



<b>DATE</b>	<b>MONDAY, MAY 13, 2024</b>
<b>SUBJECT</b>	<b>SERVICE DELIVERY REVIEW – FIRE SUPPRESSION</b>
<b>REPORT NO.</b>	<b>SDR-21</b>

**RECOMMENDATION**

- That Council of the Municipality of Greenstone approve the following:
1. THAT Staff be directed to prepare an amendment to by-law 22-08 Establish & Regulate the Greenstone Fire and Emergency Services for consideration at the June 17, 2024 meeting of Council to reflect that the wards of Geraldton and Longlac be classified as interior fire suppression level service areas with all others as exterior only fire suppression level service areas; and
  2. THAT the amendment include the removal of fire investigation services; and
  3. THAT the amendment include a revised organizational chart including aggregate staffing levels and the addition of 10 support roles which are in addition to the suppression compliment to reflect the recommendations; and
  4. THAT Staff be directed to prepare a report for the June 24, 2024 meeting of Council examining the adequacy of the hydrant and water distribution system in Caramat for fire protection purposes and it’s impact on community water quality; and
  5. THAT Staff be directed to prepare a report for the June 24<sup>th</sup> meeting of Council to identify options for fire suppression water storage and/or delivery in Caramat; and
  6. THAT Staff be directed to prepare a revised honorarium policy and by-law described as the “Suggested Point Values” and “Suggested Point Model” for consideration at the June 17, 2024 meeting of Council; and
  7. THAT Staff be directed to prepare a report for the July 8, 2024 meeting of Council identifying required updates to service agreements including the suggested standby charges based on the estimated carrying costs of the department, and realistically achievable service levels.

**SERVICE SUMMARY**

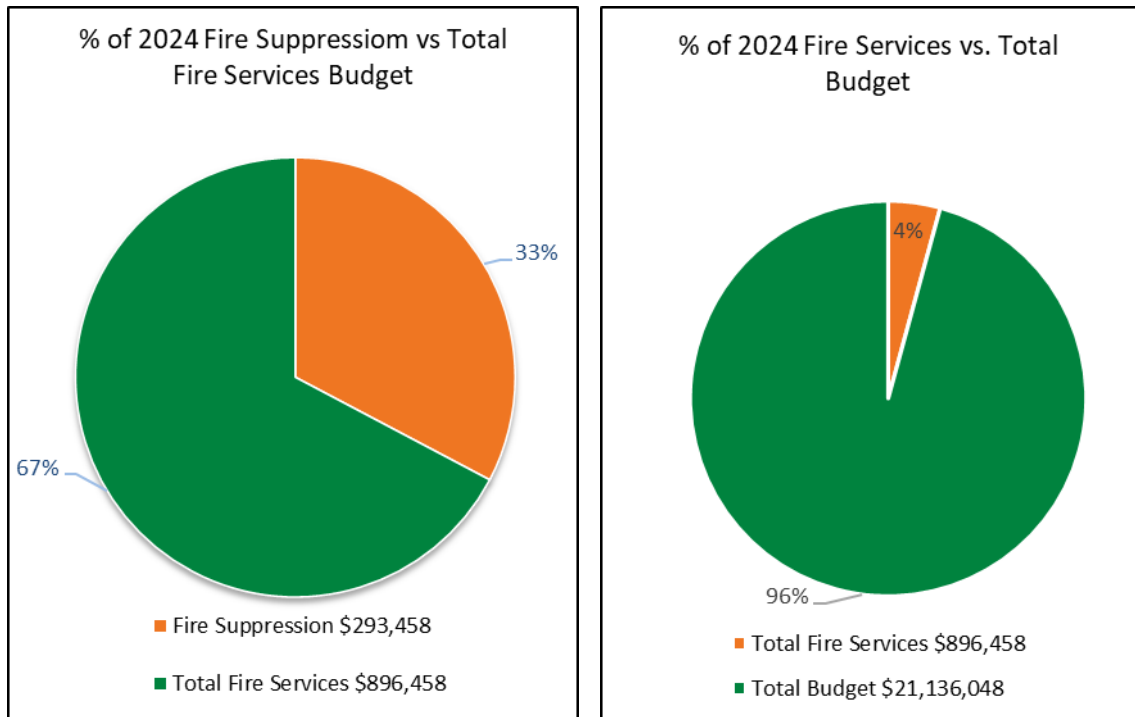
<b>SERVICE</b>		<b>FIRE SUPPRESSION</b>
<b>DEPARTMENT</b>	Fire and Emergency Services	
<b>SUMMARY</b>	The Municipality of Greenstone operates a Fire Department with specific identified emergency response types and suppression capabilities. This is presently accomplished utilizing a force of approximately 48 personnel operating out of four station locations.	

	The Municipality determines the level of services the fire department provides based on it's local needs and circumstances.
<b>LEGISLATION</b>	<ul style="list-style-type: none"> <li>▪ Fire Protection and Prevention Act, 1997, S.O. 1997, c. 4</li> <li>▪ Occupational Health and Safety Act, R.S.O. 1990, c. O.1</li> <li>▪ Ontario Fire Service Health and Safety Advisory Committee (s.21 Occupational Health and Safety Act) Guidance Notes</li> <li>▪ Building Code Act, 1992, S.O. 1992, c. 23</li> <li>▪ Forest Fires Prevention Act, R.S.O. 1990, c. F.24</li> </ul>
<b>BY-LAWS</b>	<ul style="list-style-type: none"> <li>▪ By-law 22-08 Establish &amp; Regulate the Greenstone Fire and Emergency Services</li> <li>▪ By-law 04-32 Long Lake No.58 First Nation Fire Protection Agreement</li> <li>▪ By-law 05-45 Ginoogaming First Nation Fire Protection Agreement</li> <li>▪ By-law 18-21 Sand Point First Nation Fire Protection Agreement</li> <li>▪ By-law 15-13 Municipal Forest Fire Management Agreement</li> <li>▪ By-law 24-23 Fire Protection Services Reimbursement (OFM)</li> <li>▪ By-law 14-218 Honorarium Policy 011</li> </ul>
<b>OTHER AGREEMENTS AND USERS</b>	<ul style="list-style-type: none"> <li>▪ Ministry of Transportation (Highway Incidents)</li> <li>▪ Mutual Aid - Thunder Bay District (Other Area Fire Departments)</li> <li>▪ Fire Marque Program</li> </ul>
<b>GUIDELINES AND BEST PRACTICES</b>	<ul style="list-style-type: none"> <li>▪ Fire Underwriter's Survey Fire Protection Risk Assessment</li> <li>▪ Fire Underwriter's Survey Water Supply for Public Fire Protection A Guide to Recommended Practice in Canada 2020</li> <li>▪ Ontario Fire Marshal Technical Guideline OFM-TG-03-1999 Fire Protection Water Supply Guideline for Part 3 in the Ontario Building Code</li> <li>▪ Fire Underwriter's Survey Fire Protection Risk Assessment</li> <li>▪ Fire Underwriter's Survey Water Supply for Public Fire Protection A Guide to Recommended Practice in Canada 2020</li> <li>▪ Ontario Fire Marshal Technical Guideline OFM-TG-03-1999 Fire Protection Water Supply Guideline for Part 3 in the Ontario Building Code</li> <li>▪ NFPA 1001 Standard for Fire Fighter Professional Qualifications</li> <li>▪ NFPA 1002 Standard for Fire Apparatus Driver/Operator</li> </ul>

