



State of Vermont

OFFICE OF THE GOVERNOR

**REQUEST FOR MAJOR DISASTER DECLARATION  
GOVERNOR'S REQUEST COVER LETTER**

August 2, 2024

The Honorable Joseph Robinette Biden, Jr.  
President of the United States  
The White House  
Washington, D. C.

Through: Ms. Lori Ehrlich  
Regional Administrator  
FEMA Region 1  
220 Binney Street  
Cambridge, MA 02142

Dear Mr. President,

Under the provisions of Section 401 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (Stafford Act), and implemented by 44 C.F.R. § 206.36, I request you declare a Major Disaster for the State of Vermont for heavy rainfall and severe flooding, flash flooding, and landslides in eight counties from July 9-11, 2024. I am specifically requesting Public Assistance for Addison, Caledonia, Chittenden, Essex, Lamoille, Orange, Orleans and Washington Counties; Hazard Mitigation Assistance statewide; Individual Assistance (including Individuals and Households Program, Disaster Case Management, Crisis Counseling Program, Disaster Unemployment Assistance, and Disaster Legal Services) for seven counties including Addison, Caledonia, Chittenden, Essex, Lamoille, Orleans and Washington Counties; as well as any other available federal disaster assistance, including but not limited to U.S. Small Business Administration and U.S. Department of Agriculture assistance.

I declared a State of Emergency for this event on July 10, 2024. The State Emergency Operations Center (SEOC) maintained Partial Activation status from July 11-present from 0800hrs to 2000hrs each day and reverted to Monitoring Status by the Vermont Emergency Management (VEM) Watch Officer and the Director of VEM for overnight periods. Multiple conference calls with the National Weather Service offices in Burlington, Vermont and Albany, NY have occurred with state agencies and utility companies related to these storms.

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**National Weather Service overview**

*“Exactly one year to the day from the significant flooding event that impacted northern Vermont in July of 2023, the remnant moisture from post-tropical cyclone Beryl became absorbed into a slow-moving frontal system across Vermont. Scattered thunderstorms crossed the state during the afternoon of July 9th. This was followed by numerous rounds of showers and thunderstorms, some with torrential rainfall, from midday on July 10th through daybreak on July 11th. Heavy rainfall across a complex hilly, mountainous terrain led to rapid surface runoff that caused major, destructive flash flooding of streams and other waterways, damaged or destroyed roads (both paved/gravel), as well as triggering several landslides during the evening and overnight hours of July 10th-11th across a large portion of Vermont. Significant rainfall in the headwaters and the entire watershed of several main stem rivers led to moderate and major river flooding.”*

*Widely scattered showers and thunderstorms, with locally heavy rain, crossed Vermont during the afternoon on July 9th. However, more widespread, flooding rain initially moved across central and northern Vermont during the midday hours of July 10th. By mid-afternoon, numerous bands of heavy rain showers and thunderstorms developed in New York. These showers and thunderstorms passed across Vermont in waves through the evening of July 10th and into the early morning hours of July 11th.*

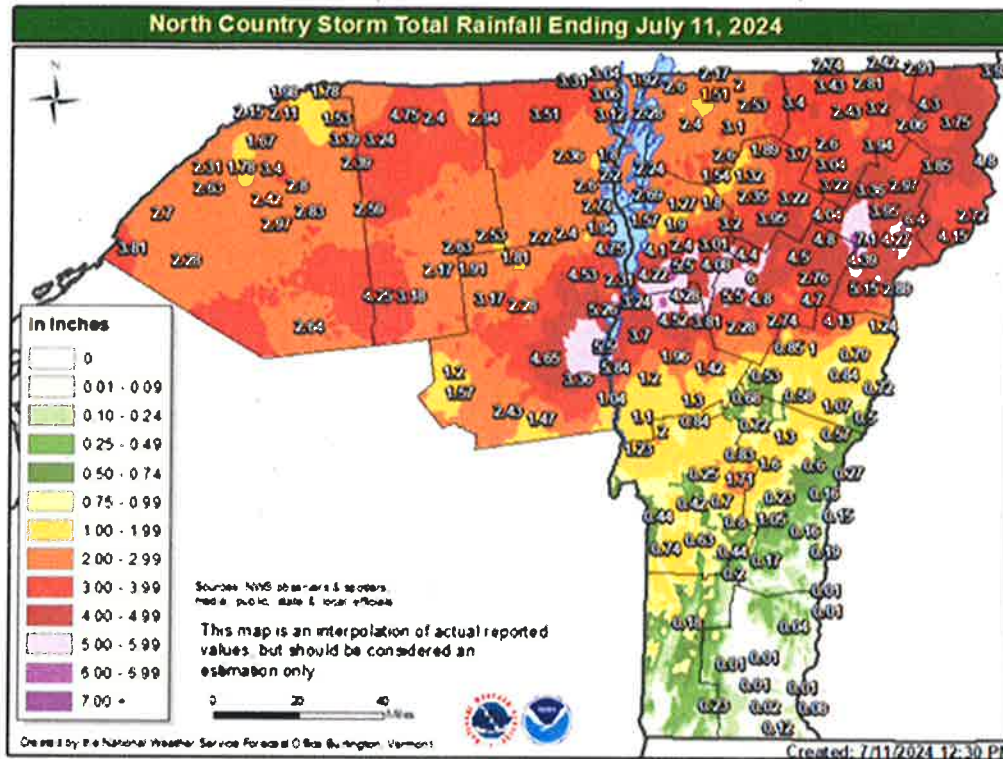
*Rainfall intensities with many of the showers and thunderstorms were 0.5-1 inch per hour with a few storms producing rainfall rates in excess of 2-3 inches per hour. Flash flooding initially began across Addison County by mid to late afternoon on July 10th and then overspread east-northeast across much of central and northeast Vermont during the evening and overnight. As flash flooding commenced across the region, additional rounds of heavy rainfall exacerbated the current flash flooding during the late evening and overnight hours of July 10th-11th.*

*Heavy rainfall and flash flooding in the headwater regions of some main stem rivers forced those rivers to rapidly rise during the early morning hours and throughout the day of July 11th. Six gauged locations experienced major flooding, with several more receiving minor to moderate flooding.”*

*-National Oceanic and Atmospheric Administration (NOAA), National Weather Service - Eastern Region - (July 22, 2024)*

For complete details of these events, please refer below to Weather Summary, **Enclosure C: National Oceanic and Atmospheric Administration (NOAA), National Weather Service - Eastern Region, Significant Flooding in Vermont – July 9-11, 2024, Report.**

The following map depicts statewide rainfall amounts on July 11, 2024:



River gauge data comparing the July 9-11, 2024, storm to the July 2023, storm (DR4720):

| Gauge Name<br>Location         | Flood Stage<br>(feet) | Crested Stage<br>(feet) | Flood Category | Compared to<br>July 2023                      |
|--------------------------------|-----------------------|-------------------------|----------------|---|
| Winooski at Essex Jct.         | 15                    | 20.5                    | MAJOR          | ~ 3 feet lower                                |
| Mad River at Moretown          | 9                     | 13.5                    | MAJOR          | ~ 4 feet higher                               |
| Lamoille at Johnson            | 13                    | 17.8                    | MAJOR          | ~ 3.5 feet lower                              |
| Lamoille at Jeffersonville     | 450                   | 453.4                   | MAJOR          | ~ 3 feet lower                                |
| Passumpsic at Passumpsic       | 14                    | 21.2                    | MAJOR          | ~ 7.5 feet higher<br>4 feet higher than Irene |
| E Branch Passumpsic at E Haven | 6.5                   | 10.7                    | MAJOR          | ~1ft higher than IRENE                        |
| Winooski at Waterbury          | 419                   | 424.9                   | Moderate       | ~1 feet lower                                 |
| Wells at Wells River           | 6                     | 8.2                     | Moderate       | ~ 1 foot higher                               |
| Barton at Coventry             | 8                     | 10                      | Minor          | ~ 1.5 feet lower                              |
| Winooski at Montpelier         | 15                    | 14.5                    | Action         | ~ 7 feet lower                                |

Table 1 – List of Gaged Rivers Crests during the event.

The National Weather Service began sending out information warning of potential impacts of this system several days in advance. VEM personnel participated in several briefings with the National Weather Service Burlington, VT and Albany, NY meteorologists for forecasting data to prepare for the potential impacts to the state.

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### **Severe Agricultural Impacts**

On July 23, 2024, I requested that the United States Department of Agriculture (USDA) issue a disaster designation for the State of Vermont in response to severe July flooding (excerpt below). A Secretarial Disaster Designation would open the availability of financial assistance, including low-interest USDA Farm Service Agency emergency loans for eligible producers in the approved counties.

“On July 10, 2024 - one year after the State of Vermont experienced historical flooding in July 2023 - Vermont suffered devastating impacts from the remnants of Hurricane Beryl. The storm's torrential rains caused innumerable streams and rivers to flood towns, destroy roads and bridges, inundate farms and ruin crops. Many Vermont farms had not fully recovered from last year's destructive storms before they were again under water in the middle of Vermont's short growing season.” [excerpt]

“Just when last year's floods seemed to be in the rear-view mirror, many of our farms are once again facing another long road to recovery. We are now focused on how we can help these farms survive,” said Agriculture Secretary Anson Tebbetts. “It will take federal, state, local and private resources to help our farmers get through this. We are committed to working with our public and private partners during this crisis.”

The Vermont Agency of Agriculture, Food and Markets (AAFM) encouraged all those who sustained losses to report their damages to VT 2-1-1 and to their local Farm Services Agency office with USDA.

### **Statewide Emergency Response**

The State Emergency Operation Center (SEOC) in Waterbury was partially activated on July 11, 2024, in a hybrid posture. Because of concerns that the Winooski River was rising in proximity to the SEOC at 45 State Drive, Waterbury, and there was a risk that floodwaters would cut off access, the SEOC was relocated to higher ground at the Agency of Transportation's Dill Building at 2178 Airport Road in Berlin, Vermont for in-person response, until July 16, 2024, when the floodwaters receded and it was safe to return to Waterbury. Many SEOC personnel and state partners performed their duties remotely.

Partners participating in the ongoing SEOC activation include Agency of Human Services, Agency of Transportation, Public Service Department, Department of Buildings and General Services, Department of Health, Department of Public Safety, including Vermont State Police, Division of Fire Safety, Urban Search and Rescue, Agency of Natural Resources - DEC, Vermont National Guard, American Red Cross, SerVermont, and VT 2-1-1.

### **Local Liaisons**

Local Liaisons (through Regional Planning Commissions) were activated by the VEM Director on July 11, 2024. The data they collected is summarized (below):

Of Vermont's 252 cities and towns, 128 had significant (if not major) impact from the winds, heavy rains, and flooding of July 10-11, 2024. Of those, the damage reported in the state's July 11 Local Liaison Report (LLR) and follow-up coordination identified 26 or so as "hardest hit" based on the local

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situation, VT 2-1-1 call volume (individual reporting), regional assessed vulnerability, Justice 40 disadvantaged communities, landslides and state road closures.

32 towns/cities reported major damage

66 towns/cities reported minor damage

24 towns/cities had more damage discovered in the days following the initial flooding

Many towns were hit hard in this event after suffering very similar damage in 2023, draining their financial reserves as well as their capacity to respond including:

Barre City; Barton; Groton; Hardwick; Lyndon; Middlesex; Moretown; Plainfield; Richmond; and Williamstown.

Additionally, there were repetitive damages in select towns from the June 23, 2024, severe storms and flooding event. These towns included:

Stowe and Walden.

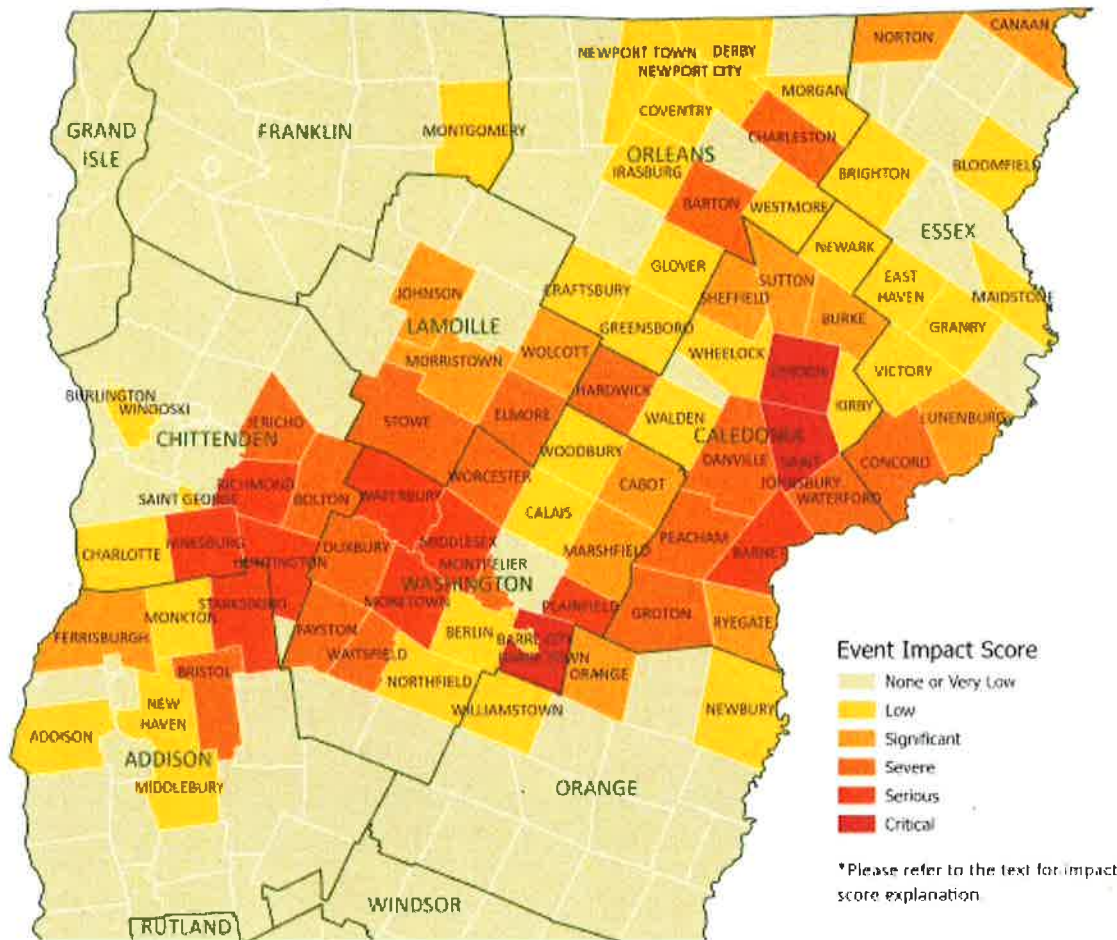
Significant issues reported through Local Liaisons included:

- The flooding directly caused 2 adult male fatalities, in Lyndon and Peacham.
- Almost every affected town had local road washouts ranging from eroded gullies to blown culverts to entire roadways washed away for hundreds of feet, often isolating residents in place and closing affecting businesses and services.
- Lyndon had flooding in its major commercial areas, wastewater plant, and water utility.
- Two towns, Barnet and Plainfield, suffered major damage to drinking water supplies while many others had damage and contamination requiring temporary boil water notices.
- Several towns suffered major damage to wastewater treatment facilities and/or sewage overflows, including Plainfield, Richmond, and Hardwick.

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The following map shows the situation-based on Local Liaison reporting on July 11, 2024\*:

July 2024 Event Hardest Hit Town Names



\*Of these, the damage reported in the state's July 11 Local Liaison Report (LLR) and follow-up coordination identified 26 or so as "hardest hit" based on the local situation, VT 2-1-1 call volume (individual reporting), regional assessed vulnerability, "Justice 40" disadvantaged communities, landslides and state road closures.

### **Fatalities and Injuries**

The Office of the Chief Medical Examiner has reported two storm-related fatalities. These occurred in Lyndonville and Peacham.

### **Towns Declaring a State of Emergency**

Barre declared a state of emergency around 9:30 p.m. Wednesday July 10, 2024, after officials rescued a dozen people from flooded houses and cars. The Towns of Williamstown, Groton and St. Johnsbury ordered evacuations as well. One of the State's hardest hit towns, Plainfield declared a State of Emergency on July 18, 2024.

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### **State Flood Recovery Centers**

The purpose of these centers is to connect people to needed services and hand out necessities. Services were offered through the following Agencies and State partners:

American Red Cross  
Community Mental Health Agencies  
Department of Financial Regulation  
Vermont Department of Children and Families, Economic Services Division  
Field Services/VCCI  
Vermont Department of Public Safety, Division of Fire Safety  
Salvation Army  
VT 2-1-1  
Vermont Department of Health  
Vermont Department of Labor

The State Flood Recovery Centers were open for three weeks, from July 24, 2024, to August 14, 2024.

#### **Locations and Weekly Schedule:** Daily hours 9:30am-6:00pm

Barre - (Mondays and Fridays)  
Plainfield - (Wednesdays and Sundays)  
Lyndonville - (Thursdays and Saturdays)  
Hinesburg - (Tuesdays)

### **Flood Recovery Center Services**

Barre: (July 29, 2024) 54 households served representing 128 individuals and (July 26, 2024) several households were served.

Plainfield: (July 28, 2024) 15 households served representing 33 individuals and (July 24, 2024) 19 households were served.

Lyndonville: (July 27, 2024) 17 households were served.

Hinesburg: (July 25, 2024) 21 households were served representing 58 individuals

### **Local Shelters**

While the state often opens local shelters, Vermonters –generally prefer to stay in damaged homes or go to friends or family instead:

Williamstown, open from 10-11 July 2024 (1 person)

Hardwick, open from 11-12 July 2024 (no overnight occupancy)

Plainfield local shelter, opened from 11-19 July 2024: the town used the dorms of the former Goddard College campus to house people displaced by widespread flooding. Still open as of 7/30/2024.

