

PETER SHUMLIN
Governor



State of Vermont
OFFICE OF THE GOVERNOR

**REQUEST FOR PRESIDENTIAL DISASTER DECLARATION
GOVERNOR'S REQUEST COVER LETTER
MAJOR DISASTER OR EMERGENCY**

May 21, 2014

The Honorable Barack Obama
President of the United States
The White House
Washington, D. C.

Through: Mr. Paul Ford
Acting Regional Administrator
FEMA Region I
99 High Street
Boston, MA 02110

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 CFR § 206.36, I request that you declare a Major Disaster for the State of Vermont as a result of flooding which occurred in Vermont from April 15 through April 18, 2014.

Beginning on April 15, 2014, there was widespread flooding, due to the combination of a moderate to heavy rainfall and rapid snow melt of an abnormally high snowpack, across a large portion of central and northern Vermont, with the greatest impacts in Caledonia, Essex, Franklin, Lamoille, Orange, Orleans and Washington counties.

There were concentrated areas of major and flash flooding that washed out roads, culverts and caused significant structural flooding in the above-mentioned counties. Although in counties not covered by this request, the lake level of Lake Champlain exceeded the 100 foot flood stage on April 17, rising more than five feet since the end of March, and eventually peaked at 100.5 feet on April 21, causing some structure flooding of lakeshore homes and seasonal camps.

The meteorological factors and precursors for this incident are more fully described in the attached memorandum of April 28, 2014 ("Weather Summary for the Spring Flooding across Vermont – April 15-18th, 2014") from Scott Whittier, Warning Coordination Meteorologist for the NOAA/National Weather Service based in Burlington, Vermont.

The National Weather Service placed all of Vermont under Flood Watch from April 14 through the evening of April 16. The Vermont Division of Emergency Management and Homeland Security created an incident in DisasterLan, "Riverbank Flooding 2014", on Tuesday, April 14. Vermont's State Emergency Operations Center (SEOC) was activated at Partial Activation level as of 1900 on Tuesday, April 15 and was staffed through the night and throughout the day shift on April 16. Early in the morning on April 16, the National Weather Service reported that most rivers around Vermont were already receding and expected to drop below flood stage later in the day. However, wintry conditions prevailed that morning, with snow and icy spots presenting travel challenges in many areas.

Many Vermont towns experienced significant damage. While only the seven northern counties of the state suffered damages in excess of the county thresholds, some damages were also reported in Chittenden, Addison, and Windsor counties.

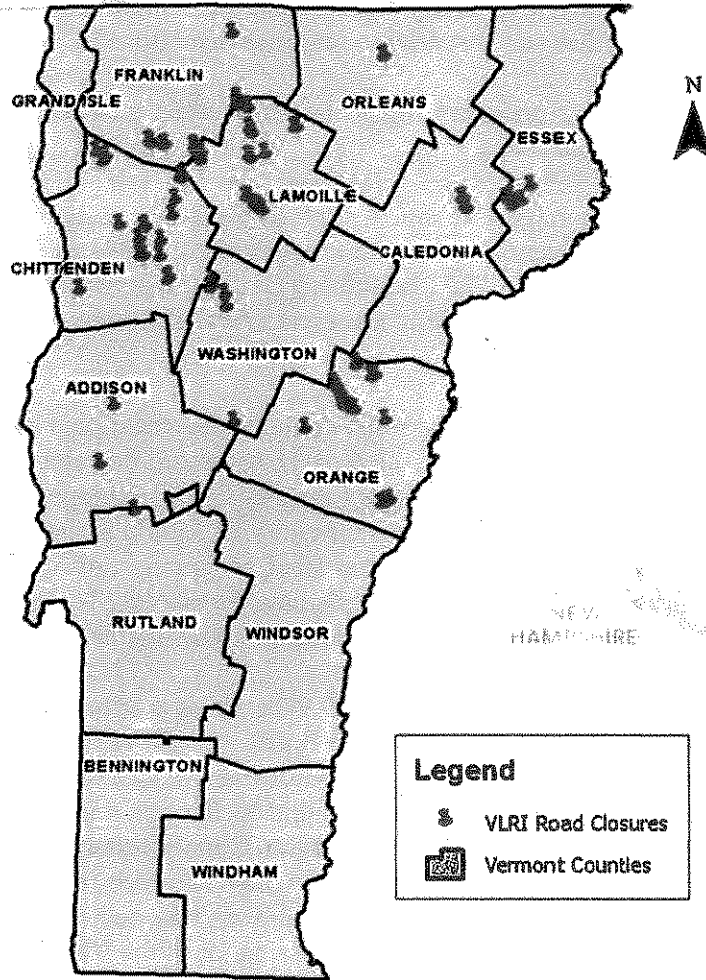
Fortunately, no deaths or injuries were reported. The American Red Cross supported three families in Barton with lodging due to water in the basement of their apartments, provided lodging for a family in Leicester overnight, and opened a shelter in Lyndonville at the Lyndonville Fire Department which lodged six people overnight on April 15. Five swift water teams were staged or on standby, with Stowe Mountain Rescue forward deployed to Berlin. Stowe stood down at 0700 Wednesday, April 16th.

Dozens of roads were closed due to flooding starting on April 15, in communities including: Kirby and Sheffield in Caledonia County; Milton, Richmond, and St. George in Chittenden County (not requested); Enosburg, Fairfax, Fletcher, and Georgia in Franklin County; Johnson in Lamoille County; Charleston and Jay in Orleans County; and Duxbury in Washington County. With some exceptions such as Willow Lane in St. George, Cadreact Road in Milton, and Wilder Road in Duxbury, most roads were re-opened by the end of the incident period.

Twelve state roads were closed, and 58 communities reported transportation infrastructure damage. Rivers/waterbodies which were monitored during the event included: Otter Creek, Winooski River, Passumpsic River, Lamoille River, Mississquoi River, Connecticut River, and Lake Champlain.

Based on an on-the-ground assessment, I did not declare a State of Emergency but activated the State Emergency Operations Plan (SEOP) to facilitate the provision of state resources to support local response and recovery operations through the state multi-agency coordination system. The Division of Emergency Management and Homeland Security staff maintained situational awareness, hosted conference calls with State Support Functions and Emergency Management Directors, and issued press releases warning the public of the dangers of the high rivers and the potential for flash flooding. Military Support monitored the situation from the Operations Center at Camp Johnson, and the National Guard had their vibratory sandbag machines at the ready, in the event of a request from a town or agency.

**Local Road Closures Reported in VLRI* Geo-Database
During the Period of
04/15/2014 12:00 AM - 04/19/2014 12:00 AM**



20 10 0 20 Miles

Vermont Local Road Information

Copyright ©2013 Esri, DeLorme, NAVTEQ

Document Path: \\vem14d020345E0CShare\Event_Riverbank-Flooding2014\MXDs\SEOC_VLRIclosuresPushPinMap_20140428_1155.mxd

State Support Function Agencies assisted with response and recovery throughout the incident period. The Agency of Transportation (AOT) sent representatives to the SEOC, monitored the situation every day from the Transportation Operations Center, and made swift repairs to closed roads and serious washouts. Not only was there damage to local infrastructure, but AOT estimates approximately \$400,000 in damage to highways on the Federal Highway Administration system, including \$200,000 of road damage in Fletcher, Vermont in Franklin County.

