

High Winds and Hazmat in Lamoille County

After-Action Report/Improvement Plan

August 12, 2020

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.

EXERCISE OVERVIEW

Exercise Name	High Winds and Hazmat in Lamoille County
Exercise Dates	August 12, 2020
Scope	This exercise is a Tabletop Exercise, planned for 4 hours virtually through Microsoft Teams.
Mission Area(s)	Response
Core Capabilities	Situational Assessment, Operational Communication, Mass Care Services, Operational Coordination
Objectives	<ol style="list-style-type: none"> 1. Discuss sharing situational awareness within the county. 2. Discuss communication and back up communication methods between organizations during a long-term power outage. 3. Discuss establishing shelters throughout the county. 4. Discuss the viability of having multi-town Emergency Operations Centers.
Threat or Hazard	High Winds & Hazmat Incident
Scenario	High Winds statewide result in significant power outages throughout the region. During the region-wide power outage, a hazmat incident in Cambridge results in evacuation and additional communication challenges.
Sponsor	Local Emergency Planning Committee 11 (Lamoille County)

Exercise Name	High Winds and Hazmat in Lamoille County
Participating Organizations	Hyde Park Waterville Lamoille County Planning Commission Vermont Electric Co-op Copley Hospital Radio Amateur Civil Emergency Service Vermont HAZMAT Team National Weather Service
Point of Contact	Carol Fano, LEPC 11 Chair cfano@comcast.net, 802-888-4347 Emily Harris, Exercise Director Vermont Emergency Management Emily.Harris@vermont.gov, 1-800-347-0488

ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P) Performed with Some Challenges (S) Performed with Major Challenges (M) Unable to be Performed (U)
Discuss sharing situational awareness within the county.	Situational Assessment	Performed with Major Challenges (M)
Discuss communication and back up communication methods between organizations during a long-term power outage.	Operational Communication	Performed with Some Challenges (S)
Discuss establishing shelters throughout the county.	Mass Care Services	Performed with Some Challenges (S)
Discuss the viability of having multi-town Emergency Operations Centers.	Operational Coordination	Performed with Some Challenges (S)

Table 1. Summary of Core Capability Performance

Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

Objective: Discuss sharing situational awareness within the county.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability: Situational Assessment

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: VT Electric Coop took the lead when it came to communications with the public

Analysis: The VT Electric Coop took the lead in terms of communications with the municipalities and the public. They continually updated their website and Facebook page with helpful information such as contact numbers, current outages, and estimated restoration time.

They took the lead in communications with the vulnerable population in both the identification of and the supplying of critical information in a timely fashion. It appears this model is standard operation with VT Electric Coop and is not a result of an inefficacies possibility displayed during the incident.

Strength 2: Many Radio Amateur Civil Emergency Service (RACES) members have access to weather information and may be able to increase coordination and information sharing with the National Weather Service.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Not enough emphasis was placed on the notification of vulnerable populations by the municipalities.

Reference: Hyde Park Local Emergency Management Plan Page 4, Waterville Local Emergency Management Plan Page 5

Analysis: Both Local Emergency Management Plans include a list of vulnerable populations and note that the Emergency Operations Center may contact those organizations and facilities who are at risk and monitor their status. This is a best practice, as many of these organizations require additional time to plan for a potential disaster. Unfortunately, neither municipality discussed notification of these organizations utilizing the information contained within the plan.

Through this exercise, municipalities became more familiar with the CARE program which can assist them with reaching vulnerable individuals during an emergency. Unfortunately, a limited number of individuals are currently registered for CARE, reducing its effectiveness in each community.

As a standard practice, Vermont Electric Coop proactively reaches out to identified vulnerable individuals. This information is not able to be shared with municipalities, which can impact their complete understanding of the situation.

Area for Improvement 2: There was a lack of formal coordination with incident command on the part of both municipalities.

Reference: Hyde Park 2020 Local Emergency Management Plan Element #2, Waterville 2020 Local Emergency Management Plan Element #2

Analysis: Each Local Emergency Management Plan noted that the Emergency Operations Center would be established to coordinate information across the municipality for Incident Commanders and Town Officials, as well as maintain situational awareness.

As individuals were filling multiple roles, Incident Command appeared to be casual in nature. At one point a participant noted “well the Fire Chiefs will talk to each other” but this was the first and only reference made to any type of fire department involvement. It was unclear who would be filling the role of Incident Commander in each municipality, and how situational awareness would be shared between towns and organizations. There was no reference to using any formal documentation, either within or between Emergency Operations Centers.

