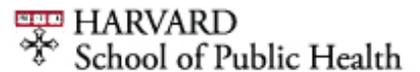




**NATIONAL  
PREPAREDNESS  
LEADERSHIP  
INITIATIVE**

# **Meta-Leadership Lessons from Tropical Storm Irene in Vermont 2011**

*An NPLI Case History*



**National Preparedness Leadership Initiative**

A Joint Program of the Harvard School of Public Health and the  
Kennedy School of Government at Harvard University

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*Flooding from Tropical Storm Irene in  
Brattleboro, VT  
(Credit: [The Point FM](#))*

## Background

Several alumni of the NPLI were involved in the response to Tropical Storm Irene through their service in the Vermont National Guard. This report captures meta-leadership lessons from this experience. Interviewed for this Case History were Brigadier General Dick Harris (Cohort IV), Colonel Terry Lambert (Cohort VII), Colonel John Boyd, Lieutenant Colonel Dwight DeCoster, and Major Jason Pelletier.

Tropical Storm Irene resulted from the remnants of Hurricane Irene, the first hurricane of the 2011 hurricane season in the United States. The storm affected much of the Caribbean and the east coast of the United States. It was only the second storm of its type in history to make a direct hit on Vermont.

Governor Peter Shumlin declared a state of emergency on Saturday, August 27, 2011, the beginning of a

long weekend, in preparation for the storm. The impact was felt in Vermont late that evening and the following day.

Between five-and-eight inches of rain fell across much of the state and more than 11 inches fell in one area. The result was the flooding of almost every river and stream in the state. At least three people were killed and several towns were so isolated by flood waters and damage that supplies had to be brought to them by helicopter. Road travel was severely disrupted throughout the state; the cost of repairs to the road infrastructure, including bridges, ran to almost \$200 million.

## About the Vermont National Guard and the Response

As in many states, the Vermont National Guard (VNG) has a small permanent staff; the vast majority of its force of approximately 4,000 is composed of part-time reservists who must be activated by the Governor or, more rarely the Department of Defense, before they can be deployed.

VNG supports Vermont Emergency Management (VEM) which has the responsibility to run the operations.

The VNG has four Quick Reaction Forces (QRFs) of 30 individuals that respond within four hours of notification. Their principal role is to provide security, initial road clearing, and other stabilizing functions. All four were activated by midday on 28<sup>th</sup>.

The QRFs are followed by Response Forces (RF). The VNG has three

specialized RFs consisting of 50 to 100 personnel depending on their specialty and two larger RFs consisting of approximately 250 individuals designed for longer deployments. Beyond this, additional forces are drawn upon as needed.

Activation of the National Guard is complex: Some full time staff are Active Guard Reserve, similar to Active Duty, but under different authorities; in most circumstances part time Guard personnel are on State Active Duty in a response. They may be paid by the state or the federal government depending upon the circumstances. If there are missions that fall outside the Guard's military capability, time must be allotted to acquire the capability from other Guard sources nationally or potentially from the Active Duty. Using Active Duty capabilities requires specific command authorities. There are conditions with each of these contingencies that have implications which must be considered in the context of the needs and interests of the full range of stakeholders.

In this event, all but the full time personnel were on State Active Duty although under Federal rules and served at Federal expense. Assets deployed from other states, such as helicopters, were on Federal status but considered to be on State Active Duty during the response. Thus Vermont had to reimburse the state from which the equipment originated.

Confused? The examples above provide only a glimpse into the intricacies of utilizing the National Guard for disaster response. Herein lies the first meta-leadership challenge: the demand for swift action will be intense yet there is significant opportunity for

unintended consequences if all of the relevant stakeholders do not share a common vocabulary and understanding of the workings of the system and chain of command.



*Vermont National Guard personnel preparing relief supplies*  
(Credit: Vermont National Guard)

On Sunday evening (Aug 28), the State's Emergency Operations Center evacuated because of flooding in the area. The functions were moved to the FEMA operations center in Burlington which was still active from the response to Spring 2011 flooding.

On Monday and Tuesday (Aug. 29-30), VNG activity diverted to focus on refueling high water vehicles to be utilized in reaching isolated communities and to distributing commodities to those areas.

The most long-term mission for the VNG was to assist in road clearance and rebuilding. They supplied planning engineers to Vermont Emergency Management (VEM) for about 30 days.

The VNG did not act alone. Their work was supplemented through support from National Guard resources from Illinois, Maine, New York, Ohio, South Carolina, Virginia, and West Virginia. Disaster Assistance Response Teams (DARTs) from outside of

Vermont were described as a “huge asset.”

