants and contractors. The project is expected to be constructed over four years based on a grant funding timeline described in the application. The 10-Year Capital Plan will need to be revised in 2022 based generally on the numbers in Table 2.

**Table 2. Estimated Annual Expenditures and Grant Funding**

Year of Implementation	Estimated Annual Capital and Design Works	Estimated Annual Grant Requirement
2021-2022	\$400,000	\$293,320
2022-2023	\$1,920,000	\$1,407,936
2023-2024	\$5,000,000	\$3,666,500
2024-2025	\$5,000,000	\$3,666,500
Total	\$12,320,000	\$9,034,256

**Financial Implications**

Central Rutland and Rio/Terrace works will be funded by a 27:73 split from their respective existing Sewer Connection Area reserves (with funds collected from previously paid connection charges) and the ICIP grant, respectively. These reserves were built up by residents, customers, and developers who had already paid their sewer charge and connected to the sanitary sewer system. New services will be extended to property line and the property owners are responsible for costs to connect the service to their home as well as paying a minimum connection charge of \$7,500 per connection.

The Hall Road area will benefit from \$657,000 worth of grant while using \$243,000 from the City sewer utility reserves to install the sewer crossing at Mission Creek. This budget will be focused on downstream components necessary to cross Mission Creek; all representing a significant hurdle to

constructing this large and complex connection area. Crossing Mission Creek first will set up the connection area for success in future phases of design and construction and simplify any new bridge construction in the near future. Payments will be recovered through future connection area fees as properties connect.

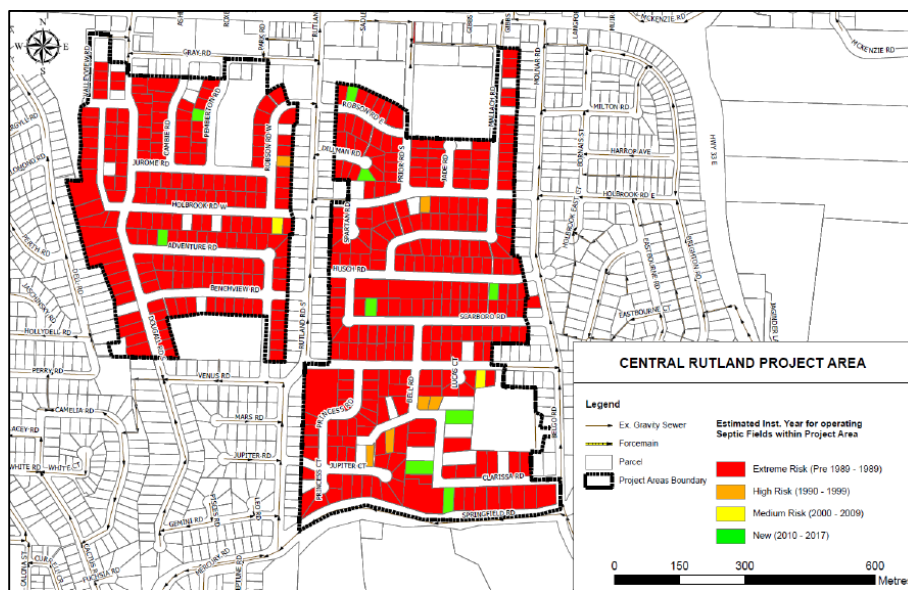
**General Commentary**

The City has been continuously looking at opportunities to remove properties off septic and connect them to the public sanitary sewer system. Serviced properties benefit from a safe, reliable and environmentally sustainable sanitary disposal system. There is a significant environmental benefit of eliminating septic systems as the City’s system collects and treats wastewater into economically and environmentally friendly by-products: fresh water and compost. The compost is used locally as soil amendments, and high-quality treated effluent water can be discharged safely to Okanagan Lake.

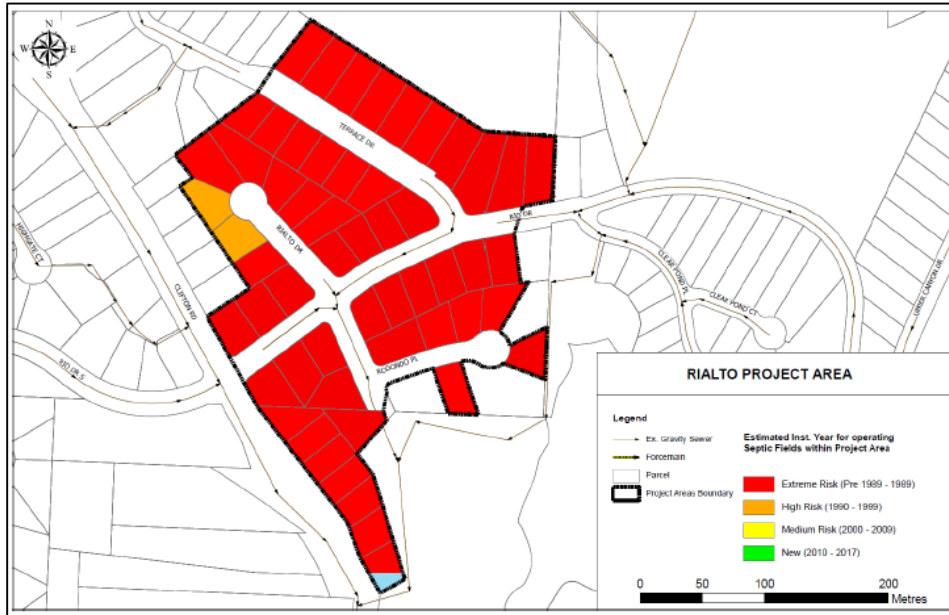
Remaining septic fields continue to deteriorate across the City (See Figure 1). Recent studies and measurements are finding poor groundwater quality in the minor storm systems in the Rutland area, demonstrating a likely link to septic systems.

