REMO Committee Meeting AGENDA

MODL Council Chambers, Hybrid Meeting

10 Allée Champlain Drive Cookville NS and Via Audio & Video Teleconference

Monday, September 18, 2023 – 1:30 p.m.

Time & Page

1. Call to Order

2. Approval of Agenda – Added Items

3. Approval of Minutes of March 20, 2023 (circulated)

4. Business Arising From Minutes

Topics Arising from Nova Scotia Wildfires

4.1 Unspent budget allocation

4.2 Be Ready staff training in Emergency Management

4.3 Evacuation Routes

4.4 Vulnerable Person Registry (presented by Alex Dumaresq)..... 1

4.5 Volunteer Roster

5. New Business

5.1 Shelburne Wildfire Fire Services Survey Report 4

5.2 Budget Variance Update (presented by Alex Dumaresq)..... 11

5.3 High-Speed Internet & Wireless – report to be circulated

5.4 Major Flash Flooding After Action Report 13

6. EMO Updates

7. REMO Coordinator Updates

8. Added Items

9. Next Meeting – Monday, November 20, 2023 at 1:30 p.m.

10. Adjournment

**** This meeting will be held as a hybrid meeting, in-person and virtually through Microsoft Teams. The link and phone number are available through the meeting invite. ****

Any problems connecting, please contact Angela at (902) 930-1085

Memorandum

To: REMO Advisory Committee
From: Alex Dumaresq, Deputy CAO
Date: September 11, 2023
Re: Vulnerable Persons Registry

Recommended Motion:
Move that the Regional Emergency Management Advisory Committee recommend that partner councils write to the Nova Scotia Federation of Municipalities and the Provincial Minister of Emergency Management, requesting the creation of a province wide vulnerable person registry.

Background:
At the July meeting of the REMO Advisory committee a motion was made for staff to investigate the resource requirements and costs of a vulnerable persons registry and report back to the advisory committee. A voluntary vulnerable person's registry can be a helpful tool for improving life safety of residents during emergencies. There are some barriers to establishing a registry, including safeguarding the privacy of our registrants and the operational time required to maintain the list.

Issue:
Two issues have prompted staff to bring this item back to the Advisory Committee. First, given the current priorities for special projects (including enhanced training, evacuation shelters, and the major flash flooding event after actions), time for the REMO coordinator to properly research the establishment of the registry is lacking, and with the addition of training development and delivery to this year's workplan, additional time will remain scarce until resources are addressed.

Second, an advocacy effort to raise the importance of a registry and to influence the provincial government to develop and maintain a province wide registry is underway.

Given that the investigation of developing a local registry cannot happen in the short term, and there is an effort to secure the creation of a provincial registry, staff recommend that in the interim, REMO's partner councils join in the advocacy for a provincial registry. A draft resolution is appended to this memo for the committee's information.

Related articles:

Halifax to launch emergency registry program to keep vulnerable people safe
https://www.cbc.ca/player/play/2255776323627

Halifax creating emergency registry for vulnerable residents
https://www.cbc.ca/news/canada/nova-scotia/halifax-bringing-in-vulnerable-persons-registry-1.6883129

Advocates calling on province for Vulnerable Person Registry https://trib.al/mFF1fw7

Disability rights advocate calls vulnerable persons registry a 'great first step'
https://www.cbc.ca/listen/live-radio/1-2-as-it-happens/clip/15992821-disability-rights-advocate-calls-vulnerable-persons-registry-great

HRM Council endorsing a Municipal VVPR
https://www.halifaxexaminer.ca/government/city-hall/halifax-to-get-vulnerable-persons-registry-to-support-people-at-exponential-risk-in-a-crisis/

RESOLUTION

WHEREAS the climate emergency is here (recent wildfires and Fiona) and climate change has been identified as a priority area of municipal interest; and

WHEREAS all Nova Scotians have a right to public safety and this area is identified one of six priority areas of municipal interest; and

WHEREAS the United Nations (https://www.un.org/disabilities/documents/events/wcdrr/background_DiDRR.docx) Identified people with disabilities are two to four times more likely to die in a disaster; and

WHEREAS equity and community well-being is another priority area to serve the 30% of Nova Scotians, and 41% of seniors identify as having a disability (https://novascotia.ca/accessibility/prevalence/), and aging in place is being encouraged; and

WHEREAS First Voices are advocating for better emergency management and planning for people with disabilities https://www.cbc.ca/listen/live-radio/1-2-as-it-happens/clip/15992821-disability-rights-advocate-calls-vulnerable-persons-registry-great; and

WHEREAS disasters do not respect administrative boundaries (https://masscasualtycommission.ca/final-report/l; and

WHEREAS all forty-nine municipalities may not have the same technical capacity or paid staff (and rely on volunteers) to respond to these needs and it's important for all Nova Scotians to have access to the same level of public safety; and

WHEREAS a Voluntary Vulnerable Persons Registry (VVPR) is recognized best practice in the emergency field https://www.soovpr.com/Home.This is a voluntary registry so those with privacy concerns need not register and only location and accommodation needs are required data. A paid coordinator who manages the Registry ensures it is constantly updated; and

WHEREAS HRM's Chief of Emergency Management, in her report https://cdn.halifax.ca/sites/default/files/documents/city-hall/regional-council/230620rc1511.pdf to HRM asking for a VVPR (recently passed by HRM) identified that the risk of not doing a VVPR (death and injuries) outweighs the risk (managing expectations) of doing one; and

WHEREAS a leading expert in disaster planning and managements Paul Kovacs, (Executive Director of the Institute for Catastrophic Loss, Univ. Of Western Ontario) says "all mechanics of a Registry have been sorted out and every question that can be asked, there is an answer for."; and

THEREFORE BE IT RESOLVED THAT we at *[name municipality]* ask the Nova Scotia Federation of Municipalities, newly formed Public Safety Advisory Committee to prioritize collaboration and partnership between municipal governments with possible support from the provincial government to ensure implementation of Voluntary Vulnerable Persons Registries province-wide that are integrated into the 911 system.

BE IT FURTHER RESOLVED a copy of the resolution be sent to the NSFM and the Minister responsible for Emergency Management Office.

Dated at [community name], Nova Scotia, August, 2023.

(Sgd.) _____ _____

Shelburne Wildfires May 2023
Lunenburg County Response from Fire Departments

1. Did we give you enough information? Feel free to provide feedback in "other" of what would have been helpful to receive.

YES > 30 NO > 2 OTHER > 4

REQUIREMENTS OF STAFF AND MAXIMIZING SUPPORT
Responses indicated that more information on details of tasks and support that was available would've been helpful; one respondent noted that, as an example, having their own tanker and staff to supply the pumper to continue operations with minimal interruption could have been useful.

Chiefs were asked what resources they could send without interrupting their districts and no department was sent without Chief approval.

MAPS AND OPS PLANS
Other respondents said that having ops plans up front and detailed maps of areas being patrolled by outside departments for every firefighter would have been a great tool. REMO and the Chiefs note that this could have been requested by local departments – in the future, plans will be made to obtain maps from local resources, as well as having a copy of "Backroads Maps of Nova Scotia" for some of the more remote areas. Additionally, having knowledgeable local navigators in trucks and a Liaison Officer to represent Lunenburg County support operations would be beneficial in future operations as well.

2. What went well

COMMUNICATION
Several respondents noted the highly effective communication that took place between agencies and departments in what was a complex and dynamic situation. Others noted that the check-ins with DNRR were positive and useful as well.

STAGGERING DEPARTMENTS
Several respondents noted that the planning around careful deployment of departments so as to ensure continued coverage "at home" while still assisting Shelburne in fighting the fires was a success.

FOOD AND DRINK
Several respondents noted that the volume of food and drink available was incredibly helpful in keeping energy levels high.

TEAMWORK
Many respondents noted that the willingness of departments to stand shoulder to shoulder and the sense of camaraderie that was evident contributed greatly to the response and the fighting spirit that invigorated folks both in Shelburne and those providing coverage at home.

FOLKS ALREADY ON THE GROUND
A number of respondents mentioned how well-received the support was by folks from the Shelburne area.

