PROVINCE OF NEW BRUNSWICK
PREPAREDNESS, RESPONSE AND RECOVERY
DECEMBER 2013 ICE STORM

AFTER ACTION REVIEW REPORT

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Final Version

Presented to:

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EXECUTIVE SUMMARY

During the period 20-31 December 2013, New Brunswick (NB) experienced an ice storm which resulted in a catastrophic loss of electric power throughout Southern New Brunswick, with the hardest hit areas being in Charlotte, St John, Kings, Queens, Sunbury and York Counties. Between the morning of 21 December 2013 and 23 December 2013, these regions of the province received 24-36 hours of mixed snowfall and freezing rain. The snow, freezing rain and winds caused power outages to more than 80,000 NB Power customers. Power failures of this magnitude and duration were unprecedented, requiring NB Power to request mutual assistance from partner service providers in neighbouring jurisdictions. New Brunswick Emergency Measures Organization (NB EMO) co-ordinated the response operations with local authorities to provide resources and assistance as required for the protection of lives and property, in accordance with their mandate. To assess the effectiveness of current plans and procedures and in keeping with the Department of Public Safety (DPS) Continuous Improvement Program, DPS contracted Atlantic Security Group Inc (ASG) to conduct a review of the preparedness for and the response to the impacts from the storm to determine what went well and what areas may need to be enhanced prior to any future occurrence. The ice storm happened at the worst time possible for the emergency managers at all levels within NB. The Regional Emergency Management Coordinators (REMC) were in place and had made some progress with regional preparedness, but they were far from ready for this unprecedented event. The response was also impacted by the Christmas holiday season. Even in this situation the response was an overall success. There were no deaths, injuries due to cold, house fires, carbon dioxide poisoning or food poisoning from the direct and secondary impacts of the loss of power in very cold weather. Details of the audit methodology and resultant findings are contained in the report. The significant findings are summarized below:

All required victim support services were provided in a timely manner.

Most of the municipalities in the impacted areas were not adequately prepared for the impacts of the ice storm.

In spite of the lessons from the December 2010 Heavy Rain Event flooding a number of the municipalities were not prepared for events such as the ice storm.

Public operational messaging needs to improve. Emergency public advisories contained the required information, but were not released frequently enough. For example, at the start of the event there was a gap of three days between advisories. At least one advisory should be released every day.

Although all parties endorse the REMC concept, there were problems with the relationships between NB EMO and the municipalities/local service districts (LSD) that created a very negative impression of NB EMO's overall response actions at the local level. All stakeholders must make a concerted effort to mend relationships and build trust as soon as possible to ensure public safety during emergencies.

During the response to the ice storm, NB EMO and municipal officials could not utilize the local radio stations for public messaging. Most of the radio stations are remotely controlled from as far away as Toronto. The capability to access radio stations in an emergency should be put in place as soon as possible.

There was an obvious lack of understanding of the NB emergency management structure and the responsibilities of the municipal, LSD and provincial levels. For example, some elected officials wrongly interrupted the campaign to encourage the population to be self-sufficient for 72 hours following an emergency event. There was a widespread belief that after the 72 hour period NB EMO would assume all response activities.

New Brunswick has a mature emergency management system that worked well during previous emergency events. However, essential elements of the emergency management structure, such as the Deputy Ministers' Security and Emergency Management Committee, were not activated during this event. This reduced the overall efficiency of the response.

It must be stressed that the people in NB EMO and the municipalities/LSDs, including many volunteers and private sector organizations worked hard over the holiday season to ensure the safety of the population without power in very cold weather. Everyone involved in the response should be commended for their efforts.

1 INTRODUCTION

During the period 20-31 December 2013, New Brunswick (NB) experienced an ice storm which resulted in a catastrophic loss of electric power throughout Southern New Brunswick, with the hardest hit areas being in Charlotte, St John, Kings, Queens, Sunbury and York Counties. Between the morning of 21 December 2013 and 23 December 2013, these regions of the province received 24-36 hours of mixed snowfall and freezing rain. The snow, freezing rain and winds caused power outages to more than 80,000 NB Power customers. Power failures of this magnitude and duration were unprecedented, requiring NB Power to request mutual assistance from partner service providers in neighbouring jurisdictions.

In accordance with the New Brunswick Department of Public Safety's (DPS) commitment to continuous improvement in emergency management, Atlantic Security Group Inc (ASG) was contracted to conduct an After Action Review (AAR) of the provincial and local preparedness, response and recovery to the ice storm. The intent of the AAR is to capture lessons learned from the event to further enhance public safety in the province.

1.1 AIM

The aim of this document is to report on the strengths, weaknesses and gaps in New Brunswick's provincial and local preparedness, response, and recovery to the ice storm that occurred between 20 and 31 December 2013. The report includes observations, deficiency classifications and where pertinent, recommendations.

1.2 SCOPE

The review concentrated on actions in the impacted Counties of Charlotte, St John, Kings, Queens, Sunbury, and York.