Area for Improvement 3: A formal communication plan between the 2 (or any) municipalities does not exist.

Reference: No known documentation.

Analysis: Each municipality attempted to manage what could only be described as a regional incident on their own utilizing their own plans and resources. There was no attempt at intermunicipal communication, resource sharing or interoperability potentially resulting in premature resource depletion, duplication of efforts, and delayed notifications and/or responses. The application of Unified Command would have alleviated many of these concerns.

Unified Command relies on the premise that there is no single incident command but rather the incident is managed via jointly or regionally adopted objectives. Agencies with different geographical, legal, and operational functions work together with one (or more) common goal(s). Unified Command is not designed to affect individual agency authority, responsibility, or culpability.

Unified Command is utilized as an authority and resource management tool which can include multiple jurisdictions, a single jurisdiction with multiagency involvement, or multiple jurisdictions with multiagency involvement.

Objective: Discuss communication and back up communication methods between organizations during a long-term power outage.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability: Operational Communication

Strengths

The partial capability level can be attributed to the following strength:

Strength 1: LEMPs for both participating towns rely heavily on phone lines for internal and partner agency communication, but do provide alternate contact means in case cell towers fail.

Reference: Hype Park LEMP, Waterville LEMP

Analysis: The Hype Park plan lists both home (landline) and cell numbers for all key Points of Contact (POCs) that presumably are operated by different telecommunication companies. In addition, the LEMP lists physical addresses for key locations such as sites housing vulnerable populations, shelters, etc. in case communication had to be made in person. The LEMP also lists places where community bulletin boards or notices may be placed for public-facing communication. Although the plan could be improved by listing addresses across the board for all contacts, or by the town investing in town-owned cell phones with different carriers to be used in times of communication interruption, Hype Park has given multiple possible methods of communication in its plan. This is critical since the scenario listed the Verizon tower as being damaged and power being intermittent. Although it was not actively discussed by Hyde Park in the scenario, the information was available to players had it been discussed in more detail.

Waterville, likewise, lists landline and cell numbers for its EOC staff, although it is missing phone numbers for some key support elements. Waterville's plan also includes addresses of key locations critical to its plan, as well as the emails of EOC members, which may still be usable in an emergency depending on computer backup power. Their plan also lists a single community bulletin board site for public communication. Waterville did address what it might do in a power failure or cell loss scenario and discussed possible use of RACES communications or transmitting messages using relationships with Vermont State Police. This should be formalized into their plan if it is a process they intend to use in a similar real life scenario.

Areas for Improvement

The following area requires improvement to achieve the full capability level:

Area for Improvement 1: The list of contacts in the LEPC 11 plan is incomplete.

Reference: LEPC 11 Regional Plan July 2020

Analysis: The LEPC 11 plan contains town contacts, general contacts, and individual Local Emergency Management Plans. The Local Emergency Management Plans include additional local contacts, and, in the case of Waterville, some regional contacts. Within the LEPC 11 plan, contact for the Vermont Electric Co-op is only noted in the Waterville Local Emergency Management Plan. Radio Amateur Civil Emergency Service (RACES) and Citizen Assistance

Registry for Emergencies (CARE) aren't mentioned at all. The contact list contained in the LEPC 11 plan should be reviewed for its completeness and accuracy on a regular basis and shared with all partners to ensure organizations have access to the most up-to-date information.

Objective: Discuss establishing shelters throughout the county.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Core Capability: Mass Care Services

Strengths

The partial capability level can be attributed to the following strength:

Strength 1: Waterville established a shelter early in the scenario.

Analysis: Waterville mentioned early in the scenario the need to contact the shelter manager, mobilize resources, and arrange transportation.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Belvidere shelter appeared to be a good location for Waterville to have a shelter, but there are no details in Waterville's Local Emergency Management Plan about this shelter and corresponding resources.

Reference: Town of Waterville LEMP; page 6, Shelters, Town of Belvidere LEMP; page 5, Shelters

Analysis: It is critical that towns list in writing the resources their EOCs should rely on, as well as the capacities/capabilities of those sites, site locations and contacts. Unwritten plans are not available to planners and responders, and key information can be lost as new people rotate into EOC positions. Having all shelter options available to the EOC will ensure the best possible option is chosen from among possible sites, as well as any gaps that will need to be addressed. It was mentioned during the scenario discussion that EOC staffing would be tight and may rely on one person or that people unfamiliar with the EOC might need to be pulled in. The LEMP should be the handbook all participants use to level the playing field and not rely on 'insider knowledge.'