3. What didn't go well? Are there any suggestions for improvement?

LOCATIONS AND RADIO CHATTER
Several respondents noted the high volume of radio chatter and occasional confusion around locations. REMO was asked to send supporting crews to the Shelburne Fire Hall and, from there, the local teams would assign. Changing fire conditions with this particular incident often made it difficult to get a handle on things. For future responses, a request will be made for more Ops channels, additional maps on site, and a Situation Unit set up in the hall to manage accountability and mapping when it comes to departmental deployments.

SOME FIRE DEPARTMENTS RECEIVING MEDIA RECOGNITION, OTHERS CRITICISM
One respondent expressed concern that some departments that didn't dispatch crews to Shelburne were feeling a sense of underappreciation, when the role they played in standing by and supporting other responding departments here in Lunenburg County was equally important. In its public communications, REMO avoided identifying specific departments responding to Shelburne for this reason – as well-intentioned as it may be for other Facebook groups/pages and the media to highlight departmental contributions, it can lead to 'us/them' perceptions.

Departments are encouraged to use their own social media presence and municipal partners to talk about their role in future events, whether its actively responding to a fire, or providing standby coverage to ensure that the residents of Lunenburg County can still feel protected even with firefighters deploying in other regions.

REQUIREMENTS OF FIREFIGHTERS ATTENDING
Some respondents indicated there was initially some confusion as to whether firefighters needed to have wildfire/woodlands training or not; there was also initial confusion over whether Lunenburg County was only providing standby duties. The request REMO received included patrols, night watch, and standby – beyond that, it went into local tasking. In future, if there is confusion, ask and we can request more information.

CALLING IN RESOURCES SOONER
A number of respondents indicated that they felt that resources from Lunenburg County should have been brought in to assist sooner. When REMO was contacted to provide assistance, it began that process and had firefighters mobilized quickly. Emergency responders nor REMO deploy without specifically receiving a request for support.

COMMITMENTS BY DEPARTMENTS TO ATTEND AND ENSURING AVAILABILITY OF PERSONNEL
Some respondents felt Chiefs needed more input and time to gather crews. As part of planning deployments, all department Chiefs were asked before the e-mail of schedules went out. With the exception of the first day of response and the Thursday 1 p.m. emergency shift, all Chiefs were aware 1 to 2 days prior to their deployment, ensuring time to arrange availability and ensure coverage within Lunenburg County as well.

ENSURING DEPARTMENTS DIDN'T FEEL STRETCHED TOO THIN
Some comments indicated they were concerned about the departments at home providing coverage in Lunenburg County being stretched too thin in the event that an emergency happened here. REMO and LRFES did their best to ensure proper coverage in Lunenburg County through mutual aid arrangements and careful deployment planning. In the future, a consideration would be to create quadrant areas to ensure that there was the continued ability to respond locally as required.

ENSURING LOCAL NAVIGATORS WERE AVAILABLE TO ASSIST CREWS
Some noted that they did not always receive a local navigator to assist with getting around the area and responding to deployment locations. REMO and LRFES were under the understanding that a local rep would be provided to each vehicle. This has been noted as an operational item to be aware of for future deployments.

LACK OF FORESTRY SPECIFIC FIREFIGHTING EQUIPMENT AVAILABLE
The lack of forestry specific firefighting equipment, including forestry hose, couplers, nozzles, etc. was noted by respondents. This is a challenge that is beyond the scope of REMO but has been noted in our conversations with DNRR as a gap.

DEPARTMENTS ENGAGED IN SELF-DISPATCHING, STAYING LONGER, OR BACKING OUT
Some respondents expressed a concern over fire departments self-dispatching outside of REMO/LRFES, staying longer without approval, or backing out after committing relief crews. Several departments went to DNRR or the Liaison Officer to ask to deploy again, not going through the proper process which puts a burden on other departments at home and does not allow firefighters proper rest periods, creates challenges to the planned process of which departments are covering, and ultimately firefighter safety. In future, we ask that the requests continue to flow through one channel for deployments.

SOME LACK OF COMMUNICATION WITH DNRR LIAISON
One comment noted that once in the Shelburne area, the DNRR Liaison Officer on site was unaware that the department was coming, suggesting a break in communication between REMO and DNRR. This has been noted for future responses; having an ambassador or liaison in the main hall answering questions from responding crews and connecting those departments with basic operational needs, such as maps, food, etc. would be beneficial.

4. What tasks did your crew do?

THE LIST OF TASKS AND DUTIES REPORTED INCLUDED:
Structure protection, addressing hot spots and flare-ups, coordinating crew assignments, coverage in Lunenburg County for dispatched departments, fire attack and fill station responsibilities, exposure protection and wildland fire fighting operations, patrol, overnight monitoring.

5. Do you feel the right people were at the table making decisions? If not, who do you suggest should be there? Provide feedback in "other", if desired.

YES > 27 NO > 3 OTHER > 5

ALL DEPARTMENT CHIEFS
Some response indicated that there was a lack of participation by department Chiefs about crew availability, but all Chiefs received an e-mail request and, when there was a request to utilize a department, the Chief of that department was contacted by phone for approval. It's worth noting that in some cases Chiefs who were asked said no and offered a different day or shift. No department was asked or forced to go out without their Chief's approval and the email schedule was sent after Chiefs were contacted.

There was also a suggestion that a rep from each department be assigned to determine the schedule, however with more than 30 fire departments in Lunenburg County, not only is that logistically challenging, it also doesn't follow ICS best-practices.

DNRR INVOLVEMENT
A number of respondents indicated they were uncertain about the level of DNRR involvement and whether DNRR should have been making a better effort to help coordinate the deployment of resources where required. As part of the after-action analysis, going forward DNRR should have a dedicated Liaison Officer made available to coordinate with the volunteer fire departments in a response like this. A recommendation will also be going forward that DNRR "bulk up" its wildfire training course offerings and that local departments make firefighters available to take such training opportunities when they arise. Additionally, the request for assistance did not come from DNRR.

6. Do you feel that Lunenburg County was still staffed appropriately while we sent resources to Shelburne? Provide feedback in "other" if desired.

YES > 31 NO > 0 OTHER > 3

DEPARTMENT OVERLAP
One respondent noted they believed at times five neighbouring departments were sent out for the same shift. Another respondent noted that taking an engine or tanker from multiple halls in the same general area posed a risk.

As part of the planning process we tried to ensure that there was adequate coverage in Lunenburg County for those departments deploying.

7. Any recommendations for the future?

AFTER-ACTION REPORTING
Several respondents noted that this is an opportune time to do a detailed analysis of what went well, what didn't go so well, and to identify any lessons learned from the response.

QUICKER ASSISTANCE
Some respondents indicated that assistance should have begun sooner and that REMO and DNRR should have deployed sooner and dealt with the red tape after the fact. As noted in other parts of this report, however, REMO only became involved once an officially request for assistance was received. It was not received from DNRR, it was received from a municipal volunteer fire department.

ENSURING LOCAL NAVIGATORS WERE AVAILABLE TO ASSIST CREWS
Some noted that they did not always receive a local navigator to assist with getting around the area and responding to deployment locations. REMO and the LRFES were under the understanding that a local rep would be provided to each vehicle. This has been noted as an operational item to be aware of for future deployments.

DEPLOYMENT TIMES
Some noted that durations of 10 to 12 hour minimums for rotation, and longer if light and crews are willing, could be helpful in getting blazes under control sooner. It's important to remember that crew safety is of the utmost importance – organizers aimed for a maximum of 12-hour shifts followed by 24 hours off to ensure that firefighters were not overly fatigued, and that proper coverage was able to be provided. For future large responses, a driver for going down who is able to rest to drive them back will be included.

FOOD ALTERNATIVES
One respondent noted having food alternatives, such as sandwiches with lactose-free cheese, would be helpful. This has been noted for future deployments.

ENSURING RESOURCE LIST IS UP TO DATE
Some respondents noted that having a list of resources in the hands of departments would be helpful. The Fire Service Coordinators have a list of all apparatus in all departments through the annual Service Providers Form. This information could be coupled with a new round of IAR training. This has been provided to REMO and will be added to IAR (may need some help from those who use it frequently).