### **American Red Cross Shelters**

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Barre, American Red Cross (ARC) shelter, was open from July 11-15, 2024, with 9 people per night (20 people-nights), and in stand-by status until July 23, 2024. The American Red Cross has been running the Barre shelter all along (though it was on standby for a couple nights),.

ARC initially provided personnel for the St Johnsbury shelter and then shifted to running the shelter in Lyndon:

St Johnsbury ARC-supported shelter, from July 11-12, 2024, with 2 people.

Lyndon ARC shelter: from July 12-17, 2024, with 7 people per night (41 people-nights), and in stand-by status until 7/23/2024.

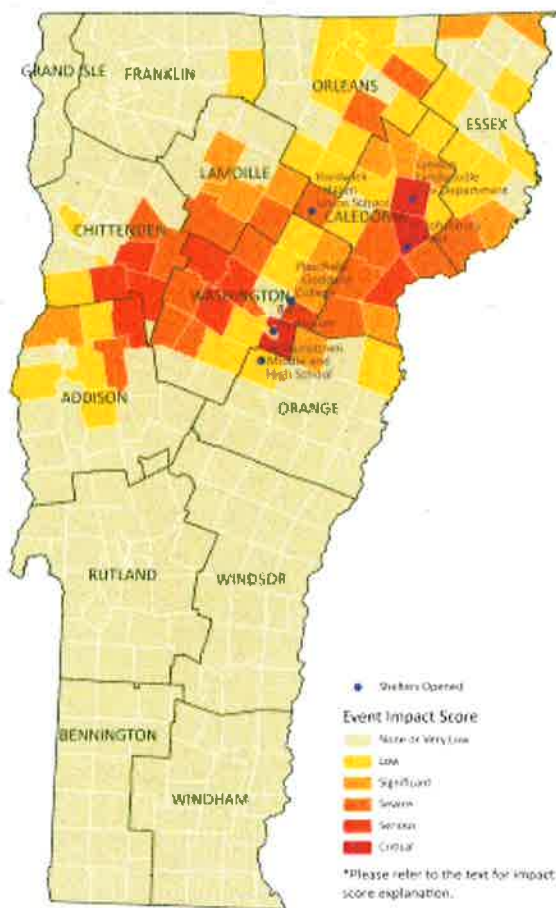
Until July 29, 2024, the American Red Cross ongoing operations included

Shelter support - One shelter in Plainfield at Goddard College which was operated by the Town of Plainfield EMD and there were 5 clients.

Feeding: Ceased feeding operations. Feeding support to the clients at Goddard College was handled by partner organizations.

### The following map shows the shelter locations

July 2024 Vermont Flood Event Hardest Hit Towns and Shelters Opened



\*Of those, the damage reported in the state's July 11 Local Liaison Report (LLR) and follow-up coordination identified 26 or so as "hardest hit" based on the local situation, VT 2-1-1 call volume (individual reporting), regional assessed vulnerability, "Justice 40" disadvantaged communities, landslides, and state road closures.



**Hospitals/Health Care**

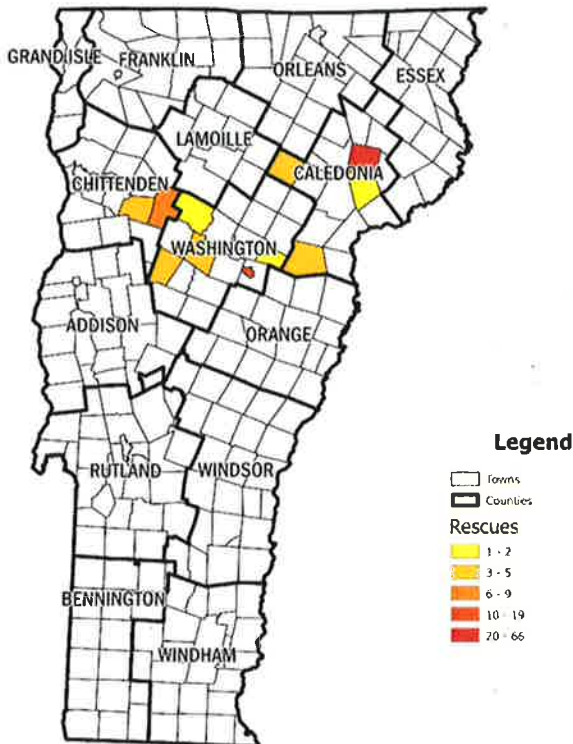
Hospitals had staffing challenges with people getting to work, and Northeastern Vermont Regional Hospital used a mass-casualty trailer to house staff that needed temporary shelter. There were 2 documented flood-related fatalities, 6 (non-fatal) documented flood-related injuries and 2 pharmacies closed (Hardwick and Lyndon).

**Swiftwater Rescues/Evacuations**

Vermont had twelve Urban Search and Rescue (USAR) Type III USAR Teams, 10 Type III Swiftwater teams (6-person team with boats) which were staged based on information from NWS and the SEOC and based on geographic areas prone to flash flooding from historical experiences. One Type III Swiftwater from Connecticut and one Type III Swiftwater Team from New Hampshire (Hanover Fire Department) were brought in via an Emergency Management Assistance Compact (EMAC).. The Swiftwater Teams also supported the mission of recovering the deceased persons who perished in Lyndonville and Peacham due to the flooding.

By the morning of July 11, 2024, there had been more than 118 active rescues, 12 evacuations from homes and 16 pet evacuations performed by the twelve (12) USAR Teams working around the state. There were 75 road closures on State roads, and numerous closures on local roads.

Swiftwater Rescues and Evacuations



| Town/City     | Rescue     | Evac      | Pet       |
|---------------|------------|-----------|-----------|
| Barre City    | 19         | 1         | 5         |
| Bolton        | 9          | 0         | 2         |
| Fayston       | 3          | 0         | 1         |
| Groton        | 5          | 0         | 0         |
| Hardwick      | 4          | 0         | 1         |
| Lyndon        | 66         | 0         | 5         |
| Moretown      | 3          | 8         | 1         |
| Peacham       | 0          | 0         | 0         |
| Plainfield    | 1          | 0         | 0         |
| Richmond      | 4          | 3         | 1         |
| St. Johnsbury | 2          | 0         | 0         |
| Waterbury     | 2          | 0         | 0         |
| <b>Total</b>  | <b>118</b> | <b>12</b> | <b>16</b> |

**State/ Local Resources for Assistance**

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**New England 5-1-1** works in partnership with the other northern New England states, the New England 5-1-1 website provides real-time road and weather conditions, links to live cameras, construction alerts, and traffic warnings); VT 5-1-1 also provided road conditions in Vermont, and the Vermont Agency of Transportation (VTrans), Transportation Management Center provided VT Alert notifications for road closures and conditions. Information was made available to notify that several roads were closed due to downed trees and utility lines during this storm event.

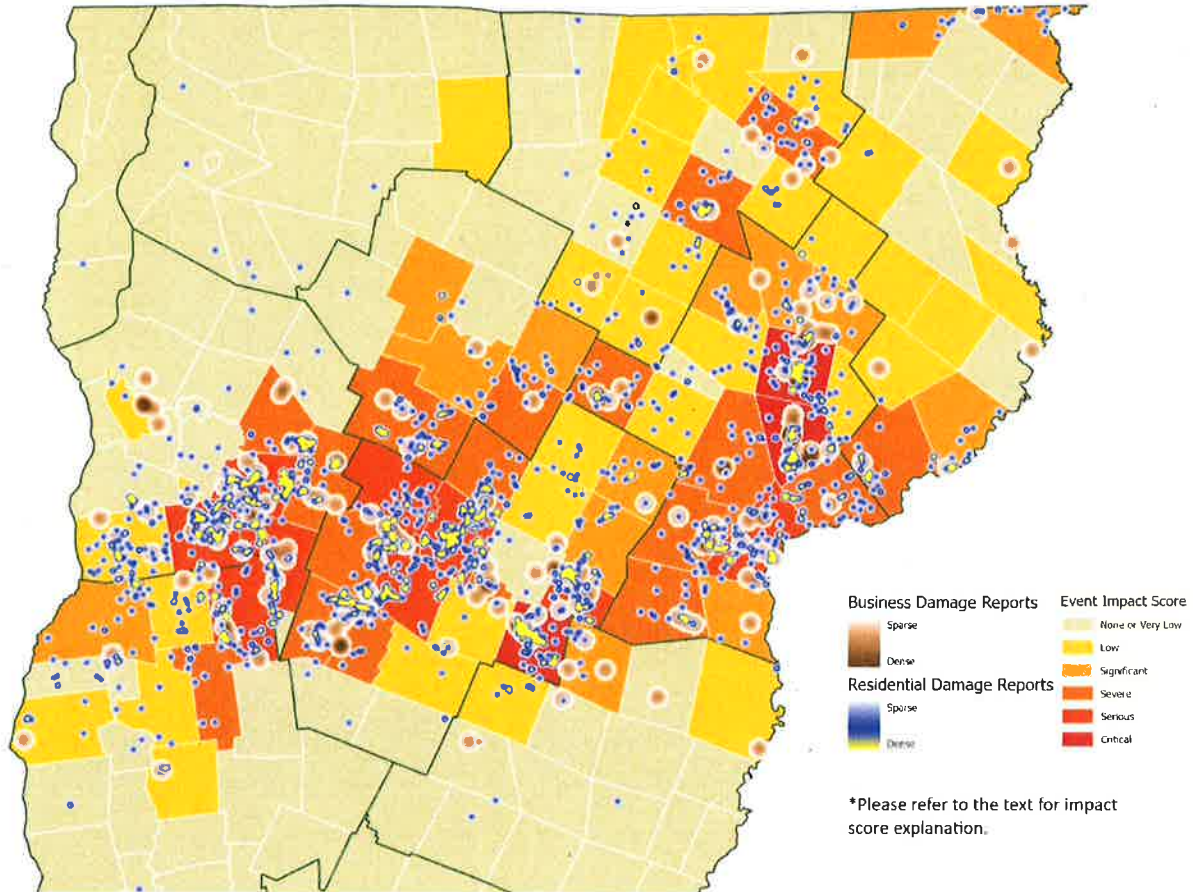
**VT 2-1-1** functions as a free, confidential information and referral program of the United Way of Vermont, helping to connect Vermonters with a wide range of community, health, and human resources and services. VT 2-1-1 responded to disaster services-related referral calls during the storm event. VT 2-1-1 continues to field calls. As of the morning of July 29, 2024, there have been 2,407 residential and 263 business damage reports to VT 2-1-1, including 111 renters. VT 2-1-1 collected individual reports which included:

- 192 callers report significant damage to the first floor of their homes
- 154 callers report their home is uninhabitable
- 149 callers need assistance to remain in their home
- 238 callers report damage to their foundation and an additional 109 report damage to walls/ roof
- 1,291 callers report damage to exterior property (e.g. driveways, outbuildings)
- 84 callers report chemicals spilling inside or outside their homes
- 123 callers are reporting about manufactured (mobile) homes
- 1,643 callers report not having flood insurance
- Only 127 of the 254 businesses reported being able to operate.

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### Individual and Business Damage Reports \*

VT211 Residential and Business Damage Calls July 11-29, 2024



\*Of those, the damage reported in the state's July 11 Local Liaison Report (LLR) and follow-up coordination identified 26 or so as "hardest hit" based on the local situation, VT 2-1-1 call volume (individual reporting), regional assessed vulnerability, "Justice 40" disadvantaged communities, landslides, and state road closures.

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**Comparison of July 2023 and July 10-11, 2024, Storms - Number of VT 2-1-1 calls/day**

|                         | 11-Jul-23 | 12-Jul-23 | 13-Jul-23 | 14-Jul-23 | 15-Jul-23 | 16-Jul-23 | 17-Jul-23 | 18-Jul-23 | 19-Jul-23 | 20-Jul-23 |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>2023 Residential</b> | 200       | 300       | 188       | 272       | 334       | 334       | 470       | 600       | 750       | 846       |
| <b>2023 Business</b>    |           |           | 5         | 20        | 30        | 30        | 40        | 59        | 69        | 82        |

Note: Over the course of the 2023 response VT 2-1-1 continually improved their process beginning with writing and then re-entering reports, then adding business reports, and eventually adding web forms and real-time operator entry

|                         | 11-Jul-24 | 12-Jul-24 | 13-Jul-24 | 14-Jul-24 | 15-Jul-24 | 16-Jul-24 | 17-Jul-24 | 18-Jul-24 | 19-Jul-24 | 20-Jul-24 |
|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>2024 Residential</b> | 247       | 644       | 860       | 1066      | 1255      | 1509      | 1777      | 1921      | 2007      | 2065      |
| <b>2024 Business</b>    | 19        | 59        | 75        | 101       | 123       | 155       | 193       | 207       | 215       | 224       |

Note: Data as of end of day, except morning for current day

Flood Recovery Resource Centers - opened July 24, 2024

Locations in the following towns: Operating hours are 9:30am-6:00pm:

Barre Municipal Auditorium - Mondays and Fridays

Hinesburg - CVU - Thursdays

Lyndon - Vermont State University - Tuesdays and Saturdays

Plainfield Health Center - Wednesdays and Sundays.

Crisis Cleanup

Activated and planned to remain open until August 9, 2024 with VT 2-1-1 routing calls to them as needed after that date.

Mass Feeding

Working with Voluntary Organizations Active in Disaster (VOAD), The American Red Cross, the Salvation Army and Hope Ministries has provided food to flood-impacted residents of Plainfield.

Long-Term Recovery Group and VOAD

Working on outreach to residents and work continues.

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### **Department of Public Safety – Division of Fire Safety**

As of 7/29/2024, there were 286 emergency building inspections (by State Fire Marshalls and electrical inspectors) performed (between 7/11-7/17/2024) in the following counties/(towns):

Addison County - (Starksboro)

Caledonia County - (Barnet, Groton, Lyndon, Lyndonville, Passumpsic, Peacham, and St. Johnsbury)

Orange County - (Wells River)

Washington County - (Barre City, Marshfield, Moretown, N. Fayston, Plainfield, and Waterbury).

### **Agency of Natural Resources – Department of Environmental Conservation (DEC)**

As of 7/18/2024, the DEC Spill Team responded to 31 flood-related spill calls including flooded basements with fuel oil spilled from 7/12/2024 to 7/16/2024 in the following towns:

Caledonia County - (Barnet 1, Groton 2, Hardwick 1, Lyndon 9, Peacham 1, Sheffield 1 and St. Johnsbury 5)

Chittenden - (Burlington 1 and Bolton 2)

Essex County - (Canaan 1)

Lamoille County - (Wolcott 1)

Orleans County - (Coventry 1)

Washington County - (Barre City 4; Plainfield 1).

### **Debris pick-up**

The State of Vermont has a pre-procured contingency debris management contract with nationally recognized CERES Environmental, held by the Department of Buildings and General Services (BGS). Recognizing the scale of the impact of this event on overwhelmed small towns, the SEOC activated a Notice to Proceed with CERES and first pass debris removal from rights-of-way commenced on July 30, 2024, in towns which have executed Memoranda of Understanding with BGS. This activity will continue over the coming week(s) in the communities which execute MOUs for state debris support.

### **Emergency Service Facilities**

The flooding affected emergency services in some areas, as well as other infrastructure, businesses, and housing. The Hardwick fire station was flooded to several feet, and stations in several communities acted as temporary impromptu shelters.

### **Landslides**

- In addition to the flooding issues caused by the heavy rains, the rains fell on saturated soils causing significant landslide activity. DEC Landslide (geology/geotechnical) inspectors visited sites statewide based on calls answered by the SEOC.
- 9 were minor or did not require immediate action;

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- 3 landslides (in Moretown, Plainfield, and Richmond) are unstable and require mitigation or ongoing monitoring;
- 2 landslides in Ferrisburgh and Fayston damaged or threatened homes; residents should evacuate and seek a buyout of some kind;
- A landslide was reported at the cemetery in Barton;
- Multiple small slides reported near the Sheldon Brook in Lyndon;
- A landslide and associated sinkholes were reported at Lake Elmore;
- Multiple bank failures/landslides were reported on the Lewis Creek in Ferrisburgh and its tributaries;
- A bank failure/landslide was exacerbated at a site in Fayston;
- A possible landslide in Jonesville was related to failed culvert under Interstate I-89; and
- Nearly every landslide previously identified in Plainfield was reactivated, posing significant issues there.

### **VT DEC Geologic Division**

*“Based on the observations of the Geologic Division of Vermont’s Department of Environmental Conservation, significant slope failures (“landslides”) caused by the July 2024 storm were generally located in or near to corridors of streams that experienced high discharge. Landslide is the generic term for the movement of rocks, soils, and debris downslope. “Mudslides” are a specific type of landslides that move rapidly across the landscape and are commonly triggered by heavy rainfall. When this precipitation collects on the ground surface it saturates soils and allows the downslope movement of mud and other debris in a fluid-like flow.*

*Of the 20 sites visited since July 11, 2024, two have been significant and are eligible for buyouts, and a third may prove eligible as well upon further assessment; all three are located along the outside bends of streams that heavily eroded their banks. Additionally, the Great Brook near Plainfield, Vermont is considered here as just one site that encompasses many landslides triggered along the banks of this stream, which caused heavy damage to multiple sections of road.*

*Five landslide sites were located away from stream corridors with impacts to private garages, an access road for a cemetery, and State Forest land.*

*Six sites consist of road sections where failed soils slumped into roadways where crews were able to quickly remove soils and mitigate issues along the travel ways.*

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*The remaining 6 sites visited by the Geologic Division did not have slope failures associated with them, but rather had significant erosion along small brooks and ditches that delivered large amounts of sediment to properties that resembled landslide debris. While they do not contain proper "landslides", extensive damage is associated with several of these, particularly with regard to private roads and driveways, that will be costly to repair."*

**-Ben DeJong, PhD, PG** | State Geologist and Director  
Vermont Geological Survey  
Department of Environmental Conservation  
Vermont Agency of Natural Resources

Please refer to **Enclosure E**: Vermont Department of Environmental Conservation - *Landslides*  
20240710 - Beryl

### **Dams and Rivers**

With the heavy rains, there was a great deal of concern about dams overtopping and riverbank erosion. There were 218 dam facilities in the impacted flood areas, with 19 high hazard sites. Fortunately, the East Barre, Wrightsville, and Waterbury flood control dams held with over 10' of storage each. The Lower Pond dam in Hinesburg overtopped but did not breach, and the Harvey's Lake dam in Barnet was damaged (initially reported as failed). DEC inspected 7 other dams on July 11 and found no ongoing issues beyond maintenance level repairs.