The National Weather Service provided timely and relevant information on the weather throughout the incident period that was essential to response operations.

As of mid-afternoon on April 17, flood warnings remained in effect for parts of Rutland, Lamoille, Orleans, and Franklin counties.

I requested a joint preliminary damage assessment for Caledonia, Essex, Lamoille, and Orange Counties on April 22, and sent an addendum requesting to add Franklin, Orleans, and Washington Counties on April 25. The Preliminary Damage Assessment (PDA) teams were composed of local, state and federal representatives. The PDA was completed on May 14, 2014.

Based on the results of the PDA, the majority of the damage incurred in this event was to roads and culverts. Statewide, \$1,206,504 (i.e. 71% of the estimated damages surveyed in PDAs) was Categories C; \$420,352 (i.e. 25%) was Category G (rail damage in Orange and Orleans Counties); and \$65,920 (i.e. 4%) was Category B. Although the impact of this incident is widespread with damages reported in 10 of 14 counties, of which we believe that at least all seven exceeded their county damage thresholds. To date, we are not aware that any of the damaged infrastructure is covered by insurance.

FEMA's PDA tally for Washington County was \$149,970, which is \$58,399 shy of the county threshold of \$208,399. Please note in Exhibit B that we believe the eligible damages for Washington County are \$241,458, i.e. \$33,089 above the county threshold. Accordingly, we are including Washington County in this declaration request. The basis for this is as follows: All reported damages in Washington County occurred in the town of Duxbury. In the case of the culvert on Wilder Road, which has been repetitively damaged in previous storms, the PDA damage estimate did not take account of an existing hydraulic study by AOT calling for culvert upsizing, or of the Vermont Stream Alteration General Permit requirements for a culvert which will meet bank full width and pass debris.

In writing up the Wilder Road (Location 1) damages, FEMA's Project Specialist captured the damages as follows: "Due to high velocity flows a 60 in D x 42 L FTCMP washed out, resulting in the washout of approx. 10 FT. L x 8 FT W x 8 FT D Inlet/outlet Wing Walls, scouring of avel road (*sic*) scoured approximately 40 FT L x 22 FT W x 3 FT D (including road shoulders) and washout of 40 LF of guardrail." The total assigned cost estimate for replacement was **\$20,187**. This is grossly insufficient to accomplish replacement in accordance with applicable codes and standards.

This is a structure that has failed at least twice before. A few years ago, the Town of Duxbury applied unsuccessfully for a competitive 2013 Town Highway Grant from AOT to upgrade this culvert, based on a March 1, 2013, hydraulics study conducted by an AOT Project Engineer, to a hydraulically-appropriate 12'x7' concrete box, at an estimated cost of \$195,000. They did not get the grant in 2013 because of lack of available program funding.

In an attempt to lower cost of replacing the culvert in a hydraulically adequate manner, the town's contracted engineer has now proposed a 12'7" x 7'5" aluminum pipe-arch culvert, which would have an estimated total cost of only **\$111,675**.

Vermont Agency of Natural Resources River Engineer Patrick Ross writes:

"... in this case FEMA is actually ignoring all Vermont Standards. The town of Duxbury had an AOT Hydraulics Study done on this site (pre-flood), that study recommended a larger structure than would be required to meet the minimum ANR General Permit standard... I believe in most cases currently our hydraulic structure size criteria is very close, that is, AOT and ANR. Personally, I think it would be hard for FEMA to ignore the VT Standards on this one with an AOT H&H study in hand..."

...if the PDA limit was met for Washington County – Wilder Road culvert would clearly be more than 50% damaged and FEMA would require an AOT H&H study for replacement options. The cost of any of the replacement option meeting VT Standards would dwarf that of the in-kind replacement."

A properly written Project Worksheet for Wilder Road will show eligible damages of at least \$111,675. Accordingly, we believe that Washington County's eligible damages are as shown in Enclosure B, exceeding the county threshold.

Even if FEMA does not concur that the cost of upgrading the culvert on Wilder Brook Road (Location 1) is eligible as required by codes and standards, **I request that the Town of Duxbury be included based on extraordinary localized impact.**

Duxbury is a tiny community, with a 2010 census population of 1,337. Duxbury has incurred extensive road damage in several disasters since 2011. During DR1995 in May 2011, federal PA share in Duxbury was \$669,931. Then, during DR4022, Tropical Storm Irene in August 2011, federal share in Duxbury was another \$629,595. In DR4140, the flash flooding of June-July 2013, Duxbury incurred another \$47,146 of federal share. Even if eligible damages in Duxbury from the April 15-18, 2014, event were "only" \$149,970, that still represents \$112.17 per capita. Further, *the cumulative impact of federally declared disasters on the public infrastructure of this one little town since 2011 add up to \$1,119 per capita.*

In the nearly three years since Tropical Storm Irene in August 2011 (DR4022), Vermont has experienced four more presidentially declared major disasters: DR4066 (flooding in May 2012), DR4120 (flooding in May 2013), DR4143 (flooding in June-July, 2013), and DR4163 (an ice storm in December 2013). To put this April event in the context of other recent flooding events, it appears to be roughly twice the magnitude of DR4066, roughly analogous in size to DR4120, and approximately half the size of DR4140. To date, the

federal shares obligated for these recent disasters statewide are: \$207,085,357.36 for DR-4022, \$976,893.54 for DR-4066, \$1,775,817.48 for DR-4120, \$5,146,870.19 for DR-4040, and \$228,875.22 for DR-4163.

It should be further noted that many of the towns hit by this event are already challenged by the financial burden of local share for costs associated with the DR4163 December 2013 ice storm, which was declared for the northern seven counties of the state, including five of the seven counties (Caledonia, Essex, Franklin, Lamoille, and Orleans) covered in this request.

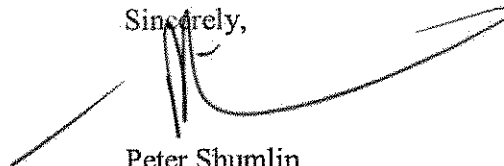
This series of disasters, piled on top of the ongoing recovery efforts associated with DR4022 (Tropical Storm Irene, from which there remain over one hundred open large Project Worksheets) continue to severely stress local and state resources.

Some of the hardest hit towns (all of which have been hit by one or more other disasters in the past three years) include: in Caledonia County, the little town of Barnet, with 1,690 people, had damages of \$50 per capita, and the town of Kirby, with 456 people, had damages of \$105 per capita. In Franklin County, the town of Montgomery, population 992, which was hard hit by the December ice storm, had damages of \$102 per capita. In Lamoille County, the town of Johnson, population 3,274, hard hit in May 2011 and again in December 2013, had damages of \$63 per capita. And in Orange County, the town of Thetford, population 2,612, had damages of \$24 per capita.

