



Making a difference...together

**PORT RENFREW UTILITY SERVICES COMMITTEE  
2010 OPERATIONS REPORT  
21 OCTOBER 2010**

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The following report is provided for information to residents and users of the Snuggery Cove water and Port Renfrew water, sewer, street lighting areas.

**COMMITTEE STRUCTURE**

The Port Renfrew Utility Services Committee administers the delivery of street lighting services, drinking water treatment and conveyance and wastewater treatment and conveyance.

**PORT RENFREW STREET LIGHTING**

At the 18 June 2009 Port Renfrew Utility Services Committee (PRUSC) meeting, a motion was passed to petition the electors of Snuggery Cove to extend the Port Renfrew street lighting service area into the Snuggery Cove water service area. The rationale for the expansion was to incorporate the five installed BC Hydro davit lights at fire hydrant locations on Parkinson Road. Petition forms were distributed by Capital Regional District (CRD) staff in August 2009, with a requested deadline of 31 August. Only five petitions were received of the required 22 for the petition to pass. BC Hydro installed the five lights in the Snuggery Cove area in 2007, based on an initial inquiry only, and without any formal request by the CRD. Reviewing invoices received by the CRD Finance Department show there has been no increase in costs associated with any additional lights being installed. After the unsuccessful August 2009 petition, staff informed BC Hydro that the five street lights in Snuggery Cove were no longer required and that three street lights in the existing service area were not being invoiced.

**Street Lighting Budget**

A 2009 operating budget deficit of \$3,947 was carried forward to the 2010 budget and was addressed through an increase to the parcel tax for the 2010 budget year. The deficit was generated when costs were not recovered to balance the invoiced amounts from BC Hydro and for the associated costs for the 2009 public petition. While BC Hydro service costs have increased minimally with inflation, previous year's parcel tax and user fees were not raised to offset the additional three lights not being invoiced and for normal increases in user fees. The \$2,900 cost to petition the Snuggery Cove area and the carry forward deficit of \$1,075 is being recovered through the 2010 parcel tax and user fee cost recovery. 2010 rates were increased accordingly to address the fact that the community needs to support higher billing costs than have been invoiced. 2010 parcel tax and user fee for each of the 86 taxable folios in the Port Renfrew street lighting service area is \$94.70, an increase of \$50.68 over 2009. It is anticipated that 2011 parcel tax and user charge will be adjusted to reflect anticipated BC Hydro invoiced costs.

A copy of the Statement of Financial Activities to 31 December 2009, as prepared by the CRD Finance and Corporate Services Department is attached for information (Attachment 1).

**PORT RENFREW WATER LOCAL SERVICE AREA**

**Water Area Expansion**

Three Point Properties Ltd. (TPP d.b.a. RTown Holdings ULC) acquired significant land holdings, adjacent to the Snuggery Cove and Port Renfrew water local service areas, from Timberwest in

2007-2008. In 2009, RTown worked with CRD staff to seek expansion of the Port Renfrew water system and an expanded Port Renfrew sewer system to service their phased approach development. To date, RTown has spent considerable resources on consultant designed construction drawings for tendering purposes, and legal fees in the creation and finalization of service extension and bylaw amendment documents. Their contribution of a new well and planned upgrades to the system has satisfied the obligation of providing community benefit.

RTown plans to develop their land in a phased approach, servicing the 42-lot parcel directly behind the community center (Phase 1) first.

#### Proposed New Water Service Area

CRD staff and TPP (RTown) reviewed, with the Province and CRD solicitors, the creation of a new Port Renfrew water service area #3, which encompasses TPP lands not currently in either water area. There are several benefits to this arrangement for both the developer and the existing community. The service area would be created to fund the installation of new works and to make improvements to the existing water system, not unlike the model used for Snuggery Cove. As operating costs are shared by parcel tax and user fee and the new development will have few of either in the early years, there is no financial reason to include the area into the overall service until development progresses. Operating costs instead would be proposed to be shared on a formula between the existing and new areas to keep the sharing of operating costs fair to both parties. The new area will remain a CRD service and the infrastructure in the new area will be owned by CRD.

The "Port Renfrew Water Service No. 3 Establishment Bylaw No. 1 2009" was adopted on 17 February 2010, creating the new water service area encompassing the 42-parcel property immediately behind the Port Renfrew Recreation Centre.

#### Water Project Implementation

The implementation of each proposal required formal agreements and bylaws, now approved and adopted by the CRD Board. The work is now complete in this area. The developer brought forward the proposals to the 22 October 2009 AGM at a special PRUSC meeting for committee endorsement. The construction and installation of the new works is not anticipated to begin in 2011.

