



Making a difference...together

**HIGHLAND WATER AND SEWER LOCAL SERVICE COMMISSION
FERNWOOD WATER LOCAL SERVICE COMMISSION**

Notice of Annual General Meetings on Tuesday, December 11, 2012 starting at 9 a.m.
Portlock Park Portable Meeting Room, 145 Vesuvius Bay Road, Salt Spring Island, BC

S. Bywater
W. McIntyre

H. Brochmann
L. Hunt

C. Newmeyer
P. Lake

A. Heeley-Ray
E. Trory

J. Jefferson

AGENDA

1. Approval of Agenda
2. Minutes of Annual General Meeting held November 24, 2011
3. Chair's Report – Highland Water and Sewer Local Service Commission
4. Chair's Report – Fernwood Water Local Service Commission
5. Annual Report
6. Election of Officers – Highland Water and Sewer Local Service Commission
7. Election of Officers – Fernwood Water Local Service Commission
8. New Business
9. Adjournment

To ensure a quorum, advise Tracey Shaver at 250.537.4448 if you cannot attend.



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**Minutes of the Highland Water and Sewer Local Services Commission
and the Fernwood Water Local Service Commission
ANNUAL GENERAL MEETING
Held Thursday, November 24, 2011
Salt Spring Island Baptist Church, Lower Auditorium
520 Lower Ganges Road, Salt Spring Island, BC**

Present: Highland: Ann Heeley-Ray, Carol Newmeyer, Sharon Bywater
Fernwood: Eli Trory, Lorrie Hunt, Peter Lake
CRD Electoral Area Director: Garth Hendren
CRD: Ted Robbins, Senior Manager, Water Management, Tim Tanton, Senior Manager,
Infrastructure Engineering, Janice Poncelet, Senior Financial Analyst, Mark Harper,
Manager, Saanich Peninsula and Gulf Islands Operations, Lorrie Siemens, Recording
Secretary

1. Call to Order

Director Hendren called the meeting to order at 5 p.m.

2. Approval of Agenda

MOVED by Peter Lake, **SECONDED** by Ann Heeley-Ray,
that the agenda of the Highland Water and Sewer Local Services Commission and the Fernwood
Water Local Service Commission Annual General Meeting of November 24, 2011 be approved as
distributed.

3. Minutes of Annual General Meeting of April 8, 2010

The minutes of the Highland Water and Sewer Local Services Commission and the Fernwood
Water Local Service Commission Annual General Meeting of April 8, 2010 were provided for
information. They were adopted at a previous meeting.

4. Chair's Report - Fernwood Water Local Service Commission

Lorrie Hunt provided a verbal report. He noted the following:

- The Fernwood water system has remained intact throughout the year but not without some serious problems.
- There was an algal bloom in St. Mary Lake. With the addition of chlorine, the toxins were neutralized which did not cause any additional expense to the water service area.
- A referendum was required to raise more money to build the water treatment plant. The referendum passed and construction is now underway.
- There have been no new subscribers and the service area has not lost any subscribers.

5. Chair's Report - Highland Water and Sewer Local Services Commission

Sharon Bywater provided a verbal report. She noted the following:

- It was a very challenging year. There have been cost overruns and plant delays.

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- A do not consume order was in place for over six months.
- The new water treatment plant is now underway and there is confidence that by March 2012 year there will be a plant that the service area can depend on.
- It was a very difficult time for the commission. Three members resigned, which meant that the total of all the remaining commission members had to be present at all meeting to provide a quorum. Director Hendren attended all meetings to ensure a quorum of the commission.
- The commission has worked very hard over the past year.
- Thank you to all the commissioners who did not resign in order to help move the project forward.
- Thank you to Garth Hendren for being the CRD Electoral Area Director throughout three very difficult years for all the water districts.
- Thank you to Peter Lake for becoming a member of the Fernwood Water Service Commission.
- Thanks to the CRD staff for their efforts in keeping the project moving forward.
- There is a need for three new commission members.

6. Annual Report - Fernwood Water Local Service Commission and Highland Water and Sewer Local Services Commission

Staff presented a written report. The following topics were addressed:

- Information about the services
- Maliview Sewer Operations
- Maliview Engineering Study
- Highland and Fernwood Drinking Water Quality
- Highland Water Operations
- Fernwood Water Operations
- Highland-Fernwood Water Treatment Upgrade Project
- Financial Reports

A question and answer period followed.