The infrastructure costs of the April 15-18 flooding are beyond the financial capabilities of the impacted communities, and well beyond the financial resources of the State's Emergency Relief and Assistance Fund (ERAF) as budgeted by the Vermont legislature.

In light of these impacts, I ask that you declare a major Public Assistance and 404 Hazard Mitigation disaster for this event. Thank you for your continuing support of Vermonters as we endeavor to recover from an increasingly alarming succession of major flood disasters.

Sincerely,



Peter Shumlin
Governor, State of Vermont

Enclosures

- A: N/A (Individual Assistance not requested)
- B: Public Assistance
- C: Requirements for Other Federal Agency Programs
- OMB No. 1660-0009/FEMA Form 010-0-13
- D. Weather Summary for the Flooding of April 15-18, 2014.

ENCLOSURE A TO MAJOR DISASTER REQUEST

Estimated Requirements for Individual Assistance
under the Stafford Act

The State of Vermont is not requesting Individual Assistance for this event.

Estimated Stafford Act Requirements for Public Assistance

DAMAGE ASSESSMENT WORKSHEET

VERMONT

Date: 5/20/2014		PUBLIC DAMAGE											
Report #:	A	B	C	D	E	F	G	TOTAL	POP. '10	\$/CAP.	\$/3.50/CAP.	SHORT	
Addison Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	36,821	\$0.00	\$128,874	(\$128,874)	
Bennington Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	37,125	\$0.00	\$129,938	(\$129,938)	
Caledonia Co	\$0	\$0	\$133,319	\$0	\$0	\$0	\$90,692	\$224,011	31,227	\$7.17	\$109,295	\$0	
Chittenden Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	156,545	\$0.00	\$547,908	(\$547,908)	
Essex Co	\$0	\$0	\$212,064	\$0	\$0	\$0	\$0	\$212,064	6,306	\$33.63	\$22,071	\$0	
Franklin Co	\$0	\$4,783	\$139,488	\$0	\$0	\$0	\$65,435	\$209,706	47,746	\$4.39	\$167,111	\$0	
Grand Isle Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	6,970	\$0.00	\$24,395	(\$24,395)	
Lamoille Co	\$0	\$61,137	\$264,811	\$0	\$0	\$0	\$0	\$325,948	24,475	\$13.32	\$85,663	\$0	
Orange Co	\$0	\$0	\$103,680	\$0	\$0	\$0	\$264,225	\$368,105	28,936	\$12.72	\$101,276	\$0	
Orleans Co	\$0	\$0	\$111,484	\$0	\$0	\$0	\$0	\$111,484	27,231	\$4.09	\$95,309	\$0	
Rutland Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	61,642	\$0.00	\$216,747	(\$216,747)	
Washington Co	\$0	\$0	\$241,458	\$0	\$0	\$0	\$0	\$241,458	59,534	\$4.06	\$208,369	\$0	
Windham Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	44,513	\$0.00	\$155,796	(\$155,796)	
Windsor Co	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	56,670	\$0.00	\$198,345	(\$198,345)	
State Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	State POP	\$/CAP.	\$1.35/CAP.	SHORT	
TOTALS	\$0	\$65,920	\$1,206,504	\$0	\$0	\$0	\$420,352	\$1,692,776	625,741	\$2.71	\$1,000,000	\$0	
NOTES:	DEBRIS CLEARANCE	PROTECTIVE MEASURES	ROAD SYSTEM	WATER CONTROL	BUILDINGS & EQUIPMENT	PUBLIC UTILITY	PARKS & OTHER		625,741	State Population total check-sum			
PDA Percentages	0.00%	3.66%	71.27%	0.00%	0.00%	0.00%	24.83%						

[illegible]

ENCLOSURE C TO MAJOR DISASTER REQUEST

Estimated Assistance from Other Federal Agency Programs

County	SBA Home Loans	SBA Business Loans	FSA Loans	NRCS	FHWA	USACE	OTHER
<i>Caledonia</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Essex</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Franklin</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Lamoille</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Orange</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Orleans</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
<i>Washington</i>	<i>TBD</i>	<i>TBD</i>	<i>TBD</i>		<i>TBD</i>		
Totals							

Note: Provide numbers and amounts, as appropriate.

ENCLOSURE D TO MAJOR DISASTER REQUEST

National Oceanic and
National Weather Service
Weather Forecast Office
1200 Airport Dr



Atmospheric Administration

Burlington, VT

South Burlington, VT 05403
www.weather.gov/btv

April 28, 2014

MEMORANDUM: FOR THE RECORD

FROM: Scott Whittier, Warning Coordination Meteorologist
NOAA/National Weather Service Burlington, VT

SUBJECT: Weather Summary for the Spring Flooding across Vermont -
April 15-18th, 2014.

Widespread flooding, due to the combination of a moderate to heavy rainfall and a rapid snow melt of an abnormally high snowpack, occurred across a large portion of central and northern Vermont between April 15-18th, with the greatest impact occurring across Caledonia, Essex, Franklin, Lamoille, Orange, Orleans and Washington counties.

Most of the flooding in Vermont was minor to moderate in nature with flooded fields, streets and basements. However, there were concentrated areas of major, even flash flooding that washed out roads, culverts and caused more significant structural flooding in those previously mentioned counties. In addition, the lake level of Lake Champlain exceeded the 100 foot flood stage on April 17th, rising more than 5 feet since the end of March, and eventually peaking at 100.5 feet (April 21st), causing some structure flooding of lakeshore homes and seasonal camps (Attachment 13).

Meteorological Set-up (Precursor) –

The winter of 2013-14 witnessed a normal to slightly above normal snowfall for Vermont, much of this snowfall was concentrated in February and March. In addition, the meteorological winter (Dec-Feb) of 2013-14 averaged 2-3 degrees colder than normal and March 2014 was the 4th coldest March on record, averaging 8-10+ degrees below normal (Attachments 1-2).

The end result was that snow packs across Vermont were deeper with greater water content than normal from mid-late March to the flood event in mid-April. As of March 26th, snow depths across Vermont ranged from 6-12 inches in the Champlain Valley, 18-30+ inches in the Connecticut River and Mountain valleys to 30-50+ inches around 2000 feet elevation with 50-80+ inches along the summits of Vermont's mountains. Snow-water equivalents of this