#### WATER SYSTEM OPERATIONS 2009/2010

Total treated water for the service area in 2009 was approximately 44,800 m<sup>3</sup> (993,000 imperial gallons), an increase of 2,800 m<sup>3</sup> or 7% over 2008; fire-fighting, hydrant flushing and system maintenance use would be included in the total water volume.

System maintenance included the cleaning of the reservoir in the summer of 2009. There was minor disruption to the service area during the work, which was performed off-hours to minimize inconvenience to the service users. Annual fire hydrant maintenance, flushing and valve operation is again scheduled for early November. Operations staff responded to a main line break on Alvarez Place, near the intersection of Parkinson Road in August 2010. The situation was quickly resolved and created minimal disruption to the service users.

As in past years, a letter to all residents will be mailed out before winter to advocate appropriate freeze protection of private residential water piping and systems.

#### Baird Creek Bridge Water Main Crossing - 2010 Works

The Ministry of Transportation (MOT), under permit from the Ministry of the Environment (Provincial) and Department of Fisheries and Oceans (Federal) performed substantial repair work at the Murton Creek

Bridge crossing in September of 2009. Similar works were planned at the Baird Creek Bridge crossing, but would involve a Port Renfrew water main relocation to facilitate the works. Staff advised MOT that the utility did not have sufficient funds, or available resources to perform the work within the prescribed 2009 window of opportunity; the planned bridge maintenance works was postponed until the summer of 2010. Staff addressed the funding shortfall with the PRUSC at the 2010 budget meeting in November 2009 and proposed partial MOT funding to offset community hardship.

The works were successfully completed in August 2010 and under budget at a cost of approximately 32,000 due to an in-kind contribution from the MOT, and innovative design and construction methods executed by CRD Integrated Water Services engineering and operations staff. A 2-inch over-land bypass pipe was installed around the project site to ensure that the community reservoir continued to receive treated water while the pipe was removed, replaced and realigned. The water works was closely coordinated with MOT staff to minimize traffic and service disruption to the community.

#### Water Budget – Snuggery Cove

The Snuggery Cove budget recovers the costs for debt servicing for the capital project and operating costs. The annual debt associated costs will not vary in the budget; however, the recovery is based on a property value tax, not unlike the assessment of school taxes. As the value of individual properties change in relation to another, so will the annual share of those costs assigned to any single property. Portions of the TPP lands may take advantage of the Snuggery Cove water system in the future, which will decrease the individual parcel burden. In this regard, it is probable that the CRD will extend the boundaries of Snuggery Cove to include additional parcels which would then assist the Snuggery Cove area with their debt servicing, providing a net reduction to existing property owners.

The building strata at the Three Point Recreation property at the corner of Baird and Parkinson Road, is already in the Snuggery Cove water service area, therefore, any increase its assessed value should realize a marginal decrease in the current individual debt servicing.

#### Water Budget – Port Renfrew Water

Total revenues collected of \$81,285 against total expenditures of \$57,987 left a 2009 year end surplus of \$23,298. Added to the 2008 year end carry forward surplus of \$29,716, the 2010 budget opened with a balance of \$53,014. In 2010, two properties were added to the system which will be reflected in the 2011 budget as additional taxable folios. One new water service was installed in the Snuggery Cove area on Baird Road, and the other for the new fire station on Deering Road.

It is anticipated that there will be upcoming long-term costs for replacement of the old asbestos cement water mains in the Beach Camp area, Upper Camp area and the feed line along Parkinson Road. Properties should be metered in future to allow better realization of leaking private side piping, and work towards less loss of water through leakage. This will suggest that additional revenue from new properties entering the area should be set aside to reserve funds for this purpose. The user fee and the parcel tax for 2010 remained essentially the same as 2009 at \$492.40 for a typical average annual user fee of one Single Family Equivalent (SFE).

The Baird Creek watermain replacement project was wholly supported with contingent funds on hand leaving approximately \$7,000 available for year-end redistribution.

A copy of the Statement of Financial Activities to 31 December 2009, as prepared by the CRD Finance and Corporate Services Department is attached for information (Attachment 2).

## **PORT RENFREW SEWER SERVICE AREA**

As with the water system, TPP (RTown) is also interested in participating with their new properties in the Port Renfrew sewer local service area. As with the water system, CRD engineers worked with the developer to identify the works necessary for this arrangement to take place.

