#### Overview

The Service Connection Failure Assistance Fund (SCFA) was set up as a type of insurance coverage for residents who have a problem with their water and sewer service.

Water and sewer service connection failures are generally due to freezing water lines. The cost of carrying out emergency repairs, especially in winter weather conditions, can exceed \$10,000. The SCFA fund also applies to sewer service connection failures, and helps cover the costs associated with fixing sewer connections.

Council established the SCFA program to provide municipal service customers with affordable insurance to cover repair costs.

The majority of customers participate in the program which, in the event of a failure, covers repair costs above \$1,000 and up to a maximum of \$25,000. The property owner pays the first \$1,000 (the deductible) and all costs exceeding \$25,000. The premium, currently set at \$10.00 per equivalent residential unit per month, is collected through a levy on the City water bill.

The program applies to failure of water or sewer services that occur between the building foundation and the City main. To qualify for the program a customer must have:

- a properly installed, operated and maintained freeze protection system
- water and sewer service connections in accordance with the applicable by-laws and codes

The costs that are covered under the program are those associated with the excavation, water and sewer repair or replacement, backfilling, placement of topsoil on the customer's property, pavement and sidewalk repair on City roadways.

### Standard Water and Sewer Service Connection

In 1984 the City adopted the two-line circulation system as its standard water service connection, which proved to be the most cost-effective freeze protection system available. The system consists of two insulated copper lines connected by a small pump located in a heated area inside the premises, which continuously circulates water back to the City main to prevent freezing. Some downtown blocks also utilize a two-line water system, but with an orifice system rather than a circulating pump. The orifice system works on the pressure differential of supply and return lines.

Prior to 1984 a variety of freeze protection systems were being installed. These were typically single lines with bleeders, heat tape, or the Aquaflow system to provide freeze protection.

The problems with the freeze protection systems associated with single line services are:

- Bleeders waste a huge volume of treated water and add to the volume of sewage that must be pumped to the sewage lagoon. This wasted water can affect the volumes stipulated under the City's mandated water licence.
- Heat tape has a relatively short lifespan and leads to frequent freeze-up problems.
- The Aquaflow system is noisy and, as the system pumps water into the City's potable water system, it is not tamper-proof.

As the City continues to reconstruct streets and services in older sections, service connections are upgraded to the current standard. Water and sewer service connections that are repaired under the SCFA are upgraded to the current standard, as well.

The Service Connection Failure Assistance Fund provides for the repair and maintenance of the water supply and sewage lines from the City mains to the customer's building and provides assistance to customers.

Service Connection Failure Assistance Fund Budget									
				2017					
	2015	2016	2016	Budget	2018	2019			
	Actual	Budget	Forecast	Approved	Budget	Budget			
	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	Note		
Revenue									
Insurance Premium	1,170	1,169	1,169	1,204	1,210	1,216	(1)		
Insurance Deductible	25	36	36	36	36	36			
	1,195	1,205	1,205	1,240	1,246	1,252			
Expenditures									
Contracted Services	684	652	652	724	717	709			
Materials	80	122	122	134	137	141			
Labour/ Equipment	200	302	302	382	392	402	(2)		
	964	1,076	1,076	1,240	1,246	1,252			
Change in Fund Balance	231	129	129	-	-	-			
Opening Balance	(157)	(157)	74	203	203	203			
Closing Balance	74	(28)	203	203	203	203			

# Notes:

See the following schedule of the Service Connection Failure Asssistance Program premiums and deductibles.
Labour and equipment are the internal charges from the Water and Sewer Fund.

## Budgeted revenue is based on the following:

			2017 Budgeted
	Rate	Number/ Volume	<u>\$</u>
Premiums Per Equivalent Residential Unit	\$10.00	10,030	1,203,600
Deductible-(Average # of Monthly Charges)	\$1,000.00	3.00	36,000
Total Revenue			1,239,600



# SERVICE CONNECTION FAILURE ASSISTANCE FUND

Service Connection Failure Assistance Performance Measures	Projected 2015	Actual 2015	Projected 2016	Forecasted 2017	Forecasted 2018	Forecasted 2019	Notes
Workload Indicators							
No. of services repaired/replaced under SCFA:							
Public Works (in-house)	65	60	75	60	60	60	
Contracted Out	15	10	12	10	10	10	
Total	80	70	87	70	70	70	
Effectiveness Measures							
Average cost to repair/replace service with dual							
circulating water service under SCFA	\$13,500	\$14,000	\$15,800	\$16,200	\$16,600	\$17,000	(1), (2) & (3)
Notes:							
(1) Pavement and sidewalk repairs are now included in the cost of perform	ing a SCFA repai	r					
(2) Average cost of service replacement/repair subject to inflation of material cost							
(3) Average repair costs are approximately 20% of service replacement cost which in turn results in lower overall average cost based on ratio							

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