



Making a difference...together

STICKS ALLISON WATER LOCAL SERVICE COMMITTEE
Notice of Annual General Meeting on **Saturday, August 13, 2016 at 9 am**
Galiano Island Community Library
1290A Sturdies Bay Road, Galiano Island, BC

D. Knight (Chair)
P. Ramsay

Director D. Howe

B. Russell

M. Serink

AGENDA

1. Approval of Agenda
2. Adoption of Minutes of Annual General Meeting of July 30, 2015
3. Chair's Report
4. Annual Report
5. Election of Committee Members
6. New Business
7. Adjournment

To ensure quorum, advise Lorrie Siemens 250.360.3087 or lsiemens@crd.bc.ca if you cannot attend.



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**STICKS ALLISON WATER SERVICE
2015 ANNUAL REPORT
AUGUST 13, 2016**

Purpose of the Annual General Meeting

The agenda for the Annual General Meeting (AGM) is approved by the members of the Sticks Allison Water Service Committee. The purposes (and hence the agenda items) of the meeting are:

- To have the last year's AGM meeting minutes approved (by committee members);
- To present reports on the work of the committee, the past year's operation, maintenance, capital upgrades and financial information of the service to the service residents and owners;
- To nominate members for appointment to the service committee;
- To enable the public to share comments on subjects which relate to the work of the committee; and,
- The committee can identify (under "new business") issues on which it wants feedback at the meeting. Motions are not considered from the public at the AGM.

Background

The Sticks Allison water service became a Capital Regional District (CRD) service in 1996 and provides potable water service to the 39 parcels within the established service area. Currently there are 34 customers.

The water system is generally comprised of the following:

- One groundwater well located at 1254 Galliano Way with a current production rate of approximately 15 US gallons per minute;
- A disinfection plant where the raw groundwater is disinfected with sodium hypochlorite (chlorine) and ultraviolet light;
- One storage tank of 32,000 US gallons;
- Distribution water mains of approximately 1.4 kilometres; and
- Four hydrants, two stand pipes, 10 valves and customer services with meters.

More detailed system information can be found in the 2015 Sticks Allison Water System Strategic Asset Management Plan located at

<https://www.crd.bc.ca/docs/default-source/crd-document-library/committeedocuments/sticksallisonwaterlocalservicecommittee/20150922/sticksdraftsampreport2015-09-22.pdf?sfvrsn=2>

Water Production and Demand

A total of 6,412 cubic metres (m³) of water was pumped (water production) from the Sticks Allison well to the community in 2015, which is 13% higher than the previous year and 20% higher than the five year annual average. Water production by month is shown in **Figure 1**. The increase in water production for 2015 is attributed to an ongoing undetected water system leak that started about October of 2015. Significant effort was expended looking for the leak which was located and repaired in early 2016.

A total of 4,666 m³ was consumed (water demand) by individual customers of the Sticks Allison Water Service in 2015, which is 13% lower than the previous year and 4% lower than the three year average. The decrease in water consumption during the period is likely the result of the community's response to the water conservation notice issued in July 2015 as a result of the provincial drought conditions during the summer.

The water conservation notice highlighted the need for customers to: not water lawns; limit the watering of trees and shrubs; not fill swimming pools and hot tubs or garden ponds; not wash vehicles or boats; and not wash outdoor surfaces such as driveways sidewalks and decks. The effect of the water conservation efforts were critical in managing the water supply for the community into the fall and winter.

