



VILLAGE OF BELCARRA
Water System Capacity for Fire
Protection Committee
Village Hall
May 21, 2019
7:00 pm to 9:00 pm



Committee Members

Brain, Douglas
Chisholm, Jim
Desbois, Martin
Devlin, Ian - Chair
Kim, Tom – Vice-Chair
Council Representative – Councillor Rob Begg

1. Call to Order

Call the meeting to order

2. Approval of the Agenda

2.1 Agenda for May 21, 2019

Recommendation:

That the Agenda for May 21, 2019 be approved as circulated.

3. Adoption of the Minutes

3.1 Minutes of April 16, 2019

Recommendation:

That the Minutes of the meeting held April 16, 2019 be adopted.

4. Delegation

5. Unfinished Business

5.1 Principal documents previously provided to Committee as follows:

1. VOB replies to Committee March 11, 2019 questions including partial SCADA data
2. OPUS replies to Committee April 10, 2019 questions (including Aug 8, 2010 FUS letter)
3. Evaluation of Fire Flow Methodologies, Fire Protection Research Foundation
4. Index of Subjects included in Water System Operational Manual being developed

5.2 Outstanding Documents

The Water System Capacity for Fire Protection Committee has requested the following documentation from Village staff which remain outstanding:

1. A list of all water system design, operation and maintenance reports from Ron Beesley, Dayton & Knight and OPUS consulting engineers (request made Feb 19 and Feb 22, 2019).
2. A copy of all 2010 to 2019 correspondence between the Village of Belcarra and Fire Underwriter's Survey (request made April 23, 2019). ***L. Dysart will work to determine the information available.***
3. A copy of the correspondence from Metro Vancouver which indicates that the alternative to supply water directly to Belcarra (and Anmore) through Port Moody is no longer being considered. Walt Bayless (OPUS) mentioned this correspondence in the April 2019 Committee meeting. ***L. Dysart confirmed during the meeting that VOB has a copy on file.***
4. April 12th email requesting operational manuals for the water system and the SCADA system as follows:
 - a. In reviewing the design of the VOB water system, our Committee was not able to obtain a listing of documentation provided by OPUS on the design and operation of the various components of the water system. What documentation was provided to the VOB by OPUS?
 - b. Tom was not able to find out from B. Serné during his review of what capability the VOB SCADA system, whether there were procedural or operational manuals. Did OPUS provide VOB with an operating manual for our version or similar version of SCADA? ***There are no operational manuals.***
 - c. Does the VOB have a procedural manual for the required reports from the SCADA system? ***There is no procedural manual for this item. A mandatory annual water report that is prepared for Council and Fraser Health. Fraser Health has an Annual Meeting with the CAO and the Superintendent of Public Works following receipt of the annual Water Report being sent to them.***

Attached is the information requested on April 12. For example, verification of VOB flows on our side of the system to the flows provided (and billed?) from the District of North Vancouver. There was a break in the line from 07/27/2017 to 11/25/2017 and not identified by SCADA even though the flows were clearly higher than normal. ***The Village has flow and billing data back to June 2016. B. Serné is not sure what the last line is concerning, as there is SCADA and billing data for that period. If it is regarding the variations of flows from the graph it could be any number of factors from DNV pressures at the time, to calibration of the flow meter.***

Message reply from B. Serné to L. Dysart on April 23rd I showed MD the water system Operation Manual that we have, photo attached.

I have only seen a SCADA manual at Maple Ridge. Index of subjects included in Water Utility Manual provided to committee on April 23

If records are incomplete, **the Committee recommends** that VOB contact the previous Public Works Superintendent, previous Mayor and Council, OPUS and FUS to obtain the missing documentation. Note that OPUS and FUS may require payment for the search and should be avoided if possible.

6. New Business

- 6.1** Discussion on proposed May 2019 Interim Report on Design Basis for Water Supply System & Fire Protection – Martin Desbois
- 6.2** Letter Dated August 8, 2010 – Fire Underwriters Survey regarding Water Supply System Improvements in Belcarra

7. Discussion on SCADA issues – Tom Kim**8. Discussion on Turtlehead and Senkler Road Fires – Doug Brain****9. Final comments on Interim Report:**