1.3 TERMS OF REFERENCE

The Terms of Reference were designed to ensure a comprehensive review of all aspects of New Brunswick's preparedness and response to the ice storm at the provincial and local levels. ASG was specifically tasked to look at:

- Processes, outcomes and actions as identified in current plans including, but not limited to:
  - Actions during the warning phase;
  - Actions during the response phase;
  - Actions during the recovery phase;
- Managerial processes and outcomes;
- Interagency coordination including, but not limited to:
  - Government Departments;
  - NB Power;
  - First responders;
  - Municipalities; and
  - Private sector actors;
- Non-governmental organizations (NGOs) and volunteer organizations;
- Critical infrastructure including utilities and supply chains;
- Preparedness of all levels of government and appropriate stakeholders;
- Plans and procedures;
- Communication functions including:

  - Public messaging;
  - Critical infrastructure;
  - First responders;
  - Municipalities; and
  - NGOs; and
- Weather forecasting and public warning.

1.4 LINES OF INVESTIGATION

In addition to the Terms of Reference, the audit team was specifically tasked to investigate and make findings on the following:

- The community/regional capacity in the affected areas of the province to develop and deliver an emergency management program;
- The effectiveness of the integration of government departments to maximize results; and
- Identified concerns which are the responsibility of other public or private agencies.

1.5 METHODOLOGY

A list of key actors/stakeholders and issues related to the event was generated by the DPS. This was augmented and supplemented further by background research using public sources of information and relevant provincial legislation. In person and telephone interviews were conducted with identified key actors/stakeholders to investigate their concerns and if possible identify the root causes of the issues. The feedback was analysed to identify gaps, weaknesses and strengths in the mitigation, preparedness, response, and recovery capabilities at the provincial, local [municipal and local service district (LSD)], and operational levels. Key actors and stakeholders included representatives from: provincial government departments; first responder organizations (police, fire, and ambulance); municipal government; LSDs; non-government organizations; the private sector; and residents in the impacted Counties of Charlotte, St John, Kings, Queens, Sunbury, and York.

At the provincial and local levels, feedback from the interviews was used to answer the following questions:

Provincial Response

1. Were preparedness, mitigation, response and recovery actions synchronised at the local and provincial levels?
2. Was the warning system adequate?
3. Were precautionary, response and recovery actions adequately aligned and coordinated with the impacted communities to deliver adequate service levels?
4. Was the pre-emergency public education program adequate?
5. Was public communication adequate?
6. Was communication and operational coordination among NB Power, local and provincial emergency measures organizations and the public adequate?

Local Response

1. Was the local emergency response capability adequate?
2. Was the local emergency management program adequate?
3. Was the pre-emergency public education program adequate?
4. Was there an adequate flow of information between the local and provincial emergency organizations?
5. Did communities receive accurate and timely emergency information?
6. Did communities have adequate emergency management and business continuity/recovery plans?
7. Was the operational coordination among NB Power, NGOs, and local and provincial emergency measures adequate?

At the operational level, documentation related to the response operation was collected and audited to identify issues related to: information management and flow; operational communications and coordination; and the consistency of information passed and received.

1.6 CLASSIFICATION OF DEFICIENCIES AND STRENGTHS

For this report the deficiencies/strengths are classified as follows:

> **Critical Deficiency** is a serious lack of an operational capability that could cause mission failure and/or lead to unnecessary deaths or serious injuries.
>
> **Deficiency** is a weakness in a capability that could adversely affect operations.
>
> **Minor Deficiency** is an operational weakness, which if corrected, could improve efficiency.
>
> **Strength** is considered a "best practice."

Experience and research has shown that the root cause of a deficiency can normally be identified as being related to the following:

1. Governance;
2. Planning;
3. Training/education;
4. Communications; and
5. Resources (human, equipment and material).

Where possible, root causes of deficiencies are identified.

1.7 DEFINITIONS

The following definitions apply to this document:

Effectiveness is the production of a desired, decided and decisive result in the management of the response to the winter ice storm event.

Executive (Strategic) Level refers to the executive management teams within the Government of New Brunswick.

Local Service Districts (LSDs) are communities that have no local governance and come under the jurisdiction of the Province.

Municipal Level refers to the management teams within the affected municipalities and in the Local Service Districts.

Operational Level refers to the management teams within the departments, as well as at the federal and municipal level responsible for providing resources and/or coordinating response actions.

Preparedness is a continuous cycle of planning, training and validating all facets of the emergency organization, resources, training, emergency plans and procedures. The intent is to ensure a timely and effective response to emergencies of any type, anywhere within the province.

Response is the application of the correct resources at the right time to prevent/reduce the impacts of the winter ice storm event.

2 FINDINGS

2.1 GENERAL

The ice storm was not an emergency in the conventional sense. Roads were opened, residents were not forced from their homes, emergency services were available and the physical impacts on community were negligible, with the exception of damage to the power grid. The problem was that vulnerable populations (e.g., the elderly and the sick) were at risk of hypothermia and the risk accelerated over time. There were also risks of fire, carbon dioxide poisoning and food poisoning. Therefore, the response was limited to operating warming centres, public messaging and the provision of general support to allow people to remain in their homes. The support provided was the distribution of firewood, potable water and fuel for portable heaters and stoves. The AAR was conducted within that context. The findings are presented as observations and recommendations under the headings:

- Preparedness;
- Response; and
- Recovery.