	<p>Professional Qualifications</p> <ul style="list-style-type: none"> <li>▪ NFPA 1006 Standard for Technical Rescue Personnel Professional Qualifications</li> <li>▪ NFPA 1021 Standard for Fire Officer Professional Qualifications</li> <li>▪ NFPA 1031 Standard for Professional Qualifications for Fire Inspectors and Plan Examiners</li> <li>▪ NFPA 1033 Standard for Professional Qualifications for Fire Investigators</li> <li>▪ NFPA 1035 Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist and Youth Firesetter Program Manager Professional Qualifications</li> <li>▪ NFPA 1041 Standard for Fire and Emergency Services Instructor Professional Qualifications</li> <li>▪ NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications</li> <li>▪ NFPA 1225 Standard for Emergency Services Communications</li> <li>▪ NFPA 1500 Standard on Fire Department Occupational Safety, Health, and Wellness Program</li> <li>▪ NFPA 1521 Standard for Fire Department Safety Officer Professional Qualifications</li> <li>▪ NFPA 1720 Standards for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments</li> </ul>						
<b>FEES/CHARGES</b>	<p>By-law 23-15 establishes user fees for responses to certain incident types where apparatus would be used. The Municipality also services many additional agencies and communities under agreements with a similar fee structure. It is important to note that fees are directly correlated to number of responses in any year and response types.</p> <p>Historical Fees Collected for Responses Only</p> <table data-bbox="505 1507 1312 1633"> <tr> <td>2020: \$80,275.09</td> <td>2023: \$114,196.60</td> </tr> <tr> <td>2021: \$104,666.06</td> <td>2024: \$92,925.00</td> </tr> <tr> <td>2022: \$203,274.01</td> <td>(from budget estimate)*</td> </tr> </table> <p>*2024 Revenues are currently at \$67,057.01. This continued trending would substantially increase the estimated revenues for this year.</p> <p>On average these fees represent a recovery of 14.5% of total operating costs of the department from outside sources.</p>	2020: \$80,275.09	2023: \$114,196.60	2021: \$104,666.06	2024: \$92,925.00	2022: \$203,274.01	(from budget estimate)*
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## 2024 BUDGET SUMMARY

<b>2024 Expenditures:</b>	\$380,183
<b>2024 Revenues:</b>	-\$86,725
<b>Net Budget:</b>	\$293,458



## STAFFING

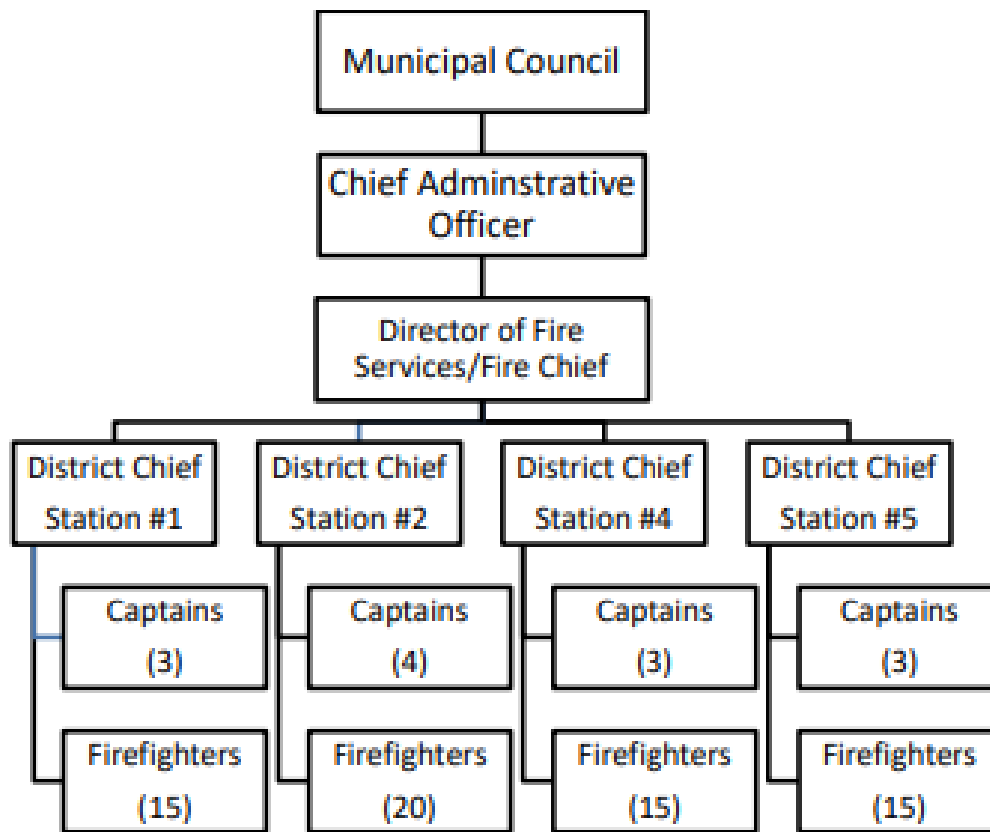
The current staffing model identified in by-law 22-08 Establish and Regulate a Fire Department allows for a complement of the Director of Fire Services/Fire Chief and 82 suppression personnel (District Chiefs 4, Captains 13, Firefighters 65). The current suppression staffing level is 48 (District Chiefs 4, Captains 9, Firefighters 35) excluding long term leaves.

The Director of Fire Services/Fire Chief is the only full-time employee in the Fire Services section. The suppression personnel are classified as volunteers per the definition in the Fire Protection and Prevention Act.

The fire station locations are:

- Station 1 - Beardmore
- Station 2 - Geraldton
- Station 4 - Nakina
- Station 5 - Longlac

## ORGANIZATIONAL CHART



## SERVICE BACKGROUND

The Fire Protection and Prevention Act provides that:

Municipal responsibilities

2 (1) Every municipality shall,

- (a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and
- (b) provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.

Council determines this level of service through the establishing and regulating by-law, for Greenstone it is By-law 22-08 Establish & Regulate the Greenstone Fire and Emergency Services. This SDR examines the provision of fire protection services. Public education and fire prevention are a separate SDR to be delivered later this year.