- 1.** Is the Belcarra water system capable of providing 30L/s for 1hr?
⇒ **YES (Committee unofficial review and discussions in March 2019)**
- 2.** Does the Belcarra water system meet the minimum FUS fire flow requirements?
⇒ **Unknown. Missing FUS correspondence confirming that design is acceptable with no Tatlow expansion.**
- 3.** Does the Belcarra water system meet the recommended fire flow requirements?
⇒ **No, as indicated in Aug 8, 2010 FUS correspondence.**
- 4.** What are the FUS recommended fire flow requirements?
⇒ **Unknown. Missing FUS correspondence defining what is the requirement.**

10. Committee Recommendations Resulting from the Review of Design basis for the water supply system

- 1.** Sprinklers – already accepted by the Committee
- 2.** Recommend that additional water supply be sought by the Village of Belcarra as suggested by FUS in 2010 letter with the appropriate Government grants. The supply from District of North Vancouver is one possible option, the other option is water supply from the GVWD system connected to the David Avenue extension.
 - a.** Formal engineering assessments will be required to support the grant requests.
 - b.** The engineering consultants will in turn request the FUS correspondence that Committee are seeking.

11. Next Steps**12. Adjournment**

Next Meeting Date: Tuesday, June 18, 2019



**VILLAGE OF BELCARRA
Water System Capacity for Fire
Protection Committee
Village Hall
April 16, 2019
Minutes**



Minutes of the Water System Capacity for Fire Protection Committee for the Village of Belcarra, held Tuesday, April 16, 2019 at the Municipal Hall, 4084 Bedwell Bay Road, Belcarra BC.

Members in Attendance

Brain, Douglas
Chisholm, Jim
Desbois, Martin
Devlin, Ian - Chair

Member Absent

Kim, Tom – Vice-Chair

Council Member in Attendance

Rob Begg, Councillor

Staff in Attendance

Lorna Dysart, Chief Administrative Officer
Connie Esposito, Recording Clerk

Also in Attendance

Walt Bayless, Project Manager, Infrastructure, wsp (OPUS)

1. Call to Order

Chair Devlin called the meeting to order at 7:01 pm

2. Approval of the Agenda

2.1 Agenda for April 16, 2019

It was moved and seconded:

That the Agenda for April 16, 2019 be approved as circulated.

CARRIED

3. Adoption of the Minutes

3.1 Minutes of March 19, 2019

Committee members requested to review draft minutes.

It was moved and seconded:

That the Minutes of the meeting held March 19, 2019 be adopted.

CARRIED

4. Delegation

4.1 Walt Bayless, Project Manager – Infrastructure, wsp (OPUS)

- W. Bayless answered questions from Water Committee members

Considerable discussion ensued relative to:

- Fire Underwriters Survey guidelines;
- History surrounding the decision on flow rate of 30 L/s;
- The design specifications and capability of the Tatlow reservoir;
- Guidelines regarding firefighting on a municipal level;
- Hydraulic capability and storage capacity are main components that determine the design of the water system;
- Financial constraints of the municipality at the time of design of the water system;
- The evolution of the types of housing in Belcarra;
- Policy decision is one way to handle the changing types of building in Belcarra;
- District of North Vancouver determined through a safety analysis that 14 L/s was a comfortable minimum taking into account maximum use of the system, but the use of hydraulics pushed this figure to 19 L/s;
- The potential for the system to handle 60 L/s on both sides;
- History surrounding the agreement between Village of Anmore and City of Port Moody which includes restrictions;
- Original cost estimate of the system versus the cost over-run, which was mainly due to the road overlay;
- SCADA system and how to interpret the data;
- Water quality the main factor in determining water flow and the importance of having residents connect to the water system.

5. Unfinished Business

5.1 Feedback from Committee members on the March 19, 2019 meeting assignments. Each Committee member provided a brief summary of information that they have concluded and other information pending as follows:

- Objectives of the Committee Report to Council – Ian Devlin
- Design basis of water supply system and fire protection – Martin Desbois
- April 2017 Turtlehead fire event – Doug Brain
- August 2017 Senkler fire event– Doug Brain
- Water supply for fire protection improvements after 2017 fire events - Martin Desbois
- Review of fire flow requirements – Martin Desbois/Jim Chisholm/Tom Kim

Discussion ensued relative to the objectives of the Committee Report noting:

- The process for Committees;
- A one-page progress report listing facts may be sufficient;
- A visual presentation may be beneficial;
- A final report would include more in-depth information and graphs;
- A status review was conducted of where Committee members regarding their areas of the report.