## **Meta-Leadership Lessons**

### ***Dimension One – The Person of the Meta-Leader***

Most Guard personnel are part time forces that provide the nation superb capability. They are dedicated but also have to balance their commitments to their families and employers with their Guard mission. This is particularly true when the families and employers are affected by the emergency, too.

“It took a great deal of emotional intelligence to determine where to pull soldiers from and for how long,” said one senior leader.

“Families and employees are supportive of Guard members but we have to be sensitive as well. We have some full time members and we look to them first. We had time in advance of Irene to determine who would be around to help. As the response unfolded, Guard leaders tried to give balance whenever we have sufficient forces to allow it.



*Vermont National Guard personnel were involved in extensive road clearing and flood response.*

*(Credit: Vermont National Guard)*

Leaders must recognize their symbolic value. The Guard represents security and resilience to a community. Just seeing the trucks and uniformed personnel can help

restore confidence in the face of adversity. Leaders must be intentional in projecting calm and self-assurance as both their troops and the community at large will mirror their behavior.

### ***Dimension Two – The Situation***

VNG deployed Key Leadership Engagement Teams to assess towns hit by the storm. Their job was to help build an operating picture through evaluation and analysis in conjunction with appropriate leadership.

Each day there was a 5 pm call with the town emergency managers. VEM was doing this in parallel yet getting different reports and information. The criteria and analysis were not consistent: assessment depended upon the individual with whom one spoke -- how things were at his house, on his road, etc. The VNG used skills deciphering “atmospherics” learned in Afghanistan and Iraq to try to develop a more accurate picture of what was actually happening. The State Police also conducted assessments that tended to corroborate with what VNG was finding.

“There is a need to better coordinate assessment activities,” said one interviewee. “It took about a week to get everyone into the field to see the damage firsthand. You couldn’t grasp how bad it was from watching television. You had to see it.”

Another commented that the work to refine situational awareness and a common operating picture was constant. One challenge: once VNG began flowing data to the state agencies it outstripped the

ability of those agencies to analyze it. Attention must be paid to calibrating both sides of this equation.

It must be assumed that the situation will change in ways which you may not anticipate. One example: news came that President Obama was considering a visit to see the damage from the storm which caused a “security rush” that diverted personnel from other activities. The President ultimately cancelled and sent FEMA Administrator Craig Fugate instead. The disruption, however, could not be undone. It was recommended by several interviewees that VIP visits be formally factored into response plans. One suggested that a special VIP security team be created as some high profile visit is “inevitable” in an event of this scale.

### ***Dimension Three: Leading Down***

Closely related to Dimension One were the challenges of leading down with a volunteer force drawn from the same area as the impact of the emergency. The VNG was fortunate in this case in that most of its personnel lived in the northern part of the state while the worst damage was in the southern counties.

The rapid organizational assessment undertaken in advance of Irene helped understand who was most likely to be available. “Knowing this upfront made it easier to manage,” said one interviewee.

As the response progressed leaders watched hours try to minimize the number of personnel working

extraordinarily long shifts. In an initial response you must use who you have to get the job done; in a prolonged response, leaders must pace their people and resources. Showing that respect and loyalty down reaps greater commitment back up.

A lesson learned was that an event of the scale of Irene requires an involuntary call-up early to ensure that the proper skill sets are available and forces are not overworked: relying only on volunteers may provide enough bodies initially, but commanders need to be cognizant of work cycles and special training requirements.



*VNG relief efforts were multi-faceted  
(Credit: Vermont National Guard)*

Another lesson learned was that running operations 24-hours per day requires not just people to perform specific functions but also additional planners to ensure that the “battle rhythm” that is necessary in the early days of a response.

A final lesson was to include all staff sections in the response including support functions even if only through information. “Everyone needs to feel that they are part of the effort.”

### ***Dimension Four: Leading Up***

There was a new state administration in place but Irene

was not the first time that the VNG had worked with the governor and his team. Vermont is subject to regular spring flooding as a result of snow melt and spring rains. This earlier experience meant that the legal processes had been exercised and relationships built.

One interviewer commented, “With any new administration it is critical that relationships are formed immediately to ensure that all potential responders understand the procedures that are necessary to activate the Guard. Whenever there is a new member of the team, they must be briefed. You don’t want to be learning ‘on the fly’ in an emergency.”



