



Making a difference...together

**PORT RENFREW UTILITY SERVICES
ANNUAL REPORT
NOVEMBER 18, 2013**

PORT RENFREW UTILITY SERVICES COMMITTEE

The Port Renfrew Utility Services Committee (PRUSC) has authority delegated by the Capital Regional District (CRD) Board for provision of water, sewer, street lighting and refuse disposal for the Port Renfrew community. Refuse disposal service is also provided to the Pacheedaht First Nation under a service delivery agreement. This Annual Report relates to the services provided under the authority of the PRUSC.

STREET LIGHTING SERVICE

Street lighting service is provided in the area of Port Renfrew known as Beach Camp. The street lights are operated and maintained by BC Hydro, and costs are recovered through a parcel tax and user charge on parcels in the area where the service is provided. There have been no significant issues with the service in the past year.

DRINKING WATER SERVICE

Operations

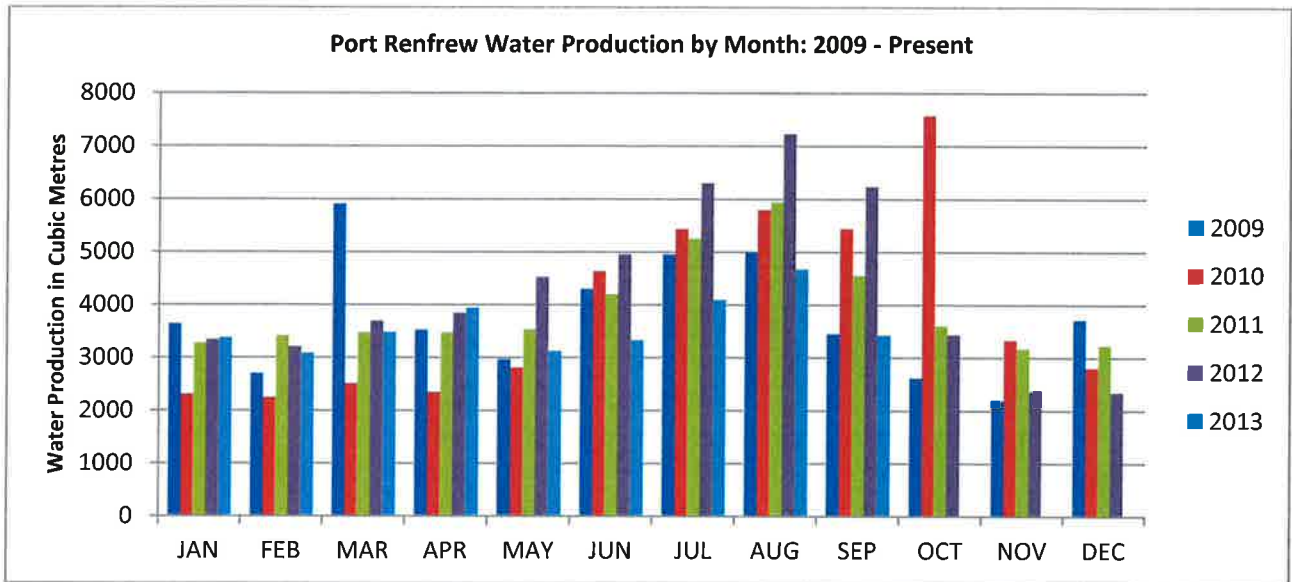
The Port Renfrew Water System, which serves the Beach Camp and Snuggery Cove areas, has operated reliably in the past year. Significant events and activities for 2012 and 2013 include:

- Installation of higher capacity Hydrogen Sulphide stripper at treatment plant (by others)
- Installation of back-up power generator at water treatment plant (by others)
- Repaired and replaced the intake valves on the water booster station.
- Water connection installation at 6493 Powdermain – May 2013
- Water connection installation at 6654 Queesto Drive – October 2013
- Baird Creek Bridge watermain pipe repair
- Annual isolation valve exercising
- Annual fire hydrant maintenance
- Repaired leak on the well pump raw water feed line
- All planned 2013 preventive maintenance work including annual system flushing and well point access road upkeep is expected to be completed by December 31, 2013.