Rivers did expand significantly, leading to ongoing problems in the following areas:

Starksboro (Lewis Creek in the vicinity of Rt 116 and Ireland Rd): major debris flooding out half a dozen homes.

Plainfield (Great Brook): 27 sites were visited with the Plainfield Road foreman and U.S. Army Corp. of Engineers. A few sites where emergency road access and rebuilding back to one lane for access to homes, all bridges damaged most by road wash out around the structures, a few bridges totaled, large sections of shoulder gone.

Huntington: (Huntington River, Brush Brook): excessive erosion along the Huntington River. The Town is focusing on small cross culverts and roadway washouts at this time and the Vermont Agency of Human Services indicated damages along Brush Brook and in the Gore may be more substantial

Middlesex, Great Brook: almost every property experienced damage to driveway accesses or advancing erosion toward improved property. The underlying till has been exposed in multiple locations and there are clear indications of head cuts moving through the system including reports of the channel cutting down 4ft

Fayston/Waitsfield, (Shepard Brook): Erosion observed for the first two miles from VT100. Multiple avulsions in the usual areas but to a larger more persistent degree. Calls for dredging, funding, and stone along this area

Duxbury, (Downsville Brook): observations suggest the highest flows experienced in 45+ years. Large amounts of wood mobilized increasing damages/destroying all known bridges; two state, one Vermont Association of Snow Travelers (VAST) trail, one town, and one private.

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Worcester: Met with Road Foreman looking at several of the urgent sites with small structures less than 8ft were afflicted but the town has opened travel to all but Downs Road. Downs Road should be repaired today but two structures remain plugged

Hardwick (Lamoille River): eroded closer to Route 15 at the site of the former Hardwick Inn that was recently demolished (after flooding in 2023), threatening a filling station immediately downstream.

Hinesburg (Platte River): excessive sediment along the VT 116 corridor at several crossings south of town.

**Department of Environmental Conservation – River Management Section**

*“Storm damage related to Vermont’s rivers that was reported to DEC’s River Management Section was seen across nine (9) of Vermont’s 14 counties. Infrastructure assets such as homes, buildings, bridges, culverts, and roads were damaged, destroyed or swept downstream. Stream channels were filled with sediment which caused diversions of flow that then directly impacted infrastructure or caused channel erosion that led to infrastructure impacts. Active incision of stream reaches destabilizing public and private roadway embankments, undermining buildings, and contributing additional sediments restricting channel capacity in downstream depositional areas. Rising flood waters inundated structures and other infrastructure and left debris behind when they receded.*

*The hardest hit county was Washington followed by Chittenden and Caledonia. Below is a summary of damage reports submitted to the Department of Environmental Conservation under a standalone inquiry form. Initial estimates by the River Management Program’s field representatives suggest the inquiry form accounts for 25% to 30% of reports received inclusive of other methods of communications and in person reports. Damage reports continue to be received and our River Engineers continue to make site visits. Below is a count of damage reports by county and type. To date residents remain without critical utility access to their primary dwellings.”*

| <b>Counties</b>   | <b>Count of Town</b> |
|---|----------------------|
| <b>Addison</b>  | <b>6</b>             |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 1                    |
| Damaged stream crossing structure (e.g. bridge, culvert)?                                 | 2                    |
| Flooding impacting my property (e.g., house, structure, road)?                            | 1                    |
| Other. Describe in next question.   | 2                    |
| <b>Caledonia</b>  | <b>12</b>            |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 3                    |
| Damaged stream crossing structure (e.g. bridge, culvert)?                                 | 2                    |
| Flooding impacting my property (e.g., house, structure, road)?                            | 4                    |
| Stream channel filled with sediment/debris and water is being diverted toward my property | 3                    |
| <b>Chittenden</b>   | <b>30</b>            |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 9                    |
| Damaged stream crossing structure (e.g. bridge, culvert)?                                 | 3                    |
| Flooding impacting my property (e.g., house, structure, road)?                            | 6                    |
| Other. Describe in next question.   | 6                    |
| Stream channel filled with sediment/debris and water is being diverted toward my property | 6                    |



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|   |            |                 |
|---|------------|-----------------|
| <b>Lamoille</b>   | <b>6</b>   | <b>-Sean J.</b> |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 2          |                 |
| Flooding impacting my property (e.g., house, structure, road)?                            | 1          |                 |
| Stream channel filled with sediment/debris and water is being diverted toward my property | 3          |                 |
| <b>Orange</b>   | <b>2</b>   |                 |
| Flooding impacting my property (e.g., house, structure, road)?                            | 1          |                 |
| Other. Describe in next question.   | 1          |                 |
| <b>Orleans</b>  | <b>7</b>   |                 |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 2          |                 |
| Damaged stream crossing structure (e.g. bridge, culvert)?                                 | 1          |                 |
| Other. Describe in next question.   | 1          |                 |
| Stream channel filled with sediment/debris and water is being diverted toward my property | 3          |                 |
| <b>Rutland</b>  | <b>1</b>   |                 |
| Flooding impacting my property (e.g., house, structure, road)?                            | 1          |                 |
| <b>Washington</b>   | <b>45</b>  |                 |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 10         |                 |
| Damaged stream crossing structure (e.g. bridge, culvert)?                                 | 6          |                 |
| Flooding impacting my property (e.g., house, structure, road)?                            | 13         |                 |
| Other. Describe in next question.   | 7          |                 |
| Stream channel filled with sediment/debris and water is being diverted toward my property | 9          |                 |
| <b>Windsor</b>  | <b>1</b>   |                 |
| Channel erosion threatening property (e.g., house, structure, road)?                      | 1          |                 |
| <b>Grand Total</b>  | <b>110</b> |                 |

McVeigh | Chief Environmental Enforcement Officer  
 Vermont Agency of Natural Resources | Department of Environmental Conservation  
 Environmental Compliance Division | Enforcement

**Vermont Agency of Transportation (VTrans) (Traffic Management Center)**

Seventy-five (75) Vermont State roads (185 miles) were closed due to flooding. They include the following:

VT Routes 2A N, 2E, 12S, 12N, 14S, 16N, 15 W, 15E, 17W, 17E, 58W, 62E, 100N, 100S, 100E, 100B N, 100B E, 100B S, 102E, 102N, 102S, 108N, 109N, 116N, 116S, 122N, 122S, 125W, 128S, 141N, 232N, 302E; US Routes 2E, 2W, 5N, 302W, and 302E; Interstate 91N and I91S, and Interstate 93S.

Two weeks after the severe storms and flooding there were three state roads impacted - US Rt.2 in St. Johnsbury at bridge #109; VT Rt. 100 in Duxbury at bridge #187; and US Rt. 5 in Barnet at bridge #121. However, 68 roads (155 miles) had been re-opened and ten roads were currently partially open (31 miles). All state roads except US Rt. 5 in Barnet have been re-opened as of this date.

Numerous local roads were also closed due to flooding throughout and after the weather event.

**State and Local Bridge Damages**

There are a total of **100** impacted bridges, the list includes bridges with damage to the adjacent roadways, embankments, channels etc., not just those with damage to the actual bridge structure.

The list includes:

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- **55 bridges on state roads:** Barnet (2), Barton (1), Bloomfield (1), Brighton (2), Bristol (1), Brownington (1), Burke (1), Cabot (1), Canaan (4), Charleston (1), Duxbury (2), Groton (2), Hardwick (1), Hinesburg (1), Jericho (1), Lyndon (3), Middlesex (2), Morgan (2), Moretown (1), Newark (2), Norton (3), Plainfield (1), St. Johnsbury (2), Starksboro (1), Waitsfield (3), Waterford (2), Westmore (4), and Williamstown (5).
- **45 bridges on town roads:** Barnet (1), Bolton (2), Concord (2), Danville (2), Duxbury (1), East Haven (1), Fayston (2), Greensboro (3), Groton (4), Hardwick (2), Jericho (1), Moretown (1), Norton (1), Plainfield (9), Richmond (1), Sheffield (3), Starksboro (2), Sutton (1), Walden (1), Waterford (1), Wheelock (1), Wolcott (2), and Worcester (10).

The inspectors are still reinspecting some bridges where the water has been too high or too cloudy to see the entire substructure, so some bridges may still be added to this list.

Two state and ten local bridges were destroyed because of the event. The destroyed town bridges were in Fayston (2), Groton (1), Hardwick (1), Plainfield (4), Walden (1) and Waterford (1). The destroyed state bridges were in Moretown (1) and St. Johnsbury (1). This sent the towns scrambling for available temporary bridges from VTrans. Unfortunately, the needed temporary bridges were not available by VTrans, and many towns were searching expeditiously to outsource them.

### **Vermont Agency of Transportation - Railroad Damages**

On July 10, 2024, the remnants of Hurricane Beryl passed through Vermont causing widespread damage to 3 rail lines in several counties. This included the suspension of the Amtrak Vermonter & Ethan Allen passenger rail services. Ethan Allen was only affected for 1 day. The Vermonter just started operating again on July 23, 2024. The Washington County Railroad Connecticut River and Montpelier & Barre Lines as well as the Vermont Railway (VTR) Northern Line sustained damage from the storm and had to be closed to trains while damage assessments were completed. 9 projects have been identified totaling over \$6.4 million in damages. Construction activities will take place over the course of the current construction season and possibly beyond in some locations, causing further disruption to train traffic and the customers they serve. Temporary repairs were made to open rail lines so that aggregates could be delivered to help municipalities make repairs to their damaged infrastructure. The Connecticut River line remains closed in Barnet while a large culvert project is on-going.

Vermont's railways are essential transportation infrastructure for interstate and intrastate commerce. High-volume freight commodities include petroleum and coal products, nonmetallic minerals, and food products. Specifically, Vermont only has a two-day storage of fuel and relies on "just-in-time" deliveries via railways and highways.

The leases and operating agreements between the State and the operators of the State-owned railroads allocate to the operator's responsibility for routine maintenance of the track structure and certain bridges. The State is responsible for repairing damage that is outside the scope of routine maintenance - e.g., damage resulting from major storms and other "acts of God."

### **Vermont Agency of Transportation - Rail Trail - Lamoille Valley Rail Trail (LVRT)**

Hurricane Beryl caused widespread damage to the LVRT across several counties. Trail segments in Franklin, Lamoille and Caledonia Counties were affected by the storm. The LVRT is a 94-mile rail

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banked multi-modal transportation corridor. The entire trail was closed on the 11<sup>th</sup> & 12<sup>th</sup> from end to end while damage assessments were being conducted. Forty-three projects involving multiple sites were identified totaling over \$4.5 million in estimated damages. That estimate includes a project in Danville at MM 13.8 where a stone box culvert failed and will need to be replaced with a new structure estimated at \$3.5 million. By the weekend of the 13<sup>th</sup> & 14<sup>th</sup> the LVRT was reopened with segments from West Danville MM 11 to Danville MM 14.2, Hardwick MM 34.3 to Wolcott MM 40.6 remaining closed. On July 20<sup>th</sup> a detour was put in place through an agreement with the Town of Danville to get around that closed segment. Repair activities will be ongoing throughout the construction season causing various trail segments to be closed while the work is performed, causing disruption to trail users. VTrans strives to reopen the LVRT quickly for the economic vitality of the communities the trail serves and for the role the trail plays as an alternate transportation route during emergencies when local and state roads are impacted.

### **Vermont's Emergency Relief and Assistance Fund (ERAF)**

Vermont's Emergency Relief and Assistance Fund (ERAF), provides the state portion of the non-federal share of declared disasters for eligible municipal Public Assistance applicants and is funded through transfers from the Vermont General Fund. Estimates are not yet available to determine the need for additional ERAF transfers from the General Fund for this event. Based on cash flow expectations regarding previous disasters, 2024 Act 87 (The FY24 Budget Adjustment Act) added \$17.25 million to ERAF. On July 30, 2024 the Emergency Board authorized the use of \$5 million of ERAF cash balance to provide short-term loans to communities impacted by Beryl to fund temporary repairs and emergency protective measures in rural communities. The Governor's Recommended FY25 Budget Adjustment will include a recommendation for an additional transfer from the General Fund to ERAF when the legislature reconvenes. Current projections for previously declared disasters indicate that \$3.9 million should be added in the FY 2025 Budget Adjustment Act to accommodate updated cash flow estimates through FY 2026, not including the as yet undetermined amount for the July 2024 flooding.

### **Impacts to Cultural Institutions**

**Public Libraries:** The libraries in Hardwick, Barnet, Lyndonville, Plainfield, Moretown, Hyde Park, Johnson, Cambridge - Varnum Memorial, Richmond Free, and Barre - Aldrich & York were inundated by floodwaters.

### **Venue Damages Reported by Vermont Council of the Arts and Department of Historic Preservation**

- Dog Mountain in St. Johnsbury reported extensive damage to grounds and infrastructure on the Friday after the flood, at that time they were working on an emergency culvert to divert water from damaging buildings. We have contacted them to offer support regarding their collections (Stephen Huneck art collection is in a barn that is /was in danger of water damage) and to get updates but didn't hear back. The Levitt Concert Series, produced by Catamount Arts, is back.
- Birds of Vermont Museum, Huntington- damage to trails and to "Bob's Bridge" which connects to many of the trails. They were able to open on the Friday after the flood, but with many of the trails closed.

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- Old Labor Hall, Barre- Basement flooded. The water is out now and mostly cleaned. Their restroom and elevator system are in the basement- as of Saturday morning (July 13, 2024), they were still assessing whether they could host an event there soon (lost revenue issues).
- York Meeting House, Lyndonville (arts venue programmed by Catamount Arts) – washed out driveway. As of Monday, July 15, 2024, has been repaired by volunteers and donated supplies.
- Those who lost their homes in Plainfield include at least one practicing artist with a studio and one staff member of Out in the Open damages included organizational computers and equipment.
- The Sanborn Covered Bridge in Lyndonville (a historic bridge that has undergone significant recent renovations funded through a community fundraising effort) has sustained damage.

### **Individual Assistance (IA) - Food Insecurity caused by the severe weather event**

There were several short-term closures (1-2 days) at local grocery stores, convenience stores, food pantries, senior meal sites and summer meal sites for children. These closures were due to power outages, transportation disruptions, and building damage. Short-term closures included locations in Washington County (Barre, Waterbury, Waitsfield, Plainfield), Caledonia County (Hardwick, Lyndon, St. Johnsbury, Waterford, Barnet), Orleans County (Barton, Brownington, Irasburg, Orleans), Essex County (Canaan, Lunenburg), Lamoille County (Morristown) and Chittenden County (Bolton).

The state's Supplemental Nutrition Assistance Program (SNAP) Agency, (Economic Services in the Department of Children and Families) reported that as of June 29, 2024, they have received 50 requests for replacement SNAP benefits due to food losses associated with the flooding. The deadline for submitting these requests has been extended to August 8, 2024. This indicates that at least 50 low-income families experienced personal food loss due to flood waters or power outages.

Municipal wells and water supplies were impacted, resulting in two municipal water supplies having no water access (Plainfield and Barnet), and some locations with boil water requirements. The lack of potable water impacted residents' ability to prepare food at home. As of July 17, 2024, the Vermont Health Department had received 566 requests for well water test kits from households that believed their wells had been impacted by floodwaters. Most municipal boil water notices were resolved within a few days, however a municipal district in Plainfield did not have water restored until July 15, 2024, with parts of the district taking longer than that, and the boil water notice continued for several days after that. The water supply issue in Barnet took two weeks to be resolved. The Barnet Emergency Management Director (EMD) reported that there were some food needs resulting from the loss of water. These were managed with local resources.

There were some transportation -related challenges for food deliveries from the Vermont Foodbank and senior meal home deliveries from the Northeast Kingdom Council on Aging, but both organizations reported that deliveries were able to be re-scheduled with some effort. Summer meal sites for children in Waitsfield and Bolton that distribute one week's worth of meals were unable to operate on July 11, 2024, because of road closures. This resulted in a loss of one week's worth of meals (breakfast and lunch) for approximately 300 children in these two towns and surrounding communities.

There were many impacts to farms and gardens, which will impact food security for residents into the fall and winter months. As of July 29, 2024, AAFM's Flood Loss and Damage Survey has reported over \$2.5 million in damage to farms and gardens so far. This included \$13,400 in losses from 3 farms who

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indicated that their most significant loss was in crops or livestock meant for charitable feeding, and \$8,000 in losses from 2 farms who indicated that their most significant loss was to crops or livestock meant for personal feeding. This survey data is likely a significant undercount as the survey did not open until July 20, 2024, and the deadline is not until August 31, 2024. In addition, the survey instructions indicate that personal gardens/farms should not be reported through this method. Two community gardens were flooded in Montpelier with produce needing to be discarded. Farms at the Intervale Center in Burlington, including the New Farms for New Americans farm, a subsistence farm for refugee and immigrant families, was inundated and sustained significant losses. They estimated that 100 households were impacted by this loss. The Intervale Center also estimated that an additional 60 people who farmed at the Intervale lost income and primary source of food because of the impacts to the farms there.