In addition, not having the Belvidere site listed also means that the EOC doesn't have readily accessible information pertaining to how to accommodate vulnerable populations or pet concerns, which is information it would need to inform its own actions and that of the public. The scenario listed that there were mobility and language needs among the displaced population, as well as families with pets. Information available to Waterville during the scenario only listed the capacities/capabilities of the Waterville shelters, and the evaluator does not know based on the existing plan whether those resources translate to another location. Gaps in information may result in populations in need being excluded from the shelter at a time critical to life safety.

Area for Improvement 2: Hyde Park did not discuss using Hyde Park Elementary as a shelter, though it is listed in their plan as a pet friendly shelter.

Reference: Hype Park LEMP; pg. 5, Shelters

Analysis: Hyde Park had good understanding of needing the EMD and EOC Coordinator’s approval and involvement in coordinating with the shelter manager to open the shelter in a timely manner. However, they did not address key aspects of the scenario which required them to plan for pets. Based on the listed shelter options in their LEMP, either the high school or elementary is likely sufficient for staffing and generator power, but only one shelter can handle the companion animal needs in the scenario. In addition, the LEMP’s sheltering section does not address resources available at any of the shelters for vulnerable populations, and the scenario stated that there were mobility and communications needs among vulnerable populations that will require such information to be addressed.

Reference to the LEMP for planning decisions is key for EOC members to make informed choices. If a shelter has been the preferential location in the past it may be natural for staff at the EOC to default to that location without examining the needs of the current emergency and the capacity/capability available at each shelter. Ensuring the LEMP reflects the differences in the shelters, as well as ensuring staff is familiar with the LEMP and how best to use it, will remove any implicit biases in decision-making. Correctly choosing the best shelter for the given emergency will prevent individuals, families and dependent pets from being turned away in time of need.

Objective: Discuss the viability of having multi-town Emergency Operations Centers.

Core Capability: Operational Coordination

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Consistent use of Incident Command System terminology helped organizations to coordinate.

Strength 2: The exercise allowed participants to develop relationships with organizations they don’t regularly work with.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: It is unclear what EOC positions would be filled at the Hyde Park EOC.

Reference: Town of Hyde Park, Local Emergency Management Plan (LEMP), (appendix to LEPC 11 Plan), dated April 20, 2020.

Analysis: The Hyde Park Local Emergency Management Plan (LEMP) calls for the EOC Director to activate the EOC. For this incident, the Town Administrator directed the Emergency Management Director (EMD) to open the EOC as the EOC Director. This same section indicates that the additional staff for the EOC includes an EOC Coordinator, a Call Taker/PIO and a Safety/Security Officer. Potential staff members by position are also listed in this section but there is no one listed as a potential staff member for the Safety/Security Officer position. It was unclear during exercise discussions, who if anyone filled the roles other than the Director.

At 143hrs, the Town Administrator directed the EMD to open the EOC. The Town Administrator indicated that he would update the Selectboard, Finance Director and the EMD on the situation. The EOC would be checking for road closures and for those who might need assistance. At 1452hrs, the EOC reported that highway crews were clearing roads, eight (8) chainsaw crews were available, all communication was by radio, and the Finance Director was taking damage reports at the town office. This might create some confusion for citizens regarding who (EOC or town office) they should call for what reason.

The Town Administrator reported that available EOC staff included himself, the EMD and the EMC which would not be sufficient for 24-hour operations. At 1520hrs, the EOC Director confirmed the opening of a shelter coordinated by the EMD/EMC but that staffing was a challenge and volunteers were needed, otherwise they may use off-duty firefighters. At 1542hrs, the EOC reported that they would not use social media to publicize the availability of the shelter but use Front Porch Forum. Although the actions taken by the town described during exercise discussions were appropriate, lack of available local personnel resources to staff the EOC and/or the local shelter may delay response activities and cause a more significant negative impact on people and property in the town.

Area for Improvement 2: The Waterville EMD was the EOC Manager, but it was not clear who filled the EOC Support positions and what their tasks were.

Reference: Town of Waterville, Local Emergency Management Plan (LEMP), (appendix to LEPC 11 Plan), dated March 26, 2020.