Water Supply and Demand

Total water production through the Port Renfrew water treatment plant in 2012 was 51,483 m³; an increase of approximately 4,318 m³ (9%) from the previous year. The production amount includes water used for fire-fighting, hydrant flushing and maintenance activities. **Figure 1** provides a monthly comparison of treated water volumes over the past four years.

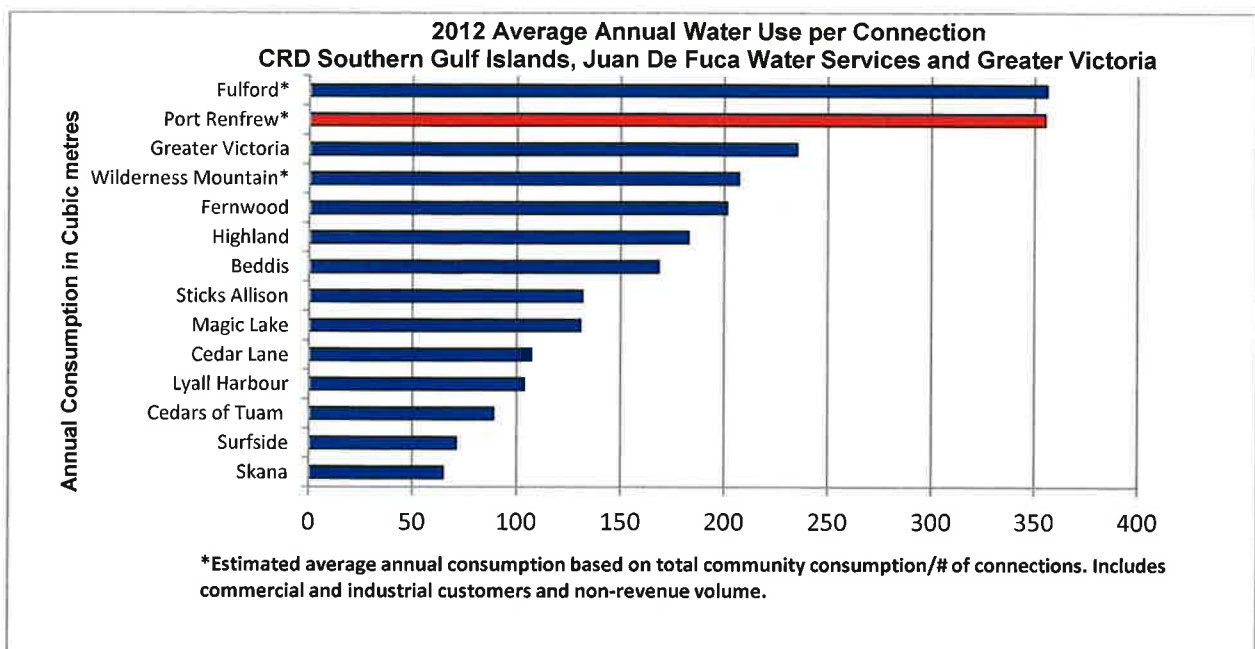
Figure 1. Port Renfrew Water Production



Of the 172 taxable folios within the water service area, 145 have service connections. There are 242.33 SFEs (Single Family Equivalents) being provided drinking water, consisting of single detached residences, duplexes, industrial and commercial businesses and properties with multiple dwellings (both strata and non-strata), each on a single property or folio.

To estimate average annual water use per connection, the total volume of produced water (measured as drawn from the well) is divided by the number of connections. For 2012 this equates to approximately 355 m³/connection, an increase of 35 m³/connection. While this quantity is significantly greater than other CRD-operated water systems (Figure 2), what must be considered is the number of SFEs within the system. If estimating water consumption based on the number of SFEs, or dwellings, 2012 Port Renfrew average consumption drops to approximately 212m³/yr.

