ALBERNI-CLAYOQUOT
REGIONAL DISTRICT

Bamfield Volunteer Fire Department

Asset Management Plan

Version 1

DATE OF ADOPTION: MARCH 24, 2021

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1 EXECUTIVE SUMMARY

1.1 Purpose of the Plan

The Bamfield Volunteer Fire Department (BVFD) Asset Management Plan (AMP) is part of the ACRD Asset Management Program to facilitate informed decision-making and effective allocation of resources for infrastructure. The purpose of an AMP is to deliver sustainable, cost effective services to ACRD communities in a socially, economically, and environmentally responsible manner, while providing the Level of Service (LOS) agreed upon by the Board. Estimates and projections included in this AMP are derived using available information with updates and changes expected with the release of each new version. AMPs are intended to be living documents, reflective of current asset conditions and data.

1.2 Asset Description

The Bamfield Volunteer Fire Department assets include:

- Halls, boat house, septic system and generator
- Firefighting apparatuses and rescue equipment including vehicles
- Self-Contained Breathing Apparatus (SCBA) Equipment excluding masks and tanks
- Electronics

1.3 Levels of Service

The present funding levels are insufficient to continue to provide the existing services at current levels in the short-term. The main service consequences will be more frequent service interruptions, a decline in service quality or loss of service.

1.4 Future Demand

The main demands for new services are created by:

- Growth rate
- Education programs
- Board of Directors and resident level of service expectations
- Legislative and industry regulations

These will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and mitigating failures.

1.5 Lifecycle Management Plan

Asset Management assists in conscious and calculated decisions for all assets covered in AMPs from acquisition, operation, maintenance, disposal and renewal or upgrade. During the course of an assets life, the replacement value is known along with an estimated date of replacement based on age and condition. Annual contributions required are calculated for each component in each service to

measure the funding gap between current and future levels of service in order to align funding and service expectations. The AM Program achieves responsible and reliable lifecycle management practices.

The Asset Management Coordinator has created the Bamfield Volunteer Fire Department AMP with the assistance of the Fire Chief, Deputy Chief and operations staff. Asset Management systems will continue to be maintained once this position expires by ACRD staff. Estimated service life (ESL) and replacement cost of the infrastructure were determined using historical data, industry standards and requirements. The BVFD Chief provided risk assessments and goals.

1.6 Financial Summary

The BVFD assets have a total current replacement value of $4.2 million in 2021 dollars. With an estimated inflation rate of 1.5% (CPI 10-year average), estimated future replacement costs are $6.9 million for current infrastructure at the end of the components estimated service life. Not included in the estimates are projections for future demand and projected capital upgrades. Bamfield has grown approximately 3% annually since the system was first established with a current population of 179 (2016 Census) so future increases in demand have not been considered for this AMP version as growth has not had an impact on levels of service. The current funding levels and ability to meet demand will be reviewed before the adoption of subsequent AMPs; in addition, the types of growth and the resulting demand on BVFD will be considered during the requisition process.

Bamfield has an assessed converted value of $10.5 million with a converted residential tax rate of $1.028 to cover all fire department expenditures. In 2020, $110,380 was collected through property taxes and approximately an additional $24,000, or roughly 20% annually based on number of structures, is collected from other neighbouring Governments. The current funding levels are sufficient for the day-to-day operation of the halls but do not allow for adequate capital reserve contributions. Large expenditures such as hall replacement or fire apparatus aren't within the current financial means of BVFD. Without adequate requisition levels, debt will likely need to be used to maintain levels of service in the future. Renewal of assets will occur in cycles based on asset life, legislative renewal requirements and according to their condition and use. The Fire Underwriters Survey (FUS) also dictates the replacement of key firefighting apparatuses based on asset age.

The first significant required capital renewal project is in 2021 for a new Fire Apparatus as per FUS guidelines to replace the current First Line apparatus, W1. While costs are not known at this time, similar trucks in the ACRD have recently been purchased between $450,000 and $640,000. Based on age regulations from the FUS, BVFD will be required to hold an exception with FUS given the current fleet and available capital replacement funding. Where possible, sharing of equipment is practiced and encouraged between all Fire Departments within the ACRD. When purchasing or disposing of equipment, other ACRD Fire Departments should be contacted to gauge interest.

1.7 Asset Management Practices

Assets are managed using a combination of FirePro2, Microsoft Office and Vadim. Registries and AMPs will be reviewed and updated on an annual basis prior to the release of the following version.

1.8 Monitoring and Improvement Plan

At the end of this AMP there will be an Improvement Plan intended to improve Asset Management practices within Bamfield Volunteer Fire Department and the Asset Management Program as a whole. Generally included in Improvement Plans are suggested changes or additions to documented inspections and condition assessments, monitoring of asset-specific operational and maintenance procedures and giving present risks a numerical rating in order to measure mitigation success.

2 INTRODUCTION

2.1 Background

This AMP encompasses all Bamfield Volunteer Fire Department assets, including fleet. The purpose of the plan is to facilitate the strategic management of the system infrastructure and the services provided by it, giving guidance on new and existing infrastructure to maximize use of financial resources long term, reduce risk and provide a prioritized view for service continuity and improvements over a 20-year planning period and beyond.