The major observations and recommendations are summarized in Annex A.

2.2 PREPAREDNESS

2.2.1 Education

Observation # 1

There was an obvious lack of understanding of the NB emergency management structure and the responsibilities of the municipal, LSD and provincial levels. For example, some elected officials wrongly interrupted the campaign to encourage the population to be self-sufficient for 72 hours following an emergency event. There was a widespread belief that after the 72 hour period NB EMO would assume all response activities. Some mayors and town administrators expressed displeasure that they were not relieved by the province after the first 72 hours. Furthermore, 72 hour preparedness is not part of the regular routine in many households. This is a **deficiency**. The root cause is **unknown** as NB EMO provides continuous emergency management training for municipalities/LSDs.

Recommendation #1

It is recommended that NB EMO continue their program to educate municipal authorities on their mandated responsibilities. Training must stress that municipalities are responsible for emergency preparedness, response and recovery and will only be replaced provincial authorities if they lack the capability to respond. In such cases, the Minister responsible for public safety will declare a state of emergency in respect to all or the impacted area of the Province. It is also recommended that 72 hour preparedness be taught in schools along with basic fire safety. Basic fire safety and prevention is ingrained in most households because of school programs.

2.2.2 Regional Emergency Management Capability

Observation #2

A number of the municipalities were not prepared for events such as the ice storm. The AAR of the 13 December 2010 Heavy Rainfall Event identified the requirement to support emergency management capability development in LSDs for small towns, villages and unincorporated rural communities. Following that review, NB EMO hired consultants to develop regional emergency management plans in Charlotte Country. After two years of employment, the consultants did not produce a useful plan. Since then NB EMO established six regional coordinator positions, Regional Emergency Management Coordinators (REMC), to work with the Regional Service Committee (RSC) to support the development of the emergency management capability in the LSDs. The REMCs had commenced work in their assigned areas, but the ice storm hit before much could be accomplished. This is a **deficiency**. The root cause is **planning**.

Recommendation #2

It is recommended that NB EMO develop/enhance the regional emergency management plans as quickly as possible. The regional emergency management plans should be developed and exercised as soon as possible.

Observation #3

While the concept of REMCs is universally accepted throughout the impacted areas, there is widespread resentment of the two planners assigned for those areas. It was mentioned in numerous interviews that one of the coordinators was selected based on political patronage over better qualified and capable applicants. There were also complaints about their approach during the response to the ice storm. In fact one mayor accused a REMC of being "on a power trip" and undermining his authority and credibility. The mayor reported that their REMC "demanded" that the local fire department do a door-to-door safety check of their residents. The community had completed a needs/risk analysis and determined that that action was not required and they did not have the resources to do a door-to-door canvas, but the REMC insisted that it be done. The expectation at the local level was that the existing emergency management structures would be used, and that the REMC would facilitate liaison and coordination with the Provincial Emergency Operations Centre (PEOC), rather than opening new centres. It was reported that the establishment of new EOCs and the REMC directing operations at the local level was an unnecessary surprise and not an efficient use of local resources. It was reported by the REMC that his actions were necessitated by the lack of corporation by the LSD. The correct version of events could not be determined. There may a resistance to change at the local level and/or the REMCs' approach may have alienated the local officials. Suffice to say that the relationship between NB EMO and the LSDs in the affected areas has deteriorated, and without a determined effort to address this issue, a comprehensive emergency management capability cannot be developed. This is a **major deficiency**. The root cause is **governance**.

Recommendation #3

It is recommended that a joint regional NB EMO – RSC emergency management working group be established to repair the relationships and to develop a regional concept of operations and plan that maximizes local capability and resources. The outcome should be a regional plan that is validated by an exercise within the next six months. The reassignment of the REMCs to other regions should be considered.

Observation #4

Municipalities reported that the emergency management planning approach directed by the REMCs is the completion of a plan template provided by NB EMO. This approach does not ensure a comprehensive emergency management plan. Without regional specific plans, based on regional threats and resources, the emergency management program will not be effective as it could be. This is a **major deficiency.** The root cause is **planning**.

Editorial note:

Following the 2010 Heavy Rain Event flooding NB EMO hired consultants to conduct a Charlotte County Risk Analysis, which was completed in October 2012. The document identified major risks to the area and local resources. This document provides a good planning basis for emergency management plans in Charlotte County.

Recommendation #4

It is recommended that the emergency management plans be based on a regional threat, risk and vulnerability analysis (TRVA) and resource analysis. Capability based planning is also recommended. The proposed approach would ensure a real response capability and avoid the production of a "paper plan."