7. Election of Officers - Fernwood Water Local Service Commission

It was noted that two terms for the Fernwood Water Local Service Commission were expiring on December 31, 2011. Director Hendren called for nominations. Peter Lake and Eli Trory were nominated and agreed to stand. Nominations were called for two more times, and hearing none, Peter Lake and Eli Trory were elected by acclamation. Their names will be forwarded to the CRD Board for appointment.

8. Election of Officers - Highland Water and Sewer Local Service Commission

It was noted that two terms for the Highland Water and Sewer Local Services Commission were expiring on December 31, 2011 and that there were three vacant positions. The vacant positions were as follows:

- One position representing water and expiring on December 31, 2011.
- One position representing water and expiring on December 31, 2012.
- One position representing Salt Spring Island and expiring on December 31, 2012.

Director Hendren called for nominations. Carol Newmeyer and Ann Heeley-Ray were nominated and agreed to stand. Nominations were called for two more times, and hearing none, Carol

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Newmeyer and Ann Heeley-Ray were elected by acclamation for a two-year term beginning January 1, 2012 and expiring on December 31, 2013. Their names will be forwarded to the CRD Board for appointment.

9. New Business

There was no new business.

10. Adjournment

The meeting was adjourned at 5:50 p.m.

DRAFT



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**HIGHLAND WATER SERVICE
FERNWOOD WATER SERVICE
MALIVIEW SEWER SERVICE
ANNUAL REPORT
DECEMBER 11, 2012**

About the Services

The Capital Regional District (CRD) provides drinking water service to the Highland and Fernwood communities on Salt Spring Island, and also provides sewer service to the Maliview community. Water service to Fernwood is administered by the Fernwood Water Local Service Commission and water and sewer services to Highland and Maliview are administered by the Highland Water and Sewer Local Services Commission. Up until September 2012, the two water services operated on separate treatment and distribution systems both drawing water from St. Mary Lake. As of mid-September 2012, both service areas were supplied through a single water treatment plant and interconnected distribution system. A new operating budget has been established to accommodate the single treatment plant and combined distribution systems and will be in place for the 2013 budget year.

The Commissions have delegated authority from the CRD Board for provision of the services, including recommending policies and budgets to the Board. Professional CRD staff provide operational, engineering and financial services. The CRD Salt Spring Island Electoral Area Director is an appointed member of each Commission and the other Commission members are residents or land owners in the service areas, elected at Annual General Meetings.

Maliview Sewer Operations

Effluent quality and flow from the Maliview wastewater treatment plant frequently exceeded the requirements of the BC Ministry of Environment (MOE) waste management permit for the plant during 2011. The permit limit for total suspended solids (TSS) was exceeded on several occasions and the limit for Carbonaceous Biochemical Oxygen Demand (CBOD) was exceeded on four occasions.

Sludge from the process tanks is removed regularly however, the biological conditions for stable, effective treatment were not achieved. Stormwater infiltration into the sewer system causes excessive peak flows through the treatment plant, establishing poor conditions for effective biological treatment. Staff met with MOE in September 2011 to discuss an action plan to achieve compliance with the permit that included making operational and infrastructure improvements, as well as addressing longer term issues such as infiltration and increased flow due to densification. With some operational improvements and change in flows, there has only been one non-compliance report (March 2012) so far this year, related to excessive flow and TSS.

Stormwater inflow and infiltration continue to be an issue for the Maliview sewer system, but may have improved slightly with the sewer main repair that was done on Maliview Drive in the fall of 2011. Monthly total flows between September 2011 and October 2012 show lower than normal monthly flows, as is evident in **Figure 1**. Also attributing to the lower flows is a drop in domestic water consumption, which has a direct effect on sewer inflows.