6. New Business**6.1** Discussion on memo to the Chief Administrative Officer from the District of North Vancouver dated March 1, 2019

Discussion ensued relative to:

- Wording in the agreement pertaining to guarantee of flows is standard practice;
- Exploring the possibility of increasing the flow rate to 60 L/s;
- Access to water during an earthquake;
- Rules and regulations surrounding the possibility of using sea water and its impact on equipment;
- Identifying areas in Belcarra where sea water may be accessed;
- Firefighting capabilities in Farrer Cove.

6.2 Emphasis on collecting/affirming accurate information (like a "fact check")

Committee member, Tom Kim, is preparing a report detailing a list of facts on a spreadsheet.

6.3 Fire Sprinklers

Discussion and approval of a recommendation to support a motion for Council to require fire sprinkler systems to be installed in all new construction and in major house renovations or additions that exceeds a floor area of 47 square meters and/or where this add-on is deemed feasible.

Discussion ensued relative to:

- Benefits and history of houses with built in fire sprinklers;
- Sasamat Volunteer Fire Department (SVFD) response time of approximately 5-10 minutes;
- Other measures that may be used to address mitigation of fires such as fire resistant building materials;
- New home construction in Belcarra have included sprinklers.

It was moved and seconded:

That Council require fire sprinkler systems to be installed in all new construction and in major house renovations or additions that exceeds a floor area of 47 square meters and/or where this add-on is deemed feasible.

CARRIED

7. Next Steps

No items.

8. Adjournment

The Chair declared the meeting adjourned at 9:10 pm.

Lorna Dysart
Chief Administrative Officer

Ian Devlin
Chair

Next Meeting Date: Tuesday, May 21, 2019

WATER SYSTEM CAPACITY FOR FIRE PROTECTION COMMITTEE

MAY 2019 INTERIM REPORT

The primary goal of the Water System Capacity for Fire Protection Committee is to assess the existing water system in Belcarra and its capabilities to support all fire-fighting efforts. The findings of the Committee regarding the design basis for the water supply system and fire protection requirements as of May 2019 are as follows:

1. The Village of Belcarra (VOB) water supply system does not currently provide the RECOMMENDED FIRE UNDERWRITERS SOCIETY (FUS) FIRE FLOW REQUIREMENTS. As indicated in a Aug 8 2010 FUS correspondence to VOB, the reviewed design (which includes expanding the Tatlow reservoir volume) barely meets the MINIMUM FUS FIRE FLOW REQUIREMENTS. FUS stated that the proposed design was “**absolutely minimalistic with respect to providing water supplies for fire-fighting**”.
2. The enlargement or replacement of the Tatlow reservoir as required in the design to meet the MINIMUM FUS FIRE FLOW REQUIREMENTS was never performed. OPUS (firm involved in the design of the water supply system), confirmed to the Committee that further discussions were held between the VOB and FUS. The Committee has requested the VOB Chief Administrative Officer to provide all correspondence between VOB and FUS to clarify the terms of a possible agreement with the Fire Underwriter’s Society.
3. Based on the 2010 review, the FUS advised VOB that “**steps should be taken to improve the water supply system on an ongoing basis to ensure that as the risk within the community increases (with new buildings, etc.) that the capacity of the water supply system also increases to match the increased demand, both in terms of domestic needs (increased Max Day) and in terms of increased required fire flows**”. Both of these water demand terms have increased in an appreciable way since the 2010 design.

4. The Committee reports that yearly inflows from District of North Vancouver (DNV) have increased by a significant 70% since 2013. A supplemental increase in water demand is also expected in 2019 with the recent hook up of the Belcarra Parks picnic area. Furthermore, residents have expressed concerns on the fire-fighting capabilities of the current water system after recent fire events (loss of 3 residences in 2017). It is becoming evident that time has come to consider the steps requested by FUS in 2010 (see item 3).
5. The FUS also concluded that **“knowing that the water supply system as designed would not provide the recommended fire flows for the type of structures being protected, fire prevention and mitigation measures are strongly encouraged to reduce the risk of loss of life and property when fire occurs”**. The Committee consequently recommends mandatory sprinkler requirements in all new residential construction and in residences requesting permits for major renovations.
6. In the early phases of the VOB water supply design (1990), the fire flow requirement for VOB was assessed as 60L/s for 1.5hrs. The Village of Belcarra who is the Authority having Jurisdiction consequently reduced the requirement to a lower value of 30 L/s for 1hr.
7. The Committee acknowledges that at the time of the initial design, water supply options from DNV, Port Moody or other GVRD sources may have been limited. Maintaining the higher design fire flow requirements as per earlier studies would have entailed the need to replace the Tatlow reservoir with a larger tank at significant additional costs.



