



Making a difference...together

SKANA WATER SERVICE COMMITTEE

Notice of Annual General Meeting on **Thursday, May 31, 2018 at 1 p.m.**

Mayne Island Agricultural Hall
430 Fernhill Road, Mayne Island, BC

J. Sanders (Chair)
G. Fryling

Director D. Howe

R. Hagkull

R. Johnston

AGENDA

1. Approval of Agenda
2. Adoption of Minutes of May 11, 2017
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.b.ca if you cannot attend.

IWSS-928280410-5818



Making a difference...together

**Minutes of the Annual General Meeting of the Skana Water Service Committee
Held Monday, May, 11, 2017 at the St. Mary Magdalene Church, 360 Georgina Point Road,
Mayne Island, BC**

PRESENT: **Committee Members:** Jon Sanders (Chair), Graeme Fryling, Ramon Hagkull, Robert Johnston, Andrea Mills, Alternate Southern Gulf Islands Regional Director
Staff: Matt McCrank, Senior Manager, Infrastructure Operations, Lorrie Siemens (recorder)
6 Members of the Public

The meeting was called to order at 11:30 a.m.

1. Approval of Agenda

MOVED by G. Fryling, **SECONDED** by J. Sanders,
That the agenda be approved as distributed.

CARRIED

2. Adoption of Annual General Meeting Minutes of May 16, 2016

MOVED by J. Sanders, **SECONDED** by R. Johnston,
That the minutes of the Annual General Meeting of May 16, 2016 be adopted as previously distributed.

CARRIED

3. Chair's Report

The chair reported that an assessment was conducted on the original storage tanks which were identified as being corroding and replacement of the tanks was recommended. This will require a public engagement process in the future.

4. Annual Report

M. McCrank presented a written report. The following items were addressed:

- Service Description
- Water Supply
- Water Production and Demand
- Drinking Water Quality
- Operational Highlights
- Capital Project Updates
- Financial Report

A question and answer period followed. The following topics were discussed:

- Water usage by air B & B's.
- Education to the public on water conservation.
- Decommissioning of surplus wells in the water service area.

5. Election of Committee Members

It was noted that the terms for Graeme Fryling and Robert Johnston would expire on June 30, 2017 and an election would be held. Nominations were called for two positions for two-year terms beginning July 1, 2017 and expiring on June 30, 2019.

The following were nominated:

- Robert Johnston (accepted)
- Graeme Fryling (accepted)

Nominations were called for two more times. There were no further nominations. Robert Johnston and Graeme Fryling were elected by acclamation. Their names will be forwarded to the CRD Board for appointment.

6. New Business

A discussion took place on the public information session to be held for replacement of the tanks.

7. Adjournment

The meeting was adjourned at 12:40 p.m.

Skana Water System

2017 Annual Report

CRD | Drinking Water

Introduction

This report provides a summary of the Skana Water Service for the year 2017. This report includes a description of the service, summary of the water supply, demand and production, drinking water quality, operations highlights, capital project updates and financial report.

Service Description

The community of Skana is a rural residential development located on the north side of Mayne Island in the Southern Gulf Islands Electoral Area which was originally serviced by a private water utility. In 2003 the service converted to the Capital Regional District. The Skana Water Service (Figure 1) is made up of 73 parcels encompassing a total area of approximately 19 hectares. Of the 73 parcels, 46 were customers to the water system in 2017; no change from the previous year.