2.3 RESPONSE

2.3.1 General

Observation #5

The Christmas holiday had a negative impact on the response by government at all levels. In all but a few interviews, people mentioned that they would have reacted differently if it was not the holiday season. More people would have been tasked to support response operations and senior officials would have been engaged earlier in the event. More troubling, in at least one case, a government employee refused to place emergency management responsibilities before his holiday plans. A communications officer refused to support NB EMO efforts to produce and distribute a public advisory after 11:00 pm on Christmas Eve. This is a **deficiency.** The root cause is **training**.

Recommendation #5

In keeping with the principle that safety and security is the prime responsibility of all government, it is recommended that supervisors at all levels ensure that all public employees are briefed that emergency management responsibilities take priority over all activities, with the exception of health care. This concept should be articulated in employees' job descriptions. Employees who refuse to execute their emergency management responsibilities should be disciplined.

2.3.2 Record Keeping

Observation #6

The NB EMO documentation from the response to the 2013 ice storm included: a summary/timeline; situation reports (SITREPs); public advisories; weather bulletins from Environment Canada; the Operational Log Report; and copies of emails sent and received. It is assumed that the Operational Log Report is the Master Log for the PEOC. For the most part the information is complete; however, log keeping could be improved. The Operational Log Report does not indicate when the PEOC was activated, the level of activation or when it was deactivated. The Operational Log Report appears to be only a record of the emails sent and received. Typically a log report is, on a line by line basis, a record of critical events and decisions, information and instructions sent and received, and actions required and time completed. The log for the ice storm event does not clearly indicate critical events/decisions and does not clearly indicate actions required or time completed. Further, it is not clear whether each member of the PEOC team maintained an individual log or whether REMCs maintained individual logs. In at least one case a REMC indicated they did not have an individual log, although they regularly provided updates that are included in the Operational Log Report. For legal and operational reasons, a complete and detailed Master Log for the PEOC should be maintained. All EOC Team members and REMCs must also keep logs. This is a **deficiency**. The root cause is **training**.

Recommendation #6

It is recommended that, for all PEOC operations, all members of the PEOC Team and REMCs maintain individual logs that are included in the Master PEOC Log. Further, the PEOC Master Log should be a complete record of critical events and decisions, information sent and received, and actions required and completed. Record keeping should be included in information management during annual EOC refresher training.

2.3.3 Communications

Observation #7

The first public advisory was issued by NB EMO on 20 December 2013. The next advisory was not issued until 23 December 2013. Also, there was no advisory issued on 25 December 2013. During an emergency event such as the ice storm, in particular where the impacts were so widespread, regular and timely public advisories are important, both to ensure the public receives the information they need and to maintain public confidence in government. This is a **deficiency**. The root cause is **governance**.

Recommendation #7

It is recommended that public advisories be issued at least daily during the response to an emergency event.

Observation #8

All impacted communities voiced suspicion that NB EMO was not involved in the response due to the Christmas holidays. A large number of officials are under the belief that the PEOC was not activated until 27 December 2013 when NB EMO requested situation reports (SITREPs) from the impacted communities. Although this was not the case, the perception caused widespread loss of confidence in the NB EMO and, by extension the government of New Brunswick (GNB). According to the ice storm update/timeline included in the NB EMO documentation on the response, the PEOC was activated on 21 December 2013 and remained so throughout the event. The perception that the PEOC was not activated until 27 December 2013 may be a result of NB EMO following the established doctrine of actioning requests for assistance only. If no requests were received, it was assumed that no assistance was required. The PEOC reverted to the duty officer system during the quite hours. This was a good operational decision to conserve human resources, but municipal evening calls to the PEOC being redirected to the duty officer reinforced the perception that the PEOC was not activated. This misperception could have been avoided by liaising with the affected communities early in the event and issuing routine SITREPs. This is a **deficiency**. The root cause is **planning**. Training may be a contributing factor.

Recommendation #8

It is recommended that NB EMO develop a procedure to liaise with affected communities early in an emergency event. Timely SITREPs should be issued whenever the PEOC is activated.

Observation #9

All public emergency management education initiatives direct people to listen to local radio stations during an event. During the response to the ice storm, NB EMO and municipal officials could not utilize the local radio stations for public messaging. Most of the radio stations are remotely controlled from as far away as Toronto. In support of public notification in the event of an emergency at Point Lepreau Generating Station, NB EMO has required agreements and the hardware to access local radio stations for emergency messaging, but the program has not been implemented. This is a **major deficiency**. The root cause is **planning**.

Recommendation #9

It is recommended that the ability to access local radio stations during an emergency be implemented as soon as possible.

Observation #10

Social media communications are restricted by GNB policy to twitter only. This policy limits the potential of social media emergency messaging. People in the rural areas relied heavily on FaceBook for their emergency information. In fact, a large number of people only attended the warming centres to charge their wireless devices batteries so they "could find out what was going on." By policy NB EMO is not authorized to use that system. Therefore, this efficient communications system is not being utilized and NB EMO's ability to distribute emergency information is hampered. This is a **deficiency**. The root cause is **governance**.