Figure 2. 2012 Average Annual Water Use per Connection



The Port Renfrew water system does not have meters installed on residential services. Without the ability to monitor individual residential use, leaks on private properties may go un-noticed, potentially wasting a significant amount of treated drinking water from the system. Commercial properties are fitted with meters which are periodically checked for anomalous readings and flagged for investigation where atypical flow is identified, but they are not used for billing purposes.

Drinking Water Quality

Typical Port Renfrew Water System water quality characteristics include:

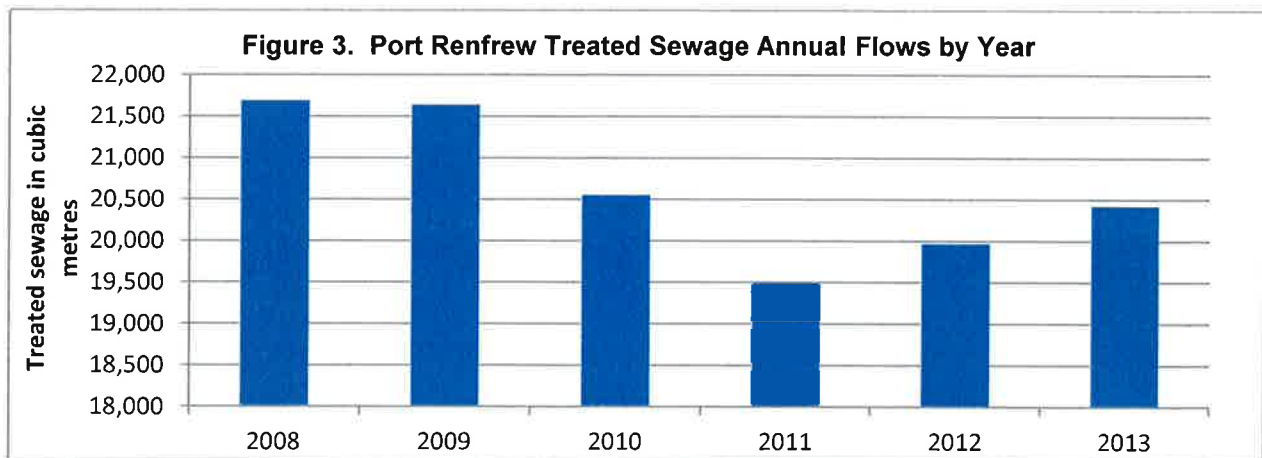
- Treated water is bacteriologically safe to drink. In 2012, a total of 60 samples were analyzed; there were zero total coliform positive samples and no *E. coli* bacteria found in the treated water. In 2013 to date, one sample was found to be total coliform positive; however the resample was negative and no *E. coli* was found in the treated water.
- Source water turbidity (cloudiness) is typically below the limit of 1 Nephelometric Turbidity Units (NTU) with a median value of 0.19 in 2012 and 0.55 in 2013 to date.
- Total organic carbon is typically less than 1 milligram per litre (mg/L).
- Disinfection by-products (total trihalomethanes) were below the guideline limit of 100 micrograms per litre (µg/L) in 2012 and in 2013 to date.
- Routine residual chlorine checks (58 in 2012 and 51 to date in 2013) to ensure the system remained disinfected were within acceptable limits.

Analytical results of water samples collected during 2012 and 2013 from the Port Renfrew Water System show that the quality of drinking water is satisfactory and well within regulatory limits. Routine water quality data is posted on the CRD website at: <http://www.crd.bc.ca/jdf/water/renfrew/water-quality.htm>

SEWER SERVICE

Operations

The Port Renfrew sewer system serves 87 properties in the Beach Camp and localized residential area above and has continued to operate reliably in the past year. The 87 properties, comprised of 94.77 Single Family Equivalents (SFEs) treated 19,968 m³ of sewage in 2012, or 210 m³/SFE. Sewage flows in Port Renfrew have remained relatively static over the years with higher recorded flows most likely due to more intense storm events in the year. **Figure 3** shows flow trends for the last six years.