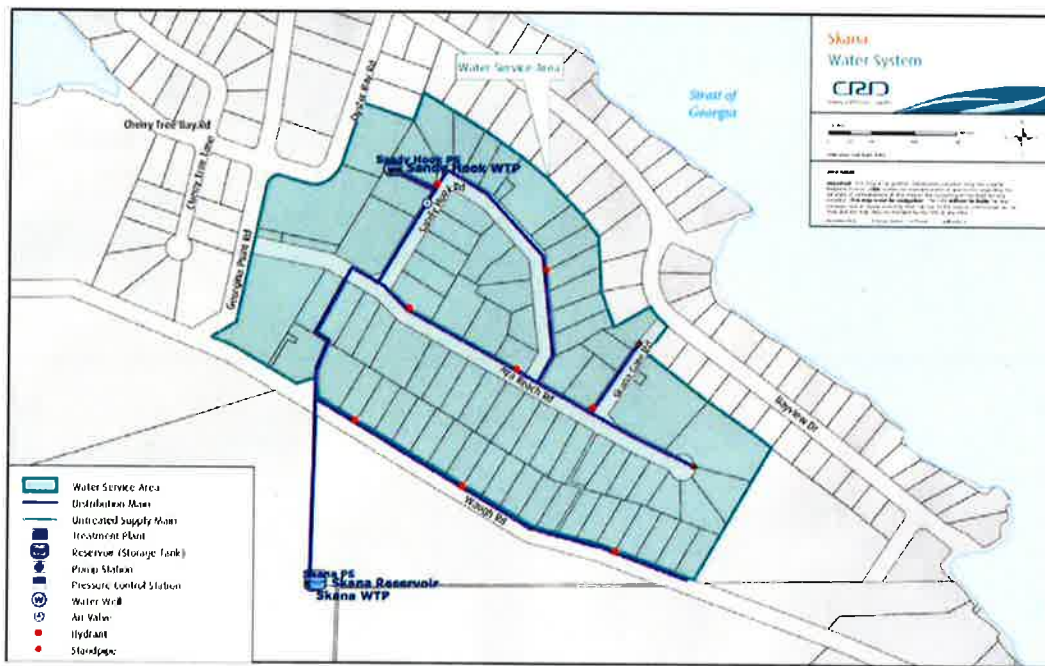


Figure 1: Map of Skana Water System.

The Skana water system is comprised of:

- Two ground water wells, related pumping and control equipment and buildings (Production Wells #8 and Well #13);
- Disinfection process equipment (ultraviolet light and chlorine at each well);
- Two steel storage tanks (total volume is 91 cubic metres);
- Distribution system (1,977 m of water mains); and,
- Other water system assets: 46 service connections and meters, 8 hydrants, 3 standpipes, 15 gate valves, 1 air release valve, SCADA system and auxiliary generator.

Water Supply

Ground water supply water levels are highlighted for 2017 in Figure 2. During the first few months of 2016 Well #8, the back-up water source, was used for water supply. As a result Well #13 water levels were not recorded during this period.