Analysis: The Waterville Local Emergency Management Plan (LEMP) calls for the Selectboard or EMD to activate the EOC. For this incident, EMD activated the EOC. This same section indicates that the staff for the EOC includes an EOC Manager which was filled by the EMD who is listed in the LEMP as a potential EOC Manager. It was unclear during exercise discussions, who if anyone filled the role(s) of EOC Support. At 1433hrs the EOC Manager indicated that he would be checking the status of roads and those that might need assistance. He additionally noted that he would activate the shelter and coordinate busses for transport to the shelter. Further he would coordinate requesting and directing chainsaw operations. Although these are appropriate actions to take in response to the incident, it seems that it would be a challenge for one person to accomplish all in a timely manner without some assistance. It was not clear that any additionally listed available EOC Staff were available or called in to assist. At 1456hrs, the EOC Manager continued to determine who in the town needed assistance. He also wanted to request RACES assistance for communications. When asked how he might make that request, the EOC Manager indicated he would make that request through an available Vermont State Police cruiser rather than through the State Emergency Operations Center or the Vermont Emergency Management (VEM) Watch Officer as indicated in Section 3 of the LEMP. At 1523, the EOC Manager

confirmed the opening of a shelter at Belvidere Elementary staffed by volunteers. He would publicize the availability of the shelter through Front Porch Forum and contact Town Market for feeding. At 1537, the EOC manager expressed a need for more volunteers for both the EOC and the shelter. It was also noted that the Town Hall EOC location does not have auxiliary power which would limit operations during a power outage. Although the actions taken by the town described during exercise discussions were appropriate, not being aware of the procedures to request external support/resources (communications and volunteers), the need for that support may not be recognized and received when needed. Additionally, available local personnel resources to staff the EOC and/or the local shelter may delay response activities and cause a more significant negative impact on people and property in the town.

Observation

Due to the limited participation from local officials in this exercise, the partial capability level can be attributed to the following observation. This observation is associated with recommendations for how to coordinate discussions on this subject in the future.

Observation 1: The concept of a multi-jurisdiction EOC needs further refinement.

Reference: FEMA, National Incident Management System, Third Edition, October 2017

Analysis: Near the end of the Tabletop Exercise, there was a brief discussion about the concept of a multi-jurisdiction EOC. However, since two of the expected town players were unable to participate in the exercise, there was insufficient detail in that discussion to establish an embryonic concept for further development. This finding is intended to include considerations for future discussions. The finding is not considered a noted strength or an area for improvement until the concept is accepted and further developed.

FEMA, National Incident Management System, Third Edition, October 2017 reminds us that National Incident Management (NIMS) Principles are Flexibility, Standardization and Unity of Effort. For the concept of a multi-jurisdiction EOC, flexibility (adaptable to any situation) and unity of effort (coordinating activities among various organizations to achieve common objectives) are particularly applicable. In the context of the discussion of multi-jurisdictional EOC, flexibility applies to numerous contiguous towns significantly impacted (loss of power, roads closed, individuals and families displaced or have homes damaged or destroyed, possible injuries or deaths) by a widespread natural disaster each responding to protect people, property and the environment. Because the towns are facing similar challenges in response, they might consider a combined effort to make the best use of their limited internal resources to control and coordinate response throughout the multi-jurisdictional area. In NIMS terminology, this unity of effort enables organizations with specific jurisdictional responsibilities to support each other while maintaining their own authorities. Although the flexibility and unity of effort approach for these towns could go in several directions, we will focus on identifying some considerations related to establishing a multi-jurisdictional EOC. COVID-19 Pandemic may have suggested that “bricks and mortar” aren’t always essential, for the purpose of this discussion and the jurisdictions involved, we will address considerations to be made in choosing an actual facility (existing or temporary) for the multi-jurisdictional EOC. For the five (5) to eight (8) towns involved in the choice of a facility, they will want to consider if the potential EOC has power

(auxiliary or other), is it reasonably accessible, what is the communications capacity (telecommunications, band width, basic phone lines), physical space (work stations, large room(s), small room(s)), number of bathrooms, kitchen or eating area, sleeping area, security? For this discussion, we are not going to establish in detail the internal EOC structure other than to assume that each jurisdiction desires to be represented in the EOC (physically or virtually) and to provide options on how command and coordination might work.

Option 1: Each jurisdiction has an incident commander on scene, all of whom are supported by a multi-jurisdictional EOC. Each jurisdiction is represented in that EOC at the EOC Director/Manager level. Each jurisdiction may provide EOC staff based on their qualifications and the established structure. Primary functions of staff in EOCs, whether virtual or physical, include: Collecting, analyzing, and sharing information; Supporting resource needs and requests, including allocation and tracking; Coordinating plans and determining current and future needs; and In some cases, providing coordination and policy direction. Consultation must occur between jurisdictions for resource needs to be shared across jurisdictional boundaries.