ACTIVATING A LOCAL ECC TO SUPPORT
One respondent wondered about activating a local ECC to support Shelburne. Lunenburg County REMO can't activate beyond its jurisdictional boundaries, but it can request to send a Liaison Officer to coordinate with Lunenburg County resources without a formal request. The Shelburne ECC was activated but dealing with the whole situation not just firefighting.

INTRA-DEPARTMENTAL COMMUNICATION
Some respondents indicated there could have been a better job done determining whether a department was able to send resources, when, what type, etc. Some recommended that Chiefs

collaborate with the Deputies and firefighters so there are fewer questions internally and everyone knows what's going on.

DNRR RESOURCES AND EQUIPMENT SUCH AS WATER BOMBERS
Several respondents noted that additional support and response from DNRR and other national or international partners, including bringing in water bombers sooner, would have been of significant assistance. These are, however, largely matters that reside with the province and, it's worth noting, REMO was not involved directly with DNRR – the request for assistance that REMO received came from volunteer fire departments. As noted elsewhere, one area where DNRR could assist immediately is in offering more wildland firefighting training to volunteer departments and that will be a topic of conversation.

8. If you led this request for assistance, what would you have done differently??

In addition to the other responses noted above, these other items were put forward:

ICS TRAINING FOR VOLUNTEER FIREFIGHTERS
It was suggested by several respondents that providing training (ICS 100, 200, 300) to volunteer firefighter would allow folks who are brought in to better understand the chain of command and the process that flow out from it. Additionally, an on-site Emergency Coordination Centre may be helpful.

ASSETS AND COVERAGE
Some respondents indicated they felt that having a list of departments capable of making required assets available and arranging mutual aid departments to cover while assets on site, instead of Chiefs having to call around for standby coverage, would be useful. Mutual aid agreements are in place for just such processes and Chiefs are responsible for their own areas and coverage under those agreements – REMO and LRFES can assist if requested.

9. Has your department returned the DNRR forms for all shifts to Angela?

YES > 29 NO > 1

10. Any other comments you wish to make?

DNRR RESPONSE
Some respondents indicated that they didn't feel the response from DNRR was enough, in terms of the management of the response.

WILLINGNESS TO CONTINUE
Several respondents noted their willingness to go back and continue to help as required. Others noted that it is the kind of event that has not ever really happened in their time of volunteer firefighting service here on the South Shore and that the lessons learned will be helpful when facing similar challenges in the future.

THANKS

Numerous respondents took the time to say thank you. As one respondent noted, we are fortunate in Lunenburg County to have some of the best equipped and knowledgeable fire departments anywhere – so sharing our resources only makes sense.

OUTSTANDING ACTIONS

Action	**Completed**
REMO to purchase a copy of Backroads Maps of Nova Scotia and can lend it to the Liaison Officer for future responses. Any fire department who wishes to purchase a copy for themselves can do so.	
REMO to add to resource list to their IAR	
LRFES to suggest dates for ICS and ECC training and can work with REMO to teach or get instructors for teaching	
Fire Departments to increase their Mutual Aid Agreements if more are needed for their departments	
More IAR training for departments and REMO.	
REMO to add Chiefs to IAR for a message followed-up with an email of time-sensitive information or requests.	

Memorandum

To: **REMO Advisory Committee**

From: **Alex Dumaresq, Deputy CAO**

Date: **September 11, 2023**

Re: **Budget Variance update – 2023/24**

Recommended Motion:

Move that the Regional Emergency Management Advisory Committee approve an additional $20,200 for the 2023/24 budget, and recommend approval to the partner municipal units in accordance with section 20 of the intermunicipal agreement.

Background:

REMO has for several years returned small operating surpluses to the partner units. Early evaluation of the current year's operating forecast suggests that this will not be the case for the 2023/24 budget year.

There are a few factors combining to result in extra expenditures. First, the need for REMO responses, including the major flash flooding event in July have depleted the REMO contingency account. Second, to improve REMO's response capabilities, training for a large number of municipal staff is planned for this fiscal year, which will be provided in house to keep costs lower and to ensure the content is tailored to Lunenburg REMO, but this approach will still incur costs. Finally, we are anticipating changes to personnel costs according to MODL's salary administration and personnel policies. The estimated differences are summarized in the table below:

Item	Estimated addition
REMO contingency	$4,000
Municipal Staff Training	$8,000
Personnel costs	$8,200

Budget

The total approved budget for REMO in 2023/24 is set at $171,800. The additional anticipated cost for these three items comes to $20,200 or 12% of the total budget. The breakdown of costs per individual unit based on uniform assessment is provided below:

Unit	Percentage	Amount
Bridgewater	12%	$ 2,505
Mahone Bay	3%	$ 505
Chester	30%	$ 6,080
MODL	50%	$ 10,080
Lunenburg	5%	$ 1,030
Total		$ 20,200

Process:

Partner units approve an operating budget for the shared service in accordance with the intermunicipal emergency services agreement. Section 20 of the agreement requires approval of the Advisory committee and recommendation to partner units' councils where an increase in budget is being sought.

Conclusion:

The increased frequency of potential emergencies has created increased need for training and preparedness among municipal staff, partner units and the broader community. This has translated to modest additional budget pressure, requiring approval from municipal councils.

AFTER-ACTION REPORT

MAJOR FLASH FLOODING EVENT

July 21-22, 2023

Prepared by:
Lunenburg County Regional Emergency Management Organization

Date Presented:
September 18, 2023

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Acronyms

AAR	After-Action Report
AEC	Assistant Emergency Management Coordinator
CAO	Chief Administrative Officer
Comms	Communications staff
DPW	Department of Public Works
ECC	Emergency Coordination Centre
EMC	Emergency Management Coordinator
GSAR	Ground Search and Rescue
HVC	Hebbville Village Commission
MODC	Municipality of the District of Chester
MODL	Municipality of the District of Lunenburg
NS EMO	Nova Scotia Emergency Management Organization
PSCB	Public Service Commission of Bridgewater
RCMP	Royal Canadian Mounted Police
REMO	Regional Emergency Management Organization
SOLE	State of Local Emergency
TOB	Town of Bridgewater
TOL	Town of Lunenburg
TOMB	Town of Mahone Bay

1 Introduction

An After-Action Report (AAR) is the process of evaluating and documenting the outcomes, actions, and lessons identified to be learned from an incident or emergency response. The goal is to facilitate learning, improvement, and preparedness for future incidents.

This report was prepared by collecting information from various internal and external partners within the Lunenburg County Regional Emergency Management Organization (REMO) relating to the major flash flooding event that occurred July 21-22, 2023. REMO provides a coordinated response to an emergency occurring within Lunenburg County and includes the Municipality of the District of Chester (MODC), the Municipality of the District of Lunenburg (MODL), the Town of Bridgewater (TOB), the Town of Lunenburg (TOL), and the Town of Mahone Bay (TOMB).

An event debrief was conducted via anonymous survey and an in-person debrief was held on August 8, 2023. Chief Administrative Officers (CAOs), Assistant Emergency Coordinators (AECs), Communications Representatives (Comms), Fire Services Coordinators, REMO partners, municipal staff in the Emergency Coordination Centre (ECC) from the five municipal units were invited to respond and attend. An electronic survey was provided to the Planning Committee member organization. The observations and accompanying recommendations are identified and documented in this After-Action Report.

2 Event Summary

During a very wet summer, another rain event was forecasted by Environment and Climate Change Canada on July 21, 2023, stated, “The localized nature of these extreme rainfall rates makes it impossible to pinpoint exactly where this will occur but there is a slightly higher risk in the St. Margarets Bay/Western HRM area, Middle Eastern Shore, and parts of Cape Breton. Generally speaking, total amounts in these areas would be in the 40 to 80 mm range but it’s likely that local amounts will exceed 100mm. Computer models do not agree on the exact location but that is typical for these types of weather patterns. Interests along the entire Atlantic Coast, parts of northern Nova Scotia and Cape Breton should closely monitor rainfall over the coming days”.

Although 80mm was forecasted, following the event, Bridgewater and area recorded having received 272 mm of rain during July 21-22, 2023. It was an unprecedented rainfall causing significant damage and major flash flooding as well as hours of excessive lightning. The term ‘biblical proportions’ has been used as we received more rain than a typical three-month summer would generally receive. There was limited damage to the power grid with no issues for power restoration escalation being received by REMO. Thankfully no injuries or fatalities occurred in Lunenburg County as a result of the major flash flooding event, however there were four deaths across the province due to the flash flooding.

