PETER SHUMLIN
Governor

State of Vermont
OFFICE OF THE GOVERNOR

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

July