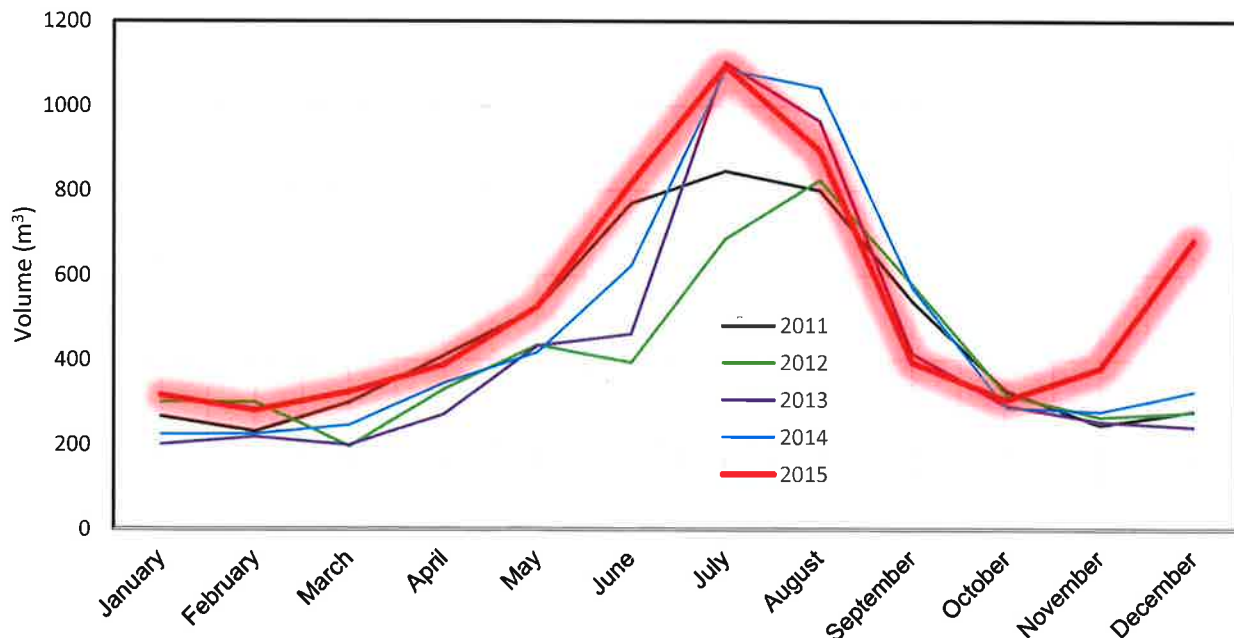


Figure 1: Sticks Allison Monthly Water Production

A comparison of the annual water production and the water demand from 2011-2015 are shown in **Figure 2**.