The state estimates that 21 residences were destroyed, and 103 that suffered major damage meaning that these households have lost their home food preparation facilities as well as food on hand at the time of the storm. In addition, as of July 16, 2024, 25 VT 2-1-1 reports from people who were still able to live in their homes mentioned impacts to food such as loss of freezers or cooking appliances, flooding in kitchen spaces, loss of vegetable gardens, or impacts to drinking water. This is likely an undercount as people impacted by flooding may not realize the need to report food or garden losses to VT 2-1-1. Many Vermonters use chest freezers to store food for future seasons, such as hunted game, bulk meat purchases, or produce harvested from gardens. In addition, many Vermonters rely on vegetable gardens to supplement their food budgets. Due to Vermont's soils and development patterns, vegetable gardens are often in low-lying areas.

As of late July, the charitable food system is beginning to note an increase in demand from pre-flood numbers. On July 17, 2024, Capstone Community Action in Barre noted that 30% of their participants reported flood impacts. On July 19, 2024, the Barton Hub reported an increase in the number of participants at their meal site compared to pre-flood. Based on previous incidents, the charitable food system expects to see a spike in demand starting in early August as impacted Vermonters expend their existing resources and turn to charitable food.

### **Vermont Housing Recovery Task Force**

Doug Farnham, Vermont Chief Recovery Officer, activated Vermont's Housing Recovery Task Force on July 25, 2024.

### **News Media Accounts of this Severe Weather Event**

Throughout this statewide weather event, local news reports rolled in capturing the impacts of the devastation. News articles from July 9-11, 2024, storm captured quotes from me and others, some with heart-breaking accounts of the impacts:

*"We know this storm has done tremendous damage in many communities, and those impacted will need help to recover. That's why it's so critical for Vermonters to report their damage to help demonstrate the need for these federal resources"*

***-Governor Phil Scott from the Governor's Press Release (July 13, 2024)***

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[The Governor] said the state's response is ongoing and a state of emergency is now in place and acknowledged the emotional depth of this disaster on last year's flooding anniversary, but said we will get through this, and reminded people we are Vermont strong.

*"It's not lost on me the irony of the flood falling on the one-year anniversary to the day when many towns were hit last year. I know that only adds to the emotion many are feeling this morning, even those who are not impacted that time around, but we're ready. Our response and tools are only stronger because of last year and we will get through this," Scott said.*

**-WCAX Channel 3 News (July 11, 2024)**

The remnants of Beryl dumped heavy rain on Vermont, washing away much of an apartment building, knocking out bridges and cutting off towns, and retraumatizing a state still recovering from catastrophic floods that hit a year ago to the day.

More than 130 people were rescued by swift-water teams during the worst of the rainfall, which started Wednesday and continued into Thursday, officials said. In Plainfield, residents of a six-unit apartment building had mere minutes to evacuate before water destroyed it, the town's emergency management director said.

Stunned residents emerged Thursday to assess damage in a series of small towns along a hilly corridor on the Winooski River, connected mostly by U.S. Highway 2. Parts of the artery were closed, along with dozens of other roads. Shelters opened in several communities.

The deluge dropped more than 6 inches of rain on parts of Vermont, and the heaviest rainfall was in the same areas devastated on July 10, 2023, said Marlon Verasamy, of the National Weather Service in Burlington. Rivers had crested at virtually all locations by late Thursday afternoon.

Residents of a small apartment building in Plainfield had only 15 minutes to evacuate, the Associated Press reported, before it was swept away by floodwaters. Many roads were impassable, and at least seven bridges were washed out near Plainfield.

*"I know last night's flooding - in many of the very same communities impacted on the same day last year - is devastating for these families, business owners and community members," Vermont Gov. Phil Scott (R) said on X. "My team, emergency responders and local leaders are working to help ensure public safety, and we will act as quickly as possible in recovery."*

**-Washington Post (July 11, 2024)**

### News reports of two fatalities:

Two dead, more than one hundred rescued after heavy rains inundate Vermont towns and cities from Addison to Caledonia counties were hit with 3 to 5 inches of rain late Wednesday, with some totals exceeding 6 and even 7 inches.

At least two people died as the remnants of Tropical Storm Beryl deluged central and northern Vermont late Wednesday and early Thursday, and more than 100 others were rescued from rising floodwaters.

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At a press conference Thursday morning in Berlin, Public Safety Commissioner Jennifer Morrison said the first death, in Peacham, appeared to be tied to the storm but offered few other details. That afternoon, Vermont State Police identified the victim as a 33 year old male from Peacham, whose UTV was found Wednesday night on its side in the South Peacham Brook. Rescue crews found Kempton's body downstream just before midnight. Later Thursday, Lyndonville Police Chief Jack Harris said that the body of a 73-year-old man had been recovered after his car was swept off a street flooded by the Passumpsic River. Harris identified the second the man as a resident of Concord.

#### Reports of swiftwater rescues and evacuations and National Guard activities:

Vermont Public Safety Commissioner Jennifer Morrison said there have been dozens of swiftwater rescues and numerous evacuations. She said rescues are still actively underway in Lyndonville, and then crews will begin secondary searches in other hard-hit areas. "We are still in active response mode and have multiple rescues ongoing in the Lyndonville area," she said at the press conference, which took place at 10 a.m. According to Mike Cannon, the state's urban search and rescue coordinator, the swiftwater teams rescued at least 118 people by boat. Officials say Central Vermont was among the hardest hit, with Moretown, Plainfield, Lyndonville, Barre, Richmond, Bolton, and Williamstown all in the crosshairs of the floodwaters.

Vermont National Guard members joined the state search and rescue teams to evacuate people from Barre, Northfield and Moretown, the Guard said in a press release, and out-of-state teams were also headed to Vermont, Cannon said. Central Vermont hammered with rain, flooding downtowns and prompting evacuations  
*-WCAX Channel 3 News (July 11, 2024)*

#### Reports of road closures:

A least 54 state roads were closed as of 10 a.m., Secretary of Transportation Joe Flynn said at the press conference, and six bridges - in Barnet, Norton, Charleston, Moretown, Hinesburg and Starksboro - were "impinged." He said he believed at least three of those had been destroyed. The state also suffered significant rail damage, including to Amtrak's Vermonter route. Countless local roads were also damaged and closed.  
*-VTDigger (July 10 and 11, 2024)*

#### Reports of dam monitoring and inspection reports:

Jason Batchelder, Commissioner of the Department of Environmental Conservation, said that officials had been monitoring dams around the state and that the flood control dams along the Winooski River were "performing phenomenally." One low-hazard dam, on Harvey's Lake in Barnet, breached, Batchelder said, but that caused no significant damage.

As more flooding swept through our region on the 1-year anniversary of the historic summer 2023 floods, some communities suffered extreme damage from the latest round of rainfall.

#### Reports of landslides:

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Landslides and slurries have damaged homes, roads and driveways after this month's flood. "It's just stunning - it's stunning how one 24-hour event can cause this amount of damage," said Ben DeJong, the state geologist. "Once it started, it went really fast, and took that whole road with it," said Ben DeJong, the state geologist. "It's just stunning - it's stunning how one 24-hour event can cause this amount of damage."

Deep mud caked the bottom of the hill, near the private drive's entrance to U.S. Route 2, half-burying Sweeney's downhill neighbor's SUV. Sweeney and his neighbors now use a path through the woods to access their homes, and have rented and borrowed cars, parked at the bottom of the hill, so they can leave the property. Edge Drive - a private road that serves only four homes, and that residents are responsible for repairing - is almost entirely gone.

One contractor told Sweeney it would cost between \$55,000 and \$60,000 to fix the road, not including materials: 40 to 50 truckloads of dirt.

There hasn't been similar water damage in the property's history, Sweeney said. He moved into the house with his wife, Virginia, exactly a year earlier, and while the floods of July 2023 caused the couple to delay their move-in date by a few days because of water flowing over a nearby road, the stream in their backyard didn't create trouble. The previous property owner said the land fared fine during Tropical Storm Irene in 2011 as well, Sweeney said. Sweeney's neighbor's car sits, half-buried, at the bottom of Edge Drive. "I put 95% of my savings into getting a house, because we wanted to - you know, this is the last place we're gonna live," Sweeney said. "I wasn't expecting this. We just don't have the resources to pay for it."

Many Vermonters have become familiar with the threat of flooding after repeated extreme rain events throughout the last decade, including three major storms since last July. But widespread landslides are a newer phenomenon - and sometimes harder to predict and prevent.

"Unlike floods, there isn't necessarily a straight-line connection between rain flow and landslides," Julie Moore, secretary of Agency of Natural Resources, told reporters at a press conference on July 19.

"However, a growing body of Vermont-specific work indicates that 3 to 5 inches of precipitation can trigger failures that can lead to landslides, particularly when the ground is already saturated," Moore said.

Last year, state scientists evaluated more than 70 fallen slopes and potential landslides after the summer floods - unprecedented in recent history. In the aftermath of this year's floods, geologists found fewer landslides, according to DeJong. That's partly because last year's storm ran in a north-south direction over mountainous terrain, while this year, the storm traveled from west to east, passing over a smaller stretch of mountains.

"Last year, we had relatively saturated slopes, and then we put a whole lot of water on it in the steep domains of the Green Mountains," he said. That prompted "a lot of landslides far and away from" rivers and streams. This time, rivers and streams often eroded their banks beneath steep land, causing those slopes to fail.



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DeJong's team has responded to roughly 20 requests to evaluate possible landslides since the storm earlier this month. Most have been neatly planted along the east-west section of the state where rain fell most heavily, he said.

Of those, two caused severe damage to homes that may result in buyouts. For four others, DeJong is "not concerned necessarily about human life or injury, it's more getting infrastructure back in place so that people can get back to their homes in their lives." Plainfield was hit particularly hard, he said.

Neighbors have questioned whether the culvert, if it were upsized and cleared beforehand, could have handled the flow and kept the water in its original channel. "We are now realizing it's really difficult to know how to design this infrastructure," DeJong said. "It's worked for many years, for many decades, and suddenly, we're getting these storms that are so intense that it like changes the game, it changes the math in some fundamental way."

Fixing that infrastructure "is probably prohibitively expensive, because we simply cannot go rip up every culvert in the state thinking that, maybe, the next pop-up extreme storm is going to be along this other brook," he said.

Municipal road crews don't fix private roads, putting those like the Sweeneys in a tough spot. "There are a lot of Vermont families in this situation right now, where long driveways, private bridges, have been destroyed, damaged, compromised," said Ben Rose, recovery section chief at Vermont Emergency Management. "The short answer is that that is their legal responsibility to repair." "There is no federal funding program or state program which is specifically designed to help people with private access repairs," he said.

**-VT Digger (July 26, 2024)**

#### Reports of emergency residential evacuations and devastating home losses:

The towns hit hardest by Beryl's rains lie east of the capital, Montpelier, which flooded last year but escaped serious damage this week.

In Plainfield, a concrete bridge that collapsed and tumbled downstream was likely responsible for ripping off part of an apartment building with five units, said Michael Billingsley, the town's emergency management director.

The occupant of another home was pulled through a window to safety moments before it was swept downstream, and a mobile home floated away with four pets belonging to a family that narrowly escaped, he said.

Hilary Conant said she had to flee her apartment as the Great Brook rose, just as she did a year earlier. "It's like rewind to last year," she said. "The water was coming up, so I knew it was time to leave with my dog. It's very retraumatizing." A neighbor offered a camper. She and her dog, Casper, sheltered Thursday at Goddard College, which opened dorm rooms to displaced residents. Around the corner from her home was the apartment building that collapsed. The front still stood, but the rest was wrecked or gone. "It's otherworldly," she said. "It's devastating."

**-CBS News (July 11, 2024)**

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**Individual Assistance (IA) - Preliminary Damage Assessments (PDAs)**

On July 12, 2024, VEM Director, Eric Forand submitted a PDA request for IA in Caledonia and Washington Counties for the flooding on July 9-11, 2024.

On July 17, 2024, Director Forand submitted another PDA request for IA to add Addison, Chittenden, Essex, Lamoille, and Orleans Counties.

**Public Assistance (PA) - Preliminary Damage Assessments (PDAs)**

On July 12, 2024, VEM Director, Eric Forand submitted a PDA request in the Counties of Addison, Caledonia, Chittenden, Essex, Lamoille, Orange\*, Orleans and Washington for PA.

\*Orange County did not meet the county threshold for PA, though it was impacted by this severe weather event. Damage assessment in Orange County is ongoing by the State of Vermont, and we believe that actual eligible damages will ultimately exceed the county threshold.

It was possible to validate some Public Assistance damages through aerial photography of flooded communities across the State.

Validated PA PDA totals were provided by FEMA to my staff on July 26, 2024. The Joint Preliminary Damage Assessment validated \$7,996,409 in public infrastructure damages. That total is likely to rise, because it does not capture damages in some small towns which incurred eligible costs but were not included during the PDAs because their counties had already exceeded thresholds. Note that municipal road damages captured in our Survey 1-2-3 continue to rise, currently exceeding \$30 million.

Of the *validated* total, the damage were broken down as follows: Category C (Roads and Bridges) was \$5,053,746, or 63.2% (Addison, Caledonia, Chittenden, Essex, Lamoille, Orleans, and Washington Counties); Category A (Debris Removal) was \$106,181, or 1.33% (Caledonia, Chittenden and Washington Counties); Category G (Other) with Railroads (Caledonia, Orleans, and Washington Counties), Rail Trails (Caledonia and Lamoille Counties) and Recreation (including a state park in Chittenden) was \$2,836,482, or 35.47%.

Please refer to **Enclosure B**: Public Assistance for a detailed breakdown.

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**Individual Assistance - Preliminary Damage Assessments (PDAs):**

Final FEMA Preliminary Damage Reporting Numbers:

| Vermont July IA PDA      |          |           |       |       |          |            |              |       |
|--------------------------|----------|-----------|-------|-------|----------|------------|--------------|-------|
| Last Updated 7/26/24     |          |           |       |       |          |            |              |       |
| County                   | Status   | Destroyed | Major | Minor | Affected | Unaffected | Inaccessible | Total |
| Addison                  | Complete | 0         | 4     | 26    | 45       | 0          | 10           | 85    |
| Caledonia                | Complete | 2         | 35    | 73    | 135      | 7          | 0            | 252   |
| Chittenden               | Complete | 1         | 13    | 64    | 122      | 1          | 13           | 214   |
| Essex                    | Complete | 1         | 1     | 16    | 22       | 0          | 2            | 42    |
| Lamoille                 | Complete | 0         | 2     | 17    | 15       | 1          | 1            | 36    |
| Orleans                  | Complete | 0         | 1     | 15    | 33       | 0          | 0            | 49    |
| Washington               | Complete | 17        | 47    | 187   | 221      | 0          | 28           | 500   |
| <b>Total By Category</b> |          | 21        | 103   | 398   | 593      | 9          | 54           | 1,178 |

Please refer to **Enclosure A: Individual Assistance** for additional information.

**Demographics of Impacted Counties**

Vermont is rural and sparsely populated. Some of the requested counties have median household incomes below the national average.

**Demographics of Impacted Counties**

Vermont Median Household income is \$73,991 and Poverty Level is 10.4%. The Statewide population is 643,077. Most counties are rural and sparsely populated. See below for details of the impacted counties, Addison, Caledonia, Chittenden, Essex, Lamoille, Orange, Orleans and Washington:

- Addison County:** Median Household income is \$85,870; Poverty @7.5%; pop. 37,363
- Caledonia County:** Median Household income is \$62,964; Poverty @11.8%; pop. 30,233
- Chittenden County:** Median Household income is \$89,494; Poverty @4.8%; pop. 168,309
- Essex County:** Median Household income is \$55,247; Poverty @13.2%; pop. 5,976
- Lamoille County:** Median Household income is \$69,886; Poverty @8.6%; pop. 25,945
- \*Orange County:** Median Household income is \$74,534; Poverty @9.2%; pop. 29,277
- Orleans County:** Median Household income is \$63,981; Poverty @6.8%; pop. 27,459
- Washington County:** Median Household income is \$77,278; Poverty @9.9%; pop. 59,807

Sources: United States Census Bureau, 2022 American Community Survey 5-Year Estimates, U.S. Census Bureau, American Community Survey Office. Web: 7 December 2023.

United States Census Bureau. Annual Estimates of the Resident Population: April 1, 2020, to July 1, 2022. U.S. Census Bureau, Population Division. Web: May 2023. <http://www.census.gov/> \*Orange County did not meet the county threshold for PA, though it was impacted by this severe weather event. Damage assessment in Orange County is ongoing by the State of Vermont, and we believe that actual eligible damages will ultimately exceed the county threshold

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### **Impact Statements from heavily hit Counties/Towns**

The devastating floods were the result of heavy rains which started Wednesday (July 10, 2024) and continued into Thursday (July 11, 2024) fueled by the remnants of Hurricane Beryl.

The impacts caused by the severe storms, flooding, flash flooding and landslides presented extreme conditions in the following counties and their respective towns and communities:

#### **Addison County**

During July 10-11, 2024, the remnants of Hurricane Beryl caused torrential rain and flooding in communities across Vermont, with Addison County bearing the brunt of the storm's initial impact. Heavy rainfall, as much as seven inches in some parts of the county, triggered flash flooding, tore apart roads, destroyed newly restored bridges, lashed historical structures and inundated homes with water and debris.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Addison:* In Addison, the Daughters of the American Revolution (DAR)/John Strong Mansion Museum is housed within the 200-year-old home of Revolutionary War Patriot John Strong and his family. Operated by the Vermont Daughters of the American Revolution, the museum includes period room displays including paintings, textiles and historical artifacts that tell the story of a colonial family's life in the northern wilderness. These displays rely on an extensive dehumidification system to maintain favorable conditions for the displays and artifacts. When over seven inches of rain caused the basement of the museum to flood, the dehumidification system failed jeopardizing all the history within the historic home's walls. To add an additional hardship, the system is not repairable due to parts no longer being available. The museum will have to find the funds to pay for an engineering assessment before a new system can be recommended. In the meantime, two hundred years of history remains vulnerable to the damage caused by the storm's deluge.