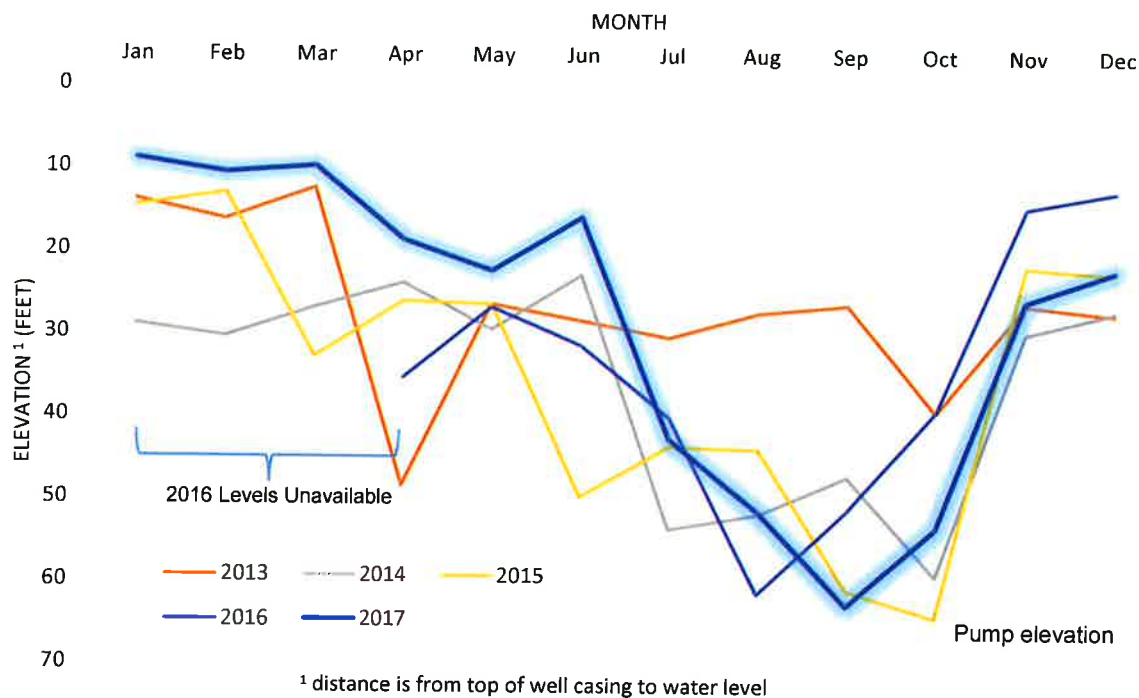


Figure 2: Skana Well #13 Ground Water Supply Monthly Water Level

Water Production and Demand

4,122 cubic meters (m³) of water was extracted (water production) from the ground water source (Well #13) in 2017; a 13% increase from the previous year and a 15% increase from the five year average (Figure 3). Water demand (customer water billing) for the service totaled 3,111 cubic meters of water; a 9% increase from the previous year and a 16% increase from the five year average.

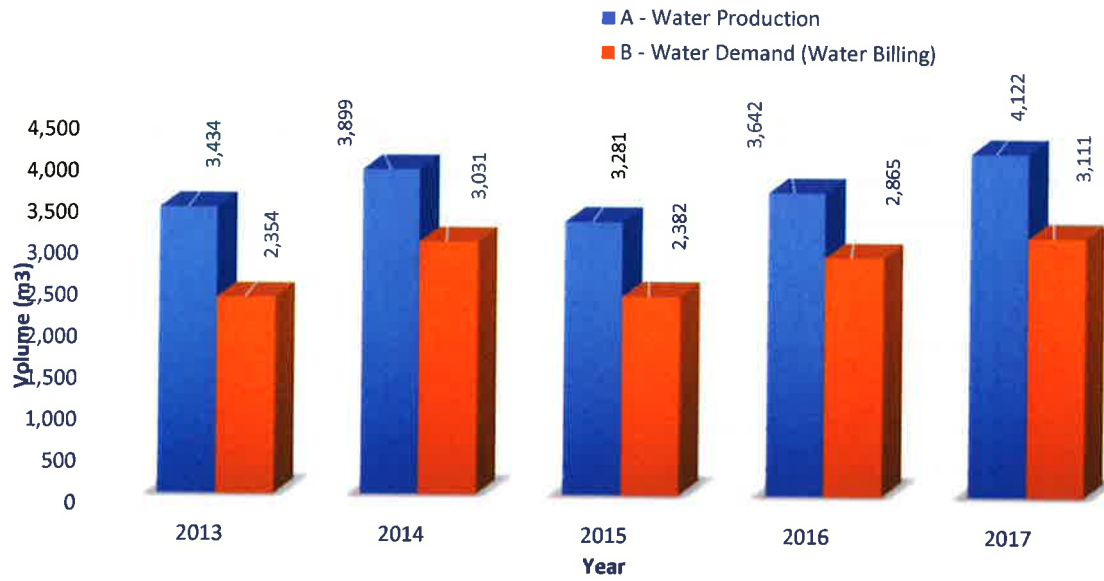


Figure 3: Skana Water Service Annual Water Production and Demand.

The difference between annual water production and annual customer water demand is referred to as non-revenue water and can include water system leaks, water system maintenance and operational use (e.g. water main flushing, filter system backwashing), potential unauthorized use and fire-fighting use.

The 2017 non-revenue water (1011 cubic meters) represents approximately 25% of the total water production for the service area. However, approximately 600 cubic meters is attributed to operational use resulting in a non-revenue water volume of approximately 10%. This is considered to be a minor quantity for a small water system.

Figure 4 below illustrates the monthly water production for 2017 along with the historical water production information. The monthly water production trends are typical for small water systems such as the Skana water system.