The ACRD AM Program follows the advice of the Asset Management BC Framework; Plans are designed to be living documents that change with the organization to reflect progress made while continuously striving for sustainable service delivery. Consideration of community priorities and an understanding of trade-offs between resources and desired services is the foundation of sound AM practices.

The AMBC Roadmap guides organizations through basic, intermediate and advanced Asset Management Practices. It is the goal of the ACRD to achieve a basic to intermediate level of understanding.

This AMP should be read in the context of the ACRD's Asset Management Policy and Strategy. The Bamfield Volunteer Fire Department AMP is a living document and will develop with AM practices and with the influence of the following corporate documents:

- Annual strategic priorities
- Short-term and long-term financial plans
- Maintenance policies and industry regulations
- Grant applications and funding

Asset Management Plans are designed for several reasons. First, to guide Fire Chiefs, Management and the Board in planning and decision-making. Second, to aid in the creation of short term and long-term financial plans as well as operational plans. Last, to spark community engagement for the service. As the ACRD moves through the AM program, knowledge and understanding of the AM program increases and it is expected that this plan will evolve further, solidifying assumptions made and filling in any present information gaps where further research or information is required.

2.2 Asset Inventory

The Bamfield Volunteer Fire Department consists of many components including:

- Fire Trucks & motor vehicles
- Fire Halls & septic system
- Larger or Specialized Electronics
- SCBA Equipment
- Rescue Equipment
- Fire boat & dock

Current replacement costs were estimated by the Fire Chief and Asset Management Coordinator using historical costs plus inflation. Unit costs include all installation and remediation activities. Remaining useful life estimates were based on installation dates and expected service life based on knowledge and experience.

Any land associated with the BVFD is not included in this AMP as there are no future plans for expansion, revival or rejuvenation of the current land.

2.3 Emergency Preparedness

The BVFD does not have a formal Emergency Preparedness plan but supports the Bamfield Community Emergency Plan (BCEP). Duties that arise from this plan are as follows:

- Potable water storage with partnership with BCEP providing water filtration/purification systems in the East and West Fire Halls and Bamfield Community School
- Support BCEP with office, storage and training space in the East Hall
- Provide Department Operations Centre space in the event of an emergency
- May respond to Dangerous Goods / Hazardous Materials, Urban/Wild Fire incidents
- Provide direction and assistance in tactical evacuation of people
- May provide First Responder medical aid in cooperation with Ambulance and Health Clinic
- Provide fire suppression and fire control in an emergency
- May provide rescue service in cooperation with other departments and agencies
- May provide assistance in determining availability of water supplies

All of this is with the expectation that the BVFD Fire Halls will survive the emergency event. The Hall is powered by a 22kW generator that is large enough to provide basic assistance in a power outage event. BVFD has both fire department and amateur radio communications available as needed.

2.4 Levels of Service

Levels of Service (LOS) are defined using two terms, customer levels of service and technical levels of service.

Customer LOS: measure how the resident receives the service and measure of value provided.
Technical LOS: technical measures of performance relating to the resources of service activities to achieving the desired outcomes and demonstrate effective performance.

- Operations – ongoing activities, day-to-day operations
- Maintenance – activities enabling an asset to provide service for its planned life
- Renewal – activities that return the service capability to near original capacity
- Upgrade – activities that provide a higher LOS

For the purposes of this report, customer's LOS expectations are set upon the annual adoption of the financial plan and strategic priorities as it is a reflection of the values, policies, and priorities of the Board of Directors with input from committees and public engagement sessions. Because residents' expectation of a Fire Department is quite simple, for the purposes of this AMP, only Technical LOS have been included.

The current and expected Technical Levels of Service detailed in Table 2.1 shows the expected levels of service based on resource levels in the current financial plan. Organizational objective measures are measures of fact related to the service delivery outcome.

Table 2.1 - Technical Levels of Service

Service	Service Objective	Objective Measure	Current Performance	Desired Outcome
Operations **$102,650 2020 Budget**	Safe and reliable equipment and equipment training to facilitate prompt fire response times	Firefighters are trained to use and regularly exercise equipment during practice times to ensure proper function at fire scenes	Equipment is tested at weekly practices on a rotational basis. Most things are tested every 1-2 months No hose tester available	All equipment aside from hoses tested on a weekly basis by a Duty Crew Hose tester available for efficiency with annual tests
Maintenance **No specific maintenance budget**	Reliable, consistent fire services without interruption or delay of service	Regular maintenance and condition assessments	Fire apparatuses are inspected annually; pumps inspected every 2 years; air packs inspected every 2 years	Condition assessments built through FirePro2 using bar codes and iPads with synchronization to AM Program
Renewal **No renewal budget**	Fire Service assets meet needs to provide quality services to customers	Renewals are performed where required, without sacrifice to quality when upgrade is a more suitable option Equipment and apparatuses are safe and in good running order	Renewals and replacements are reactive Equipment is regularly tested to ensure good running order	Renewals are proactive rather than reactive Aging equipment is renewed before it fails
Upgrade/ New **$50,000 2020 Budget for Fire Boat Dock**	Fire apparatuses at the First response positions are budgeted for replacement prior to age 25 for reliable service delivery at both East and West Halls	Fire apparatuses are kept in compliance with the Fire Underwriters Survey guidelines	Not considering any extended exceptions from FUS the following replacements apply: First Line apparatus E1 is due for replacement in 2022 First Line apparatus W1 was due for replacement in 2005	All fire apparatus are budgeted and replaced within the timeline specified by the Fire Underwriters Survey (FUS)

It is important to monitor the service levels provided regularly as these will change as regulations and expectations change. The current performance is influenced by work efficiencies, technology, and FUS regulations that will change over time. Review and establishment of the agreed position that achieves the best balance between service, risk and cost is essential.