Significant events and activities for 2012 and 2013 include:

- One sewer connection installation
- 2013 preventive maintenance work, expected to be completed by December 31, 2013
- Ministry of the Environment facility tour (2013).

Treated Effluent Discharge

The Port Renfrew Waste Water Treatment Plant continues to discharge effluent typically within the parameters allowed under the Ministry of the Environment (MOE) permit. Mean daily flows were in the upper range of flows measured since 2007, but there were no exceedences of the allowable maximum flow rate. Effluent quality improved slightly compared to the previous four years with Total Suspended Solids (TSS) exceeding allowable permit maximums 17% of the time, with no other permit violations.

Receiving water monitoring was conducted around the Port Renfrew WWTP outfall in January 2013 consisting of five sets of samples in a 30 day period from six different locations. All six of the water receiving stations (estuary) had fecal coliform and enterococci geometric means well below the guideline of 200 CFU (Colony Forming Units)/100 mL.

In response to a 2011 *Out of Compliance* notice from the MOE, the CRD provided a written proposal to enhance flow monitoring at the plant and perform an outfall inspection to assess the condition of the marine outfall pipe. In June 2013, CRD staff conducted the inspection and made recommendations to monitor the pipe and anchors as no further deterioration was recorded from the prior 2011 inspection.

REFUSE DISPOSAL SERVICE

The Port Renfrew Refuse Disposal service serves 277 properties (237 residential folios) within the area and is funded through direct taxation based on the value of each property; the Pacheedaht First Nation is provided service through an annual agreement. The tonnages of materials received and transferred at the Port Renfrew facility in 2012 are as follows:

Garbage		164 tonnes	(8% increase from 2011)
Recyclables	Paper fibres	19 tonnes	(10% decrease from 2011)
	Glass/metal/plastic containers	6 tonnes	(5% decrease from 2011)
	Scrap metal	30 tonnes	(26% decrease from 2011)
	Oil/filters/containers	<u>2 tonnes</u>	(2 in 2011)
	Total recyclables	57 tonnes	(15% decrease from 2011)

In October 2013 the road through the depot was widened to better allow service truck access and to improve site drainage. Similarly, repairs and upgrades to the facility's fence and gate systems were completed in the spring of 2013.

2012 YEAR END BUDGET AND FINANCIAL REPORT

Attached are copies of the *Statements of Operations (Unaudited)* for Port Renfrew Street Lighting, Water, Snuggery Cove Water, Sewer and Refuse Disposal services as prepared by CRD Finance and Corporate Services for the year 2012. The statements provide an overview of the revenues and expenditures for the year.

Revenue includes parcel taxes (*Transfers from government*) and user fees (*Sale of services*), and small amounts for interest on savings (*Interest Earnings*) and miscellaneous revenue such as connection charges and late payment charges (*Other revenue*). *Expenses* include all costs of providing the service. *General government services* include budget preparation, financial management, utility billing, and risk management services. *Other expenses* includes all other costs to administer and operate the water system, and the principal and interest payments on borrowing to finance capital projects. *Other fiscal services* includes administration costs for loans.

The difference between *revenue* and *expenses* is reported as *Net revenue (expenses)*. Any transfers to or from capital or reserve accounts for the service (*Transfers to own funds*) are deducted from this amount and it is then added to any surplus or deficit carry forward from the prior year, yielding an *Accumulated surplus* (or deficit) that is carried forward to the following year.

Street Lighting Service

Revenue for the Street Lighting service consisted of \$3,370 from parcel taxes, \$3,371 from user charges, and \$141 from other sources such as interest, late payment charges and payment in lieu of taxes on crown property. Of the \$5,473 expense, \$5,113 was paid to BC Hydro (an increase of \$291 over 2011), and the remaining \$360 covered finance and administrative expenses. The difference between revenue and operating expense – a surplus of \$1,409, minus \$19 of interest costs on temporary borrowing was added to the \$794 deficit carried forward from 2011, resulting in a net surplus of \$596 that was carried forward into 2013.