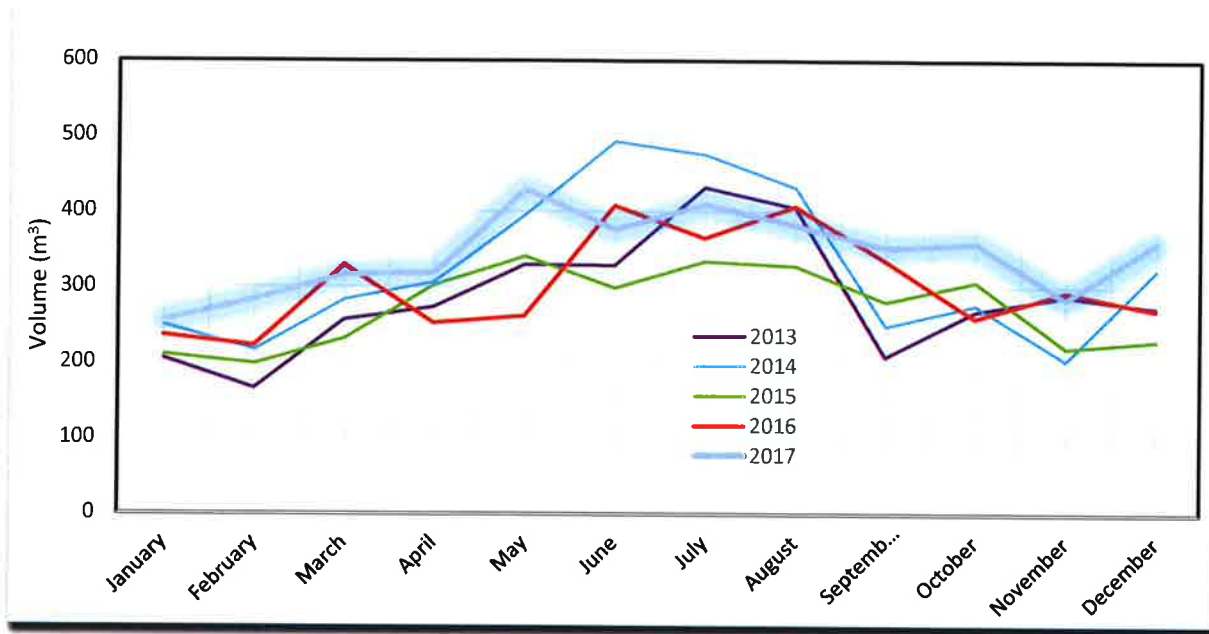


Figure 4: Skana Water Service Monthly Water Production.

Drinking Water Quality

The water quality monitoring program at Skana was carried out in 2017 based on the regulatory requirements and system specific risks. Samples were collected at regular frequencies from the raw water, at the treatment plant as well as from a number of sampling stations in the distribution system. The samples were shipped for various analyses to CRD's Water Quality Lab or to external laboratories for special analyses such as disinfection by-products or metals.

The water system performed well in 2017 and consistently supplied drinking water of good quality to its customers. One compliance sample tested positive for total coliforms on March 7, 2017, but a resample did not confirm any presence of total coliform bacteria in the treated water. No treated water sample tested positive for *E. coli* in 2017. The Skana source water from Well #13 did not exhibit any concerning turbidity increase during the well recharge period in the fall as in years prior to the well upgrades. A slightly higher total coliform concentration and the only *E. coli* positive test result in the raw Well #13 water, that was found on November 20, 2017, and elevated total organic carbon (TOC) concentrations suggest that this well may still be slightly influenced by surface water; mostly during the peak of the well recharge period in the fall. The existing disinfection process however, proved more than adequate to deal with this temporary slight increase in indicator bacteria presence in the raw water. In April and May, TTHM disinfection by-product concentrations were at or slightly above the maximum acceptable concentration (MAC) listed in the Guidelines for Canadian Drinking Water Quality in parts of the water system.

The data below provides a summary of the water quality characteristics in 2017:

Raw Water:

- Well #13, the primary source, supplied raw water free of indicator bacteria with the exception of one sample on November 20, 2017 with low concentrations of total coliform and *E. coli* bacteria.
- No samples from Well #8 were collected in 2017 as it was not being used.
- The mean raw water turbidity was 0.38 NTU.
- The raw water was hard (hardness 92.3 mg/L CaCO₃).
- The median pH was 7.21.
- The TOC concentration in the raw water ranged from 1.50 to 5.78 mg/L with the higher concentrations recorded in the spring. Deep, confined aquifers typically exhibit less than 1 mg/L of TOC. For typical confined aquifers on Mayne Island a typical range for TOC appears to be 0-2 mg/L. This indicates that Well# 13 in the Skana Water System is at least during parts of the year under some influence of surface water.

