

Municipal Guidance for Flood Emergencies In Vermont



WINDHAM
REGIONAL
COMMISSION

August 2016



riversmart
communities



This document was re-drafted for Vermont from a document originally developed for Western Massachusetts by Deerfield Watershed Creating Resilient, an ad hoc group of local political leaders, residents, scientists from UMass, engineers from NRCS and many others. It is encouraged that towns save this document to a server for electronic access, and include a hard copy in the town's LEOP binder.

Thanks and Acknowledgements

Thank you to Deborah Shriver Consulting for sharing the original document and editing this booklet, and to Deerfield Watershed Creating Resilient Communities and the University of Massachusetts [RiverSmart Communities](#) for providing the opportunity to develop and distribute it. Thank you to the Vermont Department of Emergency Management and Homeland Security and the Vermont Agency of Natural Resources for their input into the development of this document. Funding in support of this work was provided by USDA NIFA.



*Cover photo: Flooding during Tropical Storm Irene, 2011
Photo credit: Jeff Nugent, Windham Regional Commission*

This publication available at <https://extension.umass.edu/riversmart/manuals>

Table of Contents

Advance Preparations I: Have these in place 1

Advance Preparations II: Major storm is forecast with high risk of flooding 5

Activation Time: During the Storm 7

After the Storm: Recovery 9

Acronyms: 11

Resources: 12



*Remains of a home destroyed by Tropical Storm Irene, 2011
Photo credit: Jeff Nugent, Windham Regional Commission*

Advance Preparations I: Have these in place

Training:

- Agents for Boards of Health, EMDs, Zoning Administrators, Planners and others are eligible to receive free trainings through the [Department of Homeland Security](#). Programs are available for flood response and other emergencies. (Transportation, room, board and program costs are paid for by DHS.) Additional trainings are available from the State of Vermont [here](#).
- Town Administrator/EMD: Be sure the Selectboard, fire, police, highway, DPW and emergency personnel have had Incident Command System (ICS) training, available through [FEMA](#). ICS provides a consistent framework and process for responding to emergencies among local, state, federal agencies, non-profit sectors and faith-based organizations. ICS-100 and ICS-200 are available [on-line](#) and can be done in a few hours.
- Town Administrator/EMD: Set up and get trained in [VTAlert](#). VTAlert is a web-based system that provides a portal through which information can be disseminated by state and local authorities to the public, including schools and colleges, state, local, and federal government, and first responders. It allows the public to sign up for and receive notifications through a number of delivery systems such as text, e-mail, or telephone.
- Town staff should have awareness of the Emergency Protective Measures (EPM) Rule in effect in Vermont. Emergency protective measures can be taken by municipalities to preserve life or protect property from severe damage and may proceed without prior authorization from ANR, but the measures taken must meet the standards established in the Rule and be minimized to that necessary to protect life and property. The measures must be approved by a member of the municipal legislative body and must be reported to the Agency of Natural Resources within 24 hours using the [online reporting form](#). [Contact a River Management Engineer](#) or contact the Rivers Program at ANR.WSMDRivers@vermont.gov or 802-490-6195. EPM informational video is [here](#).
- Town staff should have familiarity with the Natural Resources Conservation Service's [Emergency Watershed Protection](#) program and the staff at their [local Vermont NRCS office](#). This program's objective is to assist sponsors and individuals in implementing emergency measures to relieve imminent hazards to life and property created by a natural disaster.

- Selectboard/ Town Staff/ Zoning/Floodplain Administrator: It is important to be familiar with the Special Flood Hazard Area (SFHA) and River Corridor mapping and locations for your town, in addition to sharing amongst yourselves any local knowledge of unmapped flood risk areas. Know which roads, bridges and culverts are at risk. Maintain hard copies of all maps with highway department, EMS, and local police, and/or sheriff or state police.