The current levels of service for the scope of this SDR include the following by service area:

**Station 1 Beardmore and Station 4 Nakina**

- Exterior Structural Firefighting
- Vehicle Fire
- Wildland Fire
- Hazardous Materials – Awareness Level
- Motor Vehicle Collisions Including Extrication
- Other Agencies Call For Assistance
- Water/Ice Rescue Shore Based
- Smoke/CO Alarm Activation

**Station 2 Geraldton and Station 5 Longlac**

- Interior Structural Firefighting
- Vehicle Fire
- Wildland Fire
- Hazardous Materials – Awareness Level
- Motor Vehicle Collisions Including Extrication
- Other Agencies Call For Assistance
- Water/Ice Rescue Shore Based
- Smoke/CO Alarm Activation

**General**

- Fire Investigations

The Fire Master Plan identified areas needing improvement within the department, namely:

- 1) Firefighter Turnout
- 2) Station Staffing
- 3) Certification
- 4) Training Attendance

Related to fire suppression service levels, the FMP suggests changing the level of service to exterior suppression only.

Ontario regulation 343/22 Firefighter Certification identifies what training and certification is required of firefighters who are performing the different levels of service.

The top risks identified in the Community Risk Assessment in order are:

- 1) Fire in Residential Occupancy
- 2) Road/Highway Emergency
- 3) Fire/Explosion in Assembly Occupancy
- 4) Fire/Explosion in Mill
- 5) Rail Line Fire/Explosion/Derailment
- 6) Fire in Downtown Core
- 7) Fire in Seasonal Lodging
- 8) Weather Event

These risks predominantly represent property fires and transportation network incidents and should be the focus on prevention efforts and emergency response capabilities.

## KEY PERFORMANCE INDICATORS

KPIs as they relate to fire suppression include benchmarks regarding the ability of the fire service to effectively provide the service under optimal and regular circumstances.

- 1) Station Staffing – Having the appropriate level of staffing to provide the service, or support other stations to provide the service. Fire Underwriter’s Survey identifies 15 personnel as the minimum level of a volunteer station for property insurance consideration purposes. There were no other guidelines located in relation to specific station staffing.
- 2) Turnout – Having the appropriate number of personnel respond on the first alarm to begin effectively mitigating an incident. The number for this benchmark varies by organization. NFPA 1500 & 1720 guidelines call for 4 personnel prior to attempting entry into a structure. NFPA 1720 also suggests that for our communities which would fall into a “rural area” rating, there should be 6 personnel responding to an emergency within 14 minutes of notification 80% of the time. FUS requires a response of 1 full-time firefighter for composite rating, and 3 full-time firefighters for full protection rating. The Fire Marshal’s Effective Fireground Staffing Model calls for 13 personnel required to mitigate a “routine” incident such as a fire in a single-family dwelling.
- 3) Chute Times – Amount of time from notification of personnel to first apparatus responding. Other travel factors such as distance, traffic, and weather are variables that the fire department cannot control. The only fair measure of effective initial response is chute times. Again, NFPA 1720 stipulates that 6

personnel should be responding to an emergency within 14 minutes of notification 80% of the time.

- 4) Call Handling Times – Amount of time from when an emergency call is answered by dispatch to when the call is ended, and crews are notified. This can also be the amount of time from when crews request help to when additional units are dispatched. Benchmarks are stipulated in NFPA 1225 Standard for Emergency Services Communications.
- 5) Certification – Measuring the degree of certification or legacy status compliance against the level of service being provided.
- 6) Training Attendance – The degree of participation in training programs, both regular and certification oriented training. This metric is subjective and should be measured against a reasonable expectation and progress in achieving certification requirements.

## ASSET USE

The 2023 Fire Master Plan highlighted more than \$8.1 million in replacement value fleet apparatus. The Asset Management Plan includes more than \$1.9 million in Fire & Rescue Equipment. These assets are directly used for fire suppression activities.

## ANALYSIS

Determination of service levels must consider the local needs, likelihood of an incident, risks, and available resources to perform the service. It is important to remember that any fire protection services beyond prevention and enforcement programming are discretionary services, subject to the local needs and circumstances.

### **Understanding How the E&R By-law and Incident Command Relates**

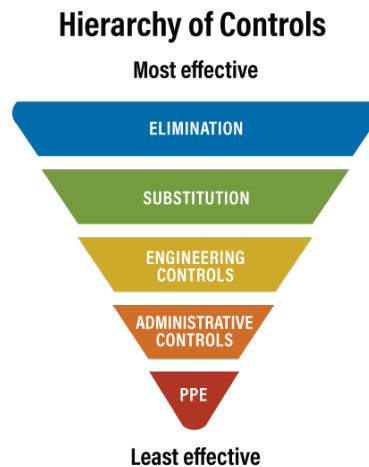
The establishing and regulating by-law from an operational perspective is interpreted as a maximum level of service subject to the unique circumstances of that emergency, not a minimum and does not establish a requirement to achieve that level on all calls. However, the level of service must reflect what the department can reasonably and consistently achieve to properly communicate service expectations to the public. It is important to consider that there are many variables which determine the actions, plans, and outcomes of an incident which are operational or command level decisions at an emergency scene. The Incident Commander through knowledge, experience and training takes many factors into consideration to determine priorities and actions which will have the greatest positive effect with the least amount of unreasonable risk. Depending on the emergency, some of these factors could be the type of building, likelihood of entrapment, location of fire, available water, available apparatus types, available personnel, weather, surrounding buildings, building contents, how developed the fire is,



and many more.

The fire service teaches that incidents should always be mitigated with the priorities of life safety, scene stabilization, and property conservation in that order. Life safety means to protect life which is a high-risk taking priority. Scene stabilization means to prevent the situation from getting worse which is a medium to low risk-taking priority. The last priority is to conserve property, which is a low or no risk-taking priority.

To designate a task high, medium, or low risk does not imply that safety is not a priority. Risk implies a need for controls to ensure safety in performing the task. The higher the risk, the more stringent the controls that are required to maintain safety. At no time should a firefighter engage in or be encouraged to perform an activity in which the risks are not properly controlled.



Changing just one of these factors could completely alter how an incident is dealt with and often the fire department does not have control over these factors. In an example of a structure fire, whether the structure is occupied or not, how long it was burning before being called in, weather, access to the property, and remote locations/travel time cannot be influenced by any fire department response metric.

The by-law cannot reasonably consider all the variables and situations, which is why it sets boundaries on what services may be performed. The Incident Commander then uses their discretion to provide the services up to this level.

### **Understanding the Measures**

There are two main benchmarks to consider, initial response and sustained operations. Initial response means the equipment and staffing of the first arriving apparatus and their capabilities. Sustained operations means what resources are required throughout the entirety of the incident to mitigate it.

## Structural Firefighting

Structural firefighting involves fire suppression for buildings of all classifications. It is important to remember that the level of service also dictates whether rescue operations are performed. There are two options for levels of service being interior or exterior only.

Interior suppression involves making entry into a building, conducting fire suppression and rescue. Exterior only involves not making entry into a burning building, but rather fighting the fire from the outside only.

