

# MBFD Strategic plan

The Mill Bay Fire Protection District also known in the community as the Mill Bay Fire Department serves the areas of Cobble Hill and Mill Bay with a total of about 9572 combined residents. The Mill Bay Fire Improvement District also serves the Malahat First Nation, Evergreen Independent School, and Brentwood College under fire protection contracts. The Mill Bay Fire Protection District is a volunteer /paid department which has 35 members and is staffed by three full time and one part time career members consisting of one full time Fire Chief, one full time Training Officer, one fulltime Maintenance Firefighter and a part time Fire Prevention Fire Fighter. As an improvement district, the department is administrated by a board of seven Trustees

The purpose of this five-year strategic plan is to identify fire and emergency service related issues that will affect the communities of Mill Bay /Cobble Hill in the next five to ten years and evaluate the needs and requirements of the Mill Bay Fire Protection District in order to meet these demands.

## Issue one: Training

The training goals of the Mill Bay Fire Protection District are to:

- Maintain sufficient members trained and proficient to the Full Service Level 1001 Firefighter 2 Level (NFPA) to maintain a full service department status.
- Provide elevated officer training to a minimum NFPA 1021 Fire Officer 1 for all officers.
- Provide Emergency Vehicle Operations for Engines, Aerials, and tenders to NFPA 1002
- Provide First Responder Level III Training to all members through Red Cross.
- To continue training to the 1001 standard through the JIBC with dual accreditation from PROBOARD and IFSAC.
- Increase the Officer training both through accredited courses and in house training. Next stage should be to move Captains to Fire Officer II and Lieutenants to Fire Officer I. In house training will consist of running incidents and leadership sessions. This will be predicated by having adequate competent instructors who are able to follow the lesson plans of lead institution (JIBC) and guidelines of the accrediting bodies (PRORBOARD and IFSAC) who mainly use NFPA as a guideline.
- Incorporate NFPA 1002 Chapter 6, Aerial devices.
- Remain status quo with the First Responder 3
- Restart speciality teams such as RIT, Hazmat, Rope Rescue, Confined Space, Trench Rescue possibly some water training in the distant future.

## Required resources

For the most part the department has adequate resources to provide the required training. There are a couple of large gaps in resources which will require addressing in order to provide training to new members and maintain skill levels of current members.

### Training facility:

While we spend a considerable amount of funds on equipment and resources for operations each year, we do not want to take away from the fact that we have also been developing our training facility over time. This facility has had several alterations without consulting an engineer. The facility is now composed of multiple sea cans in various configurations. While the construction of this facility has been done by qualified contractors, currently mold and adequate ventilation are a concern, and the board has decided to have an engineer evaluate the structure to ensure the safety of our personnel. Andrew Higginson of Higginson Engineering has been engaged to provide this work. While it will stop short of being a burn facility, when complete it will meet many of the training requirements of today and the future. We have three live fire facilities on the island and one in Maple Ridge which we can continue to use to meet those training requirements.

### Water source:

To conduct some of our training we require large amounts of water. In particular while conducting fire suppression operations a large component of the training is based on moving water through various means, tenders, drafting, hydrants and using multiple sources to supply water. While most of the other departments around us have access to lakes we are constrained by the Mill Bay and Cobble Hill Water Districts. The water districts frown upon us using large amounts of water. As climate change progresses and droughts become more severe, this will become even more of a problem. One proposal for the training facility is to store approximately 5100 gallons of water, which will be sufficient for the training building. This can be achieved by creating a reservoir attached to the training facility using underground tanks, Access to large volumes of water will be key to future training as water restrictions come into effect earlier and remain in effect longer each year.

### Space:

We are space hogs, again we are restricted in the room we have to train and the ability to provide various training. We are often using sites such as Kelsey or Cobble Hill School which are still restrictive. We need adequate space to do hose lays, stage trucks and vehicle training and trailering while not impeding on public right of ways. The department will look at sourcing a permanent area to fulfill these requirements. Should any of the properties adjacent to halls one and two become available for purchase, the MBFD should give serious consideration to acquiring them for department use.

### Access to water for fire fighting and training:

The Mill Bay Waterworks District is experiencing water supply issues. Chief Ron Beck has been instructed by the Waterworks District to contact them during periods of expected high

usage, and they have even threatened to shut down our supply of water if our usage exceeds 30% of the reservoir's capacity. How they would respond during a life and death emergency is unclear.

Communication from the Mill Bay Water District:

In the event of a fire emergency it is understood the Mill Bay Fire Department will draw water for firefighting purposes from the water improvement district. If under extreme situations, the reservoir levels are drawn down to 40% capacity, the District Operator will notify the fire department. When the reservoirs drop to 30% capacity, the District will notify again and require the Fire Department to disengage from the District system. The District must be able to provide the necessary water services to the community at all times, and allowing the reservoirs to be drawn down any further would jeopardize this ability.