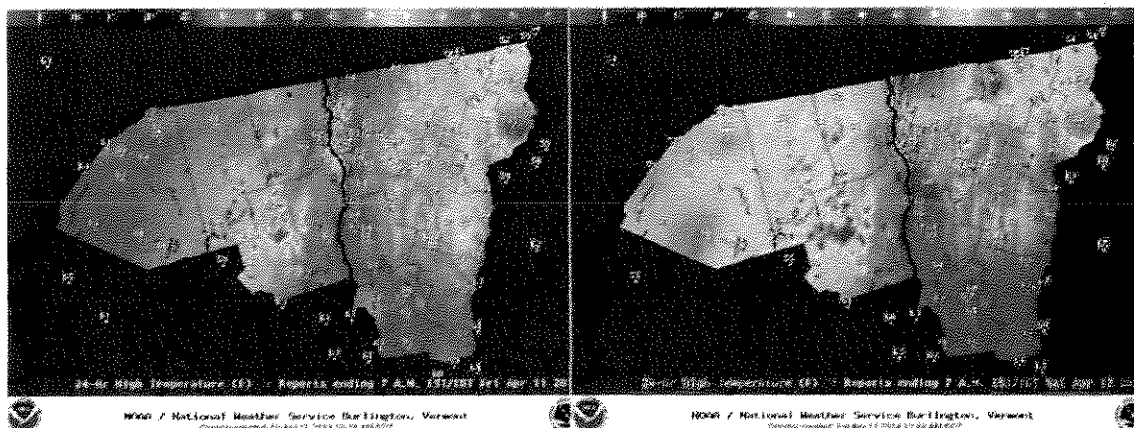


High Temperatures



April 10th

April 11th



Attachment #4 – High Temperatures for April 10th-11th, 2014

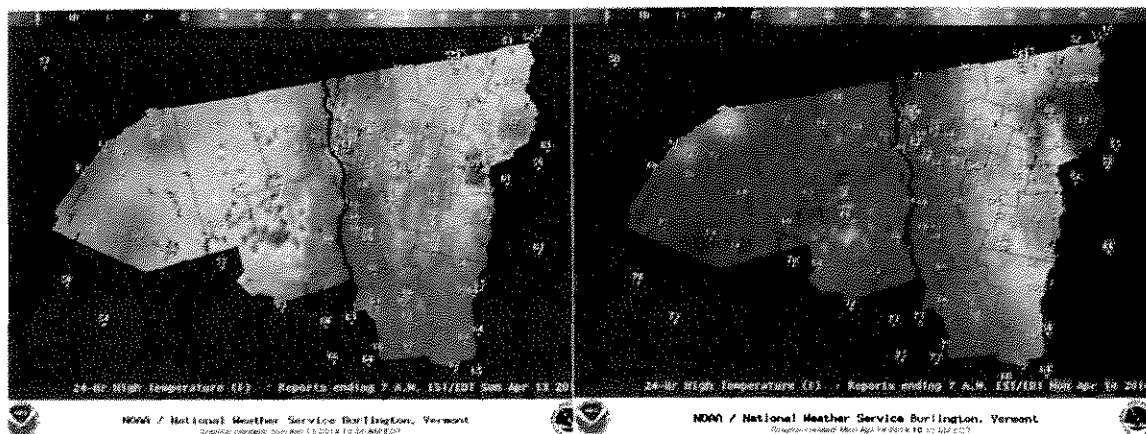


High Temperatures



April 12th

April 13th



Attachment #5 – High Temperatures for April 12th-13th, 2014



A Tale of Two Winters (St. J) Reality vs. Perception



Average Monthly Temperatures - St. Johnsbury

	Dec	Jan	Feb	Winter	Mar
Normals (1981-2010)	23.2	16.7	19.4	19.8	30.3
2013-14	21.1	15.8	16.2	17.7	18.9
2011-12	26.1	20.1	24.3	23.5	38.8

Average Monthly Departures - St. Johnsbury

	Dec	Jan	Feb	Winter	Mar
Normals (1981-2010)	23.2	16.7	19.4	19.8	30.3
2013-14	-2.1	-0.9	-3.2	-2.1	-11.4
2011-12	2.9	3.4	4.9	3.7	8.5

Sites	# Days AOB Zero			
	Normal	2013-14*	ALL-TIME	Since
BTV	17	17	24 48 (1833-34)	1884
MPV	24	24	42 50 (1958-59)	1949
1VA	26	26	48 57 (1904-05)	1994
MSS	30	30	46 53 (1983-84)	1949
SLK	Not Avbl	68	59 (2002-03)	1996

2013-14 from APR 14

Attachment #2 – Average Monthly Temperatures for Dec 2013-Mar 2014 for St. Johnsbury, VT

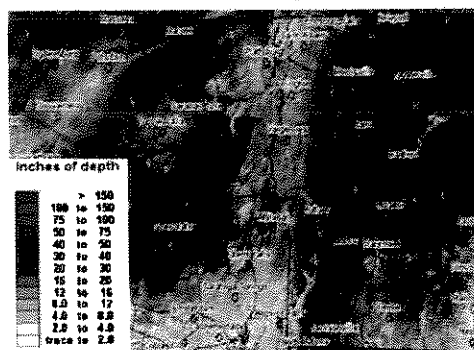


Snow Depth and Water Equivalent (3/26) ABOVE NORMAL



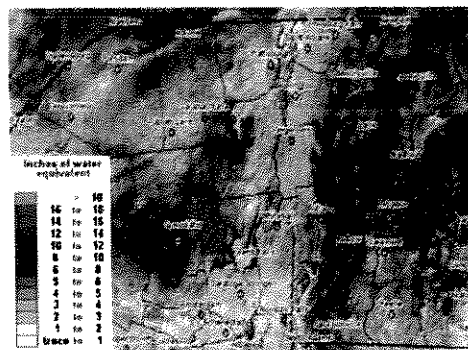
<http://www.noahsc.noaa.gov/Interactive/html/map.html>

Snow Depth



6-12" in Champlain Valley
10-15" in St. Lawrence Valley
18-24" CT River Valley
20-40" in Mountain Valleys
30-50+ in Mountain Mid-Slopes
50-80+ at Summits

Water Equivalent



2-3" in Champlain Valley
3-5" St. Lawrence/CT River Valleys
4-6+ in Mountain Valleys
6-9+ in Mountain Mid-Slopes
8-12+ at Summits

Attachment #3 – Snow Depths and Snow Water Equivalents - 26 March 2013

The Passumpsic River at Passumpsic witnessed its 5th highest observed peak with significant flooding from the headwaters in Caledonia and Essex counties through St. Johnsbury to the Connecticut River (Attachments 9-10).

The Lamoille River from the headwaters in Caledonia county, through communities of Johnson, Jeffersonville and Cambridge in Lamoille county (Attachment 11).

Significant flooding was also observed and recorded along the Missisquoi River and many of its tributaries in Orleans and Franklin counties (Attachment 12).



A Tale of Two Winters (BTV) Reality vs. Perception



Average Monthly Temperatures - BTV

	Dec	Jan	Feb	Winter	Mar
Normale (1981-2010)	25.0	18.7	21.5	22.0	31.0
2013-14	23.5	16.3	20.2	20.7	22.1
2011-12	30.6	24.5	26.4	27.8	43.2

Average Monthly Departures - BTV

	Dec	Jan	Feb	Winter	Mar
Normale (1981-2010)	25.0	18.7	21.5	22.0	31.0
2013-14	-2.3	-0.4	-1.3	-1.3	-8.9
2011-12	4.8	5.8	6.9	5.8	12.2

2011-12: 2nd Warmest

2013-14: Cooler than normal, YET
still 5 degrees milder than Top 10 Coldest

Sites	# Days AOB Zero			Since
	Normal	2013-14*	ALL-TIME	
BTV	17	24	45 (1839-34)	1884
MPV	24	42	50 (1956-59)	1949
IV4	26	48	57 (1904-05)	1894
MSS	30	46	57 (1993-94)	1949
SLK	Not Avail	60	59 (2002-03)	1999

2013-14 thru 4/1/14

2

Attachment #1 – Average Monthly Temperatures for Dec 2013-Mar 2014 for Burlington, VT

snowpack ranged from 2-3 inches in the Champlain Valley, 4-6+ inches in the Connecticut River and mountain valleys, and 8-12+ inches in the mountain summits (Attachment 3).