*Bristol:* Lewis Creek overflowed its banks, leading to substantial flooding of numerous homes, placing Bristol families and individuals in exceptionally precarious circumstances. The flooding washed out many driveways, severely restricting access and preventing both residents and emergency services from entering or exiting the affected areas. This disruption not only hindered daily activities but also posed serious safety risks, as emergency responders were unable to reach those in need in a timely manner. In addition to water damage, one family reported that fire from a lightning strike destroyed their three-bay garage during the storm. Other items near the garage, such as solar inverters, internet boxes, cable boxes and TVs were also destroyed. Two drinking wells within 100 feet of the garage may have been compromised and the family needs to have them tested. Whether the damage was from lightning strike or flood waters, the community now faces a challenging recovery process to restore infrastructure and ensure the safety and well-being of its residents.

*Starksboro:* Individuals and families experienced much the same as other flood ravaged communities in Starksboro. Small brooks transformed into powerful torrents, overflowing their banks and causing widespread devastation throughout the community. Numerous reports were submitted to the state, detailing extensive flooding of driveways, basements, homes, and garages. The sheer volume of water overwhelmed infrastructure, damaging culverts, pipes, and various land features. In addition to flooding there were two landslides on Ireland Road. Multiple reports have come in from the people who reside at

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Freedom Acres, a 9-home neighborhood, that sustained significant damage to the private road making it inaccessible to emergency vehicles. Included within that neighborhood are elderly residents on oxygen and with health conditions that may need emergency assistance. If the road is not fixed, emergency help may not arrive in time to support lifesaving treatment when needed. Some of the residents have been utilizing an all-terrain vehicles trail to get in and out for necessities; however, this trail is on private property and the owners are not happy that the trail is being extensively utilized in lieu of the roads. Not only are the people of Starksboro in need of help to repair physical infrastructure, but also the very fabric of neighborhood harmony. A public health specialist (Emergency Preparedness Vermont Department of Health) dropped off drinking water test kits, 20 masks and 5 Tyvek suits at the Starksboro Town Clerk office. The river created a new channel and is now flowing through a house where an 80-year-old man lives. He has dementia and forgets day to day that he has water in the basement. He has a son/daughter who checks on him and someone from the town checks on him daily. The Town clerk said 10 homes were destroyed, many more with water damage.

### **Caledonia County**

The devastation from the July 11, 2024, flooding in Caledonia County has brought many communities to the brink of financial, physical and mental disaster with residents and business owners begging for relief. Washed out roads and destroyed driveways have isolated already vulnerable residents in their homes, with emergency medical services unable to respond to the most desperate medical emergencies. In addition to losing access to the roads leading to crucial assistance, many residents have been displaced from their homes entirely, including elderly residents, families with young children and individuals with disabilities. Even livestock face an uncertain winter ahead with reports of winter feed ruined during nature's onslaught. Beyond physical damage, a lifetime of hard work and memories were washed away in the deluge. As the people of Caledonia County comb through what remains, they are left wondering if help will arrive and whether it will be too late to rebuild their lives when it does. While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Barnet:* Extensive damage to town and private roads has left vulnerable residents stranded and without access to emergency medical care. Being stranded on impassable infrastructure is no mere inconvenience for the households that include children with asthma, individuals requiring medical care after surgery and medically fragile adults who frequently require ambulance transport for life saving treatment. One family has been forced to leave their home by all-terrain vehicles to ensure physical therapy appointments and the corresponding medical progress are not forfeited while they await financial assistance to repair the road providing access to five households.

*Hardwick:* For some individuals and families, the flood waters have been a formidable but frequent opponent. Homes, farms and businesses have been ravaged multiple times in the last year and those impacted are at their financial and emotional breaking point as they try to navigate repeated repairs. One individual noted that he has survived four river and tributary floods in the last 12 months and is afraid for his future.

The Hardwick wastewater treatment facility, Lift Stations (Buffalo Street & VT Rt 14S), Fire Station (Hardwick) and Hydroelectric Facility (Pottersville) were impacted.

The Hardwick Electric Department (HED). They had four feet of water in their turbine station, and they estimated about \$500k in damage. The HED Turbine Facility is the same facility that was badly damaged last July, and they were in the process of rebuilding it prior to Beryl.

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*Lyndon:* Each flood damaged, unoccupied home tells a story of disaster and displacement including that of two individuals with disabilities requiring 24/7 care. Even the livestock of Lyndon have not been spared from distress with hay fields destroyed and winter feed washed away by the floods raging waters. Despite the community's resilience, they have been left reeling from not only property damage but also the loss of a 73-year-old community member who drowned when his car was swept off a flooded road. There have also been reports of potential damage to Lyndon's wastewater treatment facility.

### **Chittenden County**

Heavy rainfall from remnants of Hurricane Beryl caused significant flooding in Chittenden County, with the agricultural landscape bearing a huge burden during the important summer growing season. Reports of submerged crops, ruined hay fields, and the accompanying livelihoods of the impacted businesses abound. Reports of significant damage to residential homes and other businesses flooded in quickly on that July day. For some, this was the second year of flood devastation, and the financial resources and spirits of the people are both considerably depleted. While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Burlington:* In July 2024, heavy rain from Hurricane Beryl remnants caused flooding and impacted parts of Burlington. Flooding was observed in the Burlington Intervale, Ethan Allen Farm, and along Muddy Brook Road. Intervale Farms were hit hard last year (almost to the day) and had similar effects this year with total loss of all crops with no time left to start over this year. Basements filled with water, and heating oil tanks in those flooded basements released oil or became unstable. Some residents were displaced from their homes. The town spent \$320,000 from its annual budget to recover from the floods, and some estimate losses in the millions. Businesses closed, and business owners lost income and productivity. Rivers carried large amounts of sediment and pollutants into Lake Champlain, raising concerns about the lake's health.

*Charlotte:* Finding a daycare in Vermont where the conditions are perfect is an immense challenge on the best days. However, the flood has added additional challenges to an already precarious industry. The owner of a home-based daycare in Charlotte noted that the river slashed through their play yard taking all the sand from the sandbox, removing wood chips from around the playground, damaging the play structures and causing a total loss of the children's toys, furniture and outdoor shade structure. For parents to rebuild their own lives after the flooding, childcare facilities are crucially important community assets. Community assets that the flood also threatened to take away in Charlotte.

*Hinesburg:* The LaPlatte River swelled and spread across backyards and fields in Hinesburg. Beecher Hill Road received almost 10 inches of rain according to the town manager. The water washed away culverts, driveways, and roads. The hilly areas were hit the hardest, leaving residents stranded with no egress. Many individuals and families noted that they have lived in their homes for as long as 40 years and had never had flood waters breach their walls prior to this summer. An 82-year-old woman living alone since her husband died in December reports being marooned at home, along with two neighboring households by a washed-out private road. Her home is for sale and a potential buyer was to view it, but she was instead stranded with an inability to leave home for supplies, let alone continue the important process of selling her property.

*Huntington:* Amongst the numerous reports of people stranded by damaged driveways, contaminated wells testing positive for E. coli bacteria and basements in need of mold mitigation was a cry for help from Burnt Rock Farm in Huntington in desperate need of financial assistance. Numerous acres of vegetables were flooded and destroyed with a current loss estimate of \$150,000 with the total loss

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potentially higher if the remaining crops are lost to disease. One 6-acre field was physically destroyed by the Huntington River incising into the field, which contained sweet potatoes and onions. On top of the destroyed crops, it is estimated that the field itself would easily cost over \$20,000 to clean up and put back into a farmable condition. The field is currently covered in flood debris, has scouring 3 feet deep in spots and sediment and rock deposits 2 feet deep in others. The financial harm runs deeper than the flood waters that ravaged the farmer's fields.

*Richmond:* For one couple in Richmond, the destruction to their home was simply another blow to an already tough year. When the flood came, it inundated their mobile home with 4-5 feet of water. In addition to the structural damage to their home, the well and septic system were compromised, and mold permeates the home's surfaces as a reminder of where the waters once were. The symptoms from Parkinson's disease recently caused one of the spouses to no longer be able to work leaving the couple with one income. They are staying at a hotel while they await repairs to their home, but they are struggling to pay for all the costs thrust upon them. Not far away, another Richmond family, including a senior in poor health and an individual living with down syndrome, saw the flood waters ravage their private road leaving them physically unable to leave their property.

### **Essex County**

When the rivers crested in Essex County, some individuals and families evacuated their homes, only to wonder what they would be returning to. Farm fields flooded. Crops sat under feet of water, with the financial success of those farms at the mercy of nature's torrent. Young and old alike watched as their homes and livelihoods washed away with the waters. For some, 2024 was to be their year to recover from the devastation of 2023 severe weather events, but that was not meant to be. Uncertain financial help and lack of options have pushed individuals and families to the brink of disaster.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Guildhall:* In the tiny town of Guildhall lies Sparrow Arc Farm, a potato farm on the Connecticut River. Nineteen of the farm's 52 acres were flooded under as much as ten feet of water, creating a total loss of over 36% and valued at \$190,000. This is the second flood related blow to the farm having had nearly 20% of their crop lost in similar flooding in July 2023. When the state agriculture secretary visited the farm, the owners had to give their farm tour via canoe given the amount of water still covering the crops. In an already tough economic climate, compounded by Vermont's short growing season, it is unlikely that the farm will be able to recover what has been lost.

*Lunenburg:* For the people of Lunenburg, flooded foundations, inundated septic systems, washed out driveways and broken windows were the result of the river's deluge. A family of five, including young children, evacuated their home on the evening of July 10, 2024, only to return to the devastation of a home that may no longer be inhabitable. Regardless of safety, the family has no other options and must remain in the home. The family reached out to their insurance company for help, only to be turned away empty handed. They are out of financial resources and running out of time to fix their heating systems, water and other damage before the cold winter winds breach their flood damaged walls.

### **Lamoille County**

On July 10, 2024, the people of Lamoille County braced for a storm that they recognized all too well. They watched and they waited and slowly but surely the storm made its presence known. Roads, driveways, homes and basements took on water. Some as much as 6-7 feet, threatening the first floors of

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the homes and causing individuals and families to seek higher ground. A temporary shelter in Johnson was poised for action and local emergency management officials responded to the calls for help. While those initial calls for life safety were heeded, the devastation that remains behind cannot be ignored and assistance is needed now more than ever.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Elmore:* In Elmore many people lost vehicular access to their homes with some wondering how emergency responders would get to them. An 80-year-old gentleman living alone on a dead-end road, worries for his own safety during a medical emergency. He awaits road repairs to make his home and driveway accessible once again; however, given the significant damage elsewhere he is concerned he may not be a priority.

*Stowe:* Homes and businesses in Stowe were not spared from the storm's significant damage. Washed out driveways, flooded basements, submerged barns and damaged agricultural land were left behind when the water receded. A family of six reported that the water inundated the bottom floor of their raised ranch home, causing the total loss of all four of their children's bedrooms. The children and all the family's possessions are now crammed into the living room and kitchen upstairs. The well and septic system were both flooded causing some of the sewage to come into the house with the flood waters. The smell of feces and floodwater permeates the home. Not far away, a Stowe business has also been affected by the most recent flooding. The Gold Brook Campground sustained significant damage to its roads, 30 of its campsites, waterlines and trees. Debris now rests where there was once picnic tables and fire rings, both of which were claimed by the raging waters. In addition to the expense of excavation, arborists and other needed repairs, the owner also lost nearly \$10,000 in cancellations/refunds because of the damaged campsites during the busy summer season.

### **Orange County**

The story in Orange County mirrors that of its neighbors with driveways washed away, septic systems backed up into basements and water lines severed by the raging waters. Individuals and families watched with concern from their homes as the water continued to rise, inundating the roads, leaving them stranded and uncertain. The agricultural community was also not spared from the storm's wrath with crops destroyed and winter feed sources hanging in the balance.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Newbury:* When the waters of the Connecticut River rose at Ekolott Farms in Newbury, they did not stop until 65 acres of corn and 35-40 acres of hay sat in flooded fields. When the water crested on July 12, 2024, some fields were buried under as much as nine feet of dirty water. Ekolott produces biodiesel to fuel a portion of their tractor work, all their own heat and an increasing amount of the feed ingredients for their animals, including grains and sunflower seed meal. Even as the water receded, standing water remained on fields ensuring the ruin of the crops that would be needed for the winter ahead.

*Orange:* The residents of Meadow Brook Park in Orange watched with worry as the waters rose around their mobile homes. The flood waters came with such force that culverts were plugged with dirt, causing the water to careen over the driveways and wash out most of the roads. The culverts will need to be dug out and replaced and the roads fixed; however, there is no flood insurance to cover the damage. If the rain comes once more before repairs can be made, the erosion will continue, and mobile homes will be



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at further risk of instability and damage. Help must arrive before the next major rainstorm dumps additional challenges on an already vulnerable community.

### **Orleans County**

In Orleans County, the storm's damage feels insurmountable to many. Insurance denials and uncertain municipal support permeate the once tranquil communities. Individuals and families have been forced to grapple with inaccessible roadways and the Vermonters' ingenuity has seen tractors, All-terrain vehicles and other alternative transportation methods utilized to obtain even the most basic groceries and supplies. Contaminated water continues to create distress for people and animals alike. The tenacity of Vermont's people cannot be denied, but their strength cannot replace all that was lost. From the shores of Lake Willoughby to the farms of Barton, help is needed now.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Barton:* For the residents of Barton, even the most necessities of safe drinking water has been called into question. Boil water notices abound, private wells require testing and potable drinking water provided by the state is a mere band aid in the race to regain safe systems. Reports of damaged barns, destroyed hay bales, washed away fields and contaminated drinking water have left farmers in the lurch trying to ensure their livestock is safely provided for. Without support, these small farms may not be able to continue.

*Greensboro:* In Greensboro, there have been reports of individuals and families being stranded in their homes or making the dangerous decisions to drive over unstable infrastructure due to lack of any alternatives. A 67-year-old gentleman who is on disability and suffers from depression indicated that he has tried to fill out forms for assistance in the past, but the magnitude of the process felt insurmountable. Although the physical scars of the storm's fury can be seen on the landscape, the unseen mental impact cannot be denied or ignored. Resilience is built on the back of reliable support and the people need that support now more than ever.

*Newport:* For one individual in Newport, the limitations of homeowner's insurance have become acutely problematic. Damage to the home and garage, including spilled heating oil persists. Three claims have been filed and three claims have been denied.

### **Washington County**

On July 11, 2024, the people of Washington County were forced to once again wait and watch as their homes and businesses were threatened by nature's fury for the second July in a row. In Towns from Waterbury to Warren to Worcester, the water continued to pour in. The indiscriminate destruction left many wondering if they could or even should rebuild their lives here. Entire apartment buildings, homes and businesses were lost. Pets and possessions were washed away along with the confidence and conviction that life will ever be comfortable again.

While all the individual stories of hardship are too numerous to outline, some notable examples are provided below:

*Barre City:* Facing flooding for a second July in a row, individuals and families are physically and mentally exhausted. For a disabled veteran with spinal problems, movement issues and PTSD, the financial losses of a second disaster at this home have compounded already limited and precarious resources. For many others, the warm summer weather is of little comfort as they navigate the loss of

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furnaces, stoves and other heating equipment that will be needed to survive the cold Vermont winter ahead. These families worry that the ice and snow may arrive before help does.

*Duxbury:* In the small town of Duxbury, local roads and private driveways were obliterated by the force of the water in many rivers, brooks and streams. Numerous neighborhoods found themselves cut-off, including individuals with disabilities and the elderly. For one family living along the Crossett Brook, they watched helplessly as the river took over 25 feet of lawn, compromising the home's foundation and leaving it teetering on the precipice of the water. In addition, many private wells were damaged or compromised by the flood waters. At one home, a 75-year-old widow worries that if she cannot fix her well than her tenant will leave, which is essential for her ability to stay in her home.

*Moretown:* When evacuation orders were received to flee the flood waters, many wondered if they would return home at all in the coming days. Others were left stranded on impassable roads, including four individuals in their 80s with health conditions and a gentleman undergoing radiation treatment who were all cut off from emergency services, medical appointments, groceries and other necessities. While the physical toll of repairing flood ravaged property has been intense, the mental toll has also proven a burden too big to bear. One Moretown family sent their children to stay with relatives out of state so that they would not have to watch their parents fill a dumpster with the damaged possessions and memories that represented their childhoods.

*Plainfield:* The collective memory of the people of Plainfield will always include the abject horror of watching an apartment building, known locally as the Heartbreak Hotel, fall into the raging waters of the Great Brook. While all human occupants were evacuated safely, some of the pets occupying the premises were not as lucky. The pets, along with possessions and memories, flowed into the flood waters that day, imprinting an indelible trauma on the individuals and families impacted. Elsewhere in town, homes, businesses, driveways, bridges, barns, gardens and vehicles all lay submerged. The damage is more than a single community can bear alone.

*Waterbury:* In Waterbury, a community that has seen flooding three times in the last 12 months, deep ravines now sit where well-traveled roadways once resided, creating impassable terrain and limiting access by all, including emergency vehicles. Town highway crews worked around the clock to reopen town roads, but some private property remains untouched and unfunded. While organized volunteers helped to clean out homes, there were simply not enough hands to move the mountains of muck. The basement of one Waterbury woman who lives alone took on 6 feet of water leading to chemical spills inside the home. She is currently 8 months pregnant and is in dire need of assistance cleaning up her home to provide a safe place for her infant.