Minimum Staffing recommendations found in guidelines:

### Exterior Firefighting Only

- No suggested minimum
- Fire Underwriter's Survey
  - Requires 15 people assigned to a volunteer station for insurance grading consideration on residential and commercial property lines
  - Often allows for next nearest or "hub" supporting station to count towards rating

### Interior Firefighting and Rescue

- NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations...by Volunteer Fire Departments
  - 4 Firefighters for entry
  - Reference 4.6.1
- NFPA 1500 Fire Department Occupational Safety, Health, and Wellness Program
  - 4 Firefighters for entry
  - Reference 8.8.2
- Generally accepted practice
  - 1 Incident Commander, 1 Pump Operator, 2 Attack/Search Firefighters, 2 Rapid Intervention Team Firefighters (rescue team)
  - Total of 6 personnel on scene to begin interior operations
- OFM Effective Fireground Staffing Model
  - Calls for 13 personnel for the totality of the incident (not necessarily the nearest station)
- Fire Underwriter's Survey
  - Requires 15 people assigned to a volunteer station for insurance grading consideration on residential and commercial property lines
  - Often allows for next nearest or "hub" supporting station to count for rating

Training requirements:

Exterior

- Portions of NFPA 1001
- 49 Specific Job Performance Requirements
- Achieves a letter of compliance, not certification
- New members can work under supervision for 36 months before achieving compliance

Interior

- Full NFPA 1001
- 69 Specific Job Performance Requirements
- Achieves certification
- Members must be certified before attending calls

How does each station compare? (excludes long-term leaves, statistics from FMP)

Interior Level	Beardmore	Geraldton	Nakina	Longlac	Total
Staffing (Apr 2024)	5	22	10	11	48
Initial Turnout	3	7	4	6	20
NFPA 1720 Interior	No	Yes	Yes	Yes	
NFPA 1720 6 in 14*	No	Yes	No	Yes	
NFPA 1500	No	Yes	Yes	Yes	
FUS	No	Yes	No	No	
Policy of 6 Requirement	No	Yes	No	Yes	

\*NFPA 1720 6 in 14 is shown as a single station response. However, current practice is to send the two nearest stations to most fires which would meet this standard in all areas. The same can be applied to the Policy of 6 for interior entry.

Operational Considerations:

- Combinations of stations initial and eventual turnout can achieve effective fireground staffing numbers, though requiring more stations to be paged.
- The issue of interior entry requirements as a departmental policy was discussed as an officer group, with a minimum staffing of 6 determined to be adequate to consider beginning interior operations.
- The level of training in Beardmore and Nakina presently would need to be to the same level as Geraldton and Longlac as they back up these areas.
- The by-law currently limits the crews based on what station they are from, rather than applying a service level to a geographic area where under ideal conditions they can reasonably be performed. In instances where an exterior station is

backing up an interior one, this may result in an administrative barrier.

- For comparison, under these guidelines a full-time (career) apparatus only requires a staffing of 3 firefighters though often staffed with 4, and a Composite apparatus only requires staffing of 1 firefighter supplemented by volunteers. The difference between full-time and volunteer responses can be summarized as guaranteed response and reduced chute times. Even with full-time coverage, a single apparatus is not likely able to perform interior operations independently.

#### Other Considerations:

- Liability and exposure to risk exist with either service level option. Exposure exists if the department is allowed to provide the service but didn't, also if it was not allowed to but could have.
- Public expectations are that in more populous areas the fire department provides interior services to the best of its ability.
- A reduction in level of service may negatively impact member morale and recruitment efforts because of the perceived lessening of training, standards, and capabilities.
- Operating at an emergency poses inherent risks to firefighter safety. However, standard operating procedures and policies are typically utilized to specify what actions may be considered under what conditions to keep firefighters safe.
- A mental health and ethical dilemma scenario may result where there is a possibility of a safe and effective rescue, but the responders are restrained administratively from attempting it.

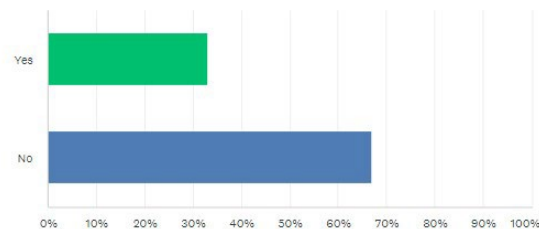
In the recent SDR survey, 66.9% of respondents did not support changing the level of service.

Q12

Customize Save as

A Fire Master Plan was presented to Council in the spring of 2023. The plan identified opportunities for improving training, certification, attendance, and emergency turnout. Citing this, the plan recommends suspending interior fire suppression and rescue services until such a time as these factors can be improved. Do you support this recommendation?

Answered: 145 Skipped: 29



ANSWER CHOICES	RESPONSES	
Yes	33.10%	48
No	66.90%	97
TOTAL		145

Volunteer based departments are all having challenges with the same identified opportunities for improvement as Greenstone. The service is making great efforts to stabilize and improve these metrics and beat this trend. Turnout and attendance have many factors that play into availability such as work schedule and time of day. Training towards certification is being implemented to allow for flexibility to members while ensuring the service meets the compliance date. Recruit requirements and intakes have been reviewed and updated to better match local realities, remove administrative barriers, and streamline the process as much as possible while maintaining integrity of the system.

Historically, each station operated in a bit of an isolated manner where calling for help was considered outside aid. The cultural mindset is being shifted to a “one-service” view where although our communities have their unique needs and attributes, the fire service operates as one unit. These past practices have led to delayed chute times, delayed dispatching practices, and delayed assistance requests which factor into the ability to mitigate an incident tremendously. Many areas of our Municipality also lack cellular and radio communications. Though the satellite trial is set to launch soon, this presents an issue with requesting help. To address these challenges, the dispatching procedures are being updated to ensure that the anticipated number of required apparatus and personnel are sent on the first alarm. If not required or the call is determined to be false, then units can be cancelled. Based on current trends, this will have minimal effect on budgeting and labour hours as these resources were typically called upon anyways. How this will help is to reduce first apparatus chute times, and guarantee back-up for call types where it is likely needed. It is anticipated that these updates will help reduce the chute time of back-up units by at least 15 minutes. Dispatch recommendations are attached for reference.

Of importance when considering the likelihood or amount of time firefighters have to effectively conduct interior operations, the building stock also needs to be examined.

In firefighting operations, buildings are classified into 5 main types:

- Type 1 Fire Resistive – Ex. Hospitals, Schools, Apartment Buildings
- Type 2 Non-Combustible – Ex. Steel buildings
- Type 3 Ordinary – Brick exterior with wood interior such as older small rise apartment buildings.
- Type 4 Heavy Timber – Ex. Churches, Wood Arenas
- Type 5 Stick Frame – Ex. Most Homes

Predominantly, the communities consist of Type 3 Ordinary and Type 5 Stick Frame construction for residential occupancies. Though the building stock is dated, the traditional building methods used in older homes fare better under fire conditions.

Factors include the use of dimensional lumber, solid beams, hardwood flooring, and minimal or no use of chemical adhesives. These traditional methods result in slower fire growth, less toxic smoke being produced, less structural damage when fought, and increased occupant survivability.

Commercial, industrial, institutional, and larger apartment buildings are generally classified as either Type 1 Fire Resistive or Type 2 Non-Combustible. These buildings are inherently designed with materials that do not burn or have a fire resistance rating (how long they can hold when exposed to fire before failing). The design typically compartmentalizes the building, with many also being equipped with fire alarms and sprinkler systems. Many of these occupancies also require regular inspections for compliance in general, for protective systems, and include fire response planning. Any level of service also affects these buildings which includes facilities such as hospitals, schools, and apartment buildings.