On March 28-29th, a storm system delivered around an inch of rainfall to Vermont along with temperatures in the 40s. This combination produced enough surface water run-off to cause many streams and small rivers to rise substantially with only isolated nuisance flooding and some localized minor ice jam flooding. The main impact was the "ripening" of the snowpack (the transition from a cold/dry snowpack to a wet/melting snowpack) and causing waterways to flow at abnormally high levels for any future episodes.

In early April, above freezing temperatures (40s/50s) and a few light (<0.25 inches) precipitation events continued the trends established by the March 28-29th event, especially "ripening" the snowpack to promote accelerated snow melt with any future above freezing temperatures and/or rainfall.

Flooding Event –

NWS Burlington issued Flood Watches for Vermont on Friday afternoon (April 11th) for the possibility of isolated to scattered flooding due to accelerated snow melt for the weekend through Monday. The main emphasis of this flood watch was a forecasted heavy rainfall event of 1 to 2 inches expected for April 15th, combined with the accelerated snow melt, that was likely to cause widespread minor to moderate flooding.

Abnormally mild temperatures in the 60s occurred on April 10th-13th that promoted an accelerated snow melt which peaked on April 14th and April 15th, as temperatures reached the 70s to lower 80s on April 14th and remained in the 60s during the heavy rainfall on April 15th (Attachments 4-6).

Heavy rainfall moved into Vermont during the afternoon of April 15th, coinciding with the peak discharge from the accelerated snow melt, and exited during the night. Rainfall amounts were generally 1 to 1.5 inches across the northern half of Vermont (Addison-Orange counties northward) with lesser amounts in southern Vermont and Washington county (Attachment 7).

Total potential water equivalents into local watersheds, being cumulative snow water equivalent loss from the snow pack (April 11-15th) and rainfall (April 15th), was generally 3-5+ inches for the impacted areas (Attachment 8).

Although much of the flooding was attributed to gradually overflowed larger streams and main stem rivers, there was evidence of "flash flood" type flooding with blown-out culverts and washed out roads as smaller streams rose rapidly could not handle the surface water run-off from amounts stated above.

There is limited gaging of waterways in the impacted area, but those that have gages did witness flooding, like the Passumpsic, Lamoille and Missisquoi river basins.

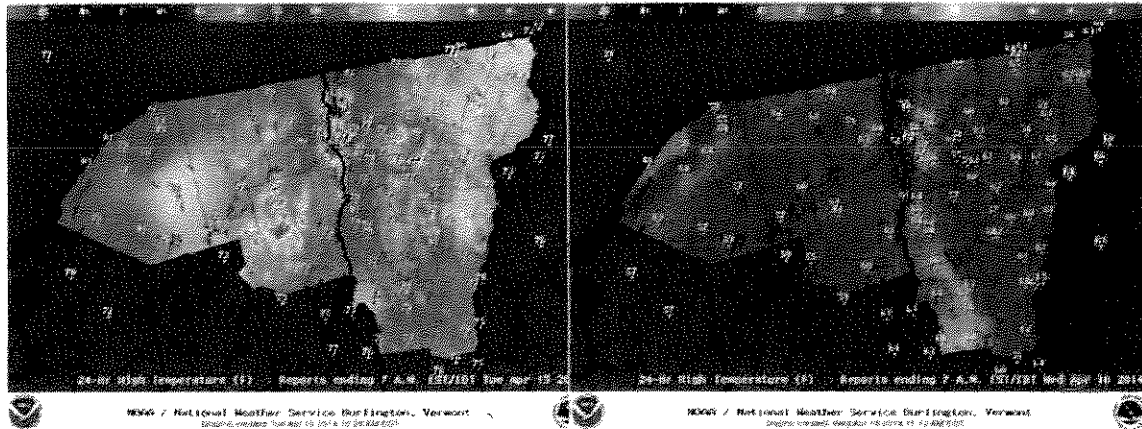


High Temperatures



April 14th

April 15th



Attachment #6 – High Temperatures for April 14th-15th, 2014

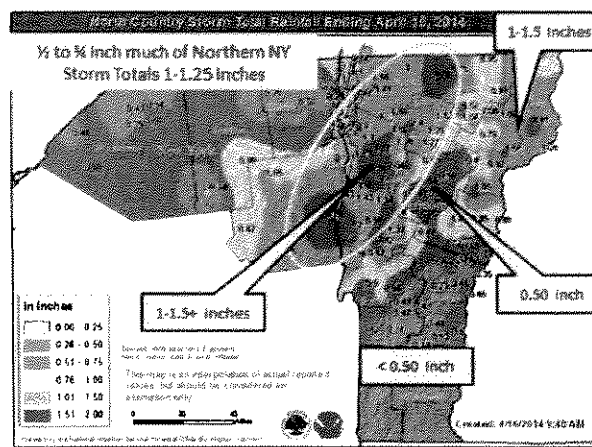
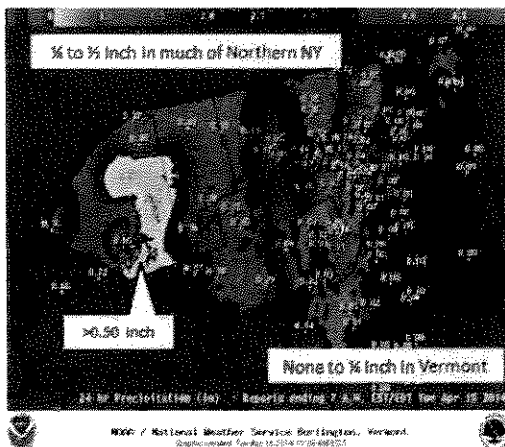