2.5 Required Replacements

The FUS provides guidelines for replacement schedules of fire apparatuses. Non-compliance to these regulations will result in receiving a less favourable Public Fire Protection Classification (PFPC). Currently, Bamfield is rated class 9 with some smaller areas rated a class 8 or 10. Areas with a class 10 rating lack any effective public fire protection and homes in these areas can expect home insurance premiums to cost 50-60% more per year than homes with a class 1 rating (typically high-density metropolitan areas). In addition, obtaining home insurance or mortgage approval for homes in these areas has been shown to be more difficult than areas with a class 9 rating or better. Figure 2.2 shows the PFPC classes throughout Bamfield.

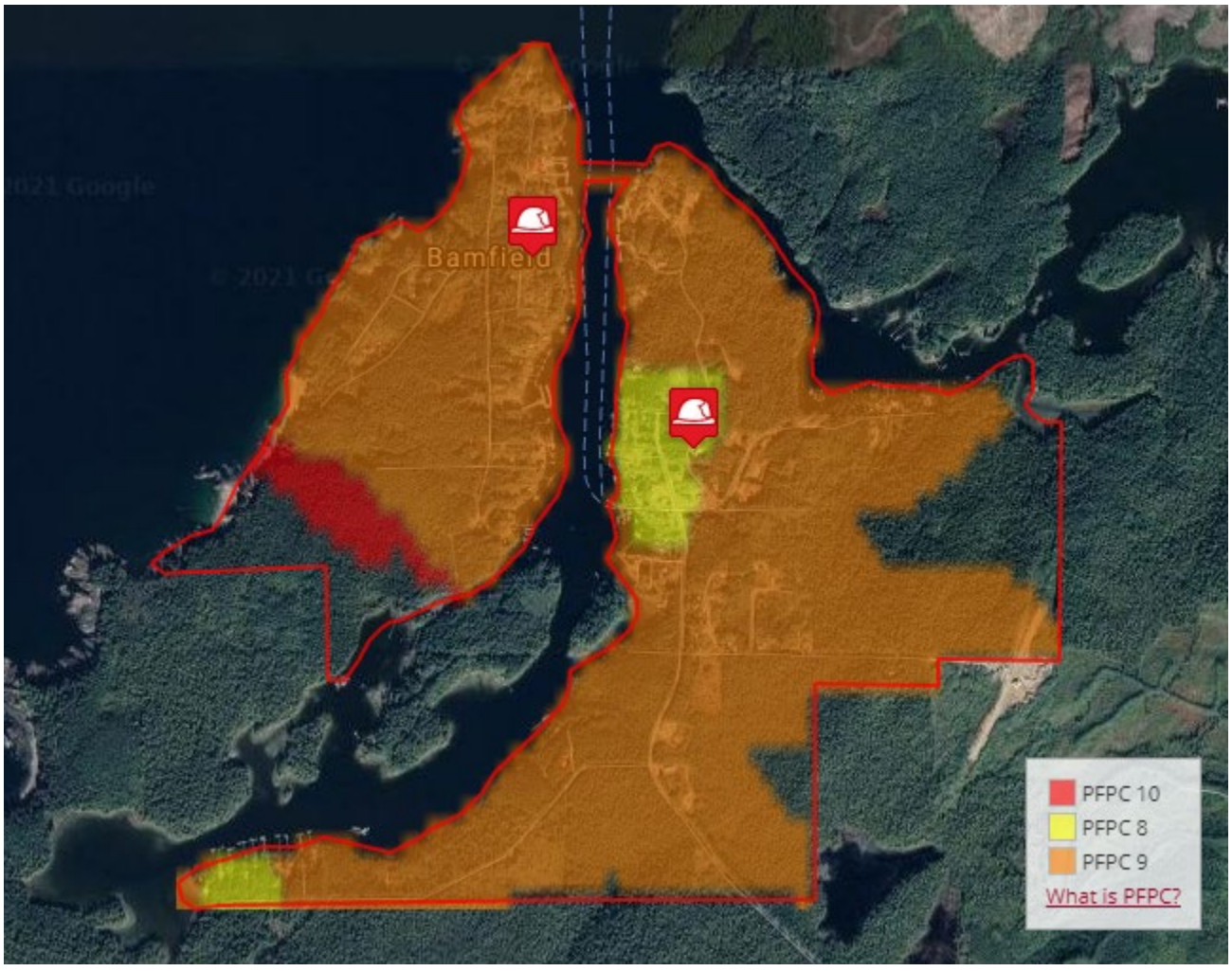


Table 2.3 shows the guidelines for First Line, Second Line, and Reserve. Based on population, Bamfield is designated as a small community and as such is required to adhere to these guidelines to retain recognition. One consequence in the loss of recognition would result in a large spike in residential fire insurance rates. During discussion with the Regional Director at the FUS, it was mentioned that many small communities are having financial difficulty maintaining these standards given the increasing cost

to build a fire apparatus (fire engine) and the current tax bases. While First and Second Line have a maximum age on the chart, apparatuses can be up to 25 years old in these positions. In addition, only one apparatus per department can be applied to have an age exception applied; only special circumstances will allow for two apparatuses being considered for exception. Age exception will allow an apparatus in a small community to reach a maximum age of 30. Leniency for these rules may change in the future but for the purposes of this AMP, a maximum apparatus age of 25 was applied in order to determine replacement dates and contribution levels.