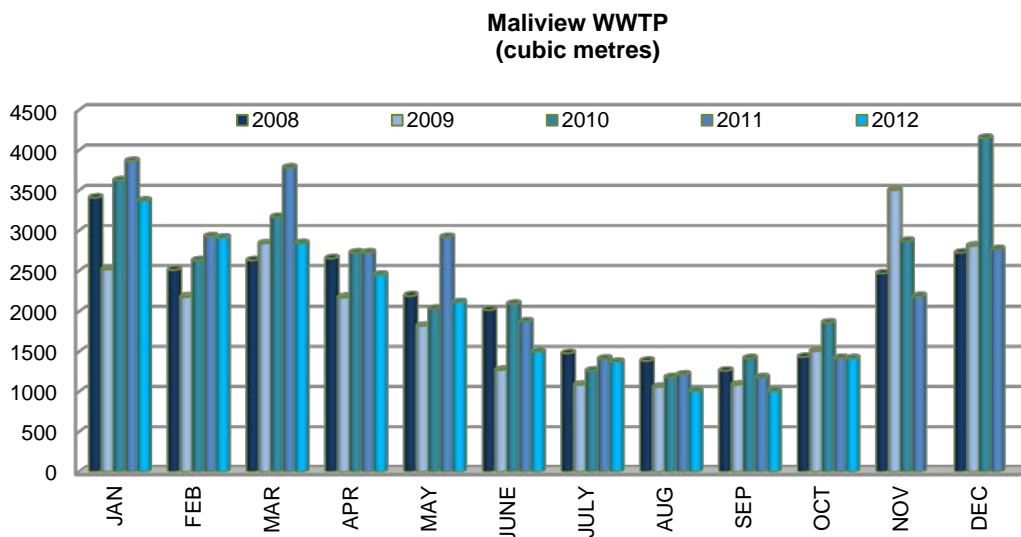
The Maliview sewer system required numerous unforeseen and significant repairs and upgrades in 2012 including:

- Removal and replacement of the Rotating Biological Contactor (RBC) chains
- Repair to the SCADA panel power supply
- Installation of a combined sewer sampling point (Ministry of Environment requirement)
- Removal and replacement of the #1 lift pump
- Repair the bearings on the effluent screening works
- Removal and replacement of the transfer pump

Maliview Engineering Study

In November 2011 staff received an Asset Condition Evaluation and Engineering Study from Stantec Engineering. Currently the study is being reviewed by engineering staff as part of the Strategic Asset Management Plan (SAMP) and information and recommendations from this plan will be incorporated into the final SAMP document.

Figure 1.



Highland Drinking Water Quality

In January 2011, the source water in St. Mary Lake tested positive for microcystin, a toxin associated with blue-green algae. The Highland treatment system lacked adequate protection against the toxin and therefore, as a precautionary measure, a “Do Not Consume” water quality advisory was posted for the Highland Water System customers and alternate sources of drinking water were provided. The Highland advisory remained in effect until June 2011 when modifications were made to the operation of the Highland treatment process to neutralize the toxin.

In 2011, the analytical results of water samples collected from the Highland Water System showed that the quality of drinking water was generally satisfactory except for trihalomethanes being over the Canadian Drinking Water Quality Guideline limit of 100 µg/L. The health effects of trihalomethanes are long term (over a lifetime). The new treatment plant will remove the carbon from the source water that is associated with the production of disinfection by-products such as trihalomethanes.

The 2011 water quality results for the Highland Water System are posted on the CRD website at: <http://www.crd.bc.ca/saltspring/water/highland/water-quality.htm>

Fernwood Drinking Water Quality

As for Highland, the source water from St. Mary Lake for the Fernwood Water System was also affected by the algal toxin. However, throughout 2011, the Fernwood water treatment system was able to effectively and reliably neutralize the toxin through its water treatment process and therefore, the quality of Fernwood drinking water was not adversely impacted by the toxin in St Mary Lake.

In 2011, the analytical results of water samples collected from the Fernwood Water System showed that the quality of drinking water was satisfactory and, except for occasional trihalomethanes results above the guideline limit of 100 µg/L, was well within regulatory limits.

The 2011 water quality results for the Fernwood Water System are posted on the CRD website at:
<http://www.crd.bc.ca/saltspring/water/fernwood/water-quality.htm>

Highland Water Operations

2011 saw many unexpected emergency responses for system failures. The more significant calls included:

- The provision of alternate drinking water in the presence of an algae toxin.
- A watermain repair on Lawnhill Drive.
- A watermain repair at 214 Maliview Drive.
- A watermain repair on Ensnilwood Road.
- Analyser installation to monitor for low chlorine residuals.

2012 continued to see watermain repairs being done on Lawnhill and Maliview Drives including the need to install four isolation valves. There were numerous other callouts typical to a water system including small service/meter leaks, as well as communication and hydro failures.

Substantial operational efforts were expended in 2012 to commission and operate the new Highland/Fernwood Water Treatment Plant. The plant is currently operating and will require monitoring and adjustments until all of the operators are confident with the operation and performance, and all seasonal operating effects have been experienced.

Fernwood Water Operations

In 2011 the Fernwood water system didn't see as many issues as Highland, but did see significant increases in water quality monitoring to ensure that the St Marys Lake algae toxin was being neutralized. Other issues included assisting with costs associated with the chlorine analyser installation, and the replacement of the corroded plant discharge piping.