FIRE UNDERWRITERS SURVEY

A SERVICE TO INSURERS AND MUNICIPALITIES

c/o Risk Management Services

August 8, 2010

Larry Scott, Public Works Superintendent
Village of Belcarra
4084 Bedwell Bay Road
Belcarra BC, V3H 4P8

Subject: Water Supply System Improvements in Belcarra

Dear Sir,

At your request, Fire Underwriters Survey has reviewed the potential impacts of the improvements to the water supply system servicing the Village of Belcarra. The improvements have been considered from the perspective of compliance with Fire underwriters Survey "Water Supplies for Public Fire Protection" and the fire insurance grading and classification system used in Canada.

Background

The Village of Belcarra has not in the past provided a potable water system but has operated several non-potable water reservoirs, distribution pipes and hydrants for the purpose of public fire protection. These efforts have been recognized as minimally achieving the requirements to be recognized for fire insurance grading purposes and as such, published fire insurance grades have indicated the recognition of water supplies for fire protection within the Village.

Current Situation

The Village of Belcarra is currently considering making alterations to water supplies that would allow the Village to provide a potable water supply to constituents. Fire Underwriters Survey has been asked to comment on design considerations with respect to potential changes to fire insurance grade status.

Comments

We have briefly reviewed the report "VILLAGE OF BELCARRA POTABLE WATER STUDY PREFERRED OPTION PRE-DESIGN" authored by Dayton and Knight Ltd. And dated December, 2006.

Key details we have considered are as follows:

1. The area is currently serviced by two reservoirs,
 - a. Tatlow Road Reservoir (270 cubic metres @ TWL=87.44m)
 - b. Dutchman Creek Reservoir (246 cubic metres @ TWL=39.074m)
2. The Dutchman Creek Reservoir will be decommissioned
3. The Tatlow Road Reservoir will be expanded to a volume of 371 cubic metres
4. Domestic demand on the potable water system have been estimated at:
 - a. 14LPS total demand including parks and all domestic uses
 - b. This value is suggested as an estimate of Max Day Demand for the community
5. Proposal includes a supply main from the District of North Vancouver capable of providing 14LPS that would refill Tatlow Road Reservoir
6. The Tatlow Road Reservoir would feed the distribution piping and hydrants
7. Distribution piping and hydrants to be expanded
8. All service areas would be able to achieve a minimum of 30LPS flow rate through hydrants with a minimum residual pressure of 20psi (except at the east end of Main Avenue)
9. The service areas that cannot through gravity achieve the minimum flow rate of 30LPS with a minimum residual pressure of 20psi are proposed to be serviced by an inline booster pump.

The proposed design would meet the minimum requirements of Fire Underwriters Survey and the recognized fire insurance grade of the Village of Belcarra would not be adversely affected by this project. However, it is important to note several things:

1. The fundamental minimum design requirement is for the system to be capable of providing 30LPS + Max Day Demand simultaneously for 1 hour with a minimum residual pressure in the system of 20 psi.
2. The system design is absolutely minimalistic with respect to providing water supplies for fire fighting that would be recognized for fire insurance grading purposes.
3. Steps should be taken to improve the water supply system on an ongoing basis to ensure that as the risk within the community increases (with new buildings, etc.) that the capacity of the water supply system also increases to match the increased demand, both in terms of domestic needs (increased Max Day) and in terms of increased required fire flows.
4. The system must be maintained and tested in accordance with relevant standards to maintain its fire insurance grade status. Fire Underwriters Survey will periodically request to review documentation of maintenance and flow testing.
5. Knowing that the water supply system as designed would not provide the recommended fire flows for the types of structures being protected, fire prevention and mitigation measures are strongly encouraged to reduce the risk of loss of life and property when a fire occurs. Particularly, provision of the earliest possible fire suppression response is recommended, as the earlier the response, the greater the chance of successful outcome with limited resources.