Life safety is the ultimate priority of emergency management and as each situation was uncovered, it was kept to the forefront of REMO's decision making. Swift and effective actions were taken to ensure the safety and well-being of all individuals involved, decisions were executed, resulting in minimized risks to life and health. Evacuations were efficient, contributing to the safe evacuation of residents.

The major flash flooding event was the first time in over fifteen years that the ECC was fully activated. This was not just a single day activation. The REMO team activated for two days on full activation, declaring three States of Local Emergency (SOLE) and accompanying evacuations, was reopened another day for a voluntary evacuation with possible mandatory evacuation. Evacuating residents in a flash flood is of paramount importance due to the unpredictable nature of these floods. Flash floods can escalate rapidly, causing significant damage and endangering lives within minutes. Evacuation measures help ensure the safety of individuals and communities by moving them to safer locations. Effective evacuation planning, communication, and execution are crucial for mitigating the immediate dangers posed by flash floods and safeguarding the well-being of those at risk.

2.1 Event Location

Within the significant rainfall and flash flooding event, REMO was activated and assisted on three key incidents: Hebb Lake Dam, RayPort Campground/Shingle Mill Road, and Walker Road landslide.

Hebb Lake Dam

The Public Service Commission of Bridgewater (PSCB) was actively monitoring the Hebb Lake Dam as water was rising. Given the lack of accurate forecast in the preceding days, water was not released prior to the event. The PSCB had active monitoring through the SCADA system as well as manual and visual monitoring throughout the evening when the most rain fell. Several logs had to be removed at different times to ensure the dam did not breach. The Municipality of the District of Lunenburg (MODL) was notified as the Hebb Lake Dam affected its residents. After consultation and review, it was decided a State of Local Emergency would be declared to initiate an evacuation to keep residents safe in case the dam breached as the volume of water would be significant in such a short period. With the assistance of the RCMP and Lunenburg County Ground Search and Rescue (GSAR), evacuations occurred, space for sheltering was secured at the Nova Scotia Community College and Red Cross brought two volunteers and cots to assist.

RayPort Campground and Shingle Mill Road Evacuation

On the evening of Sunday, July 23, 2023, REMO was advised the RayPort Campground had 250-300 customers from across North America who were stranded within the campground due to at least 3 feet of water over the road making it impassable due to the extreme current. Road repairs would need to occur once the water receded. The campground created a temporary access to Highway 103 and wanted the NS Department of Public Works (DPW) to erect traffic signs on Highway 103. This access to the Highway 103 was created illegally. Additionally, the

large slow vehicles leaving the campground made it very dangerous for travellers leaving the site and the normal traffic on the highway. In discussions with the campground, it was determined we could do a limited release of travellers to allow them onto the highway with the assistance of the RCMP for those scheduled to leave. The campground advised no one would leave until we spoke in the morning. In the morning while on our call with partners, DPW advised three vehicles had already left while they were on site. It was determined that for the safety of the campground customers with no ability to safely leave and the inability to ensure people would shelter in place, an evacuation order would be issued. As we uncovered more details, the evacuation order needed to be expanded to include the remaining area of Shingle Mill Road as there were some cabins affected. The evacuation and safe removal of customers and vehicles was enacted by the RCMP, Lunenburg County GSAR, and the Martin's River Volunteer Fire Department. A comfort centre was set up at the Blockhouse Fire Department and a variety of locations were identified that could take the campground customers.

Walker Road, Chester Landslide

With the significant rainfall the trails above Walker Road in Chester became extremely unstable and washed out creating a landslide of soil, brush, and trees creating damage to the homes and the road located below the slope. With new rain forecasted on the Monday evening, a decision was made to issue a voluntary evacuation and obtain a geotechnical engineer report on the stability of the slope to ascertain if a mandatory evacuation order would be required. With the decision being made during working hours, staff were reassigned to assist in door knocking, accessing data, locating hotels for evacuations should they be required. In the end, the geotechnical engineer advised that the way the slope eroded was the best situation for slope stability, therefore no mandatory evacuation order was necessary.

2.2 Timeline of Events

The timeline of key events is outlined, and incidents are colour coded for ease of following an incident through.
Black – general information
Blue – PSCB/MODL Hebb Lake Dam
Red – RayPort Campground and Shingle Mill Road Evacuation
Green – Walker Road Landslide

DATE	TIME	DETAILS
2023-07-20	16:07	Environment Canada, "Over the next week, we have another rainfall event (potentially significant one in some areas) setting up for the Friday into Sunday."
2023-07-21	09:17	Notification of pending heavy rain system, Weather Briefing #1
	16:00	On-call phone was monitored, with back-up, and a Comms rep
	22:30	Activation of the Provincial Coordination Centre – Event language from the Province changed from heavy rain to flash flooding
2023-07-22	02:09	Social Media post advising MODL has opened as a Comfort Centre
	03:49	Booked a conference call for REMO team in the morning

	07:00	About to close the Comfort Centre to move it to LCLC effective 08:00 as no one arrived, however Northfield Fire Dept. evacuated two individuals
	07:21	Advised AECs, CAOs and Comms of an upcoming call at 10:00 am
	07:44	PSCB advised they may need to pull two logs depending on runoff
	08:44	Provincial Coordination Centre activated, and their schedule announced – no conference calls scheduled
	10:00	REMO conference call and Situational Awareness
	10:34	PSCB advised two logs were pulled
	10:50	Decision made to Activate the ECC and begin Evacuation of Fancy Lake area
	12:01	Situational Report - SitRep #1 and Weather Briefing #2
	12:15	MODL Council convened to declare State of Local Emergency for Fancy Lake area
	12:27	Sent Form 4 to NS EMO to declare SOLE for Fancy Lake
	13:01	schedule updated – conference call at 15:00
	14:11	Alert Ready message sent to Shubie Radio to advise of Fancy Lake SOLE
	16:11	Map of Fancy Lake evacuation area was created
	17:35	PSCB advised three additional logs were pulled
	19:24	Province declared State of Emergency
	21:21	PSCB advised two additional logs were pulled
2023-07-23	08:28	PSCB no additional logs pulled overnight, but dam levels continued to rise
	09:05	PSCB advised Hebb Lake came up another 1" overnight but had slowed down substantially since yesterday. The dam was still 18" higher than normal operating levels.
	12:30	PSCB levels remained the same since 0900, it did not rise nor drop, and continued to be 18” above normal levels
	15:15	MODL Council convened to terminate the SOLE for Fancy Lake
	16:19	RayPort Campground emailed the MODL Mayor
	19:26	Mayor and Deputy CAO sent email to EMC
	17:38	PSCB dam dropped 0.5” between 10:00-17:00. Logs will remain as is until dam restores to normal operating.
2023-07-24	09:00	Meeting with REMO reps, NS EMO, DPW, RCMP re RayPort Campground issues. Meeting ended with decision to evacuate residents.
	09:57	Advised AECs of RayPort evacuation and asked for assistance
	10:31	MODL Council convened to declare State of Local Emergency for RayPort Campground
	10:55	Sent Form 4 to NS EMO to declare SOLE for RayPort Campground
	12:11	Alert Ready message sent to Shubie Radio to advise of RayPort Campground SOLE
	14:24	ECC activated in Chester to support ongoing operations and review Chester based roads and bridge issues
	15:30	MODL Council convened to declare State of Local Emergency for expanded area to include all of Shingle Mill Road
	15:57	Alert Ready message sent to Shubie Radio to advise of expanded area of

		SOLE to all of Shingle Mill Road
	17:37	ECC closed and reverted back to normal operations
2023-07-27	07:43	PSCB dam reached normal operating levels, spillway was closed, and one log inserted
	11:45	MODL Council convened to terminate SOLE for RayPort Campground and Single Mill Road.
	12:20	Notice to REMO Advisory that MODL SOLE terminated and back to normal operations
	15:35	Voluntary evacuation for Walker Road, Chester due to landslide
	16:24	Reactivated ECC in limited capacity in Chester to support a voluntary evacuation for Walker Road, awaiting geotechnical engineer report to determine if mandatory evacuation is required
	17:04	Alert Ready message sent to Shubie Radio to advise of Walker Road voluntary evacuation
	19:45	Based on geotechnical assessment, it was determined there is no need for mandatory evacuation
	19:55	Sent Shubie Radio Alert Ready Cancellation for Walker Road
2023-07-28	13:44	PSCB added two more logs and reached normal operating levels
2023-07-31	10:27	PSCB all logs were put back into the dam

3 Incident Review

The following are observations of what went well from the incident and accompanying recommendations to make improvements. A comprehensive understanding of both successes and areas for improvement ensures a holistic approach to enhancing emergency response readiness and effectiveness for future mitigation, preparedness, response, and recovery.