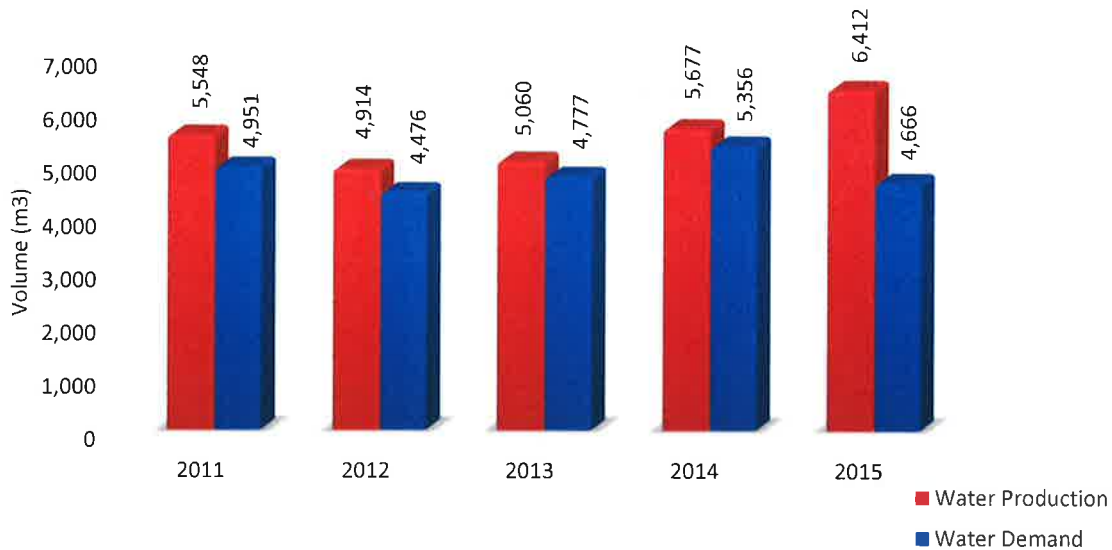


Figure 2: Sticks Allison Water System Annual Water Production and Demand

The difference between annual water production and annual customer demand is referred to as non-revenue water and can include water system leaks, water system maintenance (e.g. water main flushing), potential unauthorized consumption and fire-fighting water use. Non-revenue water represented approximately 27% of the total annual water production for the service area during 2015 while 5% has been the average for the past several years. The increase in non-revenue water is the direct result of an undetectable water system leak. It is important to note however, that the leak was finally located in early 2016 after water was observed at ground surface.

Ground water levels are monitored and recorded on a monthly basis. Static water levels provide an indication of water quantity resource concerns. Historical water levels provide a baseline in which to compare current readings which can assist in determining if additional water conservation messaging is required in order to protect water resources especially during drought periods. **Figure 3** shows the monthly static ground water levels from 2011 to 2015. It is notable that the ground water levels were much lower in 2015 especially from September to December. It is believed that the low static water depth in the well during this period is the result of the unusual well production rates required to feed higher water system demand resulting from the aforementioned water leak.