A recent example of these considerations is a structure fire in an interior service level area, it was known that there were no people in the structure. Without a life safety factor, focus was moved to containment. The fire was successfully contained using aggressive exterior tactics from 3 responding stations. Once the fire was under control, crews made entry into the structure to check for fire extension (walls, floor) and perform property conservation. The factors unique to this incident allowed our crews to make safe entry into the home approximately 40 minutes into the call. Though damage to the home was extensive, this allowed our crews to properly inspect, ventilate, and check for hidden fires inside of the home without causing unnecessary damage, and preserve property where possible. This is an example of where the level of service was achieved successfully under the unique circumstances. If there was a need to perform rescue, the proper tools and personnel were on scene or responding, and in this instance would have been possible.

One area that needs to be examined is if there will continue to be a mixed level of service throughout the Municipality, how the levels of service are being determined, and consider moving to an area based rather than station-based model. For example, Caramat is within Longlac's response area and therefore an interior service level (approximately 45km away). Jellicoe is within Beardmore's response area and is exterior only (36km away from Beardmore, 49km from Geraldton). The current model creates inconsistencies in levels of service within Greenstone and in services provided to neighbouring Indigenous Nations where the level is tied to the responding units.

The FMP suggests moving to exterior only service to mitigate issues that are actively being actioned. As training attendance is steadily at/over 50%, turnout is consistent, the service is actively working towards certification, compliant to minimum guidelines, and with departmental safety guidelines being met, the trends that resulted in this recommendation appear to be reversing. There does not appear to be an imminent need to reduce the level of service in Geraldton and Longlac. However, the ability of stations to effectively provide interior suppression and rescue in their extended response areas needs to be reconsidered. By applying a geographic based approach, the areas where interior suppression and rescue can be safely and consistently achieved are identifiable.

### **Options:**

1. Reduce the level of service of Geraldton and Longlac to exterior only fire suppression services, with the effect that the entire service becomes exterior only.
2. Increase the level of service so all stations/areas can perform interior suppression and rescue as situationally appropriate.
3. Implement an area-based service level model whereby the wards of Geraldton and Longlac are classified as interior service level, with all other areas classified as exterior only. **RECOMMENDED**

### **Non-Structure Fires**

Non-structure fires involve property where no building is involved. This includes vehicles, outdoor features, storage contents, etc. Presently all stations are trained and equipped to action non-structure fires. The E&R By-law permits all stations to perform this service.

### **Options:**

1. Reduce the level of service to exclude non-structure property fires.
2. Continue to provide service for non-structure property fires. **RECOMMENDED**

### **Wildland Fires**

All stations presently provide wildland fire suppression within the boundaries established in the Forest Fire Management Agreement. Effectively, the areas of Municipal responsibility are populated areas within the communities. The department's scope with regards to forest firefighting is narrow in that no specialized tools and equipment is carried to perform this service. Rather, the resources normally carried on a structural firefighting apparatus are used. In support of the MNRF, apparatus, portable tanks, and pumps are used to assist in areas outside of Municipal responsibility.

From a service level perspective, the current agreement is reflective of the department's realistic capabilities and deployment. A forest fire has the potential to require multiple apparatus, personnel and specialized equipment for prolonged durations. The need could quickly exceed the department's capabilities. Though the department has invested in personal protective equipment better suited to calls without a structural component, it does not presently have the capabilities to independently and reliably action a sizeable or remotely located fire.

The department is still responsible to conduct training of firefighters and public education in forest fire prevention and to ensure our agencies can work cooperatively and support each other.

The Municipal Protection Area consists of populated areas of the Municipality with water sources available. These areas are also generally less dense and present with a reduced fire load. With the risk factors and potential losses, the current agreement appears to balance the needs and resources of both the fire department and MNRF. The Municipality pays a Comprehensive Coverage Charge calculated annually as a rate per

hectare for MNRF fire protection services. Where a fire is the responsibility of one party and actioned or assisted by the other, a calculation is done to determine cost recovery.

**Options:**

1. Reduce the level of service to exclude wildland fires.
2. Continue to provide service for wildland fires per the Municipal Forest Fire Management Agreement. **RECOMMENDED**

**Hazardous Materials Response**

All stations presently perform “awareness” level of hazardous materials response. This level of response involves recognizing a hazardous materials incident, implementing an evacuation or isolation zone, and escalating to an agency able to mitigate the emergency.

Other levels of service options are Operations, Mission-Specific, and Technician. Operations level deals with indirect interaction with substances and product control (containment). Mission-specific and technician levels deal with direct interaction such as plugging holes, controlling valves, etc.

NFPA 1001 firefighter certification has a co-requisite of NFPA 1072 Hazardous Materials Operations requirement. Meaning, all firefighters seeking certification are required to be certified for Operations level. Legacy status (“grandfathering”) for Firefighter Level 2 encompasses this requirement.

Though all firefighters will be trained to the Operations level by the certification compliance date, it is important to note that the regulations make a distinction between what is called “Full-Service” fire departments and what is not. Full-service means interior firefighting, hazardous materials operations, and automobile extrication. Full-service departments cannot accept legacy status (“grandfathering”) as a means of compliance. What this means is that the key differentiator in meeting the certification requirements is that the level of service in one of these areas needs to be the lower option. If awareness level is maintained, then legacy status can be accepted in Greenstone while maintaining interior suppression services. If the service level is increased, then only full certification can be accepted. Presently, 20 firefighters hold legacy status out of 48 active. An additional 6 are certified to this standard. It is a hope that in the future all firefighters will become certified and an increase to the level of service can be explored. However, at this time compliance is heavily dependent on the department’s ability to accept legacy status.

In the case of a hazardous materials incident, after the initial assessment and isolation, the Ontario Mutual Aid Plan would be activated and proper resources from the nearest department capable of that service would be sent. In our case, this would likely be Thunder Bay.



### **Options:**

1. Reduce the level of service to exclude hazardous materials response.
2. Increase level of service to hazardous materials operations.
3. Increase the level of service to hazardous materials technician.
4. Continue to provide hazardous materials awareness response. **RECOMMENDED**

### **Motor Vehicle Collisions/Extrication**

All stations currently provide response to motor vehicle collisions and extrication services. The fire department covers over 350km of high-speed highway, plus Municipal and side roads. These calls represent a sizeable portion of the department's call volume as a single call type. These calls when actioned on a highway or outside of Municipal limits also result in a billable service helping to offset operational costs.

Currently, basic automobile extrication training is included in Firefighter Level 2 training and certification. There are NFPA 1006 Technical Rescue levels of operations and technician which deal with increasingly more complex situations. There is a separate compliance date of July 1, 2028 for technical rescue disciplines. Operations level deals with a vehicle on its wheels on a stable surface, whereas technician level deals with a vehicle on its roof or side.