Including an assessment of what went well is vital because it highlights the positive aspects of emergency response efforts. Recognizing successful strategies, actions, and decisions reinforces those practices for future incidents, enabling the REMO team to build upon its strengths. This positive reinforcement boosts morale, fosters confidence, and encourages the replication of effective approaches.

The recommendations stemming from an incident are also essential as they gather the collective wisdom from analyzing both the successes and shortcomings of emergency responses. These recommendations provide actionable insights that drive meaningful improvements in preparedness, coordination, and execution during future incidents. By addressing identified areas of concern and building upon successful strategies, REMO can enhance its capabilities, adapt to evolving challenges, and foster a culture of continuous learning.

Some items in this report were raised in the Hurricane Dorian After-Action Report and have been added to its After-Action Report. The recommendation at the time may have been completed based on what was identified and now it is another layer of improvement, or it was at the time, not considered a priority.

The following insights and recommendations are consolidated by topic and are not listed in priority order.

4 Emergency Coordination Centre (ECC) Activation

Emergency Coordination Centre Activation Insights:

- **Life Safety**: Life safety and well-being of responders and residents was always a priority and decisions were made with safety in mind.
- **Staff Availability:** During both the MODL and Chester activations, the staff availability and readiness played a crucial role. Staff availability was enhanced during the Chester response as it was during weekday hours allowing a swift mobilization and coordination of staff to the incident from regular operations.
- **Field Observation:** In all instances, REMO or municipal staff were assigned to observe impacted areas and compared changes over time which proved extremely beneficial. This first-hand observation provided valuable insights for better decision-making.
- **Door to Door Notices:** Utilizing RCMP, GSAR, firefighters, and municipal staff for door knocking, allowed those trained in the ECC to provide direction to the incident. The direct contact with residents facilitated efficient engagement with the affected community and ensured a comprehensive assessment.
- **Availability of the EMC:** The availability of the Emergency Management Coordinator (EMC) for a variety of events occurring simultaneously played a significant role in the response and contributed to more informed and timely decision-making through prioritization of response and role expertise.
- **Effective and Organized ECC Operation**: While the ECC experienced moments of chaos, it is noteworthy that it was organized and worked well despite not strictly following the Incident Command System.
- **Partner Cooperation**: Collaboration and cooperation between partners assisting in the ECC or responding to requests from the ECC was very effective.
- **Flood Mapping:** The general accuracy of MODL's past flood mapping contributed to a more informed decision-making process, enhancing the overall effectiveness of the response.
- **Quick Notification**: Using I Am Responding to alert REMO staff was quick and effective to activate and mobilize staff.
- **RCMP in ECC:** Having the RCMP in the ECC and direct access to a dedicated representative throughout the shifts was extremely advantageous. Their presence contributed to enhanced situational awareness and preparation for their work advising residents of the evacuation.
- **Dept of Public Works' Responsiveness:** The responsiveness of DPW played a crucial role throughout the week. Their efficiency contributed to a more effective response, situational awareness, as well as prioritization of issues at their departmental level which allowed for REMO's planning to continue.

- **Effective Use of Chambers as Comfort Centre**: Successfully using MODL Council Chambers as a comfort centre in the early morning proved to be an efficient alternative to mobilizing volunteers at a separate site. This was successful because the ECC was not fully activated, thereby using the same space as general best practice is to keep the ECC and residents separate.

Emergency Coordination Centre Activation Recommendations:

1. **Effective Notification**: When the REMO team responds to an I Am Responding notification, it is essential staff follow the instructions to reduce overwhelming the on-call representative as mobilization begins.
2. **Enhanced Flood Mapping**: While having access to some former flood mapping was beneficial to enhance the future response capabilities, it is recommended all units expand their flood mapping. This mapping should be easily accessible to key personnel, such as the CAOs or AECs for each unit, and preferably with REMO. Ideally, the mapping should be interactive and adjustable with real-time data on water levels (e.g., storm surge, various levels of water inundation, etc.).
3. **GIS Data:** Having a centralized location for GIS data, cross training, or share the data with all units, GIS techs will have access to all data for a timely response.
4. **GIS Mapping**: Including mapping and GIS tech at the beginning of a response. A map of the evacuation area must be included in the press release and alert to reduce questions and misunderstanding from residents which will also support the staff assisting residents.
5. **ECC Manager Role**: The ECC Manager should not be the CAO of the most impacted unit, particularly if a SOLE is being considered to avoid conflicts with their responsibility to their Council. Additionally, determining who will be the ECC Manager is important as some CAOs have expressed interest in not being an ECC Manager/attending the ECC.
6. **Clear Role Definition**: Clear role definitions and responsibilities for individuals within the ECC are essential to avoid confusion and ensure effective coordination. Designating an ECC Manager who remains within the ECC and has a comprehensive understanding of the response is crucial for effective management.
7. **Role Clarity and Checklists**: Provide role clarity for each individual in the ECC, and checklists to aid in effective communication and information sharing so the team understand and can fulfill their roles.
8. **Trigger Checklists**: Increasing trigger checklists to assist in reducing delays in decision-making. The time taken to decide on an evacuation could be minimized through more efficient processes and having the PSCB available on the initial conference call for situational awareness.
9. **Documentation Staff**: Increase ECC staffing to document the response, create reports and releases for smoother emergency response and future tracking. Having a dedicated master scribe and supporting scribes for critical roles will assist with record keeping.

10. **Expanded Training to Build Capacity**: Extend training opportunities to more individuals to bolster overall emergency response capabilities.
11. **Staff Training**: Staff training should be increased to enhance our capabilities in various areas, such as emergency management, documentation, and flood mapping. Increasing the number of staff trained for ECC activation, for example more Comms representatives and AECs would enhance the response and reduce staff burnout.
12. **Cross-Training:** Cross-training within and between units is highly advantageous, particularly in fields such as communications, GIS mapping, and water/wastewater treatment operations. This will enhance staff skills to effectively manage and be prepared for future emergencies.
13. **Universal Access to REMO Information**: Provide staff training to easily access to the REMO portal on all devices for emails, contacts, and files for streamlined operations.
14. **Accessing Evacuation Plans and Documents**: Ensure that evacuation plans and other essential documents are accessible and utilized during emergency situations for informed decision-making.
15. **Pre-Planning Meeting:** Based on pre-approved triggers, host a pre-planning meeting prior to a weather event to have proactive discussions, streamline response strategies, improve preparedness, and create staff schedules.
16. **Regular Check-Ins for ECC Staff**: Establishing regular check-ins for ECC staff can help keep them updated and informed, and they may share info about their roles/duties. Staff also need to feel confident to share challenges or information they may have.
17. **Advising of Potential Issues**: Increasing the confidence in the municipal units to raise awareness of potential issues is advisable to ensure timely response preparations. Some units did not advise of potential issues as the initial evacuation was beginning and left the topics out of future planning and awareness.
18. **Improved IT Environment**: Expanding the IT environment with extra laptops and cell phones for REMO would support more efficient operations especially for those to be trained in the ECC.
19. **Simplify and Standardize Email Addresses**: Streamline email addresses for convenience during emergencies by shortening them and ensure consistency across sections.
20. **Additional REMO Phone:** Acquire additional REMO phones to streamline communication to separate the public calls from partners and incident related calls.
21. **Sharing the REMO phone:** Partners felt that not having a dedicated phone for the EMC created problems as alternate team members than the EMC answered; it added confusion for partners.
22. **Centralized Storage:** Creating centralized storage for REMO and the ECC emergency supplies, including checklists, disposable items, tools, and maps, section to-go boxes, will ensure quick access during emergencies.