Table 2.3 - Fire Underwriters Survey Fire Apparatus Age Guidelines

Apparatus Age	Major Cities [3]	Medium Sized Cities [4] or Communities Where Risk is Significant	Small Communities [5] and Rural Centres
0 – 15 Years	First Line	First Line	First Line
16 – 20 Years	Reserve	2nd Line	First Line
20 – 25 Years [1]	No Credit in Grading	No Credit in Grading *or* *Reserve* [2]	No Credit in Grading *or* *2nd Line* [2]
26 – 29 Years [1]	No Credit in Grading	No Credit in Grading *or* *Reserve* [2]	No Credit in Grading *or* *Reserve* [2]
30 Years +	No Credit in Grading	No Credit in Grading	No Credit in Grading

[1] *All listed fire apparatus 20 years of age and older are required to be service tested by recognized testing agency on an annual basis to be eligible for grading recognition. (NFPA 1071)*

[2] *Exceptions to age status may be considered in a small to medium sized communities and rural centres conditionally, when apparatus condition is acceptable and apparatus successfully passes required testing.*

[3] *Major Cities are defined as an incorporated or unincorporated community that has:*
- *a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND*
- *a total population of 100,000 or greater.*

[4] *Medium Communities are defined as an incorporated or unincorporated community that has:*
- *a populated area (or multiple areas) with a density of at least 200 people per square kilometre; AND/OR*
- *a total population of 1,000 or greater.*

[5] *Small Communities are defined as an incorporated or unincorporated community that has:*
- *no populated areas with densities that exceed 200 people per square kilometre; AND*
- *does not have a total population in excess of 1,000.*

As previously mentioned, the current First Line apparatuses, E1 and W1, are due or overdue for replacement in 2022 and 2005, respectively, based on age. Second Line apparatuses were not included in this AMP as they are not required to maintain fire grading in a small community. As previously stated, apparatuses can cost $400,000 or more for new builds. It is entirely possible, factoring in the expiry ages for the current fleet, to purchase a used apparatus with an age not exceeding 15 years. The market for used apparatus availability and pricing is challenging to forecast but there is always room for creativity to accommodate FUS guidelines and financial budgets. For the purposes of this AMP, future exceptions for age were not considered in determining replacement timelines. Depending on availability and market prices, it may be possible to purchase a used fire apparatus if funding levels are not sufficient for a new apparatus, provided the used apparatus has a sufficient number of years

left in service prior to reaching the maximum allowable age per FUS. In order to stay compliant, debt may need to be considered.

3 CURRENT STATE OF BVFD INFRASTRUCTURE

3.1 Inventory

Table 3.1 - Assets covered by this Plan

Asset Category	Quantity	2021 Replacement Value
West Side Hall	1	375,500
East Side Hall & Septic	1	1,882,300
Boathouse	1	50,800
Generator – 22kW	1	20,300
Diesel Fuel Tank	1	1,000
Fire Trucks/Rescue & EMRU Vehicles/Fire Boat	6	1,644,300
Concrete Apron/Fuel Pad	2	70,000
Signage	4	20,300
TOTAL		**$4,064,500**

Assets that are part of operations and expensed at the time of purchase are not included in Table 3.1. Small equipment such as desktop computers, pagers, turnout gear, SCBA tanks, ladders, hoses, fittings and hand-held tools were not included in the asset listing as they did not meet the ACRD's capitalization threshold.

3.2 Replacement Costs and Dates

Asset management changes the financial focus from historical cost and annual amortization included in the ACRD's financial statements to estimated replacement value, estimated service life, and annual capital investment required. Replacements dates were determined using industry standards and historical evidence. All assets included in AMPs are deemed to have a finite life based on this evidence. Actual replacement dates and costs may vary from estimates and exclude contributions from other Governments.

Nearly a fifth of the BVFD assets are due for replacement within 10 years based on expected service life alone. To maintain FUS grading for insurance, guidelines state that a new fire apparatus must be purchased, or exception must be given beyond the FUS recommended timelines. Considering the large capital cost of such a purchase, the current capital reserve balance and the financial ability of the tax base, it is recommended that BVFD consider acquiring debt to finance the next apparatus or adopt a more frequent schedule of purchasing used apparatuses not exceeding 15 years in age. Below are some possible scenarios for the Department in order to maintain the current FUS grading.

Figure 3.2 depicts the projected timing for capital renewal with the addition of $1 million in debt to finance the upcoming purchase of 2 new fire apparatuses prior to 2022. This will add an annual debt repayment cost of approximately $76,000 for a total annual required contribution of $372,000, including operations and maintenance costs, equating to a residential tax rate increase to $3.535.