Recommendation #10

It is recommended that the policy prohibiting the use of FaceBook be reviewed and if possible revoked.

Observation #11

GNB advisories must be released simultaneously in both official languages. EOC translators worked quickly, but translation does cause a delay in the release of the advisories. This is a **deficiency**. The root cause is **governance**.

Recommendation #11

It is recommended that the use of "Google Translate" be assessed to see if it could be used during urgent situations to produce emergency advisories. If acceptable, the "Google Translate" version could be released as a draft with the EOC version to follow as the official document.

Observation #12

EMO Communications Officer was off work for the holidays during the period 23 to 26 December 2013. While on holidays his responsibilities were covered by a person assigned by the Executive Communications Office (ECO). However, the EMO Communication Officer did produce and distribute emergency advisories from his home. As a result of the fractured approach to public messaging (e.g., some work done by a backup person and some done from home) and the lack of attendance in the PEOC, the Communications Officer's situation awareness was lacking and the flow of public information was less than it should have been. Again the focus on Christmas holidays adversely impacted on operational efficiency. It was also reported that neither the EMO Communications Officer or his alternate have received emergency public communications training. This is a **deficiency**. The root cause is **governance**.

Recommendation #12

Government operational requirements must take precedence over holidays. Employees tasked with essential emergency management functions should never be allowed to work from home. The DPS Communications Officer and his/her alternate should be trained on emergency public communications as soon as possible.

2.3.4 Operational Coordination

Observation #13

Coordination of the restoration of Rogers Wireless' telecommunication services was problematic. NB EMO could not contact a Rogers' representative to coordinate restoration priorities and provincial support (e.g., tower access road clearance). They were eventually able to talk to a technician in Rogers' Network Control Center in Toronto. However, the technician was unable to participate in joint planning and could not redirect NB EMO to someone who could. This is a **deficiency**. The root cause is **planning**.

Recommendation #13

It is recommended that NB EMO develop a procedure to talk to people responsible for restoration of services during an emergency at Rogers, and all telecommunications companies operating in NB.

2.3.5 Impact Analysis

Observation #14

In previous emergency events impacting on NB, DPS Security Directorate analysts have conducted an assessment of the possible impacts from the emergency events. This has allowed the NB EMO staff to actually manage the response by developing the appropriate contingency plans and sourcing the required resources, rather than just reacting as events unfolded. This proven capability was not fully utilized during the ice storm. The Security Director provided limited support from his home, but the security analysts were not mobilized. No reason was given for this, but the Christmas holidays may have been a contributing factor. This is a **deficiency**. The root cause is **unknown**.

Recommendation #14

It is recommended that it be a standard operating procedure to employ a security analyst to conduct an impact analysis during all emergencies.

2.3.6 Executive Management

Observation #15

Based on the lessons learned during the Freshet 2008 flooding a Deputy Ministers' Security and Emergency Management Committee was formed to coordinate the whole of government response to the emergency and to provide management oversight. This concept was validated during flooding from the 2010 Heavy Rain Event. This Committee was not activated in response to the ice storm. The acting Deputy Minister (DM) was not aware of this committee and coordinated with the DMs of the departments directly involved in the response. This limited approach to intra-government coordination did not support situational awareness throughout GNB. This is a **deficiency**. The root cause is **training**.

Recommendation #15

It is recommended that the Deputy Ministers' Security and Emergency Management Committee be automatically activated during all emergencies.

2.3.7 Elected Officials' Role

Observation #16

There were reports that a Member of the Legislative Assembly (MLA) was spreading misinformation about the response. This did not happen. A review of social media accounts and NB newspapers did not reveal any misinformation. Tweets regarding the location, opening times and available services at emergency shelters were accurate. However, tweets became increasingly critical of NB EMO as the emergency continued. For example on 27 December 2013 a tweet questioned where NB EMO was and criticizes the government for not calling out the military. The fact that the emergency plan that was promised following the flooding during the Heavy Rainfall Event in 2010 was never produced was raise in the tweet. In response to the MLA's twitted messages, a large number of his readers posted very negative comments about NB EMO. This led to the deepening distrust and lack of confidence in NB EMO. To maintain confidence in government it is essential that all members of the government, including elected officials, support the responders and emergency management officials during the response phase of any emergency. Concerns about the response should be raised through government channels before making statements in the media. There will be time enough after the response to challenge government actions. This is a **deficiency**. The root cause is **governance**.

Recommendation #16

It is recommended that the Premier work with the opposition parties to obtain an agreement on the Canadian tradition of supporting the government actions until the emergency is terminated.

Observation #17

The MLAs were not informed of government actions in response to the emergency. This caused frustration for the MLAs in the affected areas, who were inundated with quires from the public. If kept fully informed of the emergency situation, the MLAs could be an effective way to distribute emergency information to their constituents. This would enhance their position in the community and help maintain confidence in the government. This is a **deficiency**. The root cause is **planning**.

Recommendation #17

It is recommended that the Executive Communications Office be tasked with keeping the MLAs fully informed through an emergency.