The ability to perform motor vehicle collision and extrication response given our geographic spread, the use of roadways by residents, travellers, and transports with limited available allied resources in the area presents a need to perform these services. The current service provided when compared to the certification standard would be at the technician level. The department plans to offer opportunities to members to achieve this certification by the compliance date of July 1, 2028. If there are an insufficient number of members able to provide this level of service at that time, the level of service will need to be reviewed or specialized units assigned to this task.

### **Options:**

1. Reduce the level of service to exclude motor vehicle collision and extrication response.
2. Continue to provide motor vehicle collision and extrication response. **RECOMMENDED**

### **Assist Other Agencies with Approved Agreements**

Assisting other agencies is performed by all stations and may include mutual aid to other Municipalities or to other agencies. The most frequent assistance call type is to assist EMS to gain entry (when someone cannot open the door), though the annual call volume of this type is negligible. The most comprehensive agreement would be the Ontario Mutual Aid Plan whereby neighbouring fire departments may be requested to assist when the needs exceed the home department's resources.

**Options:**

1. Reduce the level of service to exclude assistance to other agencies with approved agreements.
2. Continue to provide assistance to other agencies with approved agreements.

**RECOMMENDED**

**Water/Ice Rescue – Shore Based Only**

Shore based water/ice rescue is performed by all stations. This involves the use of ladders, rope throw bags, or other devices which do not require the firefighters to be in a compromised position. Under this level of service, firefighters are not to enter water, utilize any craft, or go on any ice surface to perform a rescue.

Like other technical rescue disciplines, there are operations and technician levels. The same compliance date of July 1, 2028 applies to water/ice technical rescue disciplines, in that operations and technical levels of certification will be required for the services being performed. The specific disciplines are surface water, swift water, and ice water. The operations level at the compliance date will encompass the service level presently practiced meaning shore based operations. Technician level involves making entry into or onto the water/ice. The department plans to offer opportunities to members to achieve this certification by the compliance date of July 1, 2028. If there is an insufficient number of members able to provide this level of service at that time, the level of service will need to be reviewed or specialized units assigned to this task.

**Options:**

1. Reduce the level of service to exclude water/ice shore based rescue.
2. Increase the level of service to operations level still, swift, and ice water rescue.
3. Increase the level of service to technician level still, swift, and ice water rescue.
4. Continue to provide shore based water and ice rescue. **RECOMMENDED**

**Fire Investigations**

The present E&R By-law indicates that fire investigations are a service provided. Presently, there are no qualified investigators within the department. The training required to obtain qualifications and maintain competency is extensive. Fire investigations are a discretionary service. The Office of the Fire Marshal is required to be contacted for incidents resulting in a fatality, life threatening injury, loss of more than \$1 million or twice the residential average sale price for the area, clandestine or other drug lab fires, explosions, suspected arsons, criminal activity, fires causing widespread public concern, multi-unit residential fires impacting multiple units or where Code violations directly impacted the event, and significant losses to the community. The OFM then provides investigators and conducts the investigation.

Determining causes of fires helps to identify concerns and trends to better target public education and departmental training efforts. However, fire investigations are extremely labour and resource intensive to conduct properly in a defensible way. If the findings

lead to legal action, this process could further strain departmental resources. An informal investigation may still take place to identify some opportunities to target training and public education efforts, though this would be to guide programming rather than establishing a requirement to perform the service.

The OFM Fire Investigation Service is unique in that it is the only provincial or municipal agency that performs fire investigations in compliance with professional standards that satisfies the expert evidence requirements of the judicial system.

**Options:**

1. Eliminate fire investigations as a level of service. **RECOMMENDED**
2. Continue to provide fire investigation services.

**Recruitment Strategies**

The department is actively developing training programs to meet certification requirements. The goal is to be able to provide in-house training for most of the service levels provided, though advantage will still be taken of outside opportunities to supplement.

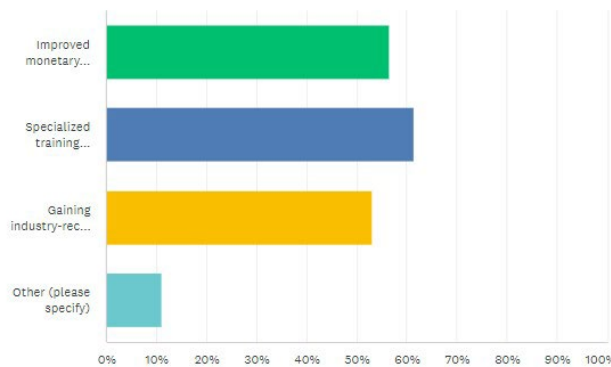
Being that the Volunteer fire service is reliant on people’s ability to commit time, and a significant investment is made in training and equipping a firefighter, input was sought through the recent survey to improve recruitment and retention efforts.

Q14

Customize Save as

Please indicate what you believe would have the most impact to attract new Volunteer (Paid-on-Call) firefighters into the service, and improve current participation and retention. (Check all that apply)

Answered: 145 Skipped: 29

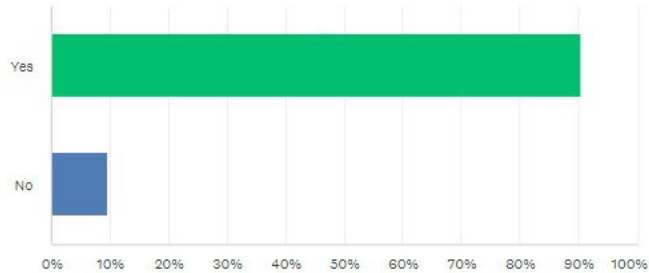


ANSWER CHOICES	RESPONSES
Improved monetary compensation	56.55% 82
Specialized training opportunities	61.38% 89
Gaining industry-recognized credentials	53.10% 77
Other (please specify)	Responses 11.03% 16
<b>Total Respondents: 145</b>	



Would you support new programs and initiatives, along with the associated funding required, aimed toward recruiting and retaining firefighters?

Answered: 145 Skipped: 29



ANSWER CHOICES	RESPONSES
Yes	90.34% 131
No	9.66% 14
TOTAL	145

It was generally found that people were supportive of added recognition, opportunities, and associated funding required to recruit and retain firefighters. There are many opportunities available and being developed to attain specialized training and certifications within the fire service. The findings support current efforts to build this capacity to recruit and train firefighters. The comments generally noted a need for more exposure and collaborative opportunities with youth. It has been identified as an opportunity to engage youth in the communities as a method of recruitment either through specific programming or collaborative approaches between the department and area schools. These options are being explored.