Figure 3.2 – Projected Timing for Capital Renewal – With Debt

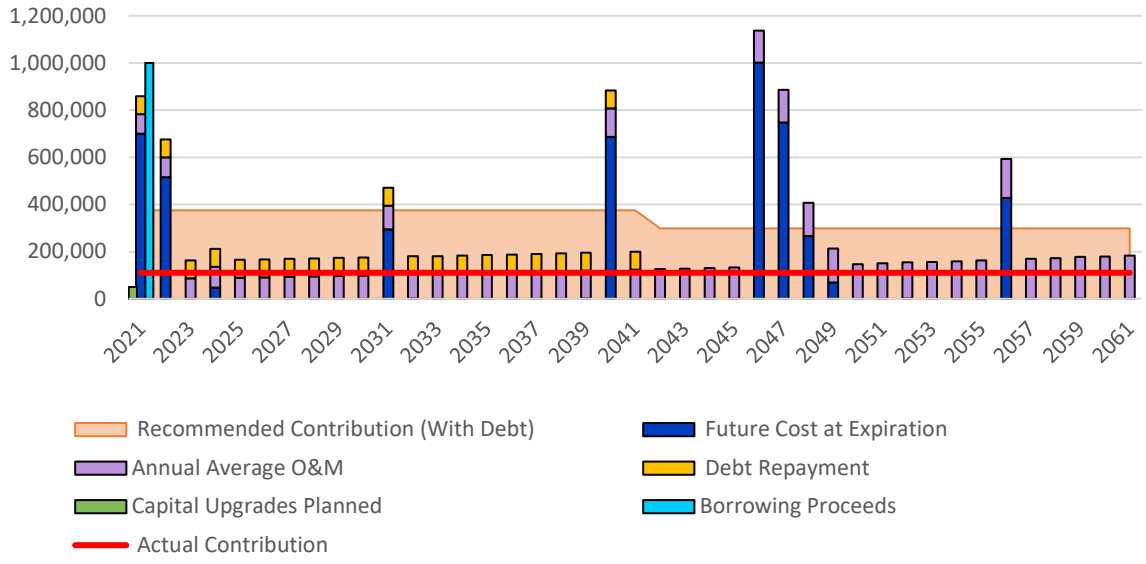


Figure 3.3 depicts the projected timing for capital renewal without the addition of debt and funding for capital replacements coming solely from the tax base. This will increase the required contribution to $1.37 million on average, or a residential tax rate of $13.082, for 2021 and 2022 until the new

apparatuses are in place; afterwards the average annual required contribution can decrease to approximately $185,200 or a residential tax rate of $1.761.

Figure 3.3 – Projected Timing for Capital Renewal – Without Debt

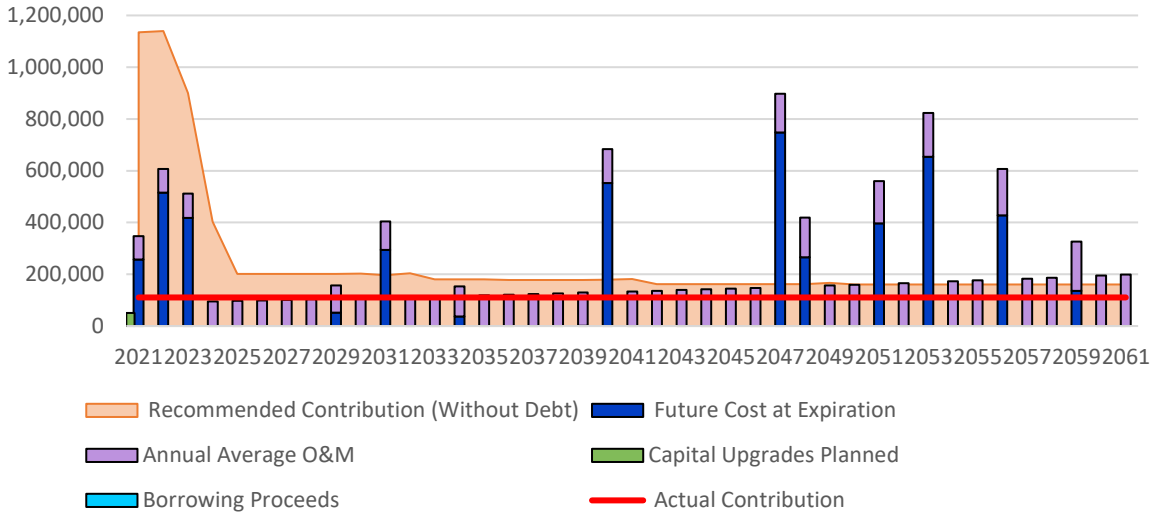
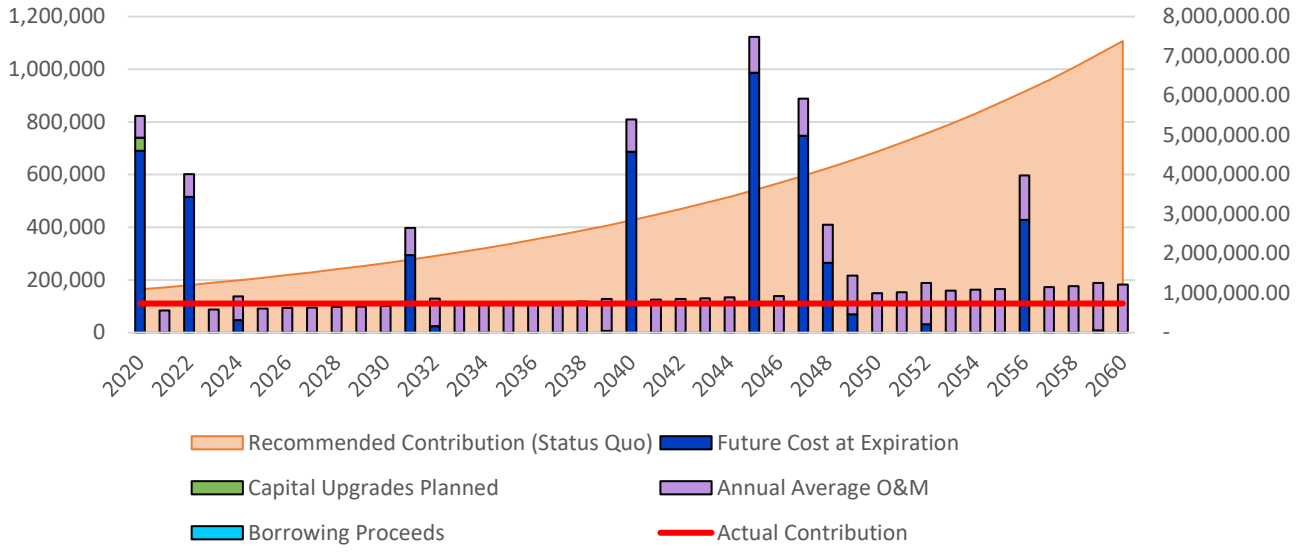