Precipitation

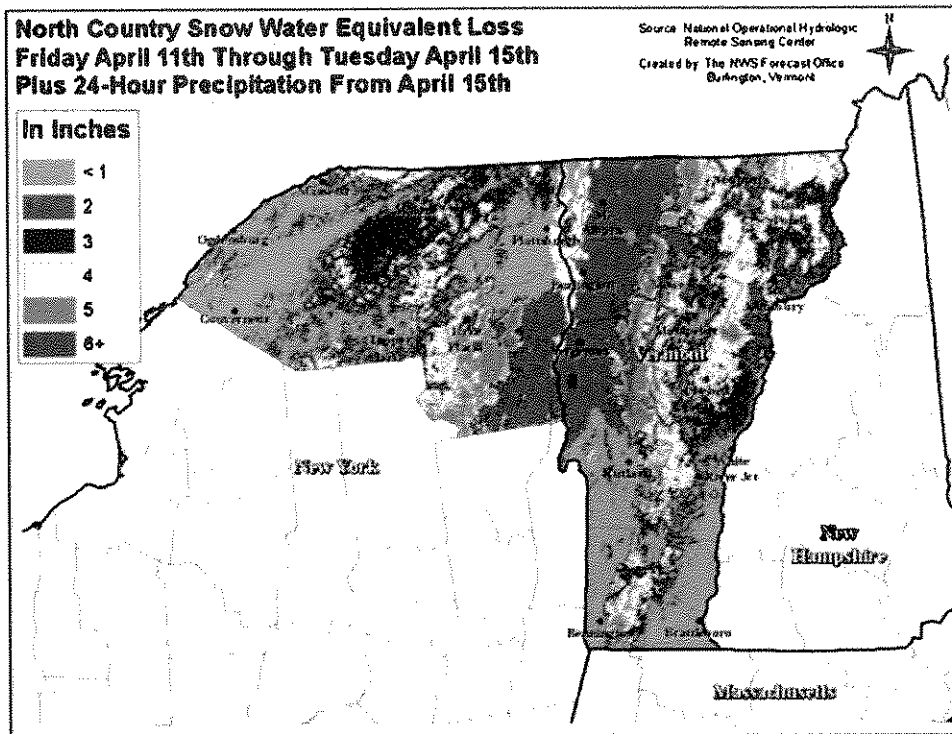


Ending 8 am Tuesday

Ending 8 am Wednesday



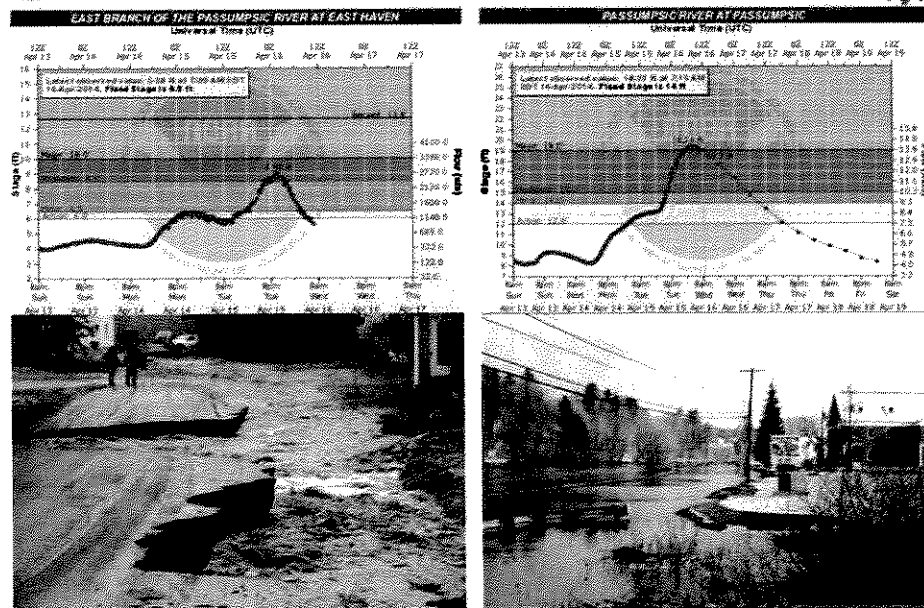
Attachment #7 – 24 Hour Precipitation ending 8 am April 15th and 8 am April 16th, 2014



Attachment #8 – Cumulative Snow water Equivalent Loss and Precipitation April 11-15th, 2014



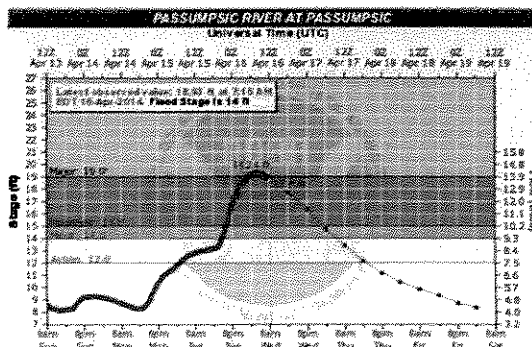
Passumpsic



Attachment #9 – Hydrographs for Passumpsic River at East Haven and Passumpsic, VT



Passumpsic



Historical Crests
 (1) 31.50 ft on 11/04/1927
 (2) 23.49 ft on 07/01/1973
 (3) 21.23 ft on 03/18/1973
 (4) 19.30 ft on 06/13/2002
 (5) 18.95 ft on 05/27/2011

22 AREA TOWNS SUCH AS EAST BURKE, WEST BURKE, LYNDONVILLE AND ST. JOHNSBURY WILL BE ISOLATED BY FLOODED ROADS. FLOODING WILL BE SIMILAR TO WHAT WAS SEEN IN JULY 1973 AND MARCH 1976.

19 WIDESPREAD FLOODING WILL OCCUR IN LYNDONVILLE AND SAINT JOHNSBURY CENTER. HOMES AND BUSINESSES ON ROUTE 5 ALONG THE PASSUMPSIC FROM LYNDONVILLE TO SAINT JOHNSBURY WILL BE INUNDED. FLOODING MAY ALSO OCCUR UPSTREAM ALONG JOE'S BROOK. FLOODING SIMILAR TO JUNE 12 2002, JULY 1 1973, AND MAY 26 2011.

17 ROUTE 5 FLOODS ON BOTH NORTH AND SOUTH SIDES OF LYNDONVILLE, AS WELL AS AT THE CENTER STREET BRIDGE. WITH HOMES AND BUSINESSES ALONG THE PASSUMPSIC TAKING ON WATER. SIGNIFICANT FLOODING OCCURS ON ROUTE 5 AND OLD CENTER ROAD IN SAINT JOHNSBURY CENTER. FLOODING MAY ALSO OCCUR UPSTREAM ALONG THE SLEEPERS RIVER IN SAINT JOHNSBURY. FLOODING WILL BE SIMILAR TO IRENE IN 2011.

15 ROUTE 5 WILL FLOOD IN ST. JOHNSBURY CENTER.

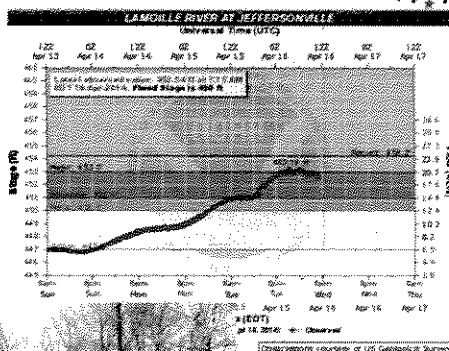
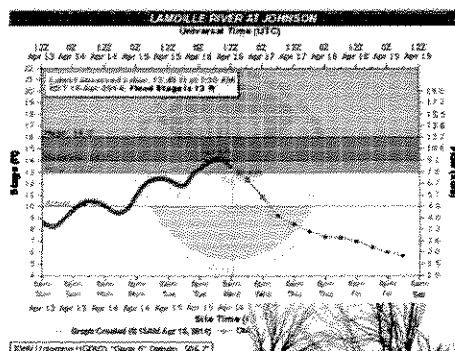
14 LOW LYING TRAILER HOMES NEAR THE RIVER WILL SEE SOME MINOR FLOODING.