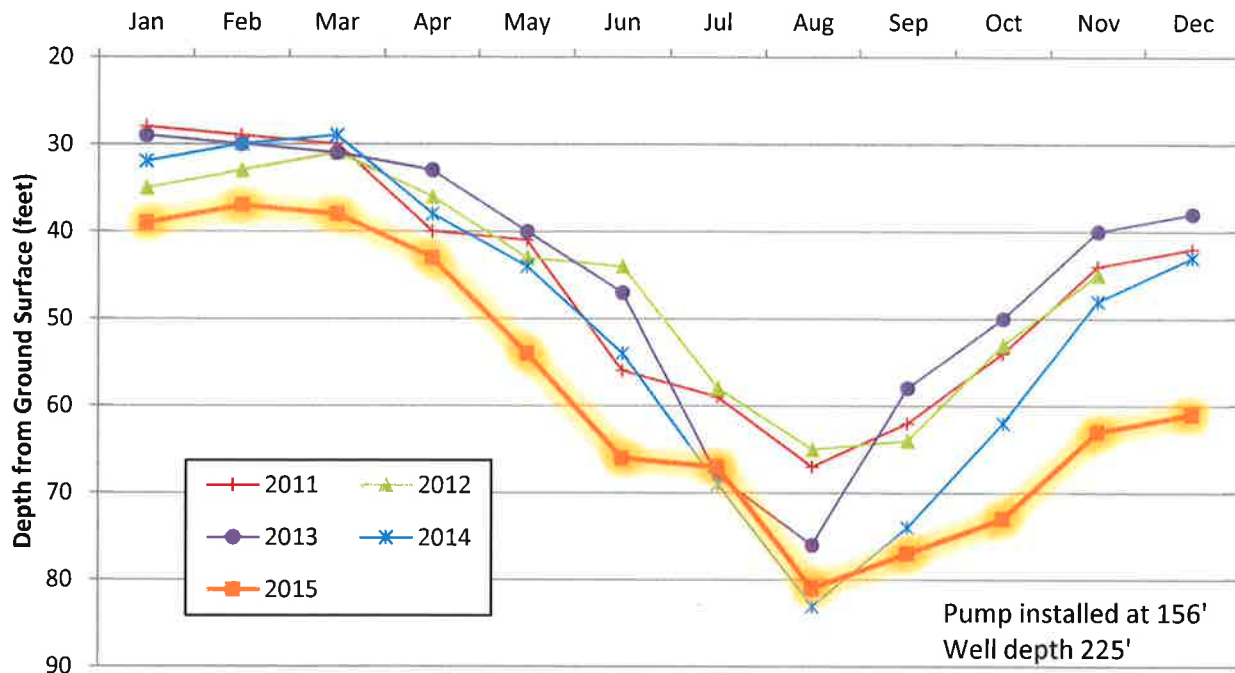


Figure 3: Sticks Allison Well Static Ground Water Level

Operations

The CRD's Integrated Water Services Peninsula and Gulf Island Operations team is responsible for the day to day operations of the water system. Galiano Island based operations staff perform regular weekly routine operational site visits to several locations including the water treatment facility, storage reservoir and various water distribution system sites to ensure the water system in functioning properly. Regular operation and maintenance duties include weekly water system chlorine residual testing, monthly bacteriological water sampling, quarterly water meter reading and facility and grounds maintenance. Additional support is provided by Peninsula Operations staff including the electrical and mechanical maintenance staff who typically respond to significant emergencies and to perform routine preventative maintenance work.

A summary of the major operational and maintenance activities is provided in **Table 1**.

Table 1: Significant Operational and Maintenance Activities

TASK	NOTES
Low water pressure complaint response	The complaint was investigated and found the water pressure at the homeowners water meter to be fine. Further investigation determined that the cause of low water pressure was likely the result of an undersized water line leading to the home.
Chlorine day tank replacement	A leak developed in the liquid chlorine holding tank. It was determined that the polyethylene tank needed to be replaced as opposed to repaired.

TASK	NOTES
Ultra Violet light (UV) equipment repairs	The UV water disinfection equipment failed. A new fuse, ballast and alarm lighting replacements were required for the sensor.
Reservoir level electronic equipment repairs	The reservoir water level indicator equipment failed and required significant repairs. Because power is not available at the reservoir site, the electronic equipment is battery powered. Battery failure is becoming more frequent which may result in complete equipment replacement in the near future.
Radio communication system repairs	The radio communications system for the Supervisory Control and Data Acquisition (SCADA) equipment failed. Emergency repairs were conducted and the system placed back into operation.
Leak investigation	A number of leaks were identified on private property. Homeowners were notified.

It is notable that the Sticks Allison water system operated reliably during 2015 without service disruption to the water system users.

Also of note in 2015 is that the water system operator, Les Laronde, retired after more than 15 years of operating the Sticks Allison water system. We appreciate and thank Les for his years of dedicated service and at the same time also welcome Genny Stirling as the new water system operator. Genny resides on Galiano Island and has a strong connection with the community and an interest in becoming a certified small water system operator. The operation of the water system will be supervised by Peninsula Operations during this transition period.

Capital Projects

Although there were no new installations or construction related capital projects in 2015, the draft Strategic Asset Management Plan (SAMP) was delivered to the Committee at its meeting of September 22, 2015 which serves as the basis for future capital planning. The scope of the SAMP was to identify issues related to aging infrastructure, changes in legislative obligations, level-of-service expectations, financial issues and water quality aspects of the water service.

In general, the water system performs well, although it was proposed to conduct a few capital expenditures including:

- the installation of safety equipment at the treatment facility (\$2,000 in 2016);
- to conduct a ground water study (\$5,000 in 2017); and,
- to complete a water audit (\$5,000 in 2017).

The latter two projects were recommended to assess the risks associated with water quantity for the system.

Water Quality

In 2015, Sticks Allison drinking water quality was typically well within the *Guidelines for Canadian Drinking Water Quality (GCDWQ)* except for one unusual exceedance of iron and manganese concentrations from the sample in the distribution system collected on September 15, 2015. Guideline limits for iron and manganese are aesthetic objectives only.