### **E&R By-law and Staffing, Division of Labour**

The current Establishing and Regulating By-law presents barriers to effective service provision and succession planning as they relate to staffing. The organizational chart sets limits on station staffing levels which do not take these factors into account. For example, some areas are more populated and may have a higher number of firefighters than others. However, if the main station is at capacity, it cannot have more personnel assigned to it even though a neighbouring station may be lower in numbers. This creates a scenario where there are service wide vacancies, but not necessarily station level vacancies. The help for the lower staffed station will likely be coming from the higher staffed one, so it is important to engage and retain persons willing to join rather turning them away because there is no vacancy at their nearest station. It is recommended that the specific maximum staffing numbers by designation be removed, and rather a total staffing number be applied to the service along with a ratio to account for span of control and professional growth opportunities for officer positions. This would ensure that when

a neighbouring station is called on to back another one up, there are sufficient resources between them. This method would also help to hedge against availability and future attrition issues. Suggested service maximum of 82 suppression staff plus Fire Chief, with ratios not exceeding one District Chief or Deputy District Chief to four Captains, and one Captain to four firefighters.

The current version of the By-law also does not allow for dedicated support positions within the volunteer ranks. Currently, only active firefighters can be assigned to perform supporting tasks. Supporting roles such as fire inspector, public educator, and communications officer are roles which can help engage persons not willing or capable of being an active firefighter while still meaningfully contributing to the department's mission. This can also help keep firefighters involved in the department if their health or circumstances do not allow for participation in suppression. It is suggested that up to 10 additional support roles be authorized, and the Fire Chief be able to recruit for and assign these roles as the positions are developed and the need arises for that support.

These support roles are expected to have a primary area of responsibility, though can be utilized as an added resource if required. These roles may also be a starting point for someone in the fire service who may not be ready for or meet the minimum requirements of a suppression firefighter. The fire inspector role is anticipated to conduct Fire Code inspections, issue orders, assess and approve fire safety plans, and conduct plans examination related to the Fire Code. The public educator role is intended to develop and deliver public safety messaging and programming in relation fire safety. The communications officer (telecommunicator) role is anticipated to conduct in-house radio monitoring, crew support, inter-agency contact, and provide dispatching assistance if required. This role is not to replace the current agreement with Northern911 as our Secondary Public Safety Answering Point (SPSAP), but rather to formalize a resource where there is a point of contact and organization available for ground crews, while monitoring emergency calls to provide better data, compliance with reporting requirements, and monitor call progress for safety concerns. The primary goal of this role is to increase operational safety by providing and tracking information while providing live support.

The fire inspector, public educator, and communications officer support roles are subject to the certification compliance date of July 1, 2026. Though fire prevention is the subject of another SDR, having these support roles helps to expand the operational abilities and effectiveness of the existing members and resources. This recommendation meets the intent of the Fire Master Plan 7.11 recommendation to explore a committee to manage public education programs, though in a more formalized way.

There has been a need identified for increase operational capacity and oversight at a management level. Currently, the department runs a risk to its progress in that there is no contingency to the Fire Chief role. There is risk to the completion of projects, the speed at which projects can be accomplished, possibility that the Chief as a member of the Emergency Control Group may be deployed in the field, and liability if items are not actioned due to time constraints and the need to prioritize (ex. issuing of orders, actioning health and safety items). There are many functions which the certification

legislation addresses beyond firefighters. Also included are the roles of Fire Officers, Pump Operators, Fire Inspectors, Training Officers, Emergency Communicators, Fire & Life Safety Educators, Incident Safety Officer, and Fire Investigators. The Fire Chief presently whether certified to or required by by-law, performs all of these functions in addition to the overall management, oversight and responsibility for the department's members, assets, policies, procedures, and long-term planning. Though permanent roles such as an administrative assistant, training officer or inspector will assist in one or some aspects of operations, these positions are not necessarily adaptable to the changing needs and focus of the department over time. A manager level role such as a Deputy Chief is generally more capable in all of these functions, can adapt to changing departmental needs, provides a contingency, and incorporates more qualified and competent supervision in the field. Many Municipalities also utilize manager level roles to build in guaranteed emergency responses into their services by employing full-time Deputy Chiefs, Training Officers, and Inspectors. A report will be coming to Council as a part of the 2025 budget process seeking to add a permanent full-time Manager of Fire Services/Deputy Fire Chief position, which is a recommendation in the Fire Master Plan.

**Options:**

1. The current staffing model remain in effect.
2. The current roles remain in effect with the staffing maximums replaced with the recommendation.
3. The staffing per station maximums be replaced with the recommendation of an aggregate maximum, and that 10 support roles are additional to the suppression complement. **RECOMMENDED**

**Honorarium and Point System**

The E&R By-law presently utilizes a point system. However, a point does not consistently equal a certain period of time. Training and incident responses are treated differently under the point system. This makes tracking difficult, calculation of service hours labour intensive, and sends a message that some things the fire department does are less important than others. With an ever-increasing need for training participation and certification requirements, it is recommended that one base rate be used regardless of activity. The point values for incident responses also maxes out at 6 hours, which does not incentivize responses to calls that may exceed that length which are usually more labour intensive and time consuming (such as structure and highway transport fires). The current model also limits all training sessions to a maximum of 2 points at the lower value, which does not incentivize participation in training days or external opportunities.

Current Point Values for Emergency Calls and Public Education:

Sector Chief	\$32.50 (130%)
Deputy Sector Chief	\$30.00 (120%)
Captain	\$27.50 (110%)
Firefighter	\$25.00 (100%)
Student Cadet	\$18.75 (75%)

Current Model for Emergency Calls (Firefighters):

Time Frame (mins)	Max Hours	Point Value	Equivalent Hourly
1-60	0-1	1	\$25.00
61-180	2-3	2	\$16.67
181-300	3-5	3	\$15.00
301-360	5-6	4	\$16.67
360+	6+	5	Below \$16.67

Current Model for Public Education (Firefighters):

Time Frame	Max Hours	Point Value	Equivalent Hourly
Each Hour	N/A	1	\$25.00

Current Point Values for Training:

Sector Chief	\$29.90 (130%)
Deputy Sector Chief	\$27.60 (120%)
Captain	\$25.30 (110%)
Firefighter	\$23.00 (100%)
Student Cadet	\$17.25 (75%)

Current Model for Training (Firefighters):

Time Frame (mins)	Max Hours	Point Value	Equivalent Hourly
0-120	2	1	\$11.50
121+	2+	2	Below \$11.50

Below is an examination of other Municipalities that engage Volunteer Firefighters who had accessible information, and their base compensation at the firefighter level:

Service	Low End	Top End	Average	Notes
Greater Sudbury (2024)	\$26.19	\$26.19	\$26.19 hourly	CBA - Subject to 2-2.25% annual increases. Minimum 2hrs paid per response.
Meaford (2023)	\$20.61	\$36.09	\$28.35 hourly	
Haldimand County (2023)	\$24.90	\$24.90	\$24.90 hourly	
Fort Frances (2018)	\$25.07	\$25.07	\$25.07 hourly	
Wainfleet (2020)	\$25.75	\$29.75	\$27.75 per point hour	CBA
Ramara (2020)	\$24.28	\$28.40	\$26.34 hourly	
Seguin (2024)	\$19.12	\$27.47	\$23.30 hourly	
<b>Average \$25.99</b>				

The Fire Master Plan recommends updating the firefighter compensation model in an effort to better attract, retain, and engage firefighters. The current model has been in effect, and has remained unchanged, since 2015. A 4% increase to the base rate was found to be necessary to bring Greenstone’s honorarium rates in line with the above average.

