



Actions Residents and Property Owners Can Take

► **FLOOD INSURANCE.** If you do not have flood insurance, talk to your insurance agent. Flood damages often occur outside the limits of the regulatory floodplain.

In Vermont, two-thirds of flood damages occur outside of federally mapped flood areas (VT ANR).

Flood insurance policies do cover damage from flood-related erosion, and purchase of flood insurance is highly recommended for structures located in the River Corridor. Moreover, flood insurance premiums for areas outside of the FEMA high risk flood zone are substantially lower.

Fact: A structure in a flood hazard area has a 26% chance of flood loss over a 30-year period, the life of a typical mortgage (FEMA).

Fact: Standard Property insurance policies DO NOT cover flood damage. The entire building value can be lost with a single flood (FEMA)

► OTHER PROPERTY PROTECTION MEASURES.

The following measures may reduce damage to flood-susceptible properties:

- Grade your yard for proper drainage. Seal and protect water entry points. Use watertight seals and flood-resistant building materials.
- Elevate or anchor fuel tanks and outbuildings. Install a floor drain plug, standpipe, overhead sewer, or sewer backup valve to prevent backup flooding.
- Elevate utilities such as heating and air conditioning systems, water heaters, washers/dryers, and other major appliances to higher floors or on raised platforms.
- Temporarily move furniture, electronics, and other valuables to higher floors; sandbag exterior openings.
- To avoid repetitive losses, consider elevating or relocating the entire structure.



For More Information



- Additional resources are available at www.eastmontpelier.vt.org. **Local Flood Hazard Area maps** can be viewed at the municipal building.
- Visit the **Vermont Agency of Natural Resources River Management Program's FloodReady web site** at www.floodready.vt.gov to find materials relating to the National Flood Insurance Program and River Corridor programs. You can also ANR's Central Vermont Floodplain Manager or River Scientists.
- Contact the **Central Vermont Regional Planning Commission** at **802-229-0389** or cvrpc@cvregion.com for more information on local flood hazards or FEMA grants available to property owners to reduce flood vulnerabilities.
- Visit the **Federal Emergency Management Agency's** website at www.floodsmart.gov or visit the **FEMA Map Service Center (877-336-2627)** at www.msc.fema.gov to access Flood Insurance Rate Maps in electronic format.

Natural and Beneficial Functions.

Watercourses and floodplains that are relatively undisturbed limit stormwater and flood damage, improve water quality, reduce soil erosion, protect habitats, and provide aesthetic and recreational benefits. Natural features such as wetlands and river bank forests can be used to help absorb floodwaters and reduce flooding. East Montpelier's zoning and flood protection standards have been crafted to protect and preserve these natural areas.



LOCAL FLOOD HAZARDS

in East Montpelier, Vermont

What you need to know about:

- Types of Flooding
- Community Actions to Prevent Flood Loss
- Flood Hazard and River Corridor Regulations
- Flood Insurance
- Protecting Your Property
- Increased Disaster Aid

Produced by
East Montpelier Planning Commission and
Central Vermont Regional Planning Commission
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Flood Hazards in East Montpelier

Flooding is the most serious potential natural disaster in the Town of East Montpelier.

Situated in the Winooski River Valley, approximately 5% of East Montpelier's land area and a little over 19% of properties in town are totally or partially located within designated flood hazard areas. Living along the river valleys unfortunately **has flood risks that may be hazardous to life and property.** East Montpelier's commercial and historic core – East Montpelier Village – sits along the banks of the Winooski River, and is particularly vulnerable to economic loss during flooding events.



Erosion damage in Rochester, VT (Jeb Wallace-Brodeur)

Major flood producing storms have affected the Town in the past 100 years. More recently, the Town's infrastructure incurred \$275,000 worth of damage during the May 2011 event and roads and bridges again took a hit during Tropical Storm Irene.



Extreme weather and heavy rain events are expected by climatologists to pose recurring challenges.