Cobble Hill Improvement District also has experienced water access issues in the past however their new well is serving the communities needs at this time.

Due to these constraints, we have begun to investigate installing dry hydrants in strategic locations where there are sufficient above ground water sources around our district, as well as identifying suitable bodies of water to access during emergency situations with our pumper trucks.

## Issue two: Climate change and its effects on interface Wildfires.

From a fire protection standpoint Climate change is affecting our community in the form of reduced rainfall events in the spring, summer and fall resulting in prolonged droughts throughout our region. Coupled with this is Mill Bay's ongoing water supply issues. All of BC including coastal areas are seeing earlier and larger fires than the historical averages. To address this the Mill Bay Fire Improvement District has begun implementing a FireSmart program. When completed, this will allow us to quickly respond to interface forest fires with the knowledge of available resources and constraints for all areas within our district. It is hoped the Mill Bay FireSmart plan will be used as a template for other communities within the Cowichan Valley. Elements of this plan will include:

- Mapping of all residences in the area using the LightShip program <https://www.lightshipworks.com/> This will allow us to identify potential hazards and deploy our crew in real time.
- Identifying the areas of highest risk of an interface fire
- Deployment planning
- Identifying all dead end or restricted access roads
- Create an evacuation check list
- Recruit FireSmart Champions for each neighbourhood
- Holding FireSmart DaysCommunity Education
- Emergency Management

- Mapping of water supplies and other resources required during an emergency. This is another area where our new Lightship program will be of benefit. It's a large task to identify and map all of our resources. The Mill Bay fire department will complete this by 2027 with biannual reviews to ensure that all the information is current.

\*It should be noted that the Lightship program costs \$12,000 per year and the board is not sure we are getting our moneys worth out of this program. Should we decide to abandon the lightship program we will adapt the activities that rely on Lightship accordingly.

### Issue Three: Accredited Superior Shuttle Service:

Fire Insurance is a significant cost for the residents of Cobble Hill – Mill Bay. Insurance companies give a discount to residences close to Fire Hydrants. In areas where a fire Hydrant is not adequate or available insurance companies will accept Superior Shuttle Service as the equivalent of having a fire hydrant close by. Until now it's been believed that the cost of implementing Accredited Superior Shuttle Service in the Mill Bay- Cobble Hill area would cost the residents more than the premium that they pay on their insurance for not having it. The Trustees of the Mill Bay Fire Improvement District will evaluate the cost benefit to providing Accredited Superior Shuttle Service to the residents of Cobble Hill- Mill Bay. Should there prove to be a benefit for most residents, we will implement Accredited Superior Shuttle Service in our district.

### Issue Four: Additional Tender

The Directors of the MBFD should consider adding another Tender to its fleet in 2022. There are several reasons that an additional tender could be beneficial to the department:

- 1) Mill Bay's chronic water shortage highlights the need for additional tender capacity in the Mill Bay Fire Protection District.
- 2) In the event of a major earthquake, it is reasonable to assume that all of the bridges between halls one and two could be unsafe for travel. Considering the correlation between earthquakes and fires, this could leave the Mill Bay area without access to a Tender in a time of emergency
- 3) Wildfire support. As climate change progresses the likelihood of an urban interface fire somewhere in Coastal British Columbia increases. By April 2020 there had been an uncontrolled wildfire in Squamish BC that resulted in several evacuation notices and an evacuation alert for the entire Squamish District. The fire destroyed several homes. Having access to an additional Tender in a situation like this could be a valuable asset.
- 4) Superior shuttle service. Should MBFD move toward Superior Shuttle Service an additional Tender would be required.

## Issue Five: Growth within our communities

The Cowichan Valley Regional District projects the growth in the South end (Mill Bay, Shawnigan Lake, Cobble Hill) to be 2,220 new residences by 2026. With the communities of Cobble Hill-Mill Bay accounting for 1,122 of the new residences.

South Cowichan OCP – Anticipated Housing Needs by Electoral Area				
	Area A Mill Bay/Malahat	Area B Shawnigan Lake	Area C Cobble Hill	Total
Population Increase	2,025	2,745	778	5,548
Annual Housing Need	54	73	20	147
5 Year Housing Need	270	366	103	739
Housing Need By 2026	810	1,098	312	2,220

Table courtesy of CVRD

The CVRD plans to allow development of ten distinct areas of Mill Bay to accommodate this growth with significant residential units in all areas. Mill Bay Fire Department will ask to have approval in future building and development permits in our district to ensure that we can safely provide emergency services to all residents. One example of this is Arbutus Ridge, where parking is allowed on both sides of the street which does not allow for passage of our engine. Another issue of concern are windrows of debris left over from land clearing, which are a potential source of fuel in a wildfire situation. A local example of this can be found on the south end of Sentinel Ridge