Town Website / Plans / Policies:

- Town Administrator/Staff/EMD: Create an unpublished webpage for the Town website that includes emergency contact numbers and other emergency information that can be activated during emergencies.
- Selectboard/Town Staff: Make sure you have a Continuity of Operations Plan (COOP) in place so that basic municipal services can be maintained during an emergency.
- EMD/Selectboard: Maintain an up-to-date [Local Emergency Operations Plan](#) (LEOP). This Plan needs to be updated by the EMD and approved/adopted by the Selectboard in a warned meeting. This must take place annually between Town Meeting Day and May 1st.
- Animal Control Officer/Town Staff: Plan for how to handle/care for animals during a disaster. Completion of [Appendix B7](#) of the LEOP will assist in doing this. Vermont Disaster Animal Response Team (VDART) also has [resources to assist towns](#) in planning for animals and setting up animal shelters.
- EMD: Contact your regional planning commission's Emergency Planner for information on getting municipal trainings, assistance with developing emergency plans, information about the Local Emergency Planning Committee (LEPC) and Community Organizations Active in Disaster (COAD), and other emergency management related questions. Your RPC can be found [here](#).
- Town Administrator/Staff/EMD: Maintain a list of extra fire, police, highway equipment drivers who can be called upon in an emergency. Check with your insurance company on coverage for these workers.
- Selectboard: If not already outlined in the Town's personnel policy, create a Town policy discussing expectations of staff during emergencies. Is everyone expected to pitch in? Will they get paid overtime?

Records:

- Road Foreman/Commissioner: Maintain an up-to-date culvert and bridge inventory with photographs of existing conditions. If one is not already in place, set up a system to keep detailed records of town

infrastructure repair costs. This is important information to have when seeking disaster repair reimbursement and/or grant funding for upgrades or retrofits. Your inventory may be online at www.vtculverts.org.

- Road Foreman/Commissioner: Maintain a highway department equipment list. After a storm event, reimbursement may be available for use of backhoes, dump trucks, etc.
- Town Clerk/Treasurer/Listeners: Consider the vulnerability of the location of town records. If necessary, store records in an alternate, less vulnerable location for safe keeping.
- EMD: Know your town's vulnerable populations and their needs during events when power may be out or roads closed for extended periods of time. Keeping an updated vulnerable populations list is one way to do this. Towns can also provide information to individuals about registering for [Citizen Assistance Registration for Emergencies \(CARE\)](#).
- Zoning/Floodplain Administrator: Know what buildings are at risk structurally or subject to inundation.

Roles:

- Town Administrator/Selectboard/EMD: Predetermine a "Volunteer Coordinator" and train them as part of your town's Emergency Operations Center (EOC) response team. This will eliminate confusion following an event and also increase utilization of volunteer support. The Volunteer Coordinator should proactively make connections with local recovery groups that may be looking for volunteers following an event.
- Selectboard/Town Staff: Designate and train a public information officer (PIO) – someone with written skills and public speaking ability who will issue statements to the media during emergencies. Have a list of local media contacts available and keep it up to date.

Emergency Operations Center:

- Ensure your local EOC is adequately equipped with emergency radio communication capability (maybe at Fire Department) that allows for communications with police, fire, selectboard and highway department vehicles. Local EOC should also have back-up power source and technology capable of maintaining uninterrupted communication with the State Emergency Operations Center (SEOC).

Sheltering:

- EMD/Town Staff: Have local shelters pre-planned and their locations made known to residents. When choosing and establishing shelters,

consider individuals with functional needs, pets, and backup power. Shelters should be noted in the town's annually updated LEOP in the planning tasks. Contact the [American Red Cross](#) for shelter best practices.

- Vermont has eight regional emergency shelters, but these can only be opened with agreement from the host town, facility, and American Red Cross. If a community doesn't have a shelter and needs one opened during a disaster, they can contact the Red Cross through the SEOC at 1-800-347-0488. This may result in opening a regional shelter, sending folks to a nearby shelter, or other situation-dependent options.
- Animal Control Officer/EMD/Town Staff: Plan for how to handle/care for animals during a disaster. Talking with shelter operators about how/where animals can be housed is the first step. Work with willing local farmers to find shelter locations for large animals that may need to be evacuated from vulnerable locations. Vermont Disaster Animal Response Team (VDART) has [resources to assist towns](#) in planning for animals and setting up animal shelters.