### **Additional Factors for Consideration**

The assessment of costs is expected to extend well beyond the validated PDAs as the county threshold was met soon after the severe weather event.

The month of July is critical to Vermont's summer tourism season. This flooding comes at a particularly detrimental time for Vermont's economy. And the adverse effects caused by this severe storm event will extend well into the fall foliage season which is historically a boon to the state's economy.

Towns in Vermont obtain insurance through the Vermont League of Cities and Towns' Property and Casualty Intermunicipal Fund (PACIF). Roads, water crossings, and drainage structures are not covered, and insurance coverage is not commercially available in most cases.

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Given the rural, agricultural nature of our state with generational land and low housing stock, many Vermonters may struggle to provide documentation of land deeds and lack permanent housing. I therefore request flexibility in aiding the most vulnerable in our communities.

Vermonters are still suffering from the devastating impacts of the historical flooding which occurred during summer of 2023, declared as DR-4720 and DR-4744 and a very recent storm event with joint FEMA/State PDAs currently underway for the June 23, 2024, Severe Storm and flooding/flash flooding event in Caledonia and Lamoille Counties.

This smaller but impactful storm caused repeated damage in numerous communities, compounding the distress, and setting back recovery efforts from the summer storms for exhausted survivors and local road crews and emergency responders.

### **Disaster History**

The impacts of this storm clearly exceed the resources of the State of Vermont. Since 2013, Vermont has experienced 18 federally declared and numerous non-declared disasters: DR4120 (May 2013 flooding), DR4140 (June-July 2013 flooding), DR4163 (December 2013 ice storm), DR4178 (April 2014 flooding), DR4207 (December 2014 severe winter storm), DR4232 (June 9, 2015 flooding), DR4330 (June-July 2017 flooding), DR4356 (October 29-30, 2018 severe storm and flooding), DR4380 (May 4-5, 2018 severe storm), DR4445 (April 15, 2019 severe storm and flooding), DR4474 (Severe storm and flooding, October 31- November 1, 2019), DR4621 (Severe storms and flooding, July 29, 2021-July 30, 2021), DR4532 (COVID-19), DR4695 (Severe storm and flooding, December 22-24, 2022), DR4720 (Severe storms and flooding, landslides and mudslides, July 7-21, 2023), DR4744 (Severe Storms and Flooding, August 3-5, 2023), DR4762 (Severe Storm and flooding, December 18-19, 2023), and DR4770 (Severe Winter Storm, January 9-13, 2023).

Currently there are two additional severe storms, flooding and flash flooding that were evaluated by Preliminary Damage Assessments for the June 23, 2024, storm event (joint FEMA/State PA PDA that were completed on July 26, 2024) and this July 9-11, 2024, Hurricane Beryl event (PA and IA) PDAs that were completed on July 26, 2024).

The state is also currently performing Initial Damage Assessments from another devastating severe storm and flooding/flash flooding event that occurred on July 29-30, 2024, with National Weather Service forecasting widespread thunderstorms capable of producing very heavy rainfall, and localized flash flooding in areas that see multiple thunderstorms and/or have recently received heavy rains and potential isolated landslides though July 31, 2024.

### **Hazard Mitigation Damage Avoidance**

In recent years, Vermont and FEMA have successfully used funding made available pursuant to Section 404 (42 U.S.C. § 5170c) and Section 406 (42 U.S.C. § 5172).

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The impacts of this flooding would have been even more devastating if not for mitigation work accomplished since Tropical Storm Irene in 2011, particularly more than 150 property acquisitions and removals of flood-prone structures accomplished through Hazard Mitigation Assistance.

Many of these sites have been inundated in recent days as rivers access their floodplains without harm. We are committed to continuing our ongoing efforts to build resiliency and reduce flood vulnerability using Section 406 and Section 404 Hazard Mitigation.

### **Conclusion**

For many Vermont communities, this statewide storm is the worst disaster in living memory, even worse than Tropical Storm Irene and the July 2023 severe storms and flooding (DR4720). The Mad River and Passumpsic River crested at historically record high levels. The magnitude and severity of the damage will clearly exceed the capabilities of the State and affected local governments without federal assistance.

Vermonters are suffering from the cumulative effects of multiple severe storms with many towns experiencing catastrophic repetitive damage.

Accordingly, I request a Major Disaster Declaration under the Stafford Act for Individual Assistance (including Individuals and Households Program, Disaster Case Management, Crisis Counseling Program, Disaster Unemployment Assistance, and Disaster Legal Services); Public Assistance; Hazard Mitigation Assistance statewide; as well as any other available federal disaster assistance; including but not limited to U.S. Small Business Administration and U.S. Department of Agriculture assistance.

Thank you for understanding the needs of our small state for your continued support of the State of Vermont and its residents.

Sincerely,



Philip B. Scott  
Governor

### **Enclosures:**

OMB No. 1660-0009/FEMA Form 010-0-13

A: Individual Assistance

B: Public Assistance

C: National Oceanic and Atmospheric Administration (NOAA), National Weather Service - Eastern Region, National Oceanic and Atmospheric Administration (NOAA), National Weather Service - Eastern Region, *Significant Flooding in Vermont July 9-11, 2024, Report.*

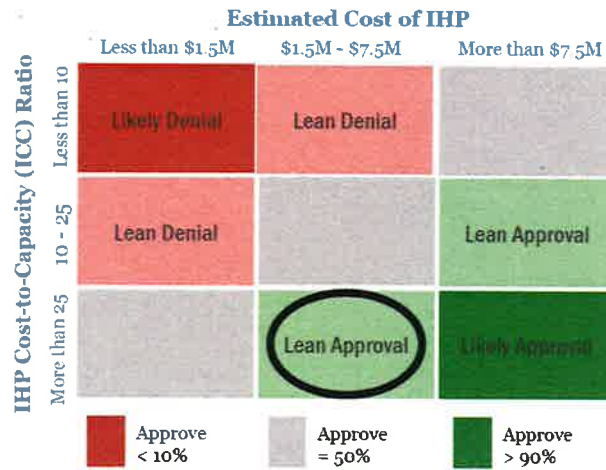
D: Requirements for Other Federal Agency Program

E: Vermont Department of Environmental Conservation - *Landslides 20240710 - Beryl*



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**VT**  
*July 2024*  
*storms*



VT TTR is \$46.4B/1,000,000=\$46,400

\$ 6,997,678 / \$46,400  
 ICC Ratio = 151

$$ICC \text{ Ratio} = \frac{\text{Estimated Cost of IHP from PDA}}{\left(\frac{\text{State TTR}}{\$1,000,000}\right)}$$

**ENCLOSURE A**  
 (continued)

Final FEMA Preliminary Damage Reporting Numbers:

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| Vermont July IA PDA      |          |           |       |       |          |            |              |       |
|--------------------------|----------|-----------|-------|-------|----------|------------|--------------|-------|
| Last Updated 7/26/24     |          |           |       |       |          |            |              |       |
| County                   | Status   | Destroyed | Major | Minor | Affected | Unaffected | Inaccessible | Total |
| Addison                  | Complete | 0         | 4     | 26    | 45       | 0          | 10           | 85    |
| Caledonia                | Complete | 2         | 35    | 73    | 135      | 7          | 0            | 252   |
| Chittenden               | Complete | 1         | 13    | 64    | 122      | 1          | 13           | 214   |
| Essex                    | Complete | 1         | 1     | 16    | 22       | 0          | 2            | 42    |
| Lamoille                 | Complete | 0         | 2     | 17    | 15       | 1          | 1            | 36    |
| Orleans                  | Complete | 0         | 1     | 15    | 33       | 0          | 0            | 49    |
| Washington               | Complete | 17        | 47    | 187   | 221      | 0          | 28           | 500   |
| <b>Total By Category</b> |          | 21        | 103   | 398   | 593      | 9          | 54           | 1,178 |

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**ENCLOSURE B**  
**PUBLIC ASSISTANCE**



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DAMAGE ASSESSMENT WORKSHEET

FINAL

Event Name: July 10 - 11, 2024 Severe Storm and Flooding  
Event Date(s): July 10 - 11, 2024

State: \$1.84  
County: \$4.60  
VERMONT

| Report #:              | PUBLIC DAMAGE    |                     |                    |               |                       |                |                    |                    | GOAL      |                                  |             |             |
|------------------------|------------------|---------------------|--------------------|---------------|-----------------------|----------------|--------------------|--------------------|-----------|----------------------------------|-------------|-------------|
|                        | A                | B                   | C                  | D             | E                     | F              | G                  | TOTAL              | POP 2020  | \$/CAP                           | \$4.60/CAP  | SHORT       |
| Addison Co             | \$0              | \$0                 | \$189,691          | \$0           | \$0                   | \$0            | \$0                | \$189,691          | 37,363    | \$5.08                           | \$171,870   | \$0         |
| Bennington Co          | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 37,347    | \$0.00                           | \$171,796   | (\$171,797) |
| Caledonia Co           | \$22,958         | \$0                 | \$1,659,434        | \$0           | \$0                   | \$0            | \$2,275,797        | \$3,958,189        | 30,233    | \$130.92                         | \$139,072   | \$0         |
| Chittenden Co          | \$13,169         | \$0                 | \$890,075          | \$0           | \$0                   | \$0            | \$8,312            | \$911,556          | 168,323   | \$5.42                           | \$774,286   | \$0         |
| Essex Co               | \$0              | \$0                 | \$149,652          | \$0           | \$0                   | \$0            | \$0                | \$149,652          | 5,920     | \$25.26                          | \$27,232    | \$0         |
| Franklin Co            | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 49,946    | \$0.00                           | \$229,752   | (\$229,752) |
| Grand Isle Co          | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 7,293     | \$0.00                           | \$33,548    | (\$33,548)  |
| Lamoille Co            | \$0              | \$0                 | \$148,367          | \$0           | \$0                   | \$0            | \$326,231          | \$474,597          | 25,945    | \$18.29                          | \$119,347   | \$0         |
| Orange Co              | \$0              | \$0                 | \$8,223            | \$0           | \$0                   | \$0            | \$0                | \$8,223            | 29,277    | \$0.26                           | \$134,674   | (\$126,452) |
| Orleans Co             | \$0              | \$0                 | \$238,668          | \$0           | \$0                   | \$0            | \$139,124          | \$377,792          | 27,393    | \$13.79                          | \$126,008   | \$0         |
| Rutland Co             | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 60,572    | \$0.00                           | \$278,631   | (\$278,632) |
| Washington Co          | \$70,053         | \$0                 | \$1,769,636        | \$0           | \$0                   | \$0            | \$87,019           | \$1,926,708        | 59,807    | \$32.22                          | \$275,112   | \$0         |
| Windham Co             | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 45,905    | \$0.00                           | \$211,163   | (\$211,163) |
| Windsor Co             | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 57,753    | \$0.00                           | \$265,664   | (\$265,664) |
| State Agencies         | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | State POP | \$/CAP                           | \$1.84/CAP  | SHORT       |
| <b>TOTALS</b>          | <b>\$106,181</b> | <b>\$0</b>          | <b>\$5,063,746</b> | <b>\$0</b>    | <b>\$0</b>            | <b>\$0</b>     | <b>\$2,836,482</b> | <b>\$7,996,409</b> | 643,077   | \$12.43                          | \$1,183,262 | \$0         |
| NOTES:                 | DEBRIS CLEARANCE | PROTECTIVE MEASURES | ROAD SYSTEM        | WATER CONTROL | BUILDINGS & EQUIPMENT | PUBLIC UTILITY | PARKS & OTHER      |                    | 643,077   | State Population total check-sum |             |             |
| <b>PDA Percentages</b> | 1.33%            | 0.00%               | 63.20%             | 0.00%         | 0.00%                 | 0.00%          | 35.47%             |                    |           |                                  |             |             |

DAMAGE ASSESSMENT WORKSHEET

| Report #:               | A   | B   | C   | D   | E   | F   | G   | TOTAL |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| ANR                     |     |     |     |     |     |     |     | \$0   |
| ACT                     |     |     |     |     |     |     |     | \$0   |
| Forest & Parks          |     |     |     |     |     |     |     | \$0   |
| Rails to Trails         |     |     |     |     |     |     |     | \$0   |
| VAST                    |     |     |     |     |     |     |     | \$0   |
| VT Electric Coop        |     |     |     |     |     |     |     | \$0   |
| VEM                     |     |     |     |     |     |     |     | \$0   |
| Washington Co Elec Coop |     |     |     |     |     |     |     | \$0   |
| Totals                  | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0   |

The Honorable Joseph R. Biden, Jr.  
August 2, 2024

### ENCLOSURE C

National Oceanic and Atmospheric Administration (NOAA), National Weather Service - Eastern Region, *Significant Flooding in Vermont July 9-11, 2024, Report.*



**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric**  
**Administration**

NATIONAL WEATHER SERVICE EASTERN  
REGION

630 Johnson Ave. Suite 202  
Bohemia, NY 11716

July 22, 2024

## Significant Flooding in Vermont – July 9-11, 2024

### Overview:

Exactly one year to the day from the significant flooding event that impacted northern Vermont in July of 2023, the remnant moisture from post-tropical cyclone Beryl became absorbed into a slow-moving frontal system across Vermont. Scattered thunderstorms crossed the state during the afternoon of July 9th. This was followed by numerous rounds of showers and thunderstorms, some with torrential rainfall, from midday on July 10th through daybreak on July 11th. Heavy rainfall across a complex hilly, mountainous terrain led to rapid surface runoff that caused major, destructive flash flooding of streams and other waterways, damaged or destroyed roads (both paved/gravel), as well as triggering several landslides during the evening and overnight hours of July 10th-11th across a large portion of Vermont. Significant rainfall in the headwaters and the entire watershed of several main stem rivers led to moderate and major river flooding.



Storm Reports - July 9-11, 2024 ([Link to this data](#))

The Honorable Joseph R. Biden, Jr.  
 August 2, 2024

**ENCLOSURE B**  
**PUBLIC ASSISTANCE**

DAMAGE ASSESSMENT WORKSHEET

FINAL

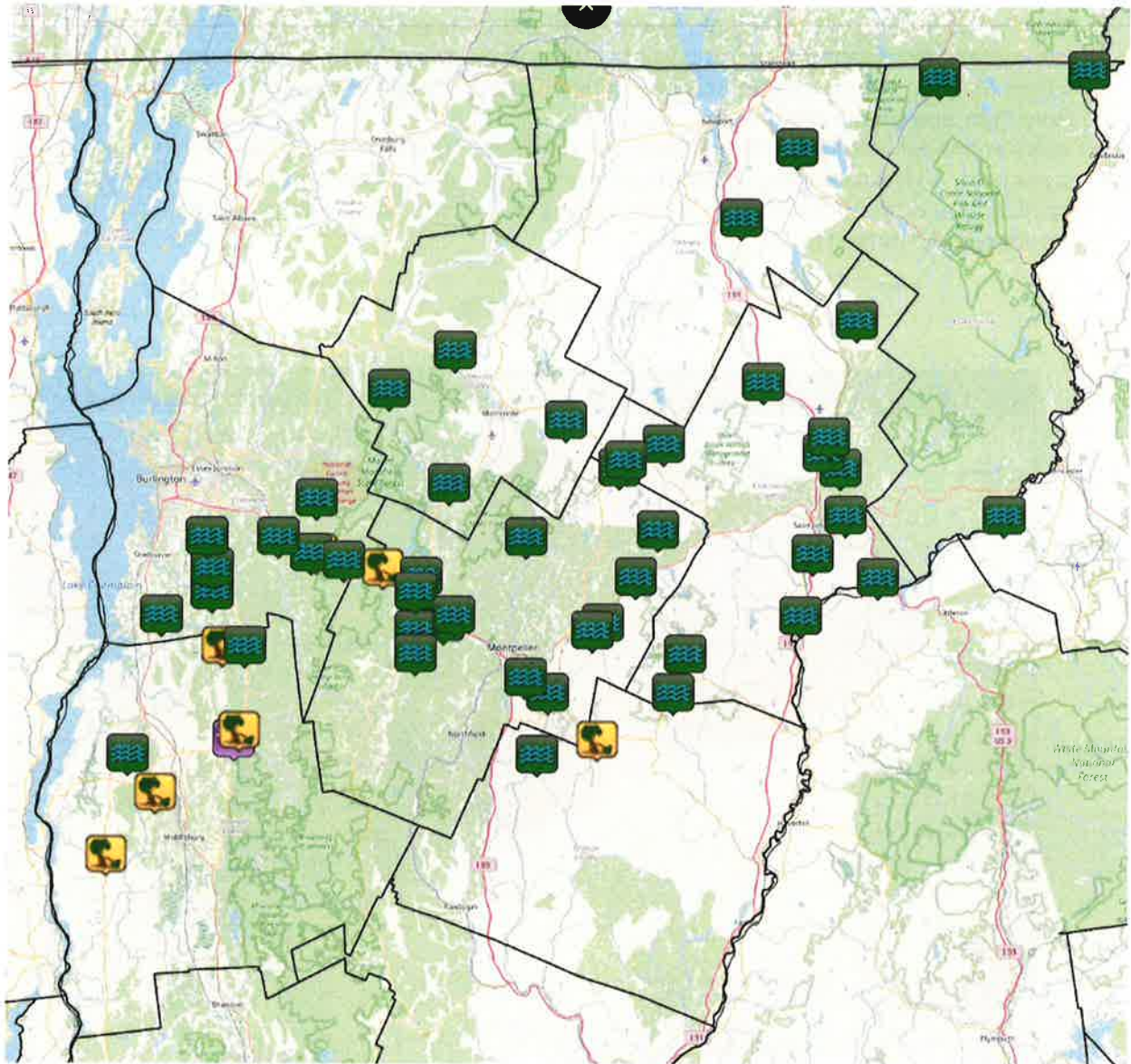
Event Name: July 10 - 11, 2024 Severe Storm and Flooding  
 Event Date(s): July 10 - 11, 2024