Option 2: Establish a single incident command post using unified command with the individuals designated by their jurisdictional or organizational authorities jointly determine priorities and objectives, allocate resources, and work together to ensure the execution of integrated incident operations and maximize the use of assigned resources. This unified command could be supported by a multi-jurisdictional EOC to support the priorities established by the unified command.

Option 3: This option is similar to option 2 except that a unified area command with jurisdictional representation is formed to command individual jurisdictional incident command posts. This unified area command could be supported by a multi-jurisdictional EOC to support the priorities established by the unified command. The unified area command could be co-located with the EOC

Appendix A: IMPROVEMENT PLAN

This IP has been developed specifically for the High Winds and Hazmat in Lamoille County Tabletop Exercise conducted on August 12, 2020 and the After Action Meeting conducted on September 16, 2020.

Core Capability	Observation	Corrective Action	Organization POC	Start Date	Expected Completion Date
Situational Assessment	Not enough emphasis was placed on the notification of vulnerable populations by the participating municipalities	As part of an EMD roundtable, provide necessary training on this part of the EOP emphasizing the importance of early notification of this segment of the population. Include Sheriff Marcoux & 211 in this conversation.	Alec Jones		12/31/2020
		Hyde Park should coordinate with Sheriff Marcoux on CARE advertisement process and next steps, including updating LEMP.	Carol & Ron		11/1/2020
		Waterville should consider providing Citizen Assistance Registry for Emergencies (CARE) information to individuals in their community and adding information to their LEMP about how to access the information during an emergency.	John Terrel, Waterville	9/30/2020	12/31/2020
		Vermont Electric Co-op should consider providing Citizen Assistance Registry for Emergencies (CARE) information to vulnerable populations that are currently registered with the utility.	Andrea Cohen, Vermont Electric Co-op	Underway	Mar-21

Core Capability	Observation	Corrective Action	Organization POC	Start Date	Expected Completion Date
	There was a lack of formal coordination with incident command on the part of both municipalities.	Hyde Park should revisit the EOC Activation process, staffing, and coordination with Incident Command. Once finalized, provide training on this to the select board.	Ron Rodjenski, Hyde Park	9/21/2020	May-21
		Waterville will coordinate with surrounding towns to discuss coordination of command and formally identifying potential incident commanders.	John Terrel, Waterville	9/21/2020	Dec-20
		Deliver an ICS 402 course directed at Lamoille County.	Alec Jones	9/30/2020	Dec-20
		Provide VT Electric Co-op EOC Activation procedure to LEPC.	Ken Tripp, VT Electric Co-Op Carol Fano, LEPC 11	9/16/2020	10/31/2020
	A formal communication plan between the 2 (or any) municipalities does not exist.	Once COVID-19 ends, continue to work with Cathy James (RACES) on NWS (Burlington and Albany) coordination with RACES.	Scott Whittier	COVID End	
		Exercising on the use of Unified Command should occur, ensuring broad participation from organizations and municipalities.	Alec Jones		Aug-21
Operational Communication	LEMPs for both participating towns rely heavily on phone lines for internal and partner agency communication, but do provide alternate	Continue to incorporate a thorough list of landline, cell, email and physical addresses for all key individuals in the LEMP, which are reviewed and updated annually.	John Terrel, Waterville Ron Rodjenski, Hyde Park		May-21
		Explore a statewide RACES advertising campaign.	Emily Harris, VEM		Dec-20

Core Capability	Observation	Corrective Action	Organization POC	Start Date	Expected Completion Date
	contact means in case cell towers fail.	Explore having more regional RACES stations (for example, Sheriff's Department)	Carol Fano, LEPC 11	COVID End	12/31/2021
		Explore and incorporate practical alternate methods of communication such as RACES in plans.	John Terrel, Waterville Ron Rodjenski, Hyde Park Ken Tripp, VT Electric Co-op		5/1/2021
	The list of contacts in the LEPC 11 plan is incomplete.	Add Vermont Electric Co-op, Radio Amateur Civil Emergency Service (RACES), and Citizen Assistance Registry for Emergencies (CARE) primary and alternate contact information to the LEPC 11 plan contacts list.	Alec Jones		12/31/2020
		Review LEPC 11 contacts list to ensure other important regional contacts are included. Update and share this list regularly.	Alec Jones		12/31/2020
Mass Care Services	Belvidere shelter appeared to be a good location for Waterville, but there are no details in Waterville's Local Emergency Management Plan about this shelter and corresponding resources.	Update Waterville Local Emergency Management Plan to include the Belvidere location under shelters.	John Terrel, Waterville		5/1/2021
		Discuss with Belvidere and external partners (such as Lamoille Kennels or Justice for Dogs) what resources are available to assist in Belvidere where there are gaps.	John Terrel, Waterville		9/17/2020