2.3.8 Military Assistance

Observation #18

As in the response to the Freshet 2008 flooding and the Heavy Rainfall Event in 2010, there was controversy surrounding the involvement of the military in response operations. A number of mayors, CEOs and a local MLA believed very strongly that the military should have been called in to assist. When asked why the military was needed, the standard response was to reassure the citizens and to conduct door-to-door safety checks. Military resources were not needed in this case and they would, mostly demanded cost recovery for their services if call upon. The military should only be requested as a last resort, once all local and provincial resources are exhausted. This is a **deficiency**. The root cause is **education**.

Recommendation #18

It is recommended that communities/LSDs include guidance in their emergency management plans on the use of military resources during an emergency and it should be reinforced during elected officials' training. The idea of sending military personnel to an impacted area for a "photo op" is not recommended. They should only be deployed for a bonafide military role or when there are not other resources available.

2.3.9 Community Support

Observation #19

J.D. Irving Limited, a privately owned conglomerate company headquartered in Saint John, NB, provided outstanding support to the people impacted by the ice storm. They provided firewood, potable water and kerosene at no expense to governments or the people. They are deserving of public recognition. This is a **strength**.

Recommendation #19

It is recommended that GNB formally and publicly acknowledge J.D. Irving Limited's generous contribution to the ice storm response efforts.

2.3.10 Firefighters

Observation #20

The employment of volunteer firefighters in non-traditional roles, such as checking on residents, during an emergency was endorsed by all of the Fire Chiefs that were interviewed. They reported that they have been doing so unofficially for years and there are no other local organizations that have the organization and training to safely and quickly mobilize and respond to the needs of the community. There was widespread concern about firefighters' insurance coverage when completing non-firefighting tasks during an emergency. It was also reported that during prolonged events firefighters face financial hardships when they leave work to help their communities. This is a **deficiency**. The root cause is **governance**.

Recommendation #20

It is recommended that the firefighters' insurance coverage be reviewed and upgraded as required. Paying volunteer firefighters when they are involved in prolonged emergency operations should be considered. The Natural Resources' pay structure for volunteers fighting forest fires is a good model.

Observation #21

A couple of fire departments reported that their volunteers were over-worked to the point that they were very close to being "burnt out." They felt that it was their responsibility to look after their communities and were reluctant to ask for outside help. Non-affected fire departments responded quickly to relieve their counterparts when the need was known. The firefighters' dedication to community safety is a **strength**.

Recommendation #21

No recommendation required.

2.4 RECOVERY

2.4.1 General

Observation #22

Other than restoration of the electric grid, no physical recovery was required. However, there is a requirement for NB EMO to recover the trust and confidence of the municipal/LSD officials in the impacted areas. The relationship between the communities/LSDs and NB EMO has deteriorated to the point that all NB EMO's actions are interpreted as wrong. This is demonstrated by the following examples. A mayor and CEO reported that the REMC's deployed to Charlotte County by helicopter.[1] Although that this did not happen, the Mayor and CEO believe it did and cited this as an example of the REMC's "showing off and power trip." They stated that their town is struggling to raise $40,000 to $50,000 for an emergency generator while NB EMO personnel are making unnecessary helicopter trips. During an After Action Review meeting in the same county, a humorous, but accurate remark by the NB EMO Director was labelled as being flippant and uncaring. This is a **major deficiency**. The root cause is **unknown**.

[1] This was false. The source of the allegation may have been helicopter reconnaissance by EMO and the local MLA during the assessment phase of the response. There was no indication that the allegation was the result of mischief.

Recommendation #22

It is recommended that all stakeholders make a concerted effort to regain the trust and confidence of impacted communities. This may be accomplished by forming an emergency management working group to work through the differences and to develop regional specific emergency management plans. It is also recommended that the Charlotte County plan be developed for as soon as possible.

3 CONCLUSION

The ice storm happened at the worst time possible for the emergency managers at all levels within NB. The REMC were in place, but had only made some progress with regional preparedness. The response was also impacted by the Christmas holiday season. Even in this situation the response was an overall success. There were no deaths, injuries due to cold, house fires or carbon dioxide poisoning from the direct and secondary impacts of the loss of power in very cold weather. All required victim support services were provided in a timely manner.

NB EMO reacted to the ice storm emergency situation according to emergency management doctrine. They were available to coordinate support to any municipality requesting help. However, operational and public communications could have been done better. There were problems with the REMC relationships with the municipalities and LSDs that created a very negative impression of NB EMO's overall response actions. Without the trust and confidence of the communities/LSDs, NB EMO will never be fully effective. This situation was not solely caused by NB EMO. Mistakes and missteps were made by all of the stakeholders. All parties endorse the concept of REMCs. Regional specific emergency plans should be developed and validated as soon as possible.