Michael Currie, GFireE, ASCT
Fire Protection Specialist
Fire Underwriters Survey

7. Discussion on SCADA issues (Tom Kim)

SCADA Summary

Through discussions with VOB staff, review of documentation and on-site system, the Committee provides the following summary of its findings related to the VOB SCADA (Supervisory Control and Data Acquisition) system (software and hardware) which allows the VOB to do the following (inductiveautomation.com):

- Control industrial processes locally or at remote locations
- Monitor, gather, and process real-time data
- Directly interact with devices such as sensors, valves, pumps, motors, and more through human-machine interface (HMI) software
- Record events into a log file

Key Details of the VOB SCADA System:

- Data backup limited to after July 2016
- There appears to be no Operating Manuals/User Guide for VOB staff to reference
- Since November 2018, the system is hosted through a virtual server instead of an on-site server
- When the SCADA system loses connectivity with the server or with devices, there is no alert sent to VOB staff
- The VOB system is currently unable to measure water inflow from the City of North Vancouver, rendering the VOB entirely dependant on monthly outflow reports from North Vancouver for billing purposes.
- Certain graphs and charts have labels that appear to not accurately reflect the displayed information or do not have proper titles and labels.

Recommendations:

- Ensure the backup process preserves the SCADA log/data going forward and does not overwrite after 3 years as previously done.
- Given the periodic outage of power and internet connectivity in the VOB and the greater dependency on connectivity since going to a virtual server, consider additional redundancies such as internet backup through a cellular data plan and other cable/optical provider.
- Look into how an alert/alarm can be sent to VOB operation staff when the SCADA system is down to avoid a water supply outage like the failure that occurred in January 2019, when the SCADA system was offline due to a software license issue unknow to the operators and a seismic valve was somehow triggered closing flow into the main reservoir tank.
- Engage a SCADA expert to review the VOB SCADA system to verify and program as needed the system to ensure reports and graphs are accurately pulling the correct data from the linked devices.
- In the absence of proper operating documentation, engage a SCADA expert to help develop a VOB specific operating manual including key reports that should be reviewed regularly.

8. Discussion on Turtlehead and Senkler Fires (Doug Brain)

There are two Fire Incident reports covering the Turtle Head fire (2017-04-09) and the Senkler fire (2017-08-02). See Attachments

Both can be found on the Belcarra website www.belcarra.ca/reports/2017_SVFD_April_Structure_Fire_Report.pdf

The following comment is in addition to the key points made on the second page of the Turtlehead Incident Report:

During the fire at Turtlehead two VOB employees, who are also members of the Sasamat fire department had access to the Belcarra SCADA system via a cell phone app. Without their presence and access to the SCADA system at the Turtlehead fire the system could have and likely would have run completely dry. The Belcarra water system is combined fire fighting and potable water system that cannot run down during a fire incident. Command needs access to the SCADA system during fires in order to monitor Tatlow tank levels and avoid running it too low and thereby causing system problems.

At one point during the fire fighting, the VOB employee had to advise Command that they had to stop the water flow as Tatlow reservoir was approaching the level where the potable water safety would be compromised.

During the Senkler fire the SCADA system was monitored (again by VOB employees) and fire flow was momentarily shutdown on at least one hose line on at least one occasion.

According to SCADA the fire flow at the Senkler fire was about 32 l/sec for 1 hour and 50 minutes before the fire was under control. The minimum level of the Tatlow reservoir during the Senkler fire was 36%.

Lesson learned from the Turtlehead and Senkler fires:

Fire Command needs access to the SCADA system during fires in order to monitor Tatlow tank levels and avoid running it too low and thereby causing system problems.



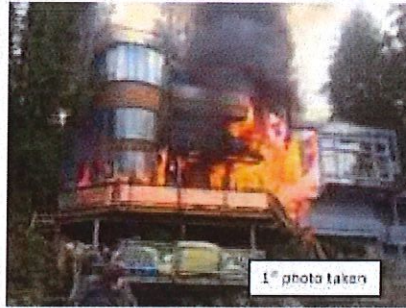
Sasamat Fire Department Incident Report



Incident: Structure Fire Turtlehead Rd, Belcarra
Date: April 9, 2017
Time: 12:52-19:09
Responding Members: 35

The SVFD was dispatched to a structure fire in Belcarra: likely the largest fire in community history.

The two homes were unoccupied at the time. As flames breached the first home, there were multiple 911 calls from North Vancouver and Belcarra residents. At 12:54, our Dispatch paged out our volunteers. Also at 12:54, the VPD Marine Unit, patrolling the area, took the first photograph of the incident (photo above). One house was engulfed in flames and the second was now on fire.



Our first engine arrived eight minutes later, roughly as the second photo was taken. Quickly surveying the scene, our crews focused on two things: attacking the fire spread on the second structure, and keeping the fire from spreading up the surrounding slopes to the rest of the peninsula.

