

**From:** Allen, Susan [Susan.Allen@vermont.gov]  
**Sent:** Wednesday, August 03, 2016 4:24 PM  
**To:** Trombley, Shana  
**Subject:** FW: Vermont After Irene.doc  
**Attachments:** Vermont After Irene.doc

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**From:** Cole, Chris  
**Sent:** Wednesday, August 03, 2016 4:24 PM  
**To:** Allen, Susan <Susan.Allen@vermont.gov>  
**Subject:** FW: Vermont After Irene.doc

FYI

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**From:** Filkorn, Erik  
**Sent:** Wednesday, August 03, 2016 3:31 PM  
**To:** Marshia, Kevin <[Kevin.Marshia@vermont.gov](mailto:Kevin.Marshia@vermont.gov)>; Rogers, Scott <[Scott.Rogers@vermont.gov](mailto:Scott.Rogers@vermont.gov)>; Cole, Chris <[Chris.Cole@vermont.gov](mailto:Chris.Cole@vermont.gov)>  
**Subject:** Vermont After Irene.doc

Sue Allen reached out to me looking for Irene numbers and “lessons learned”.

I found this document in Donna’s folder “After Irene Talking Points” which appears to cover all that and more.

Don’t want to confuse matters but this just might fit the bill.

Vermont After Irene  
Presentation talking points

#### **ICS – Incident Command System**

**Goals:** Establish emergency access to cutoff/isolated towns & locations within communities  
Establish access for utility companies to restore power to areas that are still cut off  
Establish mobility (public access) to towns that currently have emergency access only  
Establish mobility along East/West corridors (to include truck traffic/commerce)  
Inspect all bridges of concern  
Prepare state roads for winter operations

#### **Resources:**

**VTrans Employees:** Approximately 700 were assigned to *IRENE* recovery tasks  
**Hundreds of National Guard Troops:** Vermont, Maine, Illinois, Ohio, NH, SC, WV, Virginia  
**DOT Partners:** Maine and New Hampshire  
**Over 200 Private Contractors and Consultants...** Approximately 1800 people from the private sector,  
**Medical Assistance from LA, ME, AR, MO, NH, ID and FL**  
**EOC, RPCs, Red Cross Church groups, Fraternal Organizations, and many individuals**

#### **First 30-days**

Summary of State Highway Roads and Bridges August 28, 2011

State Road Segments Closed = 146 ~ 531 miles

Bridges Closed = 34

September 28, 2011

State Road Segments Closed = 6 ~ 13 miles

Bridges Closed = 6

### **Municipalities**

September 30, 2011

Road Segments Damaged = 2,260

**Road Segments Closed = 175**

Bridges Damaged = 289

**Bridges Closed = 90**

Culverts Damaged = 963

Culverts Closed = 335

### **Rail Damage**

- **107 Washouts – over 50 very large**
  - **32 on GMRC**
    - **47 on B&R**
    - **4 on VTR Northern**
    - **9 on CLP**
    - **9 on WACR Conn River**
    - **6 on WACR M&B**
- **6 Bridges severely compromised**
  - **All suffered major structural damage**

### **Rail Restoration**

- **Railroad shut down August 29**
- **Service restored on:**
  - **CLP ~ Aug 31**
  - **VTR Northern ~ Aug 31**
  - **WACR Conn River from north only ~ Sept 9**
  - **GMRC ~ Sept 16**
  - **VTR B&R ~ Sept 18**
  - **White River Junction Bridge ~ Oct 11**

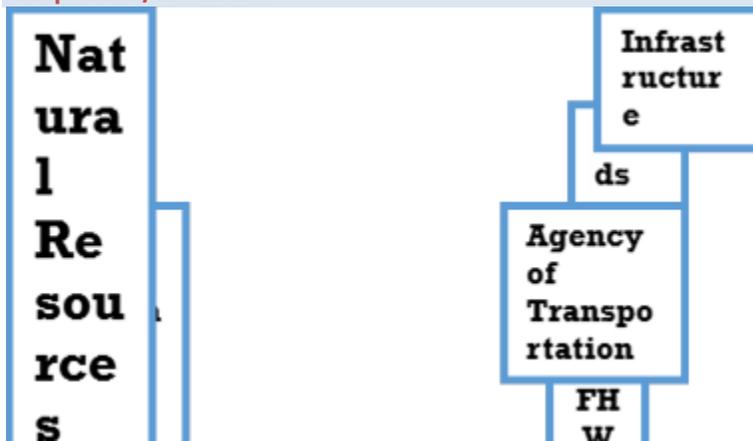
### **Emergency Response Lessons Learned**

- Use of ICS is crucial to success
- Choose leaders early
- Train leaders intensely
- Enhance technology available to ICS leaders
- Train all staff in ICS
- Adopt SOP that incorporate structure of UC and role of IT
- Communicate – constantly
- Celebrate milestones

### Irene Sparked Innovation

- Use of cross-functional teams
- Infusion of tech-savvy staff
- Empowering staff to make decisions at local level
- Close roads more frequently for repairs
- Streamline design process

### Adaptation/Resilience



### Vermont Transportation Resilience Plan

## Vermont After Irene

### Presentation talking points

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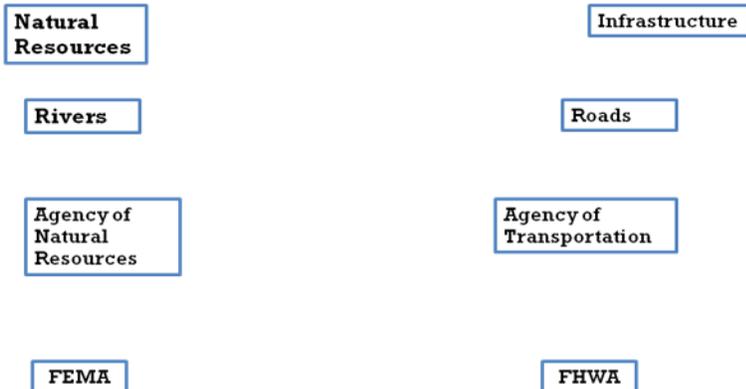
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