23. **Instruction for Door Access**: Provide clear instructions for unlocking the MODL front door for use during emergency situations.
24. **Voice Mail Passwords for Units**: Obtain the voicemail passwords for the municipal units to enable general messages related to the emergency to enhance communication capabilities with residents.
25. **Ventilation System Manual Override:** Develop instructions to manually override the ventilation system after hours and on weekends for both ECCs to ensure a comfortable working environment.
26. **Supplies on Hand:** Build a tote of miscellaneous supplies that could be used at comfort centres and shelters on hand so staff can continue to be in the ECC. Examples include, body wash, shampoo, disposable towels, toothpaste/brushes.
27. **Increased Visa Limit:** Consider increasing the visa limit to $5,000 to provide ability for emergency-related expenses.
28. **Red Cross Coordination**: Improved coordination with organizations like the Red Cross to ensure efficient distribution of resources and responsibilities and create consistency between responses. In the past Red Cross has been designated to staff shelters, however REMO was required to supplement staff and feed residents which was normally a Red Cross shelter service.
29. **Stronger Provincial Representation**: The inclusion of provincial representatives from NS EMO and DPW within the ECC could improve coordination and access to additional resources.

5 Evacuation

Evacuation Insights:

- **Primary Focus on Life Safety:** The unwavering emphasis on 100% life safety of residents was the paramount goal throughout all evacuations.
- **School Buses**: The School Board offered school buses before the evacuation took place and demonstrated proactive planning, enhanced partnerships, and effective resource utilization.
- **Smooth Evacuation Process and Door Knocking**: The evacuation process went smoothly, and no problems were raised by the affected residents. Involvement from the RCMP, GSAR, firefighters, and staff assisted with door knocking. Despite some minor errors, their support was crucial and a positive aspect of a timely response.
- **Effective Communication**: During the voluntary evacuation, after a mandatory evacuation was not required, residents appreciated the call to return, reflecting well-executed communication efforts.
- **Dedicated Roles**: Having dedicated RCMP in the ECC and a representative specifically focused on evacuation management, was a key success factor.
- **Efficient Staff Mobilization**: Rapid mobilization of staff resources, particularly during the daytime, helped streamline response efforts.
- **Voluntary Evacuation**: Initiating the voluntary evacuation early while determining the need for mandatory evacuation was a proactive approach and showed readiness and situational awareness. This allowed residents time to prepare in case the situation escalated.

Evacuation Recommendations:

1. **GIS mapping**: Ensuring mapping is requested early will assist in many aspects of the incident such as the alert, press release, social media, and with the door knockers. Maps provide a visual aid and can relay relevant information which could improve communication. Additionally, having knowledgeable staff available for input to review the map and number structures as there are many unregistered structures and backroads in the rural areas that would not be identified in GIS mapping.
2. **Comprehensive List of Addresses**: Coupled with mapping, maintaining an up-to-date list of civic addresses within the evacuation zone map for the ECC staff would assist in efficient and accurate communication, especially to those answering calls from residents.
3. **Dedicated Public Telephone Line**: Establishing a dedicated public telephone line separate from REMO's regular phone could ensure streamlined communication with the public.
4. **Door Knocking and Evacuation Process**: Providing accurate information, along with map and addresses to door knockers is crucial to prevent misunderstanding and confusion among residents.

5. **Updated Evacuation Form**: The evacuation form required updating to make it simpler, include accommodation needs, and review the gender-related fields to ensure inclusivity. Having tape and Ziplock bags in the ECC to-go-box will protect documents from rain for those residents who were not home.
6. **Evacuation Triggers**: Creating clearly defined evacuation triggers for locations like Hebbs Lake and Fancy Lake are necessary for decisive action.
7. **SOLE Termination:** Giving direction to terminate the SOLE is a significant decision. It's critical to ensure that all information and implications related to ending the SOLE are not only accurate but also fully understood by the ECC Manager(s). All relevant partners should be involved in a meeting to determine if terminating the SOLE is appropriate, and the decision would be made though a multi-jurisdictional decision-making process.
8. **GSAR Support**: During the voluntary evacuation, the RCMP contacted GSAR to assist however GSAR contacted REMO and declined assisting but indicated they would assist for a mandatory evacuation. This created an additional burden on finding staff and volunteer firefighters to advise residents. Seek clarification from the RCMP and GSAR regarding the teams' ability to assist in voluntary evacuations. Ensure that the scope of assistance is clear and aligns with the emergency needs, as waiting until a mandatory evacuation could be too late.
9. **Pre-arranged Agreements**: Having pre-arranged agreements in place for transportation, feeding, and shelter streamlines response efforts during emergencies. There was additional time and human resources required to obtain physical resources, some of which are normally provided by external partners.
10. **Comfort Centre Locations**: Clearly communicating the locations, times, and functions of comfort centres and shelters prevents confusion among residents.
11. **Staff Identification**: Having identification with REMO or the municipal logos on resources such as vehicles, vehicle magnets, vest, lanyards, etc., enhances clarity and transparency for residents during response activities.
12. **Hotels were unavailable**: During the Chester evacuation, REMO and Red Cross staff were checking for hotels and none were available from Halifax to Liverpool. This would have necessitated a shelter if the evacuation became mandatory.

6 Dam Operation

Dam Operation Insights:

Acknowledging the effective efforts of the PSCB is essential for recognizing their successful actions during the recent emergency situation. These positive aspects showcase their competence and dedication to managing the situation effectively, resulting in the safety and well-being of the community.

- **Following Dam Regulations:** The dam operations and PSCB's actions were based on the potable water dams in accordance with Canadian Dam Association regulations within the Nova Scotia Department of Environment requirements. Decisions regarding water levels and the removal of stop logs at the dam were based on the ongoing expert assessment by certified dam operators.
- **Gradual Log Management:** PSCB's approach of gradually pulling logs was commendable, demonstrating a calculated and effective strategy.
- **Minimizing Downstream Flooding:** PSCB's dedication to minimizing downstream flooding highlights their commitment to safeguarding life safety, the residents, and community.
- **Preventing Dam Breach:** PSCB's actions in preventing a potential dam breach were crucial in averting a more severe disaster.

Dam Operation Recommendations:

1. **Managing resident expectations**: Ensuring effective management and communication from MODL to the Hebbville Village Commission throughout the year is essential to avoid issues during emergencies.
2. **Public Education**: Educating the public could prevent unnecessary panic. Education that the dam operations follow the Canadian Dam Association regulations within the Nova Scotia Department of Environment requirements, how decisions regarding water levels are made, and the removal of stop logs at the dam are all based on the expert assessment of certified dam operators.
3. **Removal of Evacuation Order**: The removal of the SOLE and accompanying evacuation order requires coordinated approach from relevant parties to ensure the decision to maintains public safety. In conjunction with PSCB, create triggers and plans for initiating and removing the evacuation order to ensure public safety is upheld.
4. **Increase Communications with TOB, MODL, PSC**: Increase communication with TOB, MODL, and PSC. Direct interaction between PSCB and the HVC should be avoided to prevent the misunderstanding of data and eliminate staff from receiving unnecessary and inappropriate emails. MODL must find ways to communicate risk to the HVC while ensuring a balanced approach of timely and accurate information for residents.

5. **Support for Staff Handling Nasty Emails**: REMO staff and partners should not be subjected to offensive communications from the public. Create a policy to ensure staff dealing with emergencies do not have additional issues. Someone in a leadership role must reply identifying the action and communication ceases.
6. **Communication Triggers and Internal Information:** Establishing internal triggers and communication for dam events and adopt a colour scheme for dam operating levels to enhance internal information sharing.
7. **Contingency Plans and Risk Level:** The PSCB Emergency Response Plan to be updated and REMO to create a contingency plan for flooding in specific areas. PSCB will provide messaging about risk levels that are shared with MODL and REMO.
8. **MODL Council Workshop**: PSCB to provide a workshop with MODL elected officials about dam operations and risk levels to improve their understanding of the situation and actions taken. This should be added to new council training package every four years.
9. **MODL Water Monitoring**: Consider water level monitoring in Fancy Lake and provide data to PSCB to include the potential benefits of monitoring in relation to water releases in Hebb Lake.
10. **Safety of Staff**: RCMP were called to the PSCB Dam site as some members of the public chose to trespass in the area, deliberately disrupting staff access to the site and impacting the ability for staff to safely complete their work. It's recommended that local police and municipal partners work collaboratively to leverage social media and direct communication (such as mailouts) to better educate residents on the safety issues, risks, and legal implications of such actions.