Figure 3.4 depicts the projected timing for capital renewal without any increase in debt or tax requisition. Without an increase in the annual contributions to the service, the funding gap will continue to grow at an increasing rate and financing the service will become more difficult.

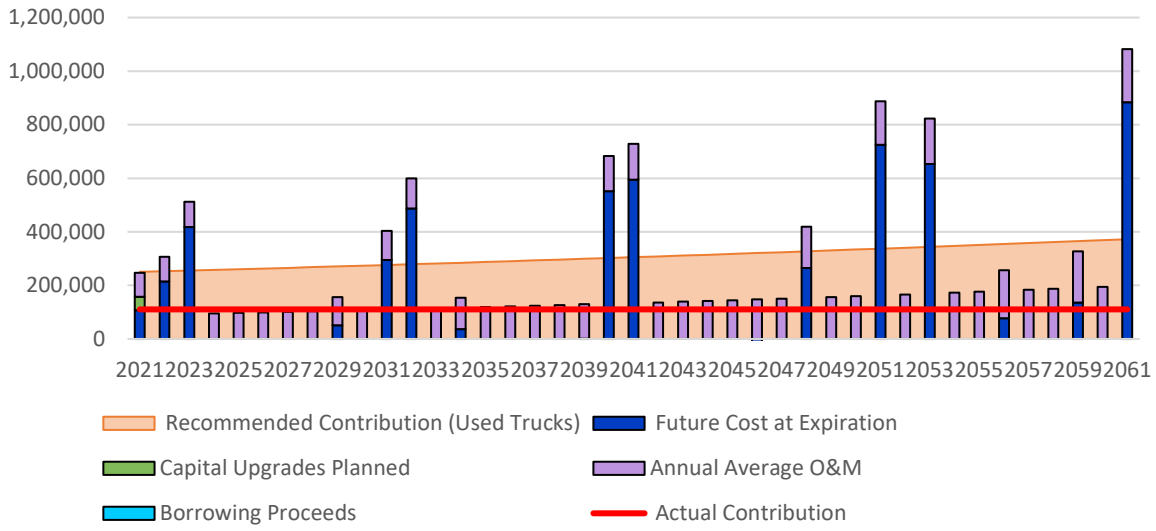
Figure 3.4 – Projected Timing for Capital Renewal – Status Quo



Finally, figure 3.5 depicts the estimated timing and cost for capital renewal while purchasing used fire apparatuses. It should be noted that purchasing used trucks will result in more frequent purchases to

accommodate the age guidelines set by FUS. For the purposes of this report, it is estimated that the used trucks purchased at no more than 15 years of age will need to be replaced every 10 years. This will require an annual contribution of approximately $250,000 or a residential tax rate of $2.377, not factoring in contributions from other Governments.

Figure 3.5 – Projected Timing for Capital Renewal – Used Purchase



Renewals required prior to 2022 will make up over an estimated $1.2 million in new component replacements costs alone, stressing the need for a capital renewal plan now to meet future financial gaps. These amounts are intended as a financial depiction of the state of the assets and funding gap at BVFD as it would be challenging for the taxpayers in Bamfield to support a large increase from the current residential tax rate of $1.028. Contribution rates are at the discretion of the Board and the recommended contribution rates will fluctuate as contributions and demands change. Recommended residential tax rates included in this plan also include the 5-year average operating and maintenance expenditures as the only revenue stream for BVFD is through tax requisition.