State: VERMONT  
 County: \$1.84  
 \$4.60

| Date:              | PUBLIC DAMAGE    |                     |                    |               |                       |                |                    |                    | GOAL     |          |             |             |
|--------------------|------------------|---------------------|--------------------|---------------|-----------------------|----------------|--------------------|--------------------|----------|----------|-------------|-------------|
| Report #:          | A                | B                   | C                  | D             | E                     | F              | G                  | TOTAL              | POP 2020 | \$/CAP   | \$/4.60/CAP | SHORT       |
| Addison Co         | \$0              | \$0                 | \$189,891          | \$0           | \$0                   | \$0            | \$0                | \$189,891          | 37,363   | \$5.08   | \$171,870   | \$0         |
| Bennington Co      | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 37,347   | \$0.00   | \$171,796   | (\$171,797) |
| Caledonia Co       | \$22,956         | \$0                 | \$1,659,434        | \$0           | \$0                   | \$0            | \$2,275,797        | \$3,958,189        | 30,233   | \$130.92 | \$139,072   | \$0         |
| Chittenden Co      | \$13,169         | \$0                 | \$890,075          | \$0           | \$0                   | \$0            | \$8,312            | \$911,556          | 168,323  | \$5.42   | \$774,286   | \$0         |
| Essex Co           | \$0              | \$0                 | \$149,652          | \$0           | \$0                   | \$0            | \$0                | \$149,652          | 5,920    | \$25.28  | \$27,232    | \$0         |
| Franklin Co        | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 49,946   | \$0.00   | \$229,752   | (\$229,752) |
| Grand Isle Co      | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 7,293    | \$0.00   | \$33,548    | (\$33,548)  |
| Lamoille Co        | \$0              | \$0                 | \$148,367          | \$0           | \$0                   | \$0            | \$326,231          | \$474,597          | 25,945   | \$18.29  | \$119,347   | \$0         |
| Orange Co          | \$0              | \$0                 | \$8,223            | \$0           | \$0                   | \$0            | \$0                | \$8,223            | 29,277   | \$0.28   | \$134,674   | (\$126,452) |
| Orleans Co         | \$0              | \$0                 | \$238,668          | \$0           | \$0                   | \$0            | \$139,124          | \$377,792          | 27,393   | \$13.79  | \$126,008   | \$0         |
| Rutland Co         | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 60,572   | \$0.00   | \$278,631   | (\$278,632) |
| Washington Co      | \$70,053         | \$0                 | \$1,769,636        | \$0           | \$0                   | \$0            | \$67,019           | \$1,926,708        | 59,807   | \$32.22  | \$275,112   | \$0         |
| Windham Co         | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 45,905   | \$0.00   | \$211,183   | (\$211,183) |
| Windsor Co         | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                | 57,753   | \$0.00   | \$265,664   | (\$265,664) |
| State Agencies     | \$0              | \$0                 | \$0                | \$0           | \$0                   | \$0            | \$0                | \$0                |          |          |             |             |
| <b>TOTALS</b>      | <b>\$106,181</b> | <b>\$0</b>          | <b>\$6,063,746</b> | <b>\$0</b>    | <b>\$0</b>            | <b>\$0</b>     | <b>\$2,836,482</b> | <b>\$7,996,409</b> |          |          |             |             |
| State POP          |                  |                     |                    |               |                       |                |                    |                    | 643,077  | \$12.43  | \$1,183,262 | \$0         |
| Notes:             |                  |                     |                    |               |                       |                |                    |                    |          |          |             |             |
| <b>PDA</b>         | DEBRIS CLEARANCE | PROTECTIVE MEASURES | ROAD SYSTEM        | WATER CONTROL | BUILDINGS & EQUIPMENT | PUBLIC UTILITY | PARKS & OTHER      |                    |          |          |             |             |
| <b>Percentages</b> | 1.33%            | 0.00%               | 63.20%             | 0.00%         | 0.00%                 | 0.00%          | 35.47%             |                    |          |          |             |             |

DAMAGE ASSESSMENT WORKSHEET

| Date:                   | PUBLIC DAMAGES - STATE AGENCIES NOT SPECIFIC TO ANY COUNTY |     |     |     |     |     |     |       |
|-------------------------|--|-----|-----|-----|-----|-----|-----|-------|
| Report #:               | A  | B   | C   | D   | E   | F   | G   | TOTAL |
| ANR                     |  |     |     |     |     |     |     | \$0   |
| AOT                     |  |     |     |     |     |     |     | \$0   |
| Forest & Parks          |  |     |     |     |     |     |     | \$0   |
| Rails to Trails         |  |     |     |     |     |     |     | \$0   |
| VAST                    |  |     |     |     |     |     |     | \$0   |
| VT Electric Coop        |  |     |     |     |     |     |     | \$0   |
| VEM                     |  |     |     |     |     |     |     | \$0   |
| Washington Co Elec Coop |  |     |     |     |     |     |     | \$0   |
| Totals                  | \$0  | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0   |



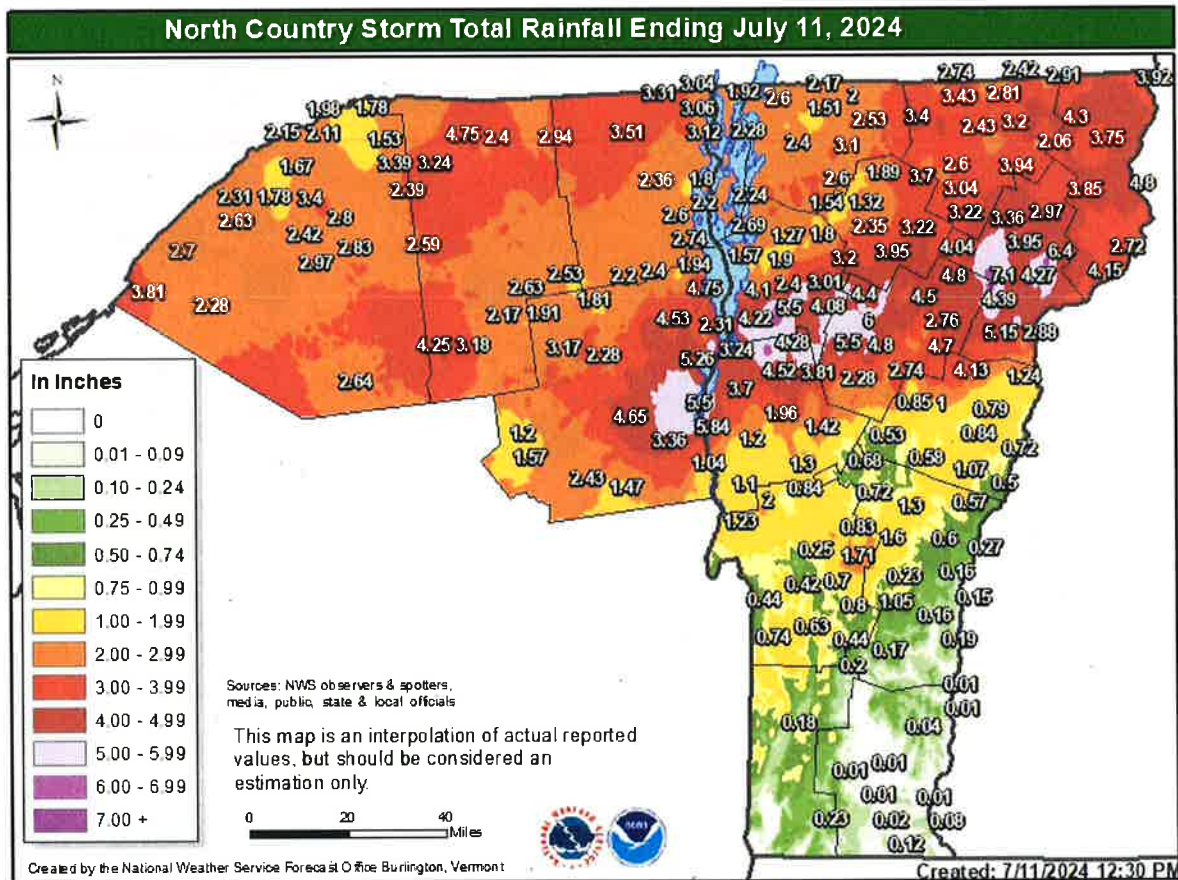
- |               |              |            |             |             |            |
|---------------|--------------|------------|-------------|-------------|------------|
| Tornado       | Funnel Cloud | Waterspout | Wind Damage | Wind Speed  |            |
| Hail          | Lightning    | Landslide  | Flooding    | Rain Amount | Snow Accum |
| Ice Accretion | Sleet        |            |             |             |            |

### **Flooding/Heavy Rain**

Widely scattered showers and thunderstorms, with locally heavy rain, crossed Vermont during the afternoon on July 9th. However, more widespread, flooding rain initially moved across central and northern Vermont during the midday hours of July 10th. By mid-afternoon, numerous bands of heavy rain showers and thunderstorms developed in New York. These showers and thunderstorms passed across Vermont in waves through the evening of July 10th and into the early morning hours of July 11th.

Rainfall intensities with many of the showers and thunderstorms were 0.5-1 inch per hour with a few storms producing rainfall rates in excess of 2-3 inches per hour. Flash flooding initially began across Addison County by mid to late afternoon on July 10th and then overspread east-northeast across much of central and northeast Vermont during the evening and overnight. As flash flooding commenced across the region, additional rounds of heavy rainfall exacerbated the current flash flooding during the late evening and overnight hours of July 10th-11th.

### Rainfall Amounts



### Total Rainfall Measurements (greater than 1.5 inches)

| County  | Location             | Amount (in) |
|---------|----------------------|-------------|
| Addison | Monkton              | 6.41        |
|         | 4 ENE Starksboro     | 5.89        |
|         | 2 NE Monkton         | 5.62        |
|         | 1 SW Goodrich Corner | 5.39        |

The Honorable Joseph R. Biden, Jr.  
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|                  |                        |      |
|------------------|------------------------|------|
|                  | 6 W Vergennes          | 5.26 |
|                  | 1 NE Bristol           | 5.18 |
|                  | STARKSBORO             | 5.11 |
|                  | 4 NE Bristol           | 5.11 |
|                  | 3 SE Monkton           | 4.85 |
|                  | 2 NE Bristol           | 4.76 |
|                  | 1 NNW South Starksboro | 4.64 |
|                  | 1 N Ferrisburgh        | 4.54 |
|                  | Bristol                | 4.52 |
|                  | Vergennes              | 4.35 |
|                  | Addison                | 3.70 |
|                  | Ferrisburg             | 3.24 |
|                  | Brooksville            | 3.17 |
|                  | 1 E South Lincoln      | 2.37 |
|                  | 1 NE South Lincoln     | 2.13 |
|                  | N Middlebury           | 2.08 |
|                  | NE Middlebury          | 1.96 |
|                  | Middlebury             | 1.68 |
| <b>Caledonia</b> | Walden                 | 7.25 |
|                  | St. Johnsbury          | 6.40 |
|                  | N St. Johnsbury        | 5.69 |
|                  | 1 NW Goslants Mill     | 5.32 |
|                  | 1 ENE North Walden     | 5.29 |
|                  | 2 S Stannard           | 5.27 |
|                  | South Wheelock         | 5.15 |
|                  | 4 W Barnet             | 5.15 |
|                  | N Danville             | 5.12 |
|                  | 1 SSE Saint Johnsbury  | 4.86 |
|                  | 1 SW Danville          | 4.75 |
| Danville         | 4.70                   |      |

|  |                    |      |
|--|--------------------|------|
|  | 2 S Wheelock       | 4.44 |
|  | Sutton             | 4.43 |
|  | 3 NW Sheffield     | 4.35 |
|  | 2 ENE East Peacham | 4.32 |
|  | 2 E Danville       | 4.27 |
|  | North Kirby        | 4.25 |
|  | 1 NE West Burke    | 4.22 |
|  | Cabot              | 4.20 |
|  | 1 W Lyndonville    | 4.14 |
|  | 1 ENE Lyndon       | 3.95 |
|  | 4 WSW Groton       | 3.63 |

|            |                   |      |
|------------|-------------------|------|
|            | Wheelock          | 3.36 |
|            | West Burke        | 2.97 |
|            | 2 WNW Wells River | 2.88 |
| Chittenden | Mechanicsville    | 6.91 |
|            | Hinesburg         | 6.76 |
|            | 2 SW Hinesburg    | 5.82 |
|            | 1 NE Richmond     | 5.79 |
|            | 2 SW Richmond     | 5.51 |
|            | 1 N Hinesburg     | 5.50 |
|            | 1 E Charlotte     | 5.39 |
|            | Charlotte         | 5.18 |
|            | 1 E Nashville     | 4.91 |
|            | Richmond          | 4.85 |
|            | RICHMOND          | 4.49 |
|            | 2 SW Shelburne    | 4.35 |
|            | 2 SW Huntington   | 4.29 |
|            | 1 N Hanksville    | 4.28 |
|            | SHELBURNE         | 4.22 |
| Shelburne  | 4.10              |      |

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|  |                        |      |
|--|------------------------|------|
|  | 1 E Huntington         | 4.08 |
|  | Jericho                | 3.97 |
|  | 3 SSW Williston        | 3.86 |
|  | 1 ENE Shelburne        | 3.51 |
|  | Milton                 | 3.25 |
|  | 4 ESE Underhill        | 3.20 |
|  | JERICHO                | 3.01 |
|  | 2 NNW Milton           | 2.89 |
|  | 2 NE Thayer Beach      | 2.69 |
|  | 2 NW Westford          | 2.63 |
|  | 3 SSW South Burlington | 2.53 |
|  | WSW Williston          | 2.51 |
|  | 3 NW Williston         | 2.40 |
|  | Underhill              | 2.38 |
|  | Colchester             | 2.38 |
|  | 1 N Westford           | 2.35 |
|  | Pleasant Valley        | 2.30 |

|       |                      |      |
|-------|----------------------|------|
|       | South Burlington     | 2.21 |
|       | 3 SSE Milton         | 1.99 |
|       | Burlington Intl Airp | 1.90 |
|       | 2 NW Underhill       | 1.80 |
|       | 4 NNE Underhill      | 1.64 |
|       | 5 NNE Underhill      | 1.63 |
|       | Essex Jct            | 1.61 |
|       | ECHO - Burlington Wa | 1.58 |
|       | 1 NW Burlington      | 1.57 |
| Essex | Maidstone State Park | 4.80 |
|       | Connecticut River At | 4.55 |
|       | 2 SE North Concord   | 4.15 |
|       | Island Pond          | 3.96 |



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|                      |                      |      |
|----------------------|----------------------|------|
|                      | 4 SSE Wallace Pond   | 3.92 |
|                      | 1 S East Haven       | 3.85 |
|                      | 1 ENE East Brighton  | 3.75 |
|                      | 2 NNW Lunenburg      | 3.66 |
|                      | West Lunenburg       | 3.55 |
|                      | Lunenburg            | 3.32 |
|                      | 2 N Baptist Hill     | 2.72 |
| Franklin             | Fletcher             | 4.45 |
|                      | 1 E West Georgia     | 3.63 |
|                      | 5 WNW Fairfax        | 3.47 |
|                      | 4 ESE Montgomery     | 3.40 |
|                      | East Fairfield       | 3.10 |
|                      | 1 NNE Enosburg Falls | 2.69 |
|                      | 2 NW Swanton         | 2.60 |
|                      | Enosburgh            | 2.53 |
|                      | 3 NW Cambridge       | 2.51 |
|                      | Georgia              | 2.47 |
|                      | Hill Farm Estates    | 2.40 |
|                      | Enosburg Falls       | 2.39 |
|                      | 1 NNE Swanton        | 2.23 |
|                      | Franklin             | 2.17 |
| 3 SW Swanton         | 2.07                 |      |
| 2 ESE Swanton Juncti | 2.03                 |      |

|            |                      |      |
|------------|----------------------|------|
|            | 3 N Enosburg Falls   | 2.00 |
|            | 3 SSW Highgate Falls | 1.98 |
|            | Sheldon Junction     | 1.51 |
| Grand Isle | Grand Isle           | 2.56 |
|            | 1 NW Grand Isle      | 2.55 |
|            | North Hero           | 2.28 |
|            | 2 E Keeler Bay       | 2.24 |

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|          |                       |      |
|----------|-----------------------|------|
|          | Alburgh               | 1.92 |
| Lamoille | 2 WSW Wolcott         | 4.58 |
|          | Elmore                | 4.33 |
|          | SW Stowe              | 4.17 |
|          | 2 NNW Stowe           | 3.95 |
|          | Eden                  | 3.70 |
|          | 1 ESE Morrisville     | 3.22 |
|          | 1 W Johnson (VTWAC)   | 2.61 |
|          | Hardwick              | 2.61 |
|          | Fletcher              | 2.60 |
|          | 3 N Smugglers Notch   | 2.35 |
|          | Cambridge             | 1.91 |
|          | Waterville            | 1.89 |
|          | 2 N Johnson           | 1.87 |
|          | 1 SSW Jeffersonville  | 1.54 |
| Orange   | 1 NNE Orange          | 4.13 |
|          | 3 E South Northfield  | 3.88 |
|          | Orange                | 3.11 |
|          | Strafford             | 1.75 |
|          | 2 SSW Bradford Center | 1.51 |
| Orleans  | 2 WNW East Charleston | 5.02 |
|          | Morgan                | 4.58 |
|          | Westfield             | 4.34 |
|          | 7 SE Morgan           | 4.30 |
|          | Craftsbury Common     | 4.17 |
|          | 2 NNW Greensboro      | 4.07 |
|          | 1 SW Westmore         | 3.94 |
|          | 2 NE Westmore         | 3.94 |
|          | 1 WNW Westfield       | 3.91 |
|          | 3 NW Irasburg         | 3.79 |