Water Service

The 2012 revenue of \$100,518 included \$49,691 parcel tax and \$49,106 user fees. The total expenses were \$65,520 for operation and administration of the service, leaving a surplus of \$34,998 of which \$5,000 was transferred to Capital Funds and \$34,235 transferred to Reserve Funds leaving a net deficit of \$4,237. This deficit was added to the \$35,952 surplus carried forward from 2011, resulting in an accumulated surplus of \$31,715 carried forward to 2013.

On December 31, 2012, the Port Renfrew Water Capital Reserve Fund held \$43,701 in funds and the Equipment Replacement Fund had a \$14,057 balance.

Snuggery Cove Water Service

This service exists for the sole purpose of repaying a \$325,000 loan for expansion of the water system to Snuggery Cove, which was completed in 2004. The revenue is raised through a property value tax on properties in the Snuggery Cove area that are able to receive water service as a result of the expansion. The expense consists of payment of principal and interest on the debt, and finance and administration costs. Expenses exceeded revenues by \$17 in 2012 and once added to the \$119 deficit carried into 2012; an accumulated year-end carry forward deficit of \$136 was realized.

Sewer Service

The 2012 revenue of \$80,743 included \$40,050 parcel tax and \$38,860 user fees, the remainder being late payment charges, interest earned and grants in lieu of taxes. The total expenses were \$79,153 for operation and administration of the service, leaving a surplus of \$1,590 for 2012. This was added to the \$15,076 surplus carried forward from 2011, and after a transfer of \$5,625 to the Reserve Fund, resulted in an accumulated surplus of \$11,041 carried forward to 2013.

As of December 31, 2012, the Port Renfrew Sewer Capital Reserve Fund contained \$6,484 and the Equipment Replacement Fund had a balance of \$18,372.

Refuse Disposal Service


The 2012 revenue of \$60,133 included \$29,973 from property value taxes, \$2,509 from the sale of recyclables (a 39% decrease or \$4,081 from 2011 recyclables revenue), \$27,251 contract revenue for service to the Pacheedaht First Nation and \$310 in earned interest and grants in lieu of taxes. The operating expense of \$77,606 was partially offset by an internal recovery of \$15,000 from the Solid Waste Function for the recycling program, resulting in a net total expense of \$62,606.

The difference between revenue and expenses in 2012 amounted to a net deficit of \$2,473. With \$968 transferred to the Equipment Replacement Fund, \$2,097 transferred to the Capital Reserve Fund and \$29 interest costs, an annual operating deficit of \$5,567 was realized. Subtracted from the 2012 opening surplus of \$7,793, an accumulated surplus of \$2,226 was carried forward to 2013.

The refuse disposal function has a capital reserve of \$15,796 and an equipment replacement fund of \$27,944 as at December 31, 2012.



Tim Tanton, MPA, P.Eng.
Senior Manager, Infrastructure Engineering



Ted Robbins, B.Sc., C. Tech
General Manager, Integrated Water Services
Concurrence

GP/TT:ls
Attachments: 4

CAPITAL REGIONAL DISTRICT

WATER REVENUE FUND
Statement of Operations (Unaudited)
For the Year Ended December 31, 2012

	Port Renfrew Water Supply
Revenue	
Transfers from government	\$ 49,691
Sale of services	49,106
Other revenue from own sources:	
Licenses and permits	-
Interest earnings	757
Other revenue	320
Grants in lieu of taxes	644
Total revenue	100,518
Expenses	
General government services	4,672
Other expenses	60,848
Other fiscal services	-
Total expenses	65,520
Net revenue (expenses)	34,998
Transfers to own funds:	
Capital Funds	5,000
Reserve Funds	34,235
Equipment Replacement Fund	-
Annual surplus (deficit)	(4,237)
Accumulated surplus (deficit), beginning of year	35,952
Accumulated surplus (deficit), end of year	\$ 31,715