Recovery:

- Road Foreman/Commissioner: Have pre-bid contracts for large equipment, materials (gravel, rock) and contractor services to avoid procurement delays. Can bid once a year.
- Town Administrator/Town Staff: Have a pre-determined debris management site identified in your community's solid waste implementation plan (SWIP). Contact your Solid Waste District or private hauler for appropriate protocol if your town does not have a SWIP.
- Develop and maintain a supportive relationship with local/regional EMS and Search and Rescue groups serving your town.



*Tropical Storm Irene
damage, 2011
Photo credit: Joe Flynn,
Department of Public Safety*

Advance Preparations II: Major storm is forecast with high risk of flooding

Highway Department:

- Ensure there is an adequate inventory of “Road Closed” signs. Ready “Road Closed” signs and place face down near locations susceptible to flood damage.
- Check and clear debris from swales, turn outs, catch basins and other drainage structures. Photograph catch basins (can use GPS units or smart phone with date/time stamp) to document pre-storm condition.
- Document mileage of highway department trucks, and other equipment at the start of the storm in order to be eligible for reimbursement for costs associated with their use during and after the storm.
- Either activate or alert back-up/extra staff of possible activation.
- Stay in contact with your [VTrans District Tech](#) and [ANR River Engineer](#) to advise them of possible issues and the need for emergency repairs.

Selectboard/Emergency Management Director/Town Staff:

- Watch river gauge information. Know at what discharges roads begin to flood.
- Alert police and highway department about potential flood emergency.
- Hold pre-event meeting with police, highway, selectboard, fire and emergency services personnel to share information and coordinate actions. Either activate or alert back-up/extra staff of possible activation. Have the “Volunteer Coordinator” begin to line up volunteers and create a schedule for shifts.
- Activate local EOC staff. Gather provisions needed for EOC staff.
- Stock up on bottled water.
- Contact local restaurants that have volunteered to cook for emergency personnel during and immediately following a storm event.
- Reach out to local faith community to solicit their help in aiding homebound residents.
- Begin keeping track of all costs, including donated time, food and materials, as it may be eligible to count as ‘local match’ for FEMA reimbursement if a federal disaster is declared.
- Contact USDA, Natural Resource Conservation Service personnel at your [local NRCS office](#) to alert them to possibility of flood damages.

NRCS may activate extra staff to go to flood damage sites to evaluate them for restoration funding via the Emergency Watershed Protection (EWP) Program. EWP funds can be used to make repairs where infrastructure is damaged or threatened. These funds can be accessed where damage has occurred due to any severe event. It need not be a federally declared emergency but non-federal disasters are put on a waitlist and not immediately funded. However, NRCS staff must evaluate damage sites before any repairs are made by the town. Call NRCS staff as soon as possible after the storm (Rob Allen, 802-951-6796 x232 or rob.allen@vt.usda.gov).

Local Police, Sheriff and/or State Police:

- Either activate or alert back-up/extra officers of possible activation.
- Prepare and distribute to officers a form for people to sign who refuse to evacuate a flooded area.



*Spring 2011 flooding in Vermont
Photo credit: Vermont Civil Air Patrol*

Activation Time: During the Storm

Highway Department:

- Maintain contact with your local EOC and selectboard.
- Find and remove downed trees.
- Report downed electrical wires.
- Maintain lines of communication with your [VTrans District Tech](#) and [regional planning commission](#). Report all damages as requested and by the time given.
- Record keeping is vital. Keep track of all materials, equipment time, and staff overtime, as it may be eligible to count as 'local match' for FEMA reimbursement if a federal disaster is declared.
- Coordinate with town staff on any needed Emergency Protective Measure (EPM) authorizations for emergency repairs required to address flood-related imminent threats to life or imminent severe damage to property. Adhere to all requirements of this process as outlined in LEOP [appendix C2](#). EPMs must be approved by a member of the municipal legislative body and must be reported to ANR within 24 hours using the [online reporting form](#). [Contact a River Management Engineer](#) or contact the Rivers Program at ANR.WSMDRivers@vermont.gov or 802-490-6195.