7 State of Local Emergency / Elected Officials

State of Local Emergency Insights:

- **Timely Declaration of SOLE:** The promptness in convening Council to declare and terminate the SOLE showcased preparedness and a commitment to addressing the situation effectively.

State of Local Emergency Recommendations:

1. **Evacuation Announcement and SOLE**: Refrain from announcing evacuations before sending out SOLE notices unless it is necessary due to life safety. Without a SOLE, the municipality does not have the proper authority to evacuate residents as it is one of the powers under the Emergency Management Act.
2. **Administrative Support for CAO**: Provide the CAO who is convening Council and declaring the SOLE with in-person admin support to assist with form completion and minute-taking.

Elected Officials Insights:

- **Effective Convening of Council:** The quick availability of elected officials to convene the MODL Council to declare and terminate the SOLE demonstrated efficient decision-making and proactive management.

Elected Officials Recommendations:

1. **Expectations for Elected Officials**: Establish clear expectations for elected officials regarding the information they share and how the ECC operates, especially in coordinating with external partners. Screen elected officials out of the ECC to allow the ECC to focus on priorities and effective emergency response.
2. **Education for Elected Officials**: Provide more education to elected officials about the roles, responsibilities, and limitations of emergency management to avoid misunderstandings. Clarify when, how, and what information elected officials should communicate, and create a process, while re-emphasizing that communication should go through the CAO or AEC to maintain consistency among units and provide relief to the on-call representative.
3. **Scheduled Updates to Elected Officials**: Provide a clear, frequent schedule to update elected officials and REMO Advisory to ensure parties are consistently informed and able to make informed decisions. Clarify who is responsible in the ECC for sending these updates to ensure consistent communication.
4. **Elected Officials at Comfort Centres**: Elected officials should not be at comfort centres in a role representing REMO to prevent miscommunication and disruptions. Create a roster of volunteers to ensure a readily available pool of resources, reducing the need to use elected officials as key volunteers providing information to residents in the shelter/comfort centres.

8 Shift Schedules / People Resources

Shift Schedules / People Resources Insights:

- **Overall Outstanding Performance**: Acknowledging the great job done by all team members in handling the emergency response.
- **Shift Change and Reporting:** Shift changes and sharing information in reports for the next shift facilitated continuity and efficient response efforts. Work can be done to provide consistency with templates, but the information shared was timely and very valuable.
- **Staff Availability for ECC:** The availability of staff for the ECC played a pivotal role in effective coordination, activation, and decision-making.
- **5-Hour Shift Schedules:** The implementation of 5-hour shift schedules on day two was beneficial in preventing burnout and maintaining a fresh response team.
- **Effective Collaboration with DPW:** The successful collaboration with the DPW Area Manager was greatly appreciated, acknowledging their hard work, contribution, and timely responses.

Shift Schedules / People Resources Recommendations:

1. **Enhanced AEC Comfort Level**: Empower AECs to feel more confident in reaching out to anyone in the contact list for assistance.
2. **Increased ECC Staff:** Increase trained staff to assist in the ECC to enhance response capabilities.
3. **Information to RCMP:** Collaborate with the RCMP to establish a mechanism for sharing crucial information outside of regular hours.
4. **Deputy REMC**: Consider having a paid Deputy EMC to enhance support of the emergency management program.
5. **Review of On-Call Rates:** Review the on-call rates with AECs and EMC to ensure fair compensation with expanded frequency.
6. **Overtime Standards and Awareness:** Creating clear standards for overtime across all units and ensure clear communication to staff and AECs about expectations, compensation, and roles during emergencies so when a notice is received, they are aware it is meant for any staff who can safely attend to help.
7. **Feeding Residents:** Clarify the situation with the Red Cross and their role in food management during emergencies. REMO had to provide the feeding services for this incident.
8. **Job Description Updates:** Each municipal unit should update all job descriptions to include potential involvement in emergencies and clarify expectations during disaster situations.
9. **Staff Schedules:** Once a staff schedule is created, add the schedule to the Info@ calendar and copy all staff to streamline communication and reduce emails.

10. **Multiple AECs:** Consider having multiple AECs for each unit to prevent burnout during extended activations.
11. **Increased REMO Staff:** Enhance the dedicated REMO staff complement to bolster response capabilities and allow sufficient staff for multiple shifts which prevents burnout.
12. **Training and Staff Expectations:** Train more staff and establish expectations for their readiness to respond during emergencies.
13. **Emergency Contact Information:** Maintaining personal home/cell numbers for all municipal staff in case of emergencies. Consider the utilization of the I Am Responding system as a conduit for communicating quickly with staff instead of using work emails which many do not receive after hours.
14. **Stagger Shifts:** Overlapping ECC shifts for key roles would prevent mass departure and abrupt transitions to maintain continuity between shifts and ongoing coverage.
15. **Roster of Volunteers:** Establishing a roster of volunteers of both staff and public volunteers, ensures a readily available resource pool for staffing the ECC, comfort centres/shelters, or other duties as required in an emergency.
16. **Shift Reporting:** Documenting key actions for each individual and generating a summary report to provide consistency for the next shift can be improved. One way to facilitate this is to have more scribes assisting in the ECC.

9 Communications

Communications Insights:

- **Separate Comms Channel**: Maintained a separate Comms channel and fostered inter-team communication for effective coordination.
- **Increased Social Media Engagement**: REMO's Facebook followers quadrupled in the past year, indicating successful engagement and effective communication.
- **Remote Comms Support**: The use of remote Comms support for updates streamlined communication efforts.
- **Effective Public Communication**: General communication with the public was commendable, ensuring crucial information was conveyed.
- **Swift Messaging for Walker Road**: Quick and effective messaging during the Walker Road event, including timely dissemination to the public, staff, and council.
- **Consistency Across Facebook Pages**: Ensuring consistent messaging across all Facebook pages preventing discrepancies and maintaining accurate information.
- **Effective Use of REMO Website and Facebook**: Utilizing the REMO website and Facebook as primary information sources facilitated efficient information sharing and directed users to a centralized platform.
- **Effective Communication Coordination**: The internal communication process was successful, facilitated by having relevant parties available.
- **Partners Feedback:** Partners felt communication between them and the ECC were highly effective, triaged, and were responsive to issues as well as sharing information.

Communications Recommendations:

1. **Coordinated Comms Team**: Maintain a coordinated and consistent approach among Comms to ensure effective information dissemination.
2. **Unit Comms Rep for Council Support**: Involve Comms of the affected unit to support council and the CAO, particularly in the early stages.
3. **Dedicated Comms Personnel**: Assign two communications personnel in the ECC: one for council, SOLE, and ECC communication; the second for social media management to ensure timely preparation of necessary materials.
4. **Social Media Posts Preservation**: Preserve social media posts for documentation, history, and potential legal matters. Consult record-keeping policies for guidance.
5. **Part-Time Comms for REMO**: Consider hiring a part-time communications representative for REMO to manage year-round public education, social media, and ECC activations.
6. **Centralized Comms Approval**: Establish a protocol where no communication is posted until approved and directed by the ECC Manager to post.