ANNEX A - SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

Ref.	Observation #	Observation	Recommendation	Classification
2.2	**PREPAREDNESS**			
2.2.1	**Education**			
	#1	There was an obvious lack of understanding of the NB emergency management structure and the responsibilities of the municipal, LSD and provincial levels.	It is recommended that NB EMO continue their program to educate municipal authorities on their mandated responsibilities. Also, 72 hour preparedness should be taught in schools along with basic fire safety.	**Deficiency** The root cause is education
2.2.2	**Regional Emergency Management Capability**			
	#2	A number of the municipalities were not prepared for events such as the ice storm. The AAR of the 13 December 2010 Heavy Rainfall Event identified the requirement to support emergency management capability development in LSDs. The REMCs had commenced work in their assigned areas, but the ice storm hit before much could be accomplished.	It is recommended that NB EMO develop/enhance the regional emergency management plans as quickly as possible. The regional emergency management plans should be developed and exercised as soon as possible.	**Deficiency** The root cause is planning
	#3	While the concept of REMCs is universally accepted throughout the impacted areas, there is widespread resentment of the two planners assigned for those areas. The relationship between NB EMO and the LSDs in the affected areas has deteriorated, and without a determined effort, a comprehensive emergency management capability cannot be developed.	It is recommended that a joint regional NB EMO – RSC emergency management working group be established to repair the relationships and to develop a regional concept of operations and plan that maximizes local capability and resources. The outcome should be a regional plan that is validated by an exercise within the next six months. The reassignment of the REMCs to other regions should be considered.	**Major Deficiency** The root cause is governance

Ref.	Observation #	Observation	Recommendation	Classification
	#4	Currently the planning approach in the regions is to complete a plan template provided by NB EMO. This approach does not ensure a comprehensive emergency management plan.	It is recommended that the emergency management plans be based on a regional threat, risk and vulnerability analysis (TRVA) and resource analysis. Capability based planning is also recommended.	**Major Deficiency** The root cause is planning
2.3	**RESPONSE**			
2.3.1	**General**			
	#5	The Christmas holiday had a negative impact on the response by government at all levels. In all but a few interviews, people mentioned that they would have reacted differently if it was not the holiday season.	It is recommended that supervisors at all levels ensure that all public employees are briefed that emergency management responsibilities take priority over all activities, with the exception of health care. This concept should be articulated in employees' job descriptions. Employees who refuse to execute their emergency management responsibilities should be disciplined.	**Deficiency** The root cause is training
2.3.2	**Record Keeping**			
	#6	For the most part the NB EMO documentation from the response to the 2013 ice storm is complete; however, log keeping could be improved. The Operational Log Report does not indicate when the PEOC was activated, the level of activation or when it was deactivated. The log appears to be only a record of the emails sent and received and does not clearly indicate critical events/decisions, actions required or time completed. Further, it is not clear whether each member of the PEOC team or the REMCs maintained individual logs	It is recommended that, for all PEOC operations, all members of the PEOC Team and REMCs maintain individual logs that are included in the Master PEOC Log. The PEOC Master Log should be a complete record of critical events and decisions, information sent and received, and actions required and completed. Record keeping should be included in information management during annual EOC refresher training.	**Deficiency** The root cause is training

Ref.	Observation #	Observation	Recommendation	Classification
2.3.3	**Communications**			
	#7	The first public advisory was issued by NB EMO on 20 December 2013. The next advisory was not issued until 23 December 2013. Also, there was no advisory issued on 25 December 2013. During an emergency event such as the ice storm, in particular where the impacts were so widespread, regular and timely public advisories are important, both to ensure the public receives the information they need and to maintain public confidence in government.	It is recommended that public advisories be issued at least daily during the response to an emergency event.	**Deficiency** The root cause is governance
	#8	All impacted communities voiced suspicion that NB EMO was not involved in the response due to the Christmas holidays. A large number of officials are under the belief that the PEOC was not activated until 27 December 2013. The perception caused widespread loss of confidence in the NB EMO and, by extension the government of New Brunswick (GNB).	It is recommended that NB EMO develop a procedure to liaise with affected communities early in an emergency event. Timely situation reports should be issued whenever the PEOC is activated.	**Deficiency** The root cause is planning. Training may be a contributing factor.
	#9	During the response to the ice storm, NB EMO and municipal officials could not utilize the local radio stations for public messaging. Most of the radio stations are remotely controlled from as far away as Toronto.	It is recommended that the ability to access local radio stations during an emergency be implemented as soon as possible.	**Major Deficiency** The root cause is planning
	#10	Social media communications are restricted by GNB policy to twitter only. People in the rural areas of the impacted areas relied heavily on FaceBook for their emergency information. By policy NB EMO is not authorized to use that system.	It is recommended that the policy prohibiting the use of FaceBook be reviewed and if possible revoked.	**Deficiency** The root cause is governance