The City has been focused on eliminating septic systems for over 30 years and has connected many properties across the City over this period. Due to lack of grant funding over the last 10 years, the City has not been able to initiate larger projects to connect many properties. Without grants, the process is costly, and the burden is almost entirely on existing property owners. The City’s existing bylaw promoted a financially sustainable process, yet the outcome has not been achieved as sewer installation have proven too costly for existing landowners. The City has tried unsuccessfully to receive grant funding for the Hall Rd connection area, identified as the number 1 priority on the connection area list in the 2030 Official Community Plan. Grant rejection justifications in past submissions mainly stemmed from two items: 1) no reserve collected, and 2) matching funding was contingent on a successful Local Area Service (LAS) process which requires a majority approval by property owners

**Figure 1. Septic field failure risk in Central Rutland Sewer Connection Area (2020)**



**Figure 2. Septic field failure risk in Rio/Terrace Connection Area (2020)**



Given these barriers for grant funding, the City used a different approach in this latest application. Priorities were shifted to the top three connection areas as a collective and focused on available reserves that avoided the LAS process. The LAS process is still available; however it is no longer useful to obtain grants.

Conditional to these changes, staff will introduce in the near future significant modifications to Sewer Connection Area Bylaw No. 11540, Sewerage System User Bylaw No. 3480, and other internal processes to better leverage reserves. Together with the grant-applied work, future customers should see the following benefits:

- Shifting the focus to maximizing sanitary sewer installation in unserved areas.
- Providing our residents and customers the option of when to connect provided they have a functional septic system. A failed septic system will require replacement to Provincial standards or require connection to the sanitary sewer system.
- Leveraging grant funds to maximize sanitary sewer construction and connect as many properties as possible to the City's system.
- Holding funds in reserve for future use to fund further sanitary sewer extension in prioritized areas on septic.
- Eliminating critical environmental problems associated with septic systems that are showing up across the City.
- Improving transition opportunities with future development.

The mission of the new Bylaws would encompass the following guiding principles:

1. **FAIR** - Fees collected under the authority of the revised bylaw must be fair.
2. **EFFICIENT** - Providing the greatest opportunity for sewer service connections and decommissioning of private, onsite sewage systems.

3. **FLEXIBLE** - Provide flexibility to accelerate sanitary sewer installation when coordination with development or capital works is possible.
4. **OPPORTUNISTIC** – Prioritize applications for senior government grants for projects where reserves exist. Ensure that customers capitalize on development opportunities, but not rely on it.
5. **EQUITABLE** - Once all public infrastructure within a connection area is completed, the benefits of surplus reserve funds resulting from grants, City/Developer contributions, and/or City/developer-built works must be applied to help initiate work in other connection areas. This addresses some issues regarding grant prioritization or opportunities that defer work to other areas.

### Summary

The City is receiving a grant to fund the installation of sanitary sewer in three connection areas in the City. Budget is available through the accumulation of connection area reserves, and the City is developing a payment process with a minimum charge. Staff will be presenting proposed bylaw amendments soon to replace the current sewer connection program framework.

### Internal Circulation:

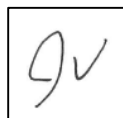
Community Communications Manager  
Development Engineering Manager  
Financial Services, Divisional Director  
Grants & Special Projects Manager  
Infrastructure Administration Manager  
Infrastructure Delivery Manager  
Infrastructure Engineering Manager  
Infrastructure Operations Department Manager  
Planning & Development Services, Divisional Director  
Policy & Planning Department Manager  
Revenue Supervisor  
Wastewater Department Manager

### Considerations not applicable to this report:

Financial/Budgetary Considerations  
Alternate Recommendation  
Communications Comments  
Existing Policy  
Legal/Statutory Authority  
Legal/Statutory Procedural Requirements  
Personnel Implication

Submitted by: Rod MacLean, Utility Planning Manager

Approved for inclusion:



J. Vos, Divisional Director (Acting), Infrastructure

cc: Divisional Director, Corporate Strategic Services  
Divisional Director, Financial Services  
Divisional Director, Infrastructure  
Divisional Director, Partnership & Investments  
Divisional Director, Planning & Development Services  
Infrastructure Operations Department Manager  
City Clerk