7. **Templates and Automatic Messages**: Create pre-populated templates and automatic messages to streamline communication during emergencies.
8. **Comprehensive Comms Strategy**: Develop an overarching communication strategy for REMO, encompassing various scenarios and channels.
9. **Public Education Enhancement**: Increase public education efforts to improve awareness and preparedness.
10. **Road Closures**: A Fire Department member felt that DPW and/or REMO should provide road updates to them. This is not REMO's role, however we can advocate to DPW for accurate and timely information on the 511 system. There were many times a road was closed or reopened, and the 511 system was not updated for a few days. For first responders, the importance of accurate information, reduces response time for fire departments and their members' ability to get to the station or incident.
11. **Transparency and Public Communication:** Clarifying that emergency management does not share all information with the province and educating the public on information-sharing procedures, similar to NSP outage maps, to improve transparency and public awareness.
12. **Trails Management Clarification**: Clarify that municipal jurisdictions manage specific trails, and communicate closures based on their jurisdiction only.
13. **Roster for Municipal Comms**: Develop a roster for municipal staff as a backup to the main Comms rep to handle municipal communication duties to prevent overburdening Comms staff during emergencies and allow downtime.
14. **Early Comms Activation**: Activate Communications earlier to inform staff and council promptly.
15. **Integration of Other Units**: Integrate Communications staff from TOL and TOMB into larger response efforts for comprehensive support. Offer training and support for inexperienced representatives to better handle emergency communications.
16. **In-Person Presence of Comms Lead**: Ensure the lead Comms representative is on site wherever possible for effective coordination.
17. **Effective Pre-Activation Communication**: Improve communication about pre-activation and monitoring stages to ensure Councils are aware of evolving situations.
18. **Communication at Exercises**: Include Comms in training and exercise sessions to improve preparedness.
19. **Checklist for Communication Points**: Develop a checklist outlining communication points and responsibilities for updates.
20. **Shared Social Media Passwords**: Facilitate collaboration among units by sharing social media passwords among Comms team members and with REMO to allow Comms downtime.
21. **Consideration for Mobile Users**: Consider a text-based website for rural residents using mobile devices to accommodate faster upload speeds.

22. **Dated and Time-Stamped Information**: Keeping all updates dated and time-stamped provides clear context and accurate information to users. Highlight 'Latest Updates' so users can obtain the most accurate version to avoid confusion when updates are issued.
23. **Enhanced Emergency Notification Triggers**: Develop clear triggers for using emergency notifications and establish streamlined procedures for their deployment.
24. **Comments and Messaging on Social Media**: Consider disabling comments on social media and directing users to send direct messages, while using automated messages linked to the website for further information.
25. **Scheduled Updates and Communication**: Provide a schedule for the next update to the public, even if there is no new information, to maintain engagement, transparency, and provide a sense of consistency to reduce uncertainty for residents.
26. **Additional Staff Email Update**: Providing a second email update to staff on Sunday would have improved awareness and engagement, as some staff were unaware that their assistance was still required.
27. **Council Communication Gap**: Address the gap between Council decisions and communication to relevant Directors, as evidenced when park/trail closures were decided by Council without notifying the Director.
28. **Appropriateness of Communication Source**: Evaluate whether REMO is the most suitable organization to convey issues to elected officials or if an alternative channel could be more effective.
29. **Automated Cross-Posting**: Explore automation to share REMO posts across all units to ensure consistent information distribution.
30. **Internal Communications**: Communication between comfort centre/shelter and the ECC could be improved. Staff in those areas felt they were out of the loop and did not receive accurate information or updates.

10 Alerting

Alerting Insights:

- **Effective Alert Ready System**: The Alert Ready system promptly and effectively notified people, contributing to rapid information dissemination.

Alerting Recommendations:

1. **Enhanced Alert Ready Usage**: Define clear triggers for when to use Alert Ready versus public notices or website/social media updates.
2. **Alert Ready Terminology**: Clarify with NS EMO the difference between "cancel" and "expire" on the SOLE forms to avoid confusion.
3. **Enhanced Content**: Ensure the alerts provide accurate information regarding civic addresses, accompanied by an evacuation area map. Clear and comprehensive information is crucial.
4. **Faster Alert Deployment**: Craft public notices in a timelier manner to ensure that residents receive crucial information promptly.
5. **Alert Ready Form Issues**: Address technical issues with NS EMO regarding the Alert Ready form, ensuring it works on all computers and fields are properly defined.
6. **Early Alerts for Potential Evacuation**: Consider issuing early alerts to notify the public about the potential for evacuation, as this could help residents prepare.

11 Prioritization and Next Steps

The priorities identified are as follows:

1. Strengthen the REMO staff complement by expanding the number of AECs per unit and have some alternate staff assigned and trained in ECC roles.
2. Train REMO staff to be more comfortable when and how to evacuate by creating triggers and checklists.
3. Train all units' staff in a course on a basic awareness of what emergency management is and how they may be called to assist.
4. Create more training/exercises opportunities the REMO team.
5. Create a Volunteer Roster for residents to support emergency management when needed. Basic training would follow.
6. Create triggers & checklists to include for role and responsibility clarity during ECC activations.
7. Create procedures and volunteers who can assist in shelter and comfort centre operations.

12 Recommendation Follow-Up

A combination of factors, including staff readiness, effective field observations, past training, expert assessments, collaboration with various partners, strategic decision-making, and timely mobilization, all contributed to the successful response. These positive outcomes highlight the importance of preparedness, expertise, and collaboration in managing such incidents effectively.

REMO has noticed an increase in the lack of staff or volunteers in partner agencies, and this has created a need for REMO to supplement the roles normally fulfilled by outside agencies. REMO will require more staff if we take on these roles, Additionally, it moved REMO from solely coordinating a response to operating some aspect of it as well.

There are several steps to ensure that the findings of the report are effectively incorporated into future planning and improvements.

Develop Action Plans: Action plans and staff allocation of resources are formulated based on the recommendations from the AAR. These plans outline specific steps to be taken to address the identified shortcomings or to reinforce successful practices.

Assign Responsibilities: Assign responsibilities for tasks to individuals or teams for executing the action plans. This ensures accountability and ownership of the improvement process.

Implementation: The action plans are put into practice. This could involve revising procedures, providing additional training, updating equipment, or making organizational changes based on the AAR findings.

Monitoring and Tracking: Progress on the action plans is monitored over time. Regular check-ins help ensure that the recommended changes are being effectively implemented and are producing the desired results. Regular feedback is solicited from those involved in the implementation process. This feedback helps to refine and adjust the action plans as needed.

Communication: The results of the AAR and the subsequent actions taken are communicated throughout the organization. Transparency about improvements being made fosters a culture of continuous learning.

Documentation: The entire process, from AAR to implementation, is documented. This documentation serves as a reference for future planning, learning, and decision-making.

Validation and Testing: In some cases, the changes implemented based on the AAR may need to be validated through drills, training, exercises, or simulations to ensure their effectiveness.

Regular Review: Periodic reviews are conducted to assess the long-term impact of the changes made and to determine if further adjustments are necessary.

Recommendations in this report will be managed and monitored by the EMC. The EMC will send out the action items report every two months where all municipal units in this incident will be able to view and check the status of all action items. The EMC will review and assess the status of all the action items and send out updates to all groups involved and include in the REMO Advisory Committee if policy changes are required.

13 Conclusion

The Major Flash Flood Event was and example of the successes the REMO Team experienced and future improvements. With this being our first activation in over fifteen years, it was a true test of our ability to respond.

This Major Flash Flooding Event After-Action Report was facilitated by the Lunenburg County Regional Emergency Management Organization's Emergency Management Coordinator. The information was submitted with the input from the Chief Administrative Officers, Assistant Emergency Coordinators, and Fire Services Coordinators, and Communications staff from the Municipality of the District of Chester, the Municipality of the District of Lunenburg, the Town of Bridgewater, the Town of Lunenburg, and the Town of Mahone Bay.

Reports presented to CAOs:

First Draft	August 25, 2023
In-person discussions	September 6, 2023
Second Draft	September 7, 2023
Final Sign-off	September 12, 2023

Reviewed and accepted:

Tara Maguire, CAO
Municipality of the District of Chester
Date: Sept 13/23

Alex Dumaresq, Deputy CAO
Municipality of the District of Lunenburg
Date: 13/23

Tammy Crowder, CAO
Town of Bridgewater
Date: Sept 13, 2023

Jamie Doyle, CAO
Town of Lunenburg
Date: 09/14/23

Dylan Heide, CAO
Town of Mahone Bay
Date: Sept 14 / 2023

Final report submitted to the REMO Advisory Committee on September 18, 2023.

REMO Advisory carried the motion to accept the Major Flash Flood Event After-Action Report on _____.