The East Hall was constructed recently in 2009 with an earthquake-resistant design. Both the East and West Halls are steel structures that may better withstand a seismic event and age slower than other construction materials. Buildings within the ACRD are given a 40-year amortization period; however, considering the structures and their use, for the purposes of this AMP, both Halls are given a total life expectancy of 65 years. It is entirely possible that future upgrades will extend the service life beyond this timeframe, but the buildings' integrity will be questionable at such time. Comparable seismic buildings of scale were used to determine the replacement cost of the building based on the current square footage, with required replacement projected to occur in 2040 and 2074 for the West and East Halls, respectively. Using an inflation rate of 1.5% and interest savings on reserve balances of 2%, it is estimated that the West Hall will cost $500,000 and the East Hall will cost $4.07 million at their expirations based on the current building size. It may be possible to construct smaller or hybrid buildings with another service in order to reduce the estimated cost of construction.

West Hall

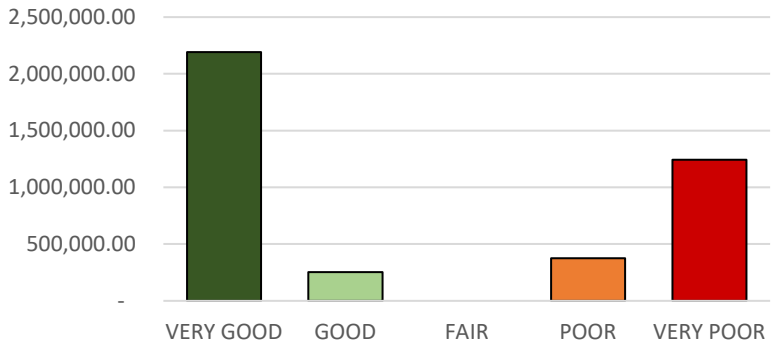
East Hall

3.3 Condition Assessments

Major pieces of equipment receive annual inspections while small pieces of equipment are tested during weekly practices. BVFD is transitioning to use FirePro to track assets with the assistance of the Regional Fire Services Manager. Currently there is no hose tester available for BVFD; access to a hose tester would increase efficiencies. Based on expected service lives, 40% of the BVFD assets assessed have a poor to very poor physical condition. Figure 3.3 shows the current cost to replace assets based on the percentage of estimated useful service life remaining.

Figure 3.3 – Current Replacement Cost by Percentage of ESL Remaining

ESL Remaining	Rating
81-100%	Very Good
61-80%	Good
41-60%	Fair
21-40%	Poor
0-20%	Very Poor

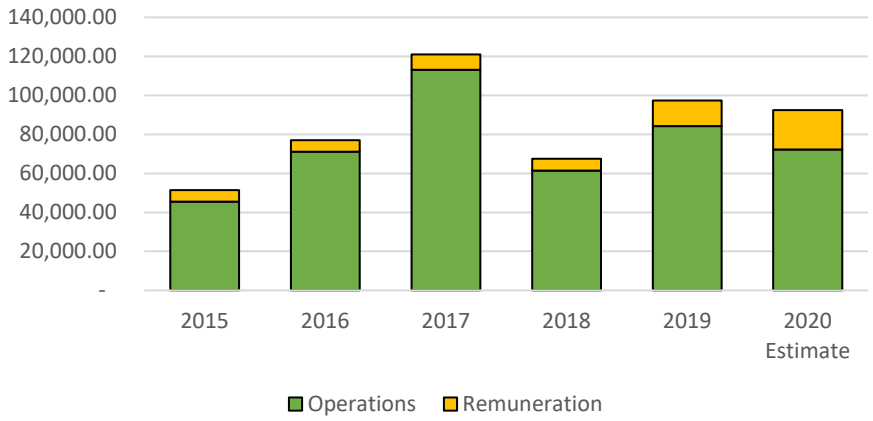


As this is the first AMP for the service of many, it is assumed that large assets, such as buildings, will be able to be broken down my major component, such as foundation, framing, roofing, etc. This will allow us to forecast more specific capital expenditures and more accurately calculate annual recommended contributions.

3.4 Current Operations and Maintenance Costs

A key function of Asset Management is to track maintenance costs separate from operations costs to identify areas that are requiring more repairs as an indication of failing infrastructure. Table 3.4 shows the trend in combined operations and maintenance costs since 2015.

Table 3.4 – Operations and Maintenance Cost Trends



Average operation and maintenance costs total $84,400 per year, including remuneration and firefighter expenses. Currently, there is no separation between operations and maintenance costs. This will be included as a part of the improvement plan to better identify areas that may be failing sooner than expected based on an increase in maintenance costs. Operations costs are associated with day-to-day expenses aimed at achieving levels of service goals while maintenance costs are associated with repairs and keeping equipment in good running order.

3.5 Future Demands

There are hydrants and standpipes near all residences that are serviced by BVFD except those along Grappler Inlet, these homes and structures are serviced with the Fire Boat. If future demand for fire services increases or the boundaries for BVFD expand into areas not currently covered under fire protection, a tender will be required to be certified to service these areas. Similar to Sproat Lake Volunteer Fire Department, tenders would fill up using an on-site hydrant and bring the water to the fire scene either as a designated Standard Tanker Shuttle Service or Superior Tanker Shuttle Service (STSS). Expansion of service boundaries would depend on several aspects; fire coverage for insurance purposes cannot be offered if certain grading factors aren't met through FUS such as tender capacity, flow rates and response times. These factors should be considered in detail if neighbouring communities were to reach out to BVFD for fire protection to determine if adequate value can be provided.