Suggested Point Values:

Rank	Rate	Change (4%)
District Chief	\$32.50 (130%)	\$33.80
Deputy District Chief	\$30.00 (120%)	\$31.20
Captain	\$27.50 (110%)	\$28.60
Firefighter, Prevention Officer, Fire Inspector, Fire and Life Safety Educator	\$25.00 (100%)	\$26.00
Student Cadet, Probationary Firefighter, Communications Officer	\$18.75 (75%)	\$19.50
Standby Rate	\$1.00	NEW

Suggested Point Model:

Point Type	Time Frame	Points
All Functions Performed	0-60 minutes	1
All Functions Performed	Each 15 minute interval thereafter	0.25

This increase in rate is estimated to have an impact of approximately \$7000 annually to existing suppression personnel honorariums. If a suppression member is acting in a role which is typically lower on the scale, their normal rate would apply.

A Standby Rate is being proposed to incentivise availability. This will be used to address certain occasions and times of the year when availability is generally low. The specific dates and times will be determined as needed by the Fire Chief. The expectation of members when receiving the rate is that they will remain in their response area, remain fit for duty, readily available to respond to the station, and respond to all alarms that occur during their standby period.

**Options:**

1. The current honorarium policy remains in effect.
2. The current honorarium amounts remain in effect with the new suggested point model.
3. The current point model is maintained with the suggested honorarium rates implemented.
4. The suggested honorarium amounts, classifications, and point model is adopted. **RECOMMENDED**



## **Dry Hydrants**

The FMP identified exploring suitable areas for and adopting a dry hydrant program to reduce travel distances to access water for firefighting operations. Due to our climate, geography and topography, this presents some additional challenges for implementation specific to our region. For example, a traditional dry hydrant results in standing water in the piping which is susceptible to freezing during the winter. Alternative materials and freezing protection methods may need to be implemented to ensure that a dry hydrant remains useable and reliable. It is still a goal of the department to explore suitable sites where a dry hydrant system can be implemented in the future.

## **Caramat Hydrants**

There is a concern regarding the hydrants in Caramat and ability to utilize them for fire protection and FUS rating implications. In the scoring system used to determine area ratings for insurance purposes, hydrant availability, size, type, maintenance, testing, and flows are used to form a portion of the area score. During the last scoring update in 2019, Caramat was identified as having some hydrant protection which may be a consideration for area property owners when seeking insurance. The hydrants were not included in the flow testing project due to the high risk of contaminating the potable water supply in the community. The present ability of the system to function reliably and provide the needed flows for fire suppression operations is unknown.

The current ratings for Caramat are class 10 for commercial lines, and 5 for residential lines, both of which are the lowest ratings on the scale representing an unrecognized level of protection. Even if the water system was completely updated, the ratings would still remain as unprotected because both categories require a fire hall for any recognized protection rating. The range for ratings is 5km for commercial, and 8km for residential from the nearest fire station. The water systems feeding apparatus need to be able to deliver adequate supply with a 20psi/140kpa residual pressure. This remaining system pressure is what ensures that water mains do not cavitate/collapse from more water being drawn than is supplied (resulting in negative pressure or vacuum), and sediment remains stable. This is also why when hydrants are used, if done properly and pressures are adequate, residents shouldn't notice any significant discoloration and this use shouldn't result in a risk of water contamination. Though the system may be able to deliver water even under ideal conditions, if it is used faster than what the plant can treat this would result in raw water being introduced into the drinking water system.

The former Caramat Fire Hall is still maintained and under the fire department's portfolio which does represent an opportunity in regards to fire protection. The station is equipped with a water reservoir and pump system though the capacity of the tank is unknown. The tank must be manually refilled by a fire apparatus after use. This system is tested and maintained by the members of the Longlac station and available to responding apparatus to use as a refill point. If stored water independent of the drinking water system is to be relied upon, options will be explored to increase the storage capacity in the now vacant building. The pump and piping will also need to be professionally maintained to ensure reliability. This would also mean that the building must be maintained in an adequate

state for its purpose and utilities provided even though it is vacant of workers. This building presently also serves as a radio repeater station, though the long-term need for it to serve this function may not exist.

Though not a recognizable level of service, this allows our crews a convenient and central point to fill apparatus without jeopardizing the water quality and plant capacity in Caramat.

Other possible solutions not tied to the fire hall may include expanding on existing pumping infrastructure to include hydrants, dry-hydrants, or strategically located fire protection pump-houses that work independently of the drinking water distribution system.

A report to Council will be prepared to examine the adequacy of the hydrant and water distribution system for fire protection and its impact on community water quality.

Another report is also planned to identify longer term solutions including water storage, dry-hydrant, adapting existing pumping infrastructure, or building new pumping infrastructure to supply fire protection water.

### **Service Agreements**

Presently, the fire department services three neighbouring Indigenous Nations under agreement, in addition to providing services to various provincial ministries. All communities may enter into automatic aid agreements where a neighbouring department responds to calls for service exclusively or alongside that community's resources. Presently, the standby rates for these agreements range from \$1200 to \$3500 annually. Calls to communities we serve under agreement are billed at the in force MTO rates on a per use basis. These standby rates have remained unchanged for many years, and do not accurately reflect the carrying cost of the department. As Greenstone's fire department is being utilized in lieu of a community providing its own fire protection, the true carrying cost of the department should be reflected in these standby rates. Even if the department does not action a single call, there are costs associated with having the service available such as maintenance, utilities, training, etc., which should be reflected between all service users. This disparity is further exaggerated with the need for upwards of \$800,000 in annual capital funding needed.

The agreements presently in force also utilize terminology that is not defined and outdated. All of these present agreements utilize the phrase "fire protection services" without describing the levels of service. This can cause confusion with regards to interior/exterior suppression, technical rescue, and other service level capabilities. With the service level being undefined, this presents a risk of liability where the members are working under our E&R By-law, which is not recognized when actioning calls outside of Greenstone's jurisdiction. The specific agreement would be in force.

An issue that was recently discovered is in relation to forest fire protection. As communities outside of Greenstone's agreement with the MNRF, they would need to

seek their own protection agreements. If the community does not hold a protection agreement with the MNRF, it could be seen that the default responsibility lies with the Municipality to action these incidents as they would be reasonably considered “fire protection services”. As mentioned earlier in this SDR, the department is not at a point where it can reasonably and independently action sizeable wildland fires. If the MNRF actions a fire which the Municipality is determined to have responsibility for or is a border fire, then the Municipality would be responsible for costs. Though the agreement does allow cost recovery when utilizing outside resources, it would be in the best interest of the Municipality to specify service levels in agreements which excludes wildland and encourages the communities to seek agreements with the MNRF independently. The agreements are auto-renewing on a yearly term, so any changes that may be negotiated may not take effect until 2025.

**Options:**

1. The current protection agreements remain in place.
2. The protection agreements to neighbouring communities are terminated.
3. The agreements are updated to include standby charges based on the carrying cost of the department, and the service levels identified in the agreements.

**RECOMMENDED**