Rte 14, East Montpelier



Types of Flooding

There are two types of flooding impacts:

1. **Inundation** where water rises into low lying land along the river,
2. **Fluvial erosion** where moving water wears away the river channel bed and banks. In some cases, a river can jump its bank and rip through an area, taking with it whatever is in its path.

While some flood losses are caused by inundation, **most flood losses in Vermont are caused by fluvial erosion.** Fluvial erosion can range from gradual bank erosion to **catastrophic changes in river channel location and size** during flood events. Dam failures are also a potential hazard in East Montpelier and can cause inundation or erosion flooding.



Inundation

Waterbury Village (G. Russell)



Erosion

Erosion damage in Rochester, VT (AP)



Actions a Community Can Take to Prevent Flood Loss

The Town is proposing the following actions to improve our community's resilience to flooding:

► IMPROVE LOCAL FLOOD HAZARD REGULATIONS.

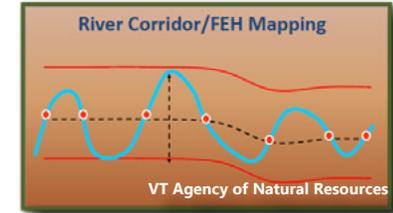
Recent major flood events have underscored the importance of supplementing the Town's existing regulatory standards. East Montpelier has participated in the National Flood Insurance Program and regulated development in the Special Flood Hazard Area (SFHA) since 1974. The SFHA is delineated on FEMA's Flood Insurance Rate Maps and is defined as the **area inundated by the 100-yr flood event.** Limiting development within the SFHA will reduce costly flood losses and increase public safety.

The 100-yr flood event is the event that has a 1% probability of occurring in any given year.

► ADOPT RIVER CORRIDOR MAPS AND REGULATIONS.

Rivers are dynamic systems that naturally move within a corridor over time. While rivers naturally erode slowly, many of the human-caused alterations of our waterways during the past 150-200 years have contributed to Vermont's erosion hazards. **Development that obstructs natural erosion at one location can significantly increase erosion downstream.** The River Corridor maps produced by the Vermont Agency of Natural Resources (ANR) define boundaries to the area the river needs to maintain a stable stream channel. **The River Corridor area boundaries also attempt to capture the lands most**

vulnerable to erosion hazards. ANR is producing River Corridor maps for East Montpelier based on quality-assured and field-tested data that describe the physical form and process of the river system. In East Montpelier, the River Corridor maps include the Winooski River and Kingsbury Branch and portions of Long Meadow Brook, Mallory Brook, Sodom Pond Brook and Muddy Brook. For streams not mapped by ANR, the regulations will apply to the area within 50 feet from the stream bank. Limiting encroachment into the River Corridor will prevent development that would increase overall erosion hazards and hinder a river's natural tendency to adjust toward a more stable condition.



River Corridor/FEH Mapping

VT Agency of Natural Resources

► QUALIFY FOR INCREASED DISASTER ASSISTANCE.

The VT Emergency Relief and Assistance Fund (ERAF) provides State funding to match Federal Public Assistance after federally-declared disasters. **Eligible public costs are reimbursed** by FEMA at 75%. For disasters after October 23, 2014, the State of Vermont will contribute 7.5% toward the local cost share. For communities that take specific steps to reduce flood damage the State will contribute 12.5% or 17.5% of the total cost. **Adopting River Corridor regulations is an action that will position the Town to receive the highest possible state contribution of 17.5% of total disaster project costs.**

Actions the Town has Already Taken. The Town has already taken a number of other important steps to reduce flood impacts, many of which help achieve the current 12.5% state cost share for East Montpelier. These include:

- Identification of flood hazards and mitigation strategies in the **2013 Town Plan**
- Regular **Bridge and Culvert** assessment and maintenance programs
- Adoption of a FEMA-Approved **Local Hazard Mitigation Plan (2011)**
- Annual adoption of a **Local Emergency Operations Plan**
- Annual adoption of updated **Road and Bridge Standards**