CAPITAL REGIONAL DISTRICT

WATER REVENUE FUND

Statement of Operations (Unaudited)

For the Year Ended December 31, 2012

	Port Renfrew Snuggery Cove Water System
Revenue	
Transfers from government	\$ 31,785
Sale of services	-
Other revenue from own sources:	
Licenses and permits	-
Interest earnings	20
Other revenue	131
Grants in lieu of taxes	-
Total revenue	31,936
Expenses	
General government services	810
Other expenses	30,858
Other fiscal services	285
Total expenses	31,953
Net revenue (expenses)	(17)
Transfers to own funds:	
Capital Funds	-
Reserve Funds	-
Equipment Replacement Fund	-
Annual surplus (deficit)	(17)
Accumulated surplus (deficit), beginning of year	(119)
Accumulated surplus (deficit), end of year	\$ (136)

CAPITAL REGIONAL DISTRICT

Sewer Revenue Fund Statement of Operations (Unaudited) For the Year Ended December 31, 2012

	Port Renfrew Sewerage System
Revenue	
Transfers from government	\$ 40,050
Sale of services	38,860
Other revenue from own sources:	
Permits	-
Interest earnings	267
Other revenue	727
Grants in lieu of taxes	839
Total revenue	80,743
Expenses	
General government services	3,360
Other	75,791
Other fiscal services	2
Recovery	-
Total expenses	79,153
Net revenue (expenses)	1,590
Transfers to own funds:	
Capital Funds	-
Reserve Funds	5,625
Equipment Replacement Fund	-
Transfers from own funds:	
Sewer Capital Fund	-
Revenue Funds	-
Annual surplus (deficit)	(4,035)
Accumulated surplus (deficit), beginning of year	15,076
Accumulated surplus (deficit), end of year	\$ 11,041

CAPITAL REGIONAL DISTRICT

GENERAL REVENUE FUND Statement Of Operations (Unaudited) Protective Services - General C For the Year Ended December 31, 2012

	Port Renfrew Street Lighting
Revenue	
Transfers from government	\$ 3,370
Sale of services:	
Other sales	3,371
Other revenue from own sources:	
Interest earnings	6
Other revenue	76
Grants in lieu of taxes	59
Total revenue	6,882
Expenses	
General government services	360
Other	5,113
Total expenses	5,473
Net revenue (expenses)	1,409
Transfers to own funds:	
Capital Funds	-
Equipment Replacement Fund	-
Transfers from own funds:	
Capital Funds	-
Debt charges:	
Interest on temporary borrowing	19
Annual surplus (deficit)	1,390
Accumulated surplus (deficit), beginning of year	(794)
Accumulated surplus (deficit), end of year	\$ 596

CAPITAL REGIONAL DISTRICT

GENERAL REVENUE FUND

Statement Of Operations (Unaudited)

Environmental Health

For The Year Ended December 31, 2012

	Port Renfrew Disposal
Revenue	
Transfers from government	\$ 29,973
Sale of services:	
Garbage collection	2,509
Other revenue from own sources:	
Building permits	-
Interest earnings	90
Other revenue	27,251
Grants in lieu of taxes	310
Total revenue	60,133
Expenses	
General government services	3,090
Other	74,516
Salaries and wages	-
Other fiscal services	-
Other (recovery)	(15,000)
Total expenses	62,606
Net revenue (expenses)	(2,473)
Transfers to own funds:	
Revenue Funds	-
Capital Funds	-
Reserve Funds	2,097
Equipment Replacement Fund	968
Transfers from own funds:	
Revenue Funds	-
Reserve Funds	-
Debt charges:	
Interest on temporary borrowing	29
Interest on long-term debt	-
Principal installments / sinking fund	-
Annual surplus (deficit)	(5,567)
Accumulated surplus, beginning of year	7,793
Accumulated surplus, end of year	\$ 2,226