Overall water quality characteristics include:

- The raw water source was of good bacteriological quality; no *E. coli* or Total Coliform bacteria were found.
- The source water is relatively soft (median hardness of 28.1 mg/L CaCO₃).
- A conductivity and chloride test of the source water did not indicate any saltwater intrusion into the well.
- The disinfected drinking water was bacteriologically safe to drink and the turbidity was well below the *GCDWQ* limit of 1 NTU.
- Metal concentrations were below *GCDWQ* limits except for one sample from the east end of Sticks Allison Road collected on September 15, 2015 which contained iron and manganese concentrations in exceedance of the *GCDWQ* limits (Fe: 610 mg/L and Mn: 124 mg/L). Elevated iron and manganese concentrations are not considered a health issue. Since the source water naturally contains lower concentrations of iron and manganese, it is hypothesized that this one unusual exceedance was a result of accumulation of precipitate and sediments in the pipes, something that can be easily addressed by regular pipe flushing.
- The water temperature exceeded the *CCDWQ* limit of 15°C from August – December.
- Concentrations of total trihalomethanes (by-products of organic material reacting with chlorine in the treated drinking water) were well below the *GCDWQ* limit of 100 µg/L.
- Free chlorine residuals were maintained within *GCDWQ* ranges and industry best practices.

A summary of the water sampling results can be found on the following website:

<https://www.crd.bc.ca/about/data/drinking-water-quality-reports/southern-gulf-islands-water-quality-reports/sticks-allison-water-quality-reports>

Financial Report

Please refer to the attached *Statements of Operations* for Sticks Allison Water. *Revenue* includes parcel taxes (*Transfers from government*), fixed user fees (*User Charges*), interest on savings and miscellaneous revenue such as late payment charges (*Other revenue*).

Expenses includes all costs of providing the service. General Government Services includes budget preparation, financial management, utility billing and risk management services. CRD Labour and Operating Costs includes CRD staff time as well as the costs of equipment, tools and vehicles. Other Expenses includes all other costs to administer and operate the water system, including insurance, supplies, water testing and electricity.

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.

The Sticks Allison Water 2015 revenue of \$45,024 includes:

- \$5,330 – *Transfers from government*
- \$39,070 – *User Charges*
- \$106 - *Interest earnings*
- \$293 - *Other revenue*
- \$225 – *Transfer from Maintenance Reserve Account*

Total expenditures for 2015 were \$41,146, comprised of:

- \$2,380 – *General government services*
- \$31,740 – *CRD labour and operating costs*
- \$7,026 – *Other expenses*

The difference between revenue and expenditures in 2015 resulted in a surplus of \$3,878. \$5,230 was transferred to the capital reserve fund, and \$1,020 was transferred to the maintenance reserve account leaving a 2015 deficit of \$2,372. This was deducted from the surplus of \$7,504 carried forward from 2014 resulting in a residual surplus at the end of 2015 of \$5,132 which was carried forward to 2016.

The balances in the Sticks Allison Water reserve funds at December 31, 2015 are summarized in Table 2.

Table 2: Sticks Allison Water reserve fund balances at December 31, 2015.

DESCRIPTION	BALANCE
Capital Reserve Fund (1068 101890)	\$11,120
Maintenance Reserve Account	\$1,795
Funds remaining to spend on projects in progress (WLA2557)	\$13,450

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General Manager, Integrated Water Services

DR/SM/PD/CM:ls

Attachment: Sticks Allison Water Statement of Operations

	2015	2014
Revenue		
Transfers from government	5,330	5,327
User charges	39,070	39,070
Other revenue from own sources		
Interest earnings	106	92
Other revenue	293	3,175
Transfer from Maintenance Reserve Account	225	-
Total revenue	45,024	47,664
Expenses		
General government services	2,380	2,378
CRD labour and operating costs	31,740	26,593
Debt servicing costs	-	5,139
Other expenses	7,027	6,592
Total expenses	41,146	40,702
Net revenue (expenses)	3,878	6,962
Transfers to own funds		
Capital Reserve Fund	5,230	4,530
Maintenance Reserve Account	1,020	1,000
Annual surplus (deficit)	(2,372)	1,432
Accumulated surplus, beginning of year	7,504	6,072
Accumulated surplus, end of year	\$ 5,132	7,504