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|            |                       |      |
|------------|-----------------------|------|
|            | 4 NNE Greensboro      | 3.54 |
|            | 2 WSW Newport         | 3.43 |
|            | 2 SSW Craftsbury      | 3.22 |
|            | 1 NNE Brownington Vi  | 3.20 |
|            | 1 SSW Derby Center    | 3.16 |
|            | 1 W Albany            | 3.04 |
|            | 2 ENE Holland         | 2.91 |
|            | 1 SW Lindsay Beach    | 2.81 |
|            | North Troy            | 2.74 |
|            | Albany                | 2.60 |
|            | Lowell                | 2.45 |
|            | Brownington           | 2.43 |
|            | 2 W Derby Line        | 2.42 |
|            | East Charleston       | 2.06 |
| Rutland    | 2 NW West Bridgewater | 2.87 |
|            | Killington            | 2.21 |
|            | 3 S Sudbury           | 2.00 |
|            | Mendon                | 1.89 |
|            | 2 SW Gifford Woods S  | 1.71 |
|            | 2 SSE Pittsford       | 1.51 |
| Washington | 2 S Walden            | 7.10 |
|            | 2 N Moretown          | 6.00 |
|            | 3 SW Duxbury          | 5.85 |
|            | 2 SSW North Fayston   | 5.50 |
|            | Moretown              | 5.18 |
|            | 4 NE Waitsfield       | 5.04 |
|            | Waterbury             | 5.03 |
|            | 4 ENE Cabot           | 4.81 |
|            | 4 NE Waterbury        | 4.80 |
|            | 2 N Calais            | 4.80 |

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|  |                    |      |
|--|--------------------|------|
|  | 1 ESE Moretown     | 4.80 |
|  | Barre              | 4.70 |
|  | 1 ESE Plainfield   | 4.57 |
|  | Cabot              | 4.54 |
|  | 1 SE South Duxbury | 4.53 |

|  |                      |      |
|--|----------------------|------|
|  | North Calais         | 4.50 |
|  | 7 NE Middlesex       | 4.50 |
|  | MONTPELIER           | 4.46 |
|  | 3 NW Waterbury       | 4.40 |
|  | 2 E Cabot            | 4.39 |
|  | 1 NNW Woodbury       | 4.29 |
|  | Worcester            | 4.11 |
|  | 2 WNW Montpelier Jun | 4.06 |
|  | 3 NNW Woodbury       | 4.04 |
|  | Plainfield           | 3.89 |
|  | Fayston              | 3.81 |
|  | 2 W Worcester        | 3.62 |
|  | 2 SE Waitsfield      | 3.44 |
|  | Berlin               | 3.42 |
|  | Waitsfield           | 3.31 |
|  | 1 SSE Waitsfield     | 3.18 |
|  | 1 SSE Waitsfield Com | 3.09 |
|  | North Barre          | 3.01 |
|  | Montpelier Airport   | 2.98 |
|  | East Montpelier      | 2.76 |
|  | 1 SSE Montpelier     | 2.75 |
|  | 1 NNE Northfield     | 2.74 |
|  | 2 N Northfield       | 2.74 |
|  | BARRE                | 2.74 |

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|         |             |      |
|---------|-------------|------|
|         | 3 E Warren  | 2.56 |
|         | Warren      | 2.28 |
| Windsor | Bridgewater | 1.60 |

**Flood and Flash Flood Reports**

| County  | Location      | Date/<br>Time (EDT) | Summary   |
|---------|---------------|---------------------|---|
| Addison | 2 W Waltham   | 2024/07/10<br>17:40 | Water flowing across East Rd in Panton.         |
|         | 1 N Rockville | 2024/07/10<br>17:45 | Water and rocks across Route 116 in Starksboro. |

|           |                   |                     |  |
|-----------|-------------------|---------------------|--|
| Caledonia | Lakeside          | 2024/07/10<br>21:26 | Flash Flooding on Depot Brook. Typically 5 feet across, now 100 feet across. 6.42 inches of rain fell. |
|           | East Hardwick     | 2024/07/10<br>21:31 | VT 16 flooded at Belfry Road.  |
|           | Barnet            | 2024/07/10<br>22:01 | Picture of gravel road washed out.   |
|           | 1 SW Hardwick     | 2024/07/10<br>22:03 | VT 14 closed in Hardwick between Marshall Street and Marshfield due to flooding.                       |
|           | Passumpsic        | 2024/07/10 22:11    | US 5 in Passumpsic Village closed due to flooding around St Johnsbury/Barnet town line                 |
|           | 2 E St. Johnsbury | 2024/07/10<br>22:29 | US 2 flooded near intersection with VT 18  |
|           | Barnet            | 2024/07/10<br>23:07 | Widespread road and business flooding including downtown.  |
|           | 2 SE Lyndon       | 2024/07/10<br>23:15 | Red Village Road Flooded in Lyndonville.   |
|           | 2 SW West Groton  | 2024/07/11 01:22    | US 302 closed from VT 25 to Groton due to multiple washouts.   |

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|                   | Lyndon      | 2024/07/11 02:46 | US-5 in Lyndon is closed at Calendar Brook due to high water and washouts. Evacuations in progress.  |
|                   | Newark      | 2024/07/11 04:13 | VT-144 in Newark is closed at the East Haven line due to multiple road washouts.   |
|                   | Lyndonville | 2024/07/11 04:21 | VT-144 and VT-122 are under water near a trailer park. Fire department has done 5 water rescues and they are going door-to-door to evacuate the trailer park. Road washouts are increasing in the Route 5 area with a lot of standing and flowing water. |
|                   | Sheffield   | 2024/07/11 04:43 | VT-122 in Sheffield is closed at Old Duck Pond Road due to high water and road washouts.   |
|                   | Hardwick    | 2024/07/11 04:50 | VT-14 and VT-15 in Hardwick are closed northwest of town by Lamoille Valley Ford due to high water over the deck of the bridge.  |
|                   | Lyndonville | 2024/07/11 06:22 | VT-114 from Lily Pond Road to US-5 is closed due to flooding.  |
| <b>Chittenden</b> | Hinesburg   | 2024/07/10 22:36 | VT 116 flooded at Commerce Street.   |

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|  | Jonesville    | 2024/07/10 22:40 | RT 2 Flooding at Jones Mill Road In Jonesville.  |
|  | Richmond      | 2024/07/10 23:13 | US 2 in Richmond closed at I 89 exit 11 due to flooding.   |
|  | Bolton        | 2024/07/10 23:17 | Route 2 flooded by Bolton Valley Access Road. Bolton Valley Access Road flooded with debris in places. |
|  | 1 E Nashville | 2024/07/10 23:56 | Nashville Road Flooded in Nashville.   |
|  | 2 E Charlotte | 2024/07/11 00:39 | Spear Street in Charlotte flooded in a few places.   |
|  | 2 N Hinesburg | 2024/07/11 00:45 | VT 116 closed due to flooding between VT 2A in St. George and CVU Road in Hinesburg.                   |

|                 |                      |                  |  |
|-----------------|----------------------|------------------|--|
|                 | 2 N St. George       | 2024/07/11 01:56 | VT 2A is closed at Butternut Road due to a washout.  |
| <b>Essex</b>    | South Lunenburg      | 2024/07/10 23:43 | River Road closed in Lunenburg due to flooding.  |
|                 | Bloomfield           | 2024/07/11 02:51 | VT 102 in Bloomfield closed due to flooding.   |
|                 | Canaan               | 2024/07/11 03:10 | CT-104 in Canaan just south of the CBP Port of Entry is closed due to high water and road washouts.  |
|                 | 1 S Norton           | 2024/07/11 04:33 | VT-114 in Norton is closed one mile south of the village due to high water and road washouts.  |
| <b>Lamoille</b> | Stowe                | 2024/07/10 22:48 | Multiple gravel roads and driveways washing out.   |
|                 | Johnson              | 2024/07/10 23:02 | Flooding on Route 15 1 mile southeast of Johnson.  |
|                 | Wolcott              | 2024/07/10 23:44 | VT 15 near Gulf Road flooded.  |
|                 | Johnson              | 2024/07/11 01:24 | Route 15 is flooded in multiple areas, Sinclair Road and French Hill Road are also flooded.  |
|                 | 4 SSE Jeffersonville | 2024/07/11 01:52 | The notch road has been closed due to flooding.  |
| <b>Orange</b>   | Williamstown         | 2024/07/10 20:21 | VT 14 closed in Williamstown due to flooding between Construction Hill and Business Center Road. Evacuations have been ordered.                |
| <b>Orleans</b>  | 2 E Orleans          | 2024/07/11 00:28 | VT 58 in Orleans is one lane between Churchill Road and Brownington Center Road due to a washout.  |
|                 | West Charleston      | 2024/07/11 04:18 | VT-105 from West to East Charleston is closed from Center School Road to Twin Bridges Road due to road washouts and a severely damaged bridge. |

|                   |                     |  |   |
|-------------------|---------------------|--|---|
| <b>Washington</b> | Colbyville          | 2024/07/10<br>18:25  | Water and rock debris on Route 100.   |
|                   | Barre               | 2024/07/10<br>20:00  | Multiple streets flooded in Barre. Evacuations ordered.   |
|                   | 1 WSW Middlesex     | 2024/07/10<br>21:21  | Rt 100B closed at Kenneth Ward Park due to flooding.  |
|                   | Marshfield          | 2024/07/10<br>21:42  | US-2 in Marshfield is closed by the Martin Covered Bridge due to high water.  |
|                   | 1 ENE Plainfield    | 2024/07/10<br>21:47  | US 2 flooded at Martin Covered Bridge near Plainfield Marshfield line.  |
|                   | Cabot               | 2024/07/10<br>22:21  | 9 roads partially or completely flooded/washed out as reported on map by fire department.   |
|                   | Plainfield          | 2024/07/10<br>23:09  | Partial building collapse on Mill Street with multiple rescues necessary.   |
|                   | 2 N Moretown        | 2024/07/11 00:36   | VT 100B in Moretown closed due to a complete washout around Stevens Brook Road.   |
|                   | Moretown            | 2024/07/11 01:11   | Numerous roads in Moretown are flooded and an evacuation has been ordered due to the Mad River.   |
|                   | 2 NE Berlin Corners | 2024/07/11 01:28   | US 302 in Berlin is closed due to flooding.   |
|                   | 2 N Worcester       | 2024/07/11 02:17   | VT 12 closed between Wrightsville and Elmore due to multiple washouts.  |
|                   | Duxbury             | 2024/07/11 03:00   | Route 100 by Ward Hill in Duxbury is closed due to a road washout. Social media image shows a destroyed culvert that took part of the road with it. |
|                   | Plainfield          | 2024/07/11 03:02   | US-2 in Plainfield is closed between Colburn Road and VT-214 due to multiple road washouts.   |
| Marshfield        | 2024/07/11 03:02    | US-2 in Marshfield is closed from Pike Road to Creamery Street due to multiple washouts. |   |

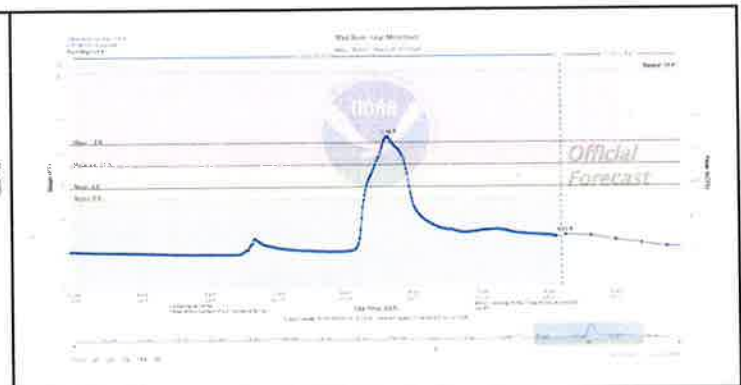
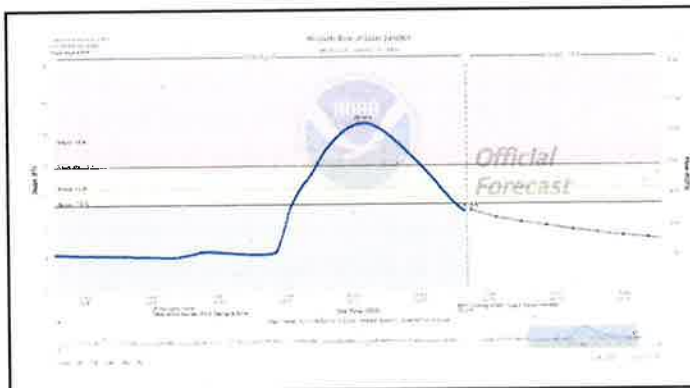


|  |           |                  |   |
|--|-----------|------------------|---|
|  | Middlesex | 2024/07/11 04:29 | US-2 Middlesex is closed just west of the State Highway Garage due to high water and road washouts. |
|--|-----------|------------------|---|

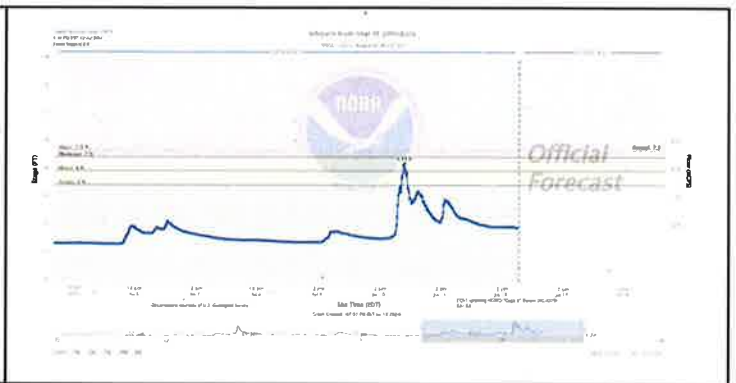
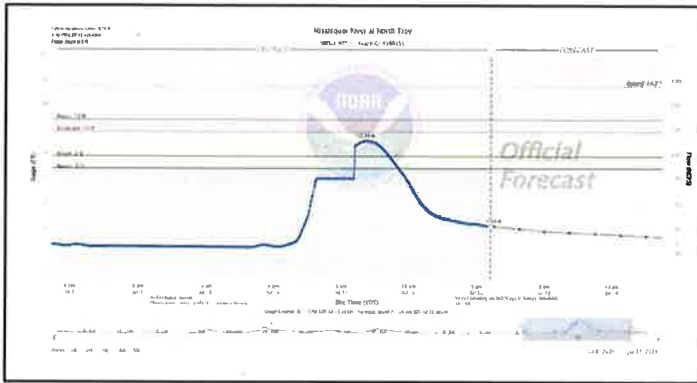
### River Flooding

Heavy rainfall and flash flooding in the headwater regions of some main stem rivers forced those rivers to rapidly rise during the early morning hours and throughout the day of July 11th. Six gauged locations experienced major flooding, with several more receiving minor to moderate flooding.

| Gage Name<br>Location             | Flood Stage<br>(feet) | Crested Stage<br>(feet) | Flood Category |
|-----------------------------------|-----------------------|-------------------------|----------------|
| Winooski at Essex Jct.            | 15                    | 20.5                    | MAJOR          |
| Mad River at Moretown             | 9                     | 13.5                    | MAJOR          |
| Lamoille at Johnson               | 13                    | 17.8                    | MAJOR          |
| Lamoille at Jeffersonville        | 450                   | 453.4                   | MAJOR          |
| Passumpsic at Passumpsic          | 14                    | 21.2                    | MAJOR          |
| E Branch Passumpsic at East Haven | 6.5                   | 10.7                    | MAJOR          |
| Winooski at Waterbury             | 419                   | 424.9                   | Moderate       |
| Wells at Wells River              | 6                     | 8.2                     | Moderate       |
| Barton at Coventry                | 8                     | 10                      | Minor          |
| Connecticut River at Dalton       | 17                    | 17.8                    | Minor          |
| Connecticut River at Wells River  | 11                    | 11.5                    | Minor          |
| Missisquoi River at North Troy    | 9                     | 10.2                    | Minor          |
| Sleepers River near St. Johnsbury | 6                     | 6.6                     | Minor          |
| Winooski at Montpelier            | 15                    | 14.5                    | Action         |



The Honorable Joseph R. Biden, Jr.  
August 2, 2024



### Wind Damage Reports

While most of the storm reports were related to the exceptionally heavy rainfall, the initial thunderstorms in the late afternoon and early evening on July 10th were severe and produced damaging winds in some locales.

| County            | Location          | Date/<br>Time (EDT) | Summary  |
|-------------------|-------------------|---------------------|--|
| <b>Addison</b>    | 1 E Monkton Ridge | 2024/07/10 16:55    | Tree down on States Prison Hollow Rd                   |
|                   | 1 N Bridport      | 2024/07/10 17:49    | Numerous trees down near 2504 route 22A in Bridport.   |
|                   | Weybridge         | 2024/07/10 19:00    | Trees and wires down in Weybridge and New Haven areas. |
|                   | 1 NE Bristol      | 2024/07/10 19:10    | Trees and wires down on Meehan Road                    |
| <b>Chittenden</b> | 1 E Jonesville    | 2024/07/10 17:10    | Tree down on I-89 Southbound near mile marker 73.      |
| <b>Orange</b>     | 1 SW Orange       | 2024/07/10 19:21    | Tree down into power lines on Tucker Road in Orange.   |
| <b>Washington</b> | 1 E North Duxbury | 2024/07/10 17:08    | Picture of tree down onto US 2                         |

Matt Doody, Scott Sukup, Peter  
Wichrowski, Howard Silverman, David  
Manning

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**Emergency Response  
Meteorologists NWS  
Eastern Region  
Headquarters**