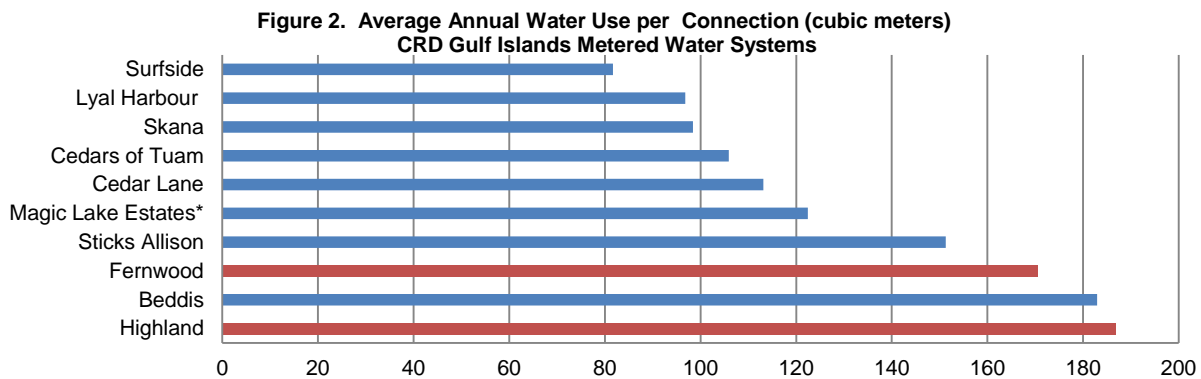
A few minor issues arose in 2012, including a leak repair at 1150 North Beach Road, as well as typical power and communication failures that required operator attendance.

As noted above, the Highland/Fernwood Water Treatment Plant is now in operation and the Fernwood Water Plant was taken off-line November 15, 2012.

Drinking Water Supply and Demand

Now that the Highland/Fernwood Treatment Plant is in operation and an appropriate production meter is in place, the old model of calculating monthly production will no longer be used and starting with the 2012 annual report, production and consumption will be compared more accurately, and with more confidence. In the short term production numbers will be compared over two or three meter billing cycles to get a better indication of what the system water losses may be.

The average water service connection in the Highland and Fernwood areas used 187 m³ and 170 m³ respectively in 2011. This represents a small reduction in the Fernwood service area and a significant 33% reduction over 2010 consumption numbers in the Highland service area. Figure 2 shows the comparison with other Gulf Islands service areas.



*MLE consumption adjusted as figures included incorrect meter reads and rolled volumes.

Highland - Fernwood Water Treatment Upgrade Project

The Highland Water and Sewer Local Services Committee (HWSLSC) initiated a capital project in 2006 to replace its aging water treatment plant with a new plant that meets current Vancouver Island Health Authority (VIHA) drinking water quality standards. In 2009, the project was expanded to include the Fernwood Water System, with a pipeline under St. Mary Lake to connect the two distribution systems to a shared intake and water treatment plant. The Highland and Fernwood electors authorized new borrowing in March 2009 to undertake the expanded project.

Design proceeded through 2009, and in 2010 a contract was awarded for general construction. Before the contractor mobilized, a dispute arose regarding certain construction details, which led to termination of the contract and a negotiated settlement between the CRD, the contractor and the engineering consultant. This dispute and a resulting budget shortfall delayed construction by about 18 months. In March 2011, the electors authorized additional borrowing to enable a redesigned project to proceed to construction, and the work was retendered in July 2011. The contract was awarded to Brunnell Construction Ltd. in October 2011. Construction is now nearing final completion and minor deficiencies are being addressed. The water treatment plant has been producing water since September 2012.

Financial Reports

Attached are copies of the *Statement of Financial Activities* as prepared by the CRD Finance and Corporate Services for 2011, for the Highland (Attachment 1), Fernwood (Attachment 2) and Maliview (Attachment 3) services. Revenues are generated primarily through parcel taxation and user fees (fixed and variable based on water use), and small amounts for interest on savings and miscellaneous revenues such as late payment charges. Expenditures include all costs to administer and operate the service. General government services are charges levied by CRD Corporate Services for the financial processing of the budget and collection of fees and charges.

Any difference between revenue and expense is added to any surplus or deficit carry forward from the prior year. Significant funds are usually transferred to a capital project or reserve account. The surplus or deficit after any transfers, are carried to the following year. CRD services are not permitted to carry forward a deficit, so a deficit in any given year usually requires a tax or fee increase in the following year to recover costs and prevent a subsequent deficit.