Most equipment is tested on a rotational basis, depending on availability, at each weekly practice. BVFD does not have access to a hose tester and given the size of the Department, there may not be a current need. Should the need arise, there is a hose tester that may become available for rent rather than purchasing new within the Alberni Valley.

3.6 Risk Management Plan

Risk management is a key objective set out in our Asset Management Policy. With acceptable Levels of Service in mind, we have adopted a risk management framework to assess and rank criticality of the ACRD's infrastructure assets. One of the outcomes of implementing risk management is the ability to prioritize required capital expenditures based on criticality for the BVFD.

The goal in adopting a framework is to have a consistent accurate understanding of the state of the BVFD's infrastructure. The framework includes a standardized grading system that is easily repeatable and enables comparison of the status of infrastructure condition over time and across municipalities for comparison. A risk matrix has been prepared and will be used for risk ratings throughout the ACRD. This matrix will also be used in conjunction with regular condition assessments to properly evaluate new and existing risks.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks. Critical risks are those assessed with 'Very High' or 'High' risk ratings identified in the assessment process and may or may not require immediate mitigation.

According to the BVFD Fire Chief, the following are credible risks that could create a "High" risk rating at this time:

1. Wildfire
2. Membership retention
3. Urban-interface fire
4. Natural disaster (seismic event, tsunami, etc)

The East Hall was designed to make the structure more resistant to seismic activity, ground motion or soil failure. While this does mitigate some risks in the event of an earthquake, it will not be known unless an event occurs as to the success of the upgrades. The Alberni-Clayoquot Regional District area is more likely to experience earthquakes than other regions due to the proximity to the Cascadia Subduction Zone and, therefore, all services within the ACRD are deemed to have some level of seismic risk.

4 ASSET MANAGEMENT IMPROVEMENT PLAN

4.1 Infrastructure Replacement Priority Ranking

Table 4.1 lists the components within the BVFD in order of their required estimated replacement. This information can be used to aid in creating a Long-Term Financial Plan (LTFP) for this class of assets.

When budgeting for future projects, it is recommended that a 30% general contingency and a 30% allowance for construction, engineering, financial, legal and admin costs be added to total project costs. It is important to note the volatile prices of fire apparatuses. Many factors can change the costs of materials required for projects and while the actual costs may differ, only the most current and available costs are used.

Table 4.1 – Infrastructure Replacement Priority Ranking

Asset	Current Replacement Cost Estimate	Risk
Replacement of First Line Apparatus – W1 (New Build)	253,800	High
Replacement of First Line Apparatus – E1 (New Build)	507,500	High
Replacement Cost – High Risk	**$ 761,300**	
West Hall Replacement	375,550	Moderate
Replacement Cost – Moderate Risk	**$ 375,550**	
Replacement of Second Line Apparatus	406,000	Low
Replacement Cost – Low Risk	**$ 406,000**	
Total	**$ 1,542,850**	

Not all assets at BVFD have been included in this listing. Only those assets that have exceeded approximately half of their expected service lives or assets with poor condition ratings have been included.

Table 4.1 is intended as a guide for replacements based on ages and known conditions. Circumstances, grant funding availability, taxpayer funding availability, governing bodies priorities, levels of service and changes in fire service boundaries will all have influences on priority replacement. This listing will be updated during each revision of the AMP.

4.2 Improvement Plan

The tasks identified in the Table 4.2 are required to achieve the BVFD asset management objectives, manage risks, and close the gap between current and targeted levels to achieve within the AMBC Road Map. The table also identifies the integration of these tasks into the organization as recommended by the AMBC Framework.

Table 4.2 – Improvement Plan

Task#	Task	Responsibility	Timeline
1	Fully implement FirePro	Regional Fire Services Manager, Fire Chief	Summer 2021
2	Aging equipment is identified and slated for replacement or renewal	Fire Chief	Summer 2021
3	Implement a Department-wide numerical condition grading system to be used for projecting replacements for non-regulated assets	Fire Chief, Asset Management Coordinator	Summer 2021
4	Regional asset identification system for specific assets to record expenses at the asset level, when appropriate	Asset Management Coordinator	Spring 2021
5	Update and monitor asset specific operations and maintenance costs	Fire Chief, ACRD Finance Department	Ongoing
6	Update inventory for additions, disposals and changes in useful life	Fire Chief, Asset Management Coordinator	Ongoing
7	Identification of funding for capital projects	Fire Chief, Regional Fire Services Coordinator, Asset Management Coordinator	Ongoing
8	Annually review Risk Framework for changes	Fire Chief, Asset Management Coordinator	Annually
9	Financial budgets for fire apparatus purchases align with Fire Underwriters Survey minimum guidelines	Fire Chief, ACRD Finance Department	2021/2022
10	Large assets, such as buildings, are broken into smaller components where value is provided to better determine replacement timelines and capital costs	Fire Chief, Asset Management Coordinator	Ongoing

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