Core Capability	Observation	Corrective Action	Organization POC	Start Date	Expected Completion Date
	Hyde Park did not discuss using Hyde Park Elementary as a shelter, though it is listed in their plan as a pet friendly shelter.	Clarification within the Local Emergency Management Plan on issues critical to sheltering decisions. This may include vulnerable populations, alternate staffing, power, and outside resources which could accommodate pets through fostering/off-site sheltering.	Ron Rodjenski, Hyde Park		5/1/2021
Operational Coordination	It is unclear what EOC positions would be filled at the Hyde Park EOC.	Identify and train additional volunteers for both the EOC and shelter activities.	Ron Rodjenski, Hyde Park		12/31/2021
		Conduct an annual workshop to review the LEMP with key town personnel and EOC and shelter staff.	Ron Rodjenski, Hyde Park		12/31/2021
		Take advantage of available exercise opportunities to reinforce the skills identified in the annual workshop.	Ron Rodjenski, Hyde Park		12/31/2021
		Provide remedial training identified EOC staff on the operational aspects of the LEMP, particularly on how to request external resources.	Ron Rodjenski, Hyde Park		12/31/2021
		Provide remedial training identified shelter staff and making use of red cross support for those trainings.	Ron Rodjenski, Hyde Park		12/31/2021
		Due to lack of existing personnel resources, consider the possible advantages of a multi-jurisdictional EOC and a regional shelter.	Carol Fano, LEPC 11	COVID End	12/31/2021
	The Waterville EOC Manager and Waterville EMD run the EOC but it was	Provide remedial training identified EOC staff on the operational aspects of the LEMP, particularly on how to request external resources.	John Terrel, Waterville		12/31/2020

Core Capability	Observation	Corrective Action	Organization POC	Start Date	Expected Completion Date
	not clear who filled the EOC Support positions and what their tasks were.	Provide remedial training identified shelter staff and making use of red cross support for those trainings.	John Terrel, Waterville EMD		12/31/2020
		Conduct an annual workshop to review the LEMP with key town personnel and EOC and shelter staff.	John Terrel, Waterville EMD		5/1/2021
		Take advantage of available exercise opportunities to reinforce the skills identified in the annual workshop.	John Terrel, Waterville EMD		Nov-21
	The concept of a multi-jurisdiction EOC needs further refinement.	Form a working group of county EMDs to develop the concept of a multi-town EOC.	Carol Fano, LEPC 11	COVID End	12/31/2021
		Conduct a table-top exercise of the plan resulting in an after-action report and improvement plan.	Alec Jones		Plan finalization +6 months

APPENDIX B: EXERCISE EVALUATIONS

Of the 14 exercise participants, 8 submitted evaluation forms. Evaluation forms requested that participants provide recommendations/actions steps as well as feedback on exercise design/conduct. Participants were not required to complete every section.

Please list the top 3 areas for improvement with a recommendation on how to improve.

Issue: Get more towns involved in the discussion.

Recommendation: Contact more than just EMD's. We could contact fire departments, police departments, select boards.

Issue: More introductions between key personnel across different agencies before an actual emergency

Issue: Better understanding between participating agencies and groups of coordination procedures and requirements (e.g., how to activate RACES, what you need to know when you call for activation, etc.)

Issue: Sharing of information for contacts and roles for possibility of large-scale emergency

Recommendation: A prepared "invite list" with all contact information could be shared ahead of the meeting - even if they end up not participating the contact info a short "what do I do?" would help with names before a training and be a good document for towns and others to incorporate into their LEMP.

Issue: More redundancy in the capabilities of the emergency management system (redundant communications, local hazmat capability, etc.)

Recommendation: This will require discussions between personnel from agencies that may be secondary suppliers of a capability.

Issue: Coordination of resources

Recommendation: Local EMDs work with department heads to develop a process.

Recommendation: Exposing everyone to all the different resources available that others have to assist in emergencies

Recommendation: Each town's EOC should have a generator and it didn't sound like that was the case. Could this be a requirement linked to acceptance of each town's plan?

Issue: Local towns rely heavily on volunteer support that may not be available during emergencies

Issue: Can participants with potential known internet connection issues be "pre-screened" for audio / video capacity.

Issue: Work on improving the Microsoft Teams platform. Continue to build the system.

