



# STAFF REPORT

To: Board of Trustees  
SUBMITTED BY: Fire Chief Arjuna George  
DATE: July 13 2017

**Recommendations:** To budget and plan for additional alternative water sources on Salt Spring Island for fire suppression.

## **Preliminary Report:**

There are over 200 fire hydrants on Salt Spring Island serviced by Water Districts. Fire hydrants are our main supply of water for fire suppression. The water main size on Salt Spring Island varies from 2” to 12”.

Over a decade ago SSIFR installed three dry hydrants in strategic areas of the island. One at St Mary Lake, Weston Lake, and Stowell Lake, all are un-hydranted areas.

Over the last twenty years SSIFR has requested as part of a development permit, for owners to install cistern tanks or dry hydrants for fire suppression. Although this is a great resource for us to access it does have its pitfalls. Most of the original tanks installed were too small for today’s standards, were not uniform in design, and more importantly were installed with no plan in place for upkeep and maintenance. Majority of the old water tanks are on private property, or strata common property with no formal agreement or maintenance program in place.

Operationally water tank storage is more efficient, guaranteed water volume, and can be located more strategically versus having to base your system around a static water source (pond, lake etc..)

I have confidence in the fire hydrant system on Salt Spring Island to provide SSIFR with water, although in some areas flow rates may be insufficient. It is prudent of SSIFR to investigate further alternate systems to accompany the hydrant system.

We have identified target areas that would improve our water storage and delivery rates on the island. The following are areas to pursue a dry hydrant or water tank storage.

- Fire Hall #2 back property. SOUTH END. Plan for a large pond that will service the south end, and our training needs. With the potential for stockpiling with additional cistern tanks at the site. This project would be the simplest and provide large volumes of water. (District Owned)
- Cistern installed at Fire Hall #3 NORTH END. (District Owned)
- Cistern installed at Fire Hall #1 DOWNTOWN CORE. (District Owned)
- Multiple cisterns installed at Brinkworthy DOWNTOWN CORE. SSIFPD property (District Owned)
- Dry hydrant at the Sunset Farm Pond NORTH END. (Private Property)
- Dry hydrant at Pringle Farm Road pond NORTH END. (Private Property)
- Dry hydrant installed at Blackburn Lake. MID ISLAND.
- Dry hydrant installed at Cusheon Lake MID ISLAND
- Dry hydrant installed at North End Road. NORTH END (Private Property Pond)

Further to our current water supply capabilities, a process should be considered to enable property owners with adequate year-round water storage to apply to FUS for certification. There are a number of adequate storage areas already identified on Salt Spring Island that would meet the FUS requirements to be “Recognized”. *Recommendation 22 of the FUS report (WS7 Application forms for Dry Hydrants)* This recognition may improve our islands Fire Insurance Grading Index.

I would recommend strong continued relationships with the Water Districts Especially North Salt Spring Water District as they supply and service most of the islands water main systems. This was also a recommendation from FUS “*Recommendations 23,24,25,26,27,28,29,30, and 31*”.

Arjuna George  
Fire Chief  
Salt Spring Island Fire Rescue