Ref.	Observation #	Observation	Recommendation	Classification
	#11	GNB advisories must be released simultaneously in both official languages. EOC translators worked quickly, but translation does cause a delay in the release of the advisories.	It is recommended that the use of "Google Translate" be assessed to see if it could be used during urgent situations to produce emergency advisories. If acceptable, the "Google Translate" version could be released as a draft with the EOC version to follow as the official document.	**Deficiency** The root cause is governance
	#12	As a result of the fractured approach to public messaging (e.g., some work done by a backup person and some done from home) and the lack of attendance in the PEOC, the Communications Officer's situation awareness was lacking and the flow of public information was less than it should have been. It was also reported that neither the DPS Communications Officer or his alternate have received emergency public communications training	Government operational requirements must take precedence over holidays. Employees tasked with essential emergency management functions should never be allowed to work from home. The DPS Communications Officer and his/her alternate should be trained on emergency public communications as soon as possible.	**Deficiency** The root cause is governance
2.3.4	**Operational Coordination**			
	#13	Coordination of the restoration of Rogers Wireless' telecommunication services was problematic. NB EMO could not contact a Rogers' representative to coordinate restoration priorities and provincial support	It is recommended that NB EMO develop a procedure to talk to people responsible for restoration of services during an emergency at Rogers, and all telecommunications companies operating in NB.	**Deficiency** The root cause is planning
2.3.5	**Impact Analysis**			
	#14	In previous emergency events impacting on NB, DPS Security Directorate analysts have conducted an assessment of the possible impacts from the emergency events. This proven capability was not fully utilized during the ice storm.	It is recommended that it be a standard operating procedure to employ a security analyst to conduct an impact analysis during all emergencies.	**Deficiency** The root cause is unknown

Ref.	Observation #	Observation	Recommendation	Classification
2.3.6	**Executive Management**			
	#15	The Deputy Ministers' Security and Emergency Management Committee was not activated in response to the ice storm. The acting Deputy Minister (DM) was not aware of the DMs' Committee and its activation was not recommended/requested by NB EMO.	It is recommended that the Deputy Ministers' Security and Emergency Management Committee be automatically activated during all emergencies.	**Deficiency** The root cause is **unknown**
2.3.7	**Elected Officials' Role**			
	#16	There were reports that a Member of the Legislative Assembly (MLA) was spreading misinformation about the response. This did not happen. However, tweets became increasingly critical of NB EMO as the emergency continued. This led to the deepening distrust and lack of confidence in NB EMO. To maintain confidence in government it is essential that all members of the government, including elected officials, support the responders and emergency management officials during the response phase of any emergency.	It is recommended that the Premier work with the opposition parties to obtain an agreement on the Canadian tradition of supporting the government actions until the emergency is terminated.	**Deficiency** The root cause is governance
	#17	The MLAs were not informed of government actions in response to the emergency. This caused frustration for the MLAs in the affected areas, who were inundated with quires from the public.	It is recommended that the Executive Communications Office be tasked with keeping the MLAs fully informed through an emergency.	**Deficiency** The root cause is planning
2.3.8	**Military Assistance**			
	#18	There was controversy surrounding the involvement of the military in response operations. A number of mayors, CEOs and a local MLA believed very strongly that the military should have been called in to assist.	It is recommended that communities/LSDs include guidance in their emergency management plans on the use of military resources during an emergency and it should be reinforced during elected officials' training.	**Deficiency** The root cause is education

Ref.	Observation #	Observation	Recommendation	Classification
2.3.9	**Community Support**			
	#19	J.D. Irving Limited, a privately owned conglomerate company headquartered in Saint John, NB, provided outstanding support to the people impacted by the ice storm. They provided firewood, potable water and kerosene at no expense to governments or the people.	It is recommended that GNB formally and publicly acknowledge J.D. Irving Limited's generous contribution to the ice storm response efforts.	**Strength**
2.3.10	**Firefighters**			
	#20	The employment of volunteer firefighters in non-traditional roles, such as checking on residents, during an emergency was endorsed by all of the Fire Chiefs that were interviewed. There was widespread concern about firefighters' insurance coverage when completing non-firefighting tasks during an emergency. It was also reported that during prolonged events firefighters face financial hardships when they leave work to help their communities.	It is recommended that the firefighters' insurance coverage be reviewed and upgraded as required. Paying volunteer firefighters when they are involved in prolonged emergency operations should be considered. The Natural Resources' pay structure for volunteers fighting forest fires is a good model.	**Deficiency** The root cause is governance
	#21	A couple of fire departments reported that their volunteers were over-worked to the point that they were very close to being "burnt out." They felt that it was their responsibility to look after their communities and were reluctant to ask for outside help. Non-affected fire departments responded quickly to relieve their counterparts when the need was known.	No recommendation required	The firefighters' dedication to community safety is a **strength**.

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2.4	**RECOVERY**			
2.4.1	**General**			
	#22	Other than restoration of the electric grid, no physical recovery was required. However, there is a requirement for all stakeholders to rebuild trust. The relationship between the communities/LSDs and NB EMO has deteriorated to the point that all NB EMO's actions are interpreted as wrong.	It is recommended that all stakeholders make a concerted effort to regain the trust. This may be accomplished by forming emergency management working groups to work through the differences and to develop regional specific emergency management plans. It is also recommended that the Charlotte County plan be developed for as soon as possible.	**Major Deficiency** The root cause is unknown