*Vermont’s roadways suffered extensive damage which complicated response and recovery efforts*  
(Credit: Vermont National Guard)

Another interviewee noted that it is important that state officials not only know how to activate the Guard but also how to best utilize them. “We are a capabilities-based, mission driven organization. Give us a job to do and let us figure out how best to do it.” In this situation, VEM – the agency in charge – put forward one plan for commodities distribution by the Guard that they thought made sense but the Guard saw an alternative plan that better used their resources. VNG presented its

case and prevailed. “When coordinating efforts, each agency has to respect and leverage the expertise of the others. Communication is key.”

The VNG has built its relationship with VEM and other agencies over time. This has been a benefit of exercises around the Yankee nuclear power plant. “The State is the customer,” said one interviewee. “But sometimes you have to educate them just as they have to educate us.”

### ***Dimension Five: Leading Across***

A major emergency such as that created by tropical storm Irene required “odd relationships”: non-doctrinal relationships between civilian, government, and NGO entities formed based on the situation. “It is tough – but essential – to keep your hands around the evolving structure and relationships.”

A large response should be viewed as a complex adaptive system: there will be interconnections and interdependencies not foreseen in formal plans. Nor will the event conform exactly to planning scenarios. In this case, Irene did not even track exactly as forecast. The ability to adapt and assemble these “odd relationships” may prove to be the difference between success and failure.

As noted above, the VNG was aided by personnel and resources from other states. They noted a lesson learned in the need for joint reception staging and onward integration: you must be able to handle and take care of these out

of state assets. It took some time to get this in place after Irene.

VNG leaders noted that regional challenges are a challenge as the Guard is organized state-by-state. Joint Task Forces (JTF) at the state level are excellent coordinating bodies but there may be a need for regional JTFs.



*Vermont National Guard personnel assess storm damage  
(Credit: Vermont National Guard)*

change such as when a JTF stands up, new personnel will become involved, and attitudes of the public and media will evolve. Meta-leaders must be attuned to the structural, psychological, and emotional inflection points that will mark transitions in the response. There will be implications across all five dimensions that must be understood and addressed. Use the five dimension model to anticipate and manage them.

- ✓ The VNG is an emergency force only. The goal is to transition to civilian entities as quickly yet seamlessly as possible (more critical transitions). They never want to do a job that a local business could do – they should not impede the local economy.

### **Other Key Take-Aways**

- ✓ Monitor social media. VNG did not do this actively in the response to Irene. Doing so may have aided community assessment as well identifying immediate needs.
- ✓ Document lessons learned as the event progresses. “Tell it as it happens.” VNG uses an “in progress review” (IPR) as a vehicle learning-while-doing. These can supplement and inform after action reviews (AARs).
- ✓ Intentionally lead transitions as they can be particularly treacherous. These come into play both as the response ramps up, levels off --especially during an extended response, and again as it winds down. Command structures may

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## **About the National Preparedness Leadership Initiative**

The NPLI, a joint program of the Harvard School of Public Health and Harvard's Kennedy School of Government, was established in 2004 to help ensure that public officials are prepared to meet the challenge of mass casualty terrorist attacks through training and research. The initiative is supported by the Centers for Disease Control and Prevention.

## **About Meta-Leadership**

The meta-leadership framework and practice method is part of the initiative's curricula and was developed by Drs. Leonard Marcus and Barry Dorn, co-director and associate director of the NPLI, respectively; Colonel (Ret.) Isaac Ashkenazi, formerly Surgeon General of the Israel Defense Forces Home Front Command; and Joseph Henderson, formerly director of the CDC Office of Terrorism Preparedness and Emergency Response.

"Graduates of the NPLI executive education program report that this framework has made a significant difference when applied in their real world," said Marcus. "For example, several related that what they learned through the NPLI had informed their response to Hurricane Gustav and preparations for the Obama inauguration. They reached out to each other and coordinated their actions more pro-actively than they otherwise would have. This sort of meta-leadership in a crisis or other major event has important public health impact insofar as agencies are better able to serve the population and reduce the loss of life."

The Meta-leadership framework has five dimensions to teach leadership skills:

- 1) personal self-knowledge and awareness;
- 2) diagnosis of the situation;
- 3) leading one's organizational base;
- 4) leading up, or understanding and delivering on the expectations of one's superiors; and
- 5) leading connectivity among people and organizations over which the leader does not have direct control.

The meta-leadership framework and vocabulary have become common across a swath of the government preparedness and public health communities. Marcus and Dorn have led more than 400 training sessions including efforts with the leadership at the CDC, DHHS, and the National Security Council of the White House. A national series of seminars for business, non-profit, philanthropic, and public leaders — the Meta-Leadership Summits for Preparedness sponsored by the CDC Foundation and Robert Wood Johnson Foundation — is also under way.

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