The project would be phased much like the water servicing plans. The initial phase includes up to 30 new strata housing units which are proposed to be added to the present sewer local service area, with service provided from the existing treatment works, but only after an amended permit is granted, dependent on minimizing the amount of inflow and infiltration (I&I) into the sewer system.

RTown will also be required to construct all sewer collection system components for the development as it proceeds. On completion, the new system would be turned over to CRD to operate as an extended Port Renfrew sewer system.

As with the water system, servicing bylaws and a Memorandum of Understanding (MOU) have been finalized and presented following the 2009 AGM for committee endorsement. The documents were presented to the Electoral Area Services Committee prior to going to the CRD Board for their review and approval.

### **Sewer System Operations**

The Port Renfrew sewer system includes a gravity collection system of 1,850 meters and a treatment plant, which currently serves 86 properties. Sewage is treated at the extended aeration treatment plant with treated effluent discharged to Port San Juan through an 81-meter long outfall. Plant operation is monitored daily by CRD local operators, as well as electronically through a Supervisory Control and Data Acquisition (SCADA) system. The treatment plant remains operational during power outages through a diesel powered back-up generator.

The operation of the treatment plant is authorized by the Ministry of Environment under the provisions of the *Waste Management Act* under Permit Number PE-00312. Effluent from the plant is sampled and analyzed monthly by staff. The plant has remained in permit compliance this year to date, however, low pH and higher mixed liquor suspended solids values during the summer months (during the times when the sewage is most concentrated), indicate plant performance is decreasing, due to the inability to waste sludge more frequently because of the current plant configuration. In order to increase the sludge wasting frequency, additional sludge storage will be required on-site, to supplement the existing 9-cubic meter tank, or alternatively, a sludge thickener could be installed at the plant to reduce the sludge volume. Additional sludge storage alone would result in increased hauling and disposal costs. CRD staff will continue to monitor effluent quality prior to recommending upgrades to the current plant. With respect to permit compliance, the plant is periodically out of compliance due to an exceedance of maximum daily allowable flow. Approximately 21,700 cubic meters of sewage was treated in 2009, remaining essentially the same as 2008.

One of the key flow inputs to a waste treatment plant during wet weather is stormwater that enters the sewer system through direct connections (inflow) or through cracked pipes and manholes (infiltration). Based on flow data, it is known that the wet weather daily flow to the plant is approximately four to five times the dry weather daily flow. In order to determine sources of I&I, smoke testing of the gravity sewer system was completed in 2009. The majority of I&I identified related to private plumbing and drainage systems.

In 2009, staff liaised with MOT in the installation of a perforated storm drain in the rear yards of the two Tsonoqua Drive properties to divert artesian flows and surface storm water directly to a new storm outfall. MOT is aware of the need for a storm drain system in Beach Camp and is considering such works for MOT capital funding in future years.

In 2009, RTown hired a Closed Circuit Television Viewing (CCTV) contractor to locate sources of inflow and infiltration in the entire Port Renfrew sewer system in the hopes of minimizing the superfluous storm water flows, and in so doing, recovering original design capacity in the system for use for their Phase 1 works. The reduction of inflow and infiltration should satisfy the MOE concerns in granting an amended permit for the existing wastewater treatment plant to accommodate the additional lots planned in RTown's land Phase 1 development. A list of main line pipe deficiencies was produced through the viewing software. To date, no repairs to the system have been performed.

Operationally, maintenance flushing of the gravity sewer system is scheduled for early November. The netting installed over the aeration tank and clarifier at the plant continues to catch falling leaves from adjacent trees to prevent them from entering the tanks and minimizes their interfering with the treatment process and re-circulating pumps. Additional netting will be installed to confine all leaves from entering the process equipment allowing full maximization of the plant.

One new sanitary sewer service was installed to the Port Renfrew Fire Station in 2010.


#### Sewer Budget

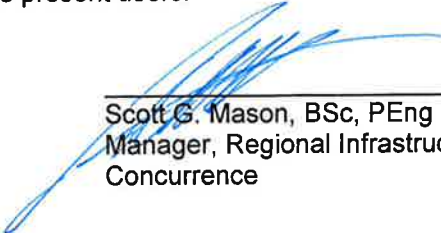
Total revenues collected of \$60,090 against total expenditures of \$57,152 left a 2009 year end surplus of \$2,938. Added to the 2008 year end carry forward surplus of \$1,952, the 2010 budget opened with a balance of \$4,890. The \$1,952 surplus was generated some years ago when contingency funds were provided against a possible expenditure to dig out the wastewater outfall. While operating costs have increased with inflation, the surplus was used to offset normal increases in user fees. 2010 parcel tax and user fee remained the same as 2009, being \$693.59 for a typical average annual user fee of one Single Family Equivalent (SFE). There is currently no contingency or reserve fund to support an emergency in the service. The Equipment Replacement Fund remains at \$17,333 with no growth over 2008.