Mill Bay Village Housing Capacity	
Area	Number of Dwellings
Stonebridge Development	600
Ocean Terrace Development	438
Bickford Development	80
Sentinel Ridge Development	30
Sangha Development	100
Mill Springs Development	200
Mill Bay Marina Development	14
Mixed Use Area Development	60
Multi Family Development	20
Manufactured Home Park Development	225
<b>TOTAL</b>	<b>1,767</b>

Table courtesy of CVRD

Not addressed in the CVRD OCP 3510 are the planned developments of The Limona Group who is planning on developing the Stonebridge property on Shawnigan Mill Bay Road consisting of 1200 residential units including a mixed use component made up of five story units which have commercial units on the bottom floor and four stories of residential units above. In addition to this the Malahat Band is currently planning to lease commercial lots on their lands and plan for a residential development near the old Bamberton site. It should be noted that all the Malahat Band developments are outside the jurisdiction of the CVRD and a solid working relationship between the MBFD and the Malahat First Nation will be critical going forward. In preparation for the development of the Malahat lands the MBFD is working with the Malahat First Nation to acquire lands for a future Hall Three site. When the land transfer is complete the Mill Bay Fire District will decide the appropriate timing to build Hall Three on the transferred land.

There are also plans to replace the shopping center at Frayne Center with complexes totalling 4996.64 sq meters. Consisting of two buildings with commercial units on the bottom floor of both buildings, and office space on the second floor of one unit and, 18 residences above the second building

With the exception of building a future hall three. At this time, it is felt that the MBFD has sufficient resources to address the needs of the proposed community developments, the Officers and board will continue to balance our equipment needs with future growth within the communities.

## Issue Six: Shower facilities at Hall 2

As we become more aware of the need to decontaminate our members after an incident the need for better shower facilities at hall two has become apparent. In light of the safety concerns around decontamination the board is committed to improving the shower capacity at hall two and providing space for personal lockers for the members using Hall 2. In addition, Washers and dryers will be supplied in both halls to wash turn out gear.

## Issue Seven: Recruitment

Recruitment is an ongoing issue within the department. In the past few years, we have spent more than ten thousand dollars on recruitment drives with no measurable results, then for seemingly no reason we can have several new applications. There should be a survey question included on the application form asking how the applicant decided to apply for the department and those responses would then be tracked and evaluated for targeted recruitment drives. We have presently experienced an influx of new recruits including several female recruits making our membership approximately one to six female to male members. While no one would claim that we have reached gender parity we are heading in the right direction. We still lack

cultural diversity, but due to our demographics we may never have a culturally diverse membership.

A potential recruitment driver might be to provide accommodations within the firehall. This could be a positive solution to some of our recruitment and retention problems. View Royal FD has done this with their new hall. The FF or recruit would reside there with a low rent in exchange for firefighting duties and response to incidents. While this is not practical for our existing halls one and two, it might be an option for hall three. This may be an incentive to get firefighters from the Malahat Nations.

## Issue Eight: Chief Succession Planning and Board of Trustees recruitment.

The Current Chief is nearing the end of his working career, having already retired from his career at MOT and taking on a part time position as Chief of MBFD that has become a fulltime position, he has stated that December 31 2022 will be his last day of work for MBFD. In view of the fact that the Chief has fully indicated his desire to retire, the Board of Trustees will plan for a smooth transition to a new Chief.

The Board of Trustees is currently a group of mostly retired men supported by an Administrator who has been with the department for 30 years. While unforeseen circumstances will come up from time to time, the board should develop a protocol for addressing the turnover of Trustees who do not wish to stand for re election and the eventual retirement of Deb Murphy the present administrator. As part of this preparation, we will complete a full job description for the administrators position. And work toward a more gender inclusive board. One possible solution might be to post Trustee openings on Facebook and Instagram.

## Issue Nine: Secure hall three site

As mentioned earlier in this plan, the Board has been working to secure property on the Malahat First Nations land formerly known as the Bamberton Development Lands for six years. This land will be fee simple and allow us to build a fire hall to service the proposed developments on the Malahat First Nations lands when the time is right. The property for this site has been identified and agreed upon by all parties. As with all inter governmental projects, this is moving very slowly. The board will continue to work with all government departments, First Nation and Provincial to formally secure this land for our future use.

## Major equipment replacement needs

This list represents the expected major equipment needs of the Department until 2033. It does not take in to account sundry items

### **2021-2023**

- New Tender for Hall One. \$500,000 to \$600,000

### **2025**

- Rescue 73 \$60,000

### **2027**

- 20-Year service life Ladder 81 \$1,500,000 ladder to \$2, 000,000

### **2029**

- 20-year service life of Engine 74. \$1,200,000

### **2030**

- 20-Year service life Tender 76. \$500,000 to \$600,000

### **Other items possibly needing replacement**

- Utility 79 \$75,000
- Tender 76 Drop Tanks Replacement liners \$2,000
- Hall 1 Generator (30-year approximate service life) \$ 25,000
- Hall #3 \$2,500,000 based on Hornby Island New Fire Hall