34

Attachment #10 – Hydrograph/Impact Statements for Passumpsic River at Passumpsic, VT



Lamoille

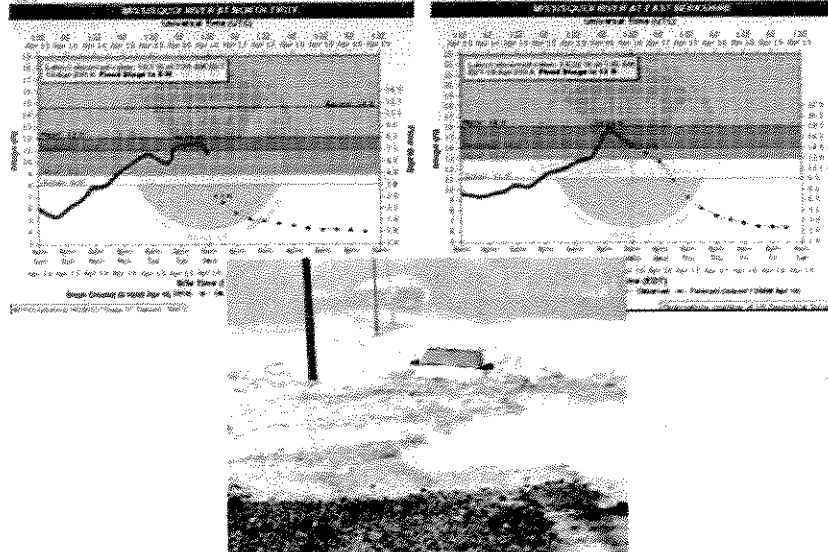


37

Attachment #11 – Hydrographs for Lamoille River at Johnson and Jeffersonville



Missisquoi

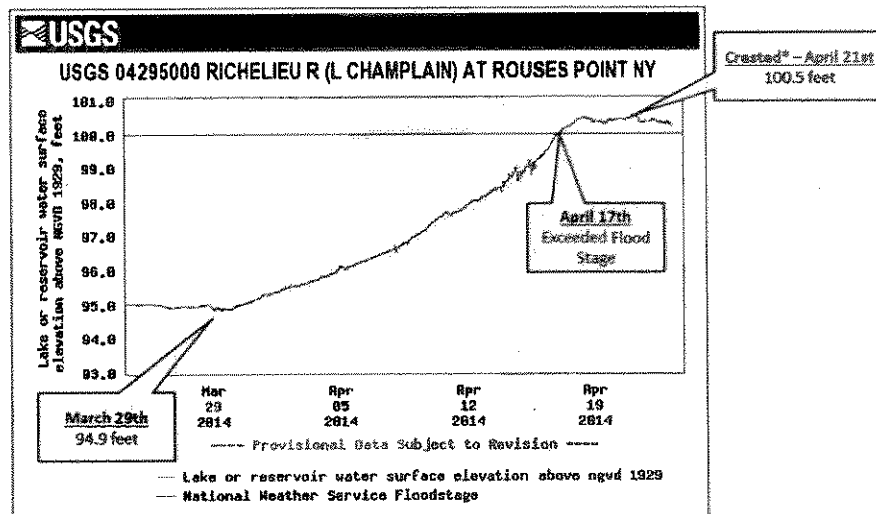


33

Attachment #12 – Hydrographs for Missisquoi River at North Troy and East Berkshire



Lake Champlain



http://waterdata.usgs.gov/ny/nwis/hv/?site_no=04295000

44

Attachment #13 – Hydrograph for Lake Champlain at Rouses Point, NY

DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

OMB No. 1660-0009 Expires March 31, 2015

**REQUEST FOR PRESIDENTIAL DISASTER DECLARATION
MAJOR DISASTER OR EMERGENCY**

1. Request Date May 21, 2014

Burden Disclosure Notice

Public reporting burden for this form is estimated to average 9 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and submitting the form. This collection of information is required to obtain a benefit. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing the burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472, Paperwork Reduction Project (1660-0009). **NOTE: Do not send your completed form to this address.**

Completion of this form including applicable attachments satisfies legal requirements for emergency and major disaster declaration requests under 42 U.S.C. §§ 5170 and 5191, respectively, as implemented at 44 C.F.R. §§ 206.35 and 206.36. Failure to use this form may result in a failure to meet these requirements and/or a delay in processing the request.

2a. Name of State (as defined in Stafford Act 102, 42 U.S.C. § 5122) or Indian tribal government requesting declaration. Vermont		2b. Population (as reported by 2010 Census) or estimated population of Indian tribal government's damaged area(s). 625,741
3. Governor's or Tribal Chief Executive's Name Peter Shumlin	4. Designation of State or Tribal Coordinating Officer upon declaration (if available) and phone number Ross Nagy, 800 347-0488	
5. Designation of Governor's Authorized Representative or Tribal Chief Executive Representative upon declaration (if available) and phone number Jeb Spaulding, 802 828-3322		

6. Declaration Request For: ☒ Major Disaster (Stafford Act Sec. 401) ☐ Emergency (Stafford Act Sec. 501(a))

7. Incident Period: Beginning Date April 15, 2014 End Date April 18, 2014 or ☐ Continuing *If requesting a "continuing" incident period, enclose an official statement from a qualified Federal Government agency acknowledged as a national authority in a specific incident field (e.g., United States Geological Survey for seismic incidents, the National Weather Service for flooding).*

7b. Type of Incident (Check all that apply)

<input type="checkbox"/> Drought	<input type="checkbox"/> Earthquake	<input type="checkbox"/> Explosion	<input type="checkbox"/> Fire	<input checked="" type="checkbox"/> Flood	<input type="checkbox"/> Hurricane	<input type="checkbox"/> Landslide	<input type="checkbox"/> Mudslide
<input type="checkbox"/> Severe Storm (rain, high water, wind-driven rain, hail, lightning)	<input type="checkbox"/> Snowstorm (Must include Enclosure D: Historic and Current Snowfall Data)		<input type="checkbox"/> Straight-Line Winds				
<input type="checkbox"/> Tidal Wave	<input type="checkbox"/> Tornado	<input type="checkbox"/> Tropical Depression	<input type="checkbox"/> Tropical Storm	<input type="checkbox"/> Tsunami	<input type="checkbox"/> Volcanic Eruption	<input type="checkbox"/> Winter Storm	
<input checked="" type="checkbox"/> Other (please specify) <u>Flash Flooding</u>							

8. Description of damages (Short description of impacts of disaster on affected area and population). Include additional details in enclosed Governor's or Tribal Chief Executive's cover letter.
Beginning on April 15, 2014, there was widespread flooding, due to the combination of a moderate to heavy rainfall and rapid snow melt of an abnormally high snowpack with the greatest impacts in Caledonia, Essex, Franklin, Lamoille, Orange, Orleans and Washington counties. Most of the flooding in Vermont was minor to moderate in nature with flooded fields, streets and basements. However, there were concentrated areas of major, even flash flooding that washed out roads, culverts and caused more significant structural damage in those previously mentioned counties. In addition, the lake level of Lake Champlain exceeded the 100 foot flood stage on April 17th, and eventually peaking at 100.5 feet (April 21st), causing some structure flooding of lakeshore homes and seasonal camps. Dozens of roads were closed due to flooding starting on April 15, in communities including: Kirby and Sheffield in Caledonia County; Milton, Richmond, and St. George in Chittenden County (not requested); Enosburg, Fairfax, Fletcher, and Georgia in Franklin County; Johnson in Lamoille County; Charleston and Jay in Orleans County; and Duxbury in Washington County. Wilder Road in Duxbury was closed through the end of the incident period.