Local Police, Sheriff and/or State Police:

- Maintain contact with EOC and selectboard.
- Conduct well-being checks on homebound and at-risk populations. Take those needing assistance to local shelters.
- Set up "Road Closed" signs where necessary.
- Determine when and where flood evacuation is needed. Evacuate people and animals from flood-inundated areas and take them to shelters. Once the Governor declares a state of emergency, the Governor has the authority to order the evacuation of persons living or working within all or a portion of an area for which a state of emergency has been proclaimed. Vermont does not have a specific procedure in place regarding enforcement of an evacuation order.

Selectboard/Emergency Management Director/Town Staff:

- Be at EOC and maintain communication with police, highway, fire and emergency personnel.
- If needed, the town can submit a request for the Governor to declare an emergency (using the form in [appendix A](#) of the LEOP). Multiple towns requesting an emergency declaration is a signal to the governor that the SEOC should be opened, an emergency should be declared

for the state, and they should consider requesting a Preliminary Damage Assessment (PDA) from FEMA.

- Track costs during emergency response, including donated time, food and materials, as it may be eligible to count as 'local match' for FEMA reimbursement.
- Designate an emergency shelter, if necessary. During the event, a town may activate an emergency shelter. If a community doesn't have a shelter and needs one opened during a disaster, it can contact the Red Cross through the SEOC at 1-800-347-0488. This may result in opening a regional shelter, sending folks to a nearby shelter, or other situational dependent options. In addition to SEOC, notify your regional planning commission when any shelter is being opened.
- Notify your regional planning commission/SEOC of all damages using the situational report form (appendix A2 of the LEOP). Your regional planning commission and/or the SEOC will give you direction, including submission deadlines and methods.
- Any requests for resources that exceed mutual aid can be communicated to the SEOC by calling 1-800-347-0488.
- If needed, contact DEMHS, using the SEOC hotline, and request activation of a Community Emergency Response Team (CERT). These volunteers can perform non-medical assistance via the Incident Command System (ICS). CERT can direct traffic, assist in shelters and provide other services. DEMHS must activate these teams in order for them to be covered under DEMHS liability coverage.

Zoning Administrator/Floodplain Administrator:

- Check status of buildings that are at risk structurally or subject to inundation.



Tropical Storm Irene damage, 2011

Photo credit: Jeff Nugent, Windham Regional Commission

After the Storm: Recovery

Zoning Administrator/Floodplain Administrator:

- Local zoning bylaws and floodplain regulations should be utilized during consideration of repair/replacement options for damaged properties and infrastructure. Local permits may be needed, depending on your town.
- Substantial Damage determinations need to be completed and homeowners must be told if their home is substantially damaged ASAP (includes labor even if DIY) because that will change how they can complete repairs. Information on how to make that determination can be found [here](#).

Board of Health:

- Inspect crops for contamination. Be sure crops contaminated by flood debris are plowed under or removed. For assistance in evaluating crops contact the VT Department of Health at the SEOC: 1-800-347-0488
- Contact Vermont Agency of Agriculture, Food and Markets for requirements for burying or disposing of animal carcasses, at the SEOC: 1-800-347-0488
- First line of communication for any questions about potential public health issues should be the SEOC, and they can get in contact with the VT Department of Health for further assistance.
- Centers for Disease Control Emergency Response Hotline (24-hour): 1-770-488-7100.
- The USDA's Farm Service Agency (FSA) can provide disaster relief assistance for farmers. The FSA may offer Emergency Conservation Program cost-shares to eligible producers, depending on funding allocations, to help repair farmland and conservation facilities damaged by a natural disaster occurrence. A Federal Declaration is not required to implement this program. More information can be found [here](#) or by contacting your [county FSA office](#).

Selectboard/Emergency Management Director/Town Staff:

- Report spills or releases of hazardous materials or waste 24/7 by calling the [Vermont HAZMAT](#) Hotline at 1-800-641-5005 or by calling the ANR Spills Program during business hours at 802-828-1138. The ANR Spill Program assesses the environmental impact of hazardous materials spills, oversees the cleanup of spills, and enforces environmental regulations triggered by spills. By calling the HAZMAT Hotline and providing the information, the State will make sure that the right groups know about it and can assist in response.