Issue: With Virtual meetings, VEM & LEPC could advertise these meetings as 2 hour initial block (fire departments) and a second 2-hour optional for evaluation to encourage volunteers to participate - many work during the day so maybe a 4 pm start?

Issue: Encourage more participant involvement by holding the exercise at different times/days

Issue: Improve communications

Recommendation: Verify communications in towns and test interoperability and shortfalls.

Recommendation: Continue to improve the Radio Amateur RACES emergency services

Recommendation: Expand resources for RACES to be able to increase volunteer staff to cover multiple operational periods and to have back-up for volunteers that may not be available. Could RACES partner with the State to provide training for volunteers through the State's LMS?

Recommendation: Provide resources for LEPC 11 EMDs to obtain satellite phones for redundant emergency communication with SEOC. Are there grants available for this type of resource?

Issue: Unified Command

Recommendation: Develop process for establishing unified command at large incidents

List the Equipment, training or plans/procedures that should be reviewed, revised, or developed. Indicate the priority level for each.

- High - Ensure HazMat operational training is provided for FD responders and Awareness training for other agencies.
- High - Ensure responders have electrical safety training.
- High - Each town's redundant communications plans should be reviewed
- High - The use of FirstNet, its status and its capabilities should be reviewed with LEPC 11 EMDs.
- High - Equipment to quickly deploy oil containment of a large quantity spill.
- Medium- High - Hazmat communications with Dam operations, prior to exercise we identified difficulty in communications with operations of dam
- Medium - ICS training for responders and potential EOC staff
- Medium - Verify shelters and shelter equipment, and provide training to potential shelter staff.
- Medium - RACES procedures for deployment and rotation of volunteers during an extended activation, including procedures that will work when phone & email to volunteers homes are offline
- Medium - Live or virtual presentations of RACES capabilities and requirements to wider range of towns, agencies, etc. to enable them to understand the benefits and limits of the program
- Low - Evaluate whether permanent RACES stations should be installed in town EOCs
- Low - Boom should be available to contain HazMat spills in bodies of water.
- Nothing to offer here not mentioned above - virtual is great to get all areas of the State together (and technology will improve over time with connectivity issues).
- Improving communications with an eye towards field activities.

- LEPC regional plan needs to be reviewed to add hazardous materials and spill capabilities of each town.
- More personal involvement

Additional Comments:

- Very good exercise. Thank you for including RACES.
- Emily was great so not sure how to make sure that isn't changed for future events!
- Many of the above suggestions could be accomplished with annual exercising of local LEMPs.
- Increase regional exercises to improve coordination of resources across town lines.
- Increase awareness of RACES capabilities with potential formalization of activations. Shelter communications and weather reporting are good functions.
- Vermont Electric Cooperative has access to 15 tree crews at a time during a storm with different capabilities and equipment that could be dispatched to road clearing if towns were not able to staff and clear sections of roads as a last resort.

What is your assessment of the exercise design and conduct?

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with 1 indicating strong disagreement with the statement and 5 indicating strong agreement.



What changes would you make to improve the design of the exercise?

Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

- I felt that more participation from local police and fire departments would have been useful.

- I have used several virtual applications, and would generally recommend Zoom over Microsoft Teams. More people use it, and are used to it.
- Agree with need to have fire chiefs present (or a couple at least). Otherwise, I would add homeless shelter services staff and possibly Sheriff's dept.
- This exercise worked very well, especially for a first virtual tabletop exercise. Greater participation of responding agencies would be very beneficial.
- It would be helpful if the slide deck was emailed out at the start of the exercise so that we could refer back to the slides that had the scenario information on them.
- Would have been very helpful if someone from the Local FD had participated in the exercise. I would also suggest making sure that the Division of Fire Safety (Bob Sponable) is invited to participate in the exercises as well, as he oversees the Divisions EOC.
- It is more a technology improvement to bandwidth in the state of Vermont so people can communicate and have access to internet for a virtual exercise.