A copy of the Statement of Financial Activities to 31 December 2009, as prepared by the CRD Finance and Corporate Services Department is attached for information (Attachment 3).

The Port Renfrew wastewater treatment plant has shown its age for some time. There is considerable benefit to the sewer area if the plant is replaced as a component of the servicing by the RTown development. Staff will however be discussing with the PRUSC, as part of the 2011 budget, the need to develop a fall back program to allow incremental upgrades of the facility commencing in the near future. The plant requires additional sludge storage and thickening to maintain effluent quality, and there is concern that any additional electrical equipment will prompt a need to bring the service and electrical equipment up to current BC Electrical Code standards. The PRUSC could agree to fund these costs on an annual year-to-year basis or through a long-term borrowing bylaw.

It is anticipated that increased operating costs would be associated with a new sewage treatment facility associated with the RTown development. Operating costs to the present sewer service area users may increase during the initial years of operation of the replacement plant, but will be mitigated as new parcels and connections are added to the system. The substantial increase of parcels into the extended service area would minimize or offset substantial increases to the present users.

  
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Gary Plevin, ASCT  
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Scott G. Mason, BSc, PEng  
Manager, Regional Infrastructure  
Concurrence

GP:ls  
Attachments: 3

## CAPITAL REGIONAL DISTRICT

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**GENERAL REVENUE FUND**  
**Statement Of Financial Activities (Unaudited)**  
**Protective Services - General**  
**For the Year Ended December 31, 2009**

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		Port Renfrew Street Lighting
<b>Revenue</b>		
Transfers from government	\$	1,885
Sale of services:		
Other sales		1,871
Other revenue from own sources:		
Interest earnings		-
Other revenue		-
Grants in lieu of taxes		45
		<hr/> 3,801
<b>Expenditure</b>		
General government services		380
Other		6,284
		<hr/> 6,664
<b>Net revenue (expenditure)</b>		(2,863)
Transfers to own funds:		
General Capital Fund		-
Equipment Replacement Fund		-
Debt charges:		
Interest on temporary borrowing		9
		<hr/>
<b>Change in fund balance</b>		(2,872)
Opening balance		(1,075)
<b>Closing balance</b>	\$	<hr/> <hr/> (3,947)

## CAPITAL REGIONAL DISTRICT

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### WATER REVENUE FUND

#### Statement of Financial Activities (Unaudited)

For the Year Ended December 31, 2009

		Port Renfrew Water Supply
<b>Revenue</b>		
Transfers from government	\$	38,999
Sale of services		39,050
Other revenue from own sources:		
Other licenses and permits		-
Interest earnings		660
Other revenue		1,922
Grants in lieu of taxes		654
		<hr/> 81,285
<b>Expenditure</b>		
General government services		3,360
Other		54,627
Other fiscal services		-
		<hr/> 57,987
<b>Net revenue (expenditure)</b>		
		23,298
Transfers to own funds:		
Water Capital Fund		-
Reserve Funds		-
Equipment Replacement Fund		-
<b>Change in fund balance</b>		
Opening balance		29,716
<b>Closing balance</b>	\$	<hr/> 53,014

## CAPITAL REGIONAL DISTRICT

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### Sewer Revenue Fund Statement of Financial Activities (Unaudited) For the Year Ended December 31, 2009

		Port Renfrew Sewerage System
<b>Revenue</b>		
Transfers from government	\$	29,755
Sale of services		29,531
Other revenue from own sources:		
Building permits		-
Interest earnings		45
Other revenue		-
Grants in lieu of taxes		759
		<hr/> 60,090
<b>Expenditure</b>		
General government services		2,390
Other		54,723
Salaries and wages		-
Other fiscal services		39
Recovery		-
		<hr/> 57,152
<b>Net revenue (expenditure)</b>		2,938
Transfers to own funds:		
Sewer Capital Fund		-
Reserve Funds		-
Equipment Replacement Fund		-
Transfers from own funds:		
Sewer Capital Fund		-
Reserve Funds		-
<b>Change in fund balance</b>		2,938
Opening balance		1,952
<b>Closing balance</b>	\$	<hr/> 4,890 <hr/>