- Any release which impacts surface water must also be reported 24/7 to the [National Response Center \(NRC\)](#) at 1-800-424-8802.
- Information about the triggers for reporting hazardous material spills or releases can be found [here](#).
- Wastewater releases should be reported to the wastewater treatment facility operator, and then be reported through the ANR online services portal [ANR Online](#).
- Contact your responsible COAD for additional recovery assistance if needed. Your regional planning commission can assist with making this contact.
- Assistance to landowners who have experienced severe property damage may be available through the [Natural Resources Conservation Service](#). This work must have a state or local government sponsor and serve to reduce threats to life and property, be economically and environmentally defensible and sound from an engineering standpoint. NRCS covers 75% of costs and the sponsor is responsible for the remaining 25%. Applications for assistance must be submitted within 60 days of the disaster. Contact your [local NRCS office](#) for assistance.
- Direct all volunteers to your town's pre-determined Volunteer Coordinator for how they can assist the town and/or local recovery groups.
- FEMA provides 75% of the cost for emergency work and permanent work after a declared disaster. Emergency work categories include debris removal and emergency protective measures. Examples of emergency protective measures include sandbagging, closing roads, and a quick repair to a road. Permanent work categories include upgrades or retrofits of road systems (bridges, culverts, roads), water control facilities (levees), equipment, public facilities, or parks, recreational, and other (cemeteries). More information about this reimbursement can be found [here](#).
- When a Federal Disaster Declaration is made, FEMA opens up a [Hazard Mitigation Grant Program \(HMGP\)](#) funding source. This program requires local governments to apply on behalf of applicants, or for themselves. This is a state competitive grant program, which pays 75% of eligible costs and requires a 25% local match, which the town either directly provides or is responsible for receiving. This program can be used for projects that serve to mitigate future damage from natural disasters. A Benefit/Cost Analysis is required for this grant, for which records must be available to complete. Information can be found by contacting your [regional planning commission](#) or [Vermont State Hazard Mitigation staff](#).

Highway Department:

- Maintain line of communication with your [VTrans District Tech](#). Report all damages as requested by VTrans.
- Record keeping is vital. Take pictures before completing any repairs. Keep track of all materials, equipment time, and staff overtime, as it may be eligible to count as 'local match' for FEMA reimbursement if a federal disaster is declared.
- Coordinate with town staff on any needed Emergency Protective Measure (EPM) authorizations for emergency repairs required to address flood-related imminent threats to life / imminent severe damage to property. Adhere to all requirements of this process as outlined in [appendix C2](#). EPMs must be approved by a member of the municipal legislative body and must be reported to the Agency within 24 hours using the [online reporting form](#). [Contact a River Management Engineer](#) or contact the Rivers Program at ANR.WSMDRivers@vermont.gov or 802-490-6195.

Acronyms:

ANR – VT Agency of Natural Resources
CERT – Community Emergency Response Team
COOP – Continuity of Operations Plan
COAD – Community Organizations Active in Disaster
DEMHS – VT Division of Emergency Management and Homeland Security
DHS – Federal Department of Homeland Security
EMD – Emergency Management Director
EMS – Emergency Medical Services
EOC – Emergency Operations Center (local)
EPM – Emergency Protective Measures
FEMA – Federal Emergency Management Agency
FSA – USDA's Farm Service Agency
GPS – Global Positioning System
ICS – Incident Command Systems
LEOP – Local Emergency Operations Plan
NRC – National Response Center
NRCS – Natural Resources Conservation Service (Division of USDA)
PDA – Preliminary Damage Assessment
SEOC – State Emergency Operations Center
SFHA – Special Flood Hazard Area
SWIP – Solid Waste Implementation Plan
USDA – United States Department of Agriculture
VDART – Vermont Disaster Animal Response Team

Resources:

Vermont DEMHS: <http://demhs.vermont.gov/>

Vermont Division of Fire Safety: <http://firesafety.vermont.gov/>

VTrans: <http://vtrans.vermont.gov/>

Vermont Agency of Natural Resources: <http://anr.vermont.gov/>

Regional Planning Commission map and list: <http://www.vapda.org/>

Natural Resources Conservation Service: <http://www.nrcs.usda.gov>

FEMA Emergency Management Institute: <https://training.fema.gov/>

USDA Farm Service Agency: <https://www.fsa.usda.gov/index>



Spring 2011 floods

Photo credit: Mike Cannon, Department of Public Safety