9. Description of the nature and amount of State and local or Indian tribal government resources which have been or will be committed. Include additional details in enclosed Governor's or Tribal Chief Executive's cover letter.
Based on an on-the-ground assessment, I did not declare a State of Emergency but activated the State Emergency Operations Plan to facilitate the provision of state resources to support local response and recovery operations through the state multi-agency coordination system. The DEMHS staff maintained situational awareness, hosted conference calls with State Support Functions (SSFs) and Emergency Management Directors, issued press releases warning the public of the dangers of over-topped roads, closures and the potential for flash flooding. Military Support monitored from the Joint Operations Center at Camp Johnson, and had their vibratory sandbag machines ready, in the event of a request from a town or agency. SSF Agencies (Transportation, Human Services, Red Cross, State Police) assisted with response and recovery throughout the incident period. The Agency of Transportation monitored the situation every day from the Transportation Operations Center, and made swift repairs to closed roads and serious washouts. Local road crews and emergency management accomplished life safety and infrastructure restoration efforts.

10. Joint Preliminary Damage Assessment*

☐ Individual Assistance Dates Performed Requested Start End

Individual Assistance Accessibility Problems (Areas that could not be accessed, and why)

Individual Assistance is not requested at this time.

☒ Public Assistance Dates Performed Requested Apr 22, 2014 Start Apr 29, 2014 End May 14, 2014

Public Assistance Accessibility Problems (Areas that could not be accessed, and why)

Some state and local roads were flooded throughout the incident period making complete PDA challenging. The initial request for a Joint PDA included Caledonia, Essex, Lamoille, and Orange counties. A subsequent request on April 25, 2014 added Franklin, Orleans, and Washington Counties.

11. Programs and Areas Requested

Individual Assistance ☒ N/A ☐ Individuals and Households ☐ Crisis Counseling Program ☐ Disaster Unemployment Assistance Program
☐ All ☐ Disaster Case Management ☐ Disaster Legal Services

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)) If additional space is needed, please enclose additional documentation).

For States, identify Federally-recognized Tribes in the requested counties (if applicable).

Please see Enclosure A: Supplemental Information for Individual Assistance for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Public Assistance ☐ N/A ☒ Debris Removal (Category A) ☒ Emergency Protective Measures (Category B) ☒ Permanent Work (Categories C-G)* (not available for Emergency Declaration Requests)

For the following jurisdictions, specify programs and areas (counties, parishes, independent cities; for Indian tribal government, list tribe(s) and/or tribal area(s)). If additional space is needed or your request includes different categories of work for different jurisdictions; please enclose additional documentation.

We are seeking Public Assistance and Hazard Mitigation for Caledonia, Essex, Franklin, Lamoille, Orange, and Orleans counties as well as for Washington County (or, at minimum, the Town of Duxbury within Washington County).

For States, identify Federally-recognized Tribes included in the requested counties (if applicable).

Please see **Enclosure B: Supplemental Information for Public Assistance** for additional information in support of this request*.

Indemnification for Debris Removal Activity

☐ I do not anticipate the need for debris removal.

I anticipate the need for debris removal, which poses an immediate threat to lives, public health and safety. Pursuant to Sections 403 and 407 of the Stafford Act, 42 U.S.C. §§ 5170b & 5173, the State or Indian tribal government agrees to indemnify and hold harmless the United States of America for any claims arising from the removal of debris or wreckage for this disaster. The State or Indian tribal government agrees that debris removal from public and private property will not occur until the landowner signs an unconditional authorization for the removal of debris.

☒

Request for Direct Federal Assistance

☒ I do not request direct Federal assistance at this time.

☐ I request direct Federal assistance for work and services to save lives and protect property, and:

a. I request the following type(s) of assistance:

b. List of reasons why State and local or Indian tribal government cannot perform, or contract for, required work and services.

c. In accordance with 44 C.F.R. § 206.208, the State or Indian tribal government agrees that it will, with respect to direct Federal assistance: (1) Provide without cost to the United States all lands, easements, and rights-of-ways necessary to accomplish the approved work; (2) Hold and save the United States free from damages due to the requested work, and shall indemnify the Federal Government against any claims arising from such work; (3) Provide reimbursement to FEMA for the non-Federal share of the cost of such work in accordance with the provisions of the FEMA-State or FEMA-Tribe Agreement; and (4) Assist the performing Federal agency in all support and local jurisdictional matters.

Request for Snow Assistance

☒ N/A ☐ I request snow assistance.

Snow assistance for the following jurisdictions (Specify counties, independent cities or tribes and/or tribal areas).

Please see **Enclosure D: Historic and Current Snowfall Data** for additional information in support of this request*.

*Not Required for Emergency Declaration Request

11. Programs and Areas Requested (Continued)

Hazard Mitigation* ☒ Statewide

OR

For the following specific counties, parishes, independent cities or tribes and/or tribal areas.

12. Mitigation Plan Information*

a. Mitigation Plan Expiration Date November 18, 2018

b. Type of Plan

☐ Enhanced

☒ Standard

13. Other Federal Agency Programs

☐ I do not anticipate requirements from Other Federal Agencies ☒ I do anticipate requirements from Other Federal Agencies

Please see **Enclosure C: Requirements for Other Federal Agency Programs** for additional information in support of this request*.

14. Findings and Certifications

☒ I certify the following:

a. I have determined that this incident is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local government or Indian tribal government and that supplementary federal assistance is necessary.

b. In response to this incident, I have taken appropriate action under State or tribal law and have directed the execution of the State or Tribal Emergency Plan on Apr 14, 2014 in accordance with the Stafford Act.

c. The State and local governments, or Indian tribal government will assume all applicable non-Federal share of costs required by the Stafford Act.

15. List of Enclosures and Supporting Documentation

☒ Cover Letter ☐ Enclosure A (Individual Assistance)* ☒ Enclosure B (Public Assistance)*

☒ Enclosure C (Requirements for Other Federal Agency Programs) ☐ Enclosure D (Historic and Current Snowfall Data)

☒ Additional Supporting Documentation NWS Summary



Governor's or Tribal Chief Executive's Signature

5/21/2014
Date

If anyone except the Governor or Tribal Chief Executive signs this document, please provide the documentation that establishes that this individual has the legal authority to act on behalf of the Governor or Tribal Chief Executive.

*Not Required for Emergency Declaration Request