Highland Water Service

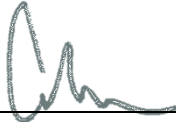
2011 revenue of \$205,064 includes \$116,250 parcel tax and \$85,073 user fees and charges. Total expenditure for 2011 was \$238,492. The difference between revenue and expense in 2011 was a net expense of \$43,428, including a \$10,000 transfer to capital funds which was deducted from the \$99,375 surplus carried forward from 2010, resulting in a surplus of \$55,947 carried forward to 2012. The Highland Water Service held no capital reserves at December 31, 2011.

Fernwood Water Service

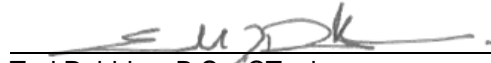
2011 revenue of \$94,252 includes \$24,760 parcel tax and \$69,016 user fees and charges. The total expenditure for 2011 was \$109,858. The difference between revenue and expense in 2011 was a net expense of \$15,606, which was deducted from the \$16,678 surplus carried forward from 2010, resulting in a surplus of \$1,072 carried forward to 2012. The Fernwood Water Service held no capital reserves at December 31, 2011.

Maliview Sewer Service

2011 revenue of \$79,908 includes \$28,835 parcel tax and \$50,455 user fees and charges. Total expenditure for 2011 was \$95,402. The difference between revenue and expense in 2011 was a net expense of \$15,494. After deducting the 2010 surplus of \$8,568 from the 2011 expenses, a deficit of \$6,926 remains and was carried forward to 2012. The Maliview Sewer Service held no capital reserves at December 31, 2011.



Cam Preece
Acting Senior Manager, Water Management



Ted Robbins, B.Sc.,CTech
Acting General Manager,
Integrated Water Services

TR:CP:mm

Attachments: 3

ATTACHMENT 1

CAPITAL REGIONAL DISTRICT

WATER REVENUE FUND
Statement of Operations (Unaudited)
For the Year Ended December 31, 2011

	Salt Spring Island (Highland) Water Supply
Revenue	
Transfers from government	\$ 116,250
Sale of services	85,073
Other revenue from own sources:	
Licenses and permits	-
Interest earnings	816
Other revenue	2,925
Grants in lieu of taxes	-
Total revenue	205,064
Expenses	
General government services	8,160
Other expenses	230,214
Other fiscal services	118
Total expenses	238,492
Net revenue (expenses)	(33,428)
Transfers to own funds:	
Capital Funds	10,000
Reserve Funds	-
Equipment Replacement Fund	-
Annual surplus / (deficit)	(43,428)
Accumulated surplus / (deficit), beginning of year	99,375
Accumulated surplus / (deficit), end of year	\$ 55,947

ATTACHMENT 2

CAPITAL REGIONAL DISTRICT

WATER REVENUE FUND

Statement of Operations (Unaudited)
 For the Year Ended December 31, 2011

	Fernwood Water Supply
Revenue	
Transfers from government	\$ 24,760
Sale of services	88,018
Other revenue from own sources:	
Licenses and permits	-
Interest earnings	20
Other revenue	458
Grants in lieu of taxes	-
Total revenue	94,252
Expenses	
General government services	4,820
Other expenses	104,748
Other fiscal services	292
Total expenses	109,858
Net revenue (expenses)	(15,606)
Transfers to own funds:	
Capital Funds	-
Reserve Funds	-
Equipment Replacement Fund	-
Annual surplus / (deficit)	(15,606)
Accumulated surplus / (deficit) , beginning of year	18,678
Accumulated surplus / (deficit) , end of year	\$ 1,072

ATTACHMENT 3

CAPITAL REGIONAL DISTRICT

Sewer Revenue Fund
Statement of Operations (Unaudited)
For the Year Ended December 31, 2011

	Maliview Estates Sewerage System
Revenue	
Transfers from government	\$ 28,835
Sale of services	50,455
Other revenue from own sources:	
Permits	-
Interest earnings	40
Other revenue	578
Grants in lieu of taxes	-
Total revenue	79,908
Expenses	
General government services	3,700
Other	91,628
Salaries and wages	-
Other fiscal services	74
Recovery	-
Total expenses	95,402
Net revenue (expenses)	(15,494)
Transfers to own funds:	
Capital Funds	-
Reserve Funds	-
Equipment Replacement Fund	-
Transfers from own funds:	
Sewer Capital Fund	-
Revenue Funds	-
Annual surplus / (deficit)	(15,494)
Accumulated surplus / (deficit), beginning of year	8,568
Accumulated surplus / (deficit), end of year	\$ (6,926)