APPENDIX C: PARTICIPANTS

August 12, 2020 - Exercise	
Name	Organization
Ron Rodjenski	Hyde Park
Carol Fano	Hyde Park
John Terrel	Waterville
Alec Jones	Lamoille County Planning Commission
Kris Smith	Vermont Electric Co-op
Michael Cole	Vermont Electric Co-op
Andrea Cohen	Vermont Electric Co-op
Bob Stein	Vermont Electric Co-op
Cyril Brunner	Vermont Electric Co-op
Ken Tripp	Vermont Electric Co-op
Kelly Colling	Copley Hospital
Cathy James	Radio Amateur Civil Emergency Service
Todd Cosgrove	Vermont HAZMAT Team
Scott Whittier	National Weather Service
Emily Harris	VT Emergency Management – Facilitator

September 16, 2020 - After Action Meeting	
Name	Organization
Ron Rodjenski	Hyde Park
Carol Fano	Hyde Park
John Terrel	Waterville
Alec Jones	Lamoille County Planning Commission
Ken Tripp	Vermont Electric Co-op
Kelly Colling	Copley Hospital
Scott Whittier	National Weather Service

APPENDIX D: HOTWASH

Strengths

- Learned more from exercise about emergencies and practical application. Scenario made participant realize work that needed to be incorporated into plan. Gave him useful tools and ideas of things that would make the plan more robust.
- Online exercise was a positive forum in which players could discuss the issues. Phone, email exchange included in the chat window was helpful for communication and networking.
- RACES members have weather stations and knowledge and can be used as an info resource for others.
- Towns liked the idea of discussing a joint EOC with local partners for Staffing/Command and Control purposes.
- Multiple players were involved, exercise went smoothly based on the number participating.
- Strong commitment from the players who did participate.
- Good scenario with multiple overlapping issues challenged participants. Players felt they could use the practice with having different incidents occurring simultaneously.
- Format of exercise good with presentation/discussion.
- Use of same ICS terminology helped different groups communicate.
- Participants learned how towns use Front Porch Forum and other media to reach the public, also that VEM can help with communication through VT Alert.
- Got to work with entities that were not normally agencies they worked with. Good to establish relationships prior to a real incident/network.
- Learned about what other agencies do, such as RACES, hospitals.
- Learned more about CARES and that towns can access it in emergencies.
- Well-organized exercise. Tech worked well for organizational purposes despite connectivity problems.
- RACES now has a better understanding of how towns work with each other and how they can fill gaps.
- Ongoing continuation of discussion between NWS and RACES about moving to internet-based communication due to radio signal interruption in the Burlington area. Maybe lessons-learned and new technology would help other areas.
- Exercise was realistic in terms of what weather we could experience.
- Confirmation that it is possible to do a Tabletop Exercise in a virtual environment.

Areas for Improvement

- Communications with players who had connectivity issues difficult. Inherent problem with tech in VT.
- Participants miss side talk during breaks that can best be done in person. Networking is crucial to some participants' learning styles.

- Eye opening that towns did not clearly define in LEMP criteria for opening EOC (threshold), what the approval process would be, how those who might be called on to staff EOC were notified and trained.
- EOC staffing needs to be improved. Fire Department can't staff everything with ongoing incident needs. May need to increase bench depth to staff an EOC 24/7 or for multiple days.
- Exercise needs to involve more towns, ensure those who committed don't back out.
- Would like to explore more on unified command model.
- Disappointed that some agencies (towns, NGOs) did not prioritize this exercise.
- Staff fatigue on moderate/large exercise will occur in towns. Need to identify other human resources that small communities can tap.
- Virtual technology is a poor substitute for in person training.
- Need to have a central repository of contacts for all agencies and towns that gets updated regularly. How do we reach a town whose EOC isn't stood up?
- Recommend fire departments attend exercises in the future if there is an operational piece.
- Participants were not sure how to handle communications with loss of a cell tower as part of the scenario. A few agencies discussed needing to reevaluate their communications plan to reach staff and give/receive communications to staff, volunteers, public.
- Emphasis needs to be placed on letting towns know how to activate support services through VEM, VDH and other state agencies when needed.
- Prefer in-person exercises.
- Staff depth of bench and resource allocation.
- Still unclear how much impact the loss of the Verizon tower would have on organization operations. Need to explore further internally.
- Need to continue providing information to organization about how RACES can assist.

APPENDIX E: ACRONYMS

Acronym	Term
CARES	Citizens Assistance Registry for Emergencies
DHS	U.S. Department of Homeland Security
EMD	Emergency Management Director
EOC	Emergency Operations Center
ExPlan	Exercise Plan
HSEEP	Homeland Security Exercise and Evaluation Program
LCPC	Lamoille County Planning Committee
LEMP	Local Emergency Management Plan
LEPC	Local Emergency Planning Committee
LMS	Learning Management System
MRC	Medical Reserve Corps
NWS	National Weather Service
RACES	Radio Amateur Civil Emergency Service
SEOC	State Emergency Operations Center
SME	Subject Matter Expert
TTX	Tabletop Exercise
VEM	Vermont Emergency Management