As more firefighters arrived with additional trucks, hose lines, and equipment, our water flow reached its peak. Just over an hour into the fight, the municipal reservoir began to get low. Moving to "Plan B," we shifted to secondary water sources.



Using hose pumps, crews attacked the fire from the ocean. Using tender shuttles, firefighters fed one engine with water, while our second engine continued to top up its supply from the nearest municipal hydrant.

Multiple trees did go up in flame and the fire threatened several times to migrate elsewhere, but the flames did not escape our defensive perimeter. After battling and containing the blaze, our crews moved onto a mop-up and overhaul phase, extinguishing hotspots and drowning embers. A fire patrol remained overnight, knocking down any areas that reignited. Final mop-up ended on April 10th. All together, 35 SVFD firefighters and all four of our fire trucks responded.

This fire was a tragic loss for the tenants and homeowners. One family lost their pet and business. Another tenant lost all their possessions. Two homeowners lost their houses. Fortunately, however, nobody was injured or killed. Containment also worked – the incident commander and firefighters did a spectacular job of holding the line.

Some Key Things to Share:

- Quick 911 calls make an enormous difference in outcome. If you smell smoke, investigate and report. Don't presume somebody else is doing it. The house that the SVFD saved on Watson Road last fall was reported before the flames could breach the walls and roof. Once the flames get out and spread, there is very little anyone can do.
- Close construction, slope, and overhanging trees were contributing factors to the blaze. Cedar building materials on siding and decks ignite quickly. Had this fire occurred in July or August, it would likely have mushroomed into a severe forest fire event. Please ensure that all trees and vegetation are well back from your homes. Please help us by following the recommendations in BC's Fire Smart manual. It is available online at <http://www2.gov.bc.ca>
- If you become aware of a fire in either Belcarra or Anmore, please help us by restricting your domestic water usage. And then please ask your neighbours to do the same. Our crew want as much water as they can get.
- Having working extinguishers and fire alarms in your home are critical tools to buy the precious minutes for emergency response.
- The Vancouver Fire Boat was requested but was tied up at a second fire. Had they been available, their involvement would have been useful but not timely enough to change the outcome. Our trucks will always be the first arrivals. When we need to attack from the water (as we did here), we can use our two large hose pumps.
- Our crews need space to work (a clogged single-lane road proved difficult for our tanker to navigate). In an incident, please do not park your car where it can conceivably be a nuisance to us. If unsure, leave your keys in the ignition so that we can move it if need be.
- The VPD were instrumental in helping us with pump transport and crowd control. Thanks to all supporting agencies (BCAS, RCMP, Fortis and BC Hydro). Thanks also to neighbours for watching out for each other and supplying us with extra fuel for our hose pumps. Great community support.
- The investigation found no evidence of foul play.
- Go Fund Me pages were setup to support the victims of the blaze.



Sasamat Fire Department Incident Report



Incident: Structure Fire: Senkler Road, Belcarra

Date: August 2-3, 2017

Time: 19:29 (Aug 2) – 08:00 (Aug 3)

Responding Members: 35

On August 2nd, the SVFD was dispatched to a two-story structure fire in Belcarra.

An occupant of the home in question smelled smoke and investigated. A quick assessment with a neighbour determined a fire in the attic space and 911 was called.



At 7:29PM, our Dispatch paged out our volunteers. As members responded and smoke and flames began to breach the roof, more calls from neighbours flooded 911.

Our first crew arrived 8 minutes after the page out. Quickly surveying the scene, the incident commander focused on two things: containing the fire to the top floor of the home, while keeping fire embers from spreading to neighbouring properties and to the surrounding forest.

Supplementing hydrant supply with tender shuttles and hose pumps, our firefighters battled the blaze for many hours. Firefighters did some outstanding work to contain the blaze to the top story and then moved into a mop-up and overhaul phase after dark. A fire patrol remained overnight, extinguishing hotspots and drowning embers. Final mop-up ended on August 3rd. All together, 35 SVFD firefighters responded.



This fire was a tragic loss for the long-term tenants and homeowner, but thankfully nobody was injured. Containment also worked – the incident commander and firefighters did a first-class job of saving the bottom floor of the structure, while keeping the flames from spreading to the forest. Considering the time of year and the very real potential for forest fire spread, the result was by far the best possible outcome. Huge accolades go out to the crew for what they accomplished.