Treated Water:

- The treated water was bacteriologically safe to drink with no confirmed *E. coli* or total coliform bacteria.
- The median treated water turbidity was 0.74 NTU.
- The annual average levels of the disinfection by-products (total trihalomethanes (TTHM) and haloacetic acids (HAA)) were below the MAC. One April sample from Skana Gate Road in the distribution system exceeded the MAC of 100 µg/L for TTHM (110 µg/L). These exceedances coincided with high TOC concentrations in the raw water.
- The free chlorine residual concentrations ranged from 0.19 to 1.49 mg/L in the distributions system indicating good secondary disinfection.

Water quality data collected from this drinking water system can be reviewed on the CRD website:

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

Operational Highlights

The following is a summary of the major operational issues that were addressed by CRD Integrated Water Services staff:

- February 2, 2017 - Performed five year annual reservoir cleaning and inspection preventative maintenance.
- March 20, 2017 – Replaced chlorine storage kiosk at Well #13
- April 25, 2017 – Performed three year annual fire hydrant preventative maintenance.
- June 26, 2017 – Replaced a failed water meter register.

Capital Project Updates

There were no Capital Projects completed in 2017.

Financial Report

Please refer to the attached *Statement of Operations*. Revenue includes parcel taxes (*Transfers from Government*), fixed user fees (*User Charges*), interest on savings (*Interest Earnings*), a transfer from the maintenance reserve account, 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. *Debt servicing costs* are interest and principal payments on long term debt. *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.

| | |
|---------------|---|
| Submitted by: | Matt McCrank, M.Sc., P.Eng., Senior Manager, Infrastructure Operations |
| | Ian Jesney, P.Eng., Senior Manager, Infrastructure Engineering |
| | Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection |
| | Rianna Lachance, BCom, CPA, CA, Senior Manager, Financial Services |
| Concurrence: | Ted Robbins, BSc, C.Tech, General Manager, Integrated Water Services |

Attachment: 2017 Financial Summary (Statement of Operations)

CAPITAL REGIONAL DISTRICT

SKANA WATER

Statement of Operations (Unaudited)

For the Year Ended December 31, 2017

| | 2017 | 2016 |
|---|--------|---------|
| Revenue | | |
| Transfers from government | 19,350 | 19,350 |
| User Charges | 40,634 | 37,607 |
| Other revenue from own sources: | | |
| Interest earnings | 47 | 81 |
| Other revenue | 207 | 556 |
| Transfer to Capital Projects | - | - |
| Total revenue | 60,238 | 57,594 |
| Expenses | | |
| General government services | 2,900 | 2,820 |
| Contract for Services | 10,196 | 8,954 |
| CRD Labour and Operating costs | 16,249 | 19,113 |
| Debt Servicing Costs | 11,016 | 11,093 |
| Other expenses | 10,494 | 8,498 |
| Total expenses | 50,855 | 50,478 |
| Net revenue (expenses) | 9,383 | 7,115 |
| Transfers to own funds: | | |
| Capital Reserve Fund | 8,383 | 11,315 |
| Operating Reserve Fund | 1,000 | 3,900 |
| Annual surplus (deficit) | - | (8,100) |
| Accumulated surplus, beginning of year | - | 8,100 |
| Accumulated surplus, end of year | \$ - | 0 |

CAPITAL REGIONAL DISTRICT

SKANA WATER

Statement of Reserve Balances (Unaudited) For the Year Ended December 31, 2017

| | Capital Reserve | |
|---|-----------------|---------------|
| | 2017 | 2016 |
| Beginning Balance | 65,941 | 56,453 |
| Transfer from Operating Budget | 8,383 | 11,315 |
| Transfers from completed capital projects | - | 7,385 |
| Interest Income | 571 | 788 |
| Transfer to Capital Projects | (38,000) | (10,000) |
| Ending Balance | <u>36,895</u> | <u>65,941</u> |

| | Operating Reserve | |
|---|-------------------|--------------|
| | 2017 | 2016 |
| Beginning Balance | 6,264 | 2,364 |
| Transfer from/(to) Operating Budget | 1,000 | 3,900 |
| Transfer from/(to) Environmental Services | 181 | - |
| Interest Income | 178 | - |
| Ending Balance | <u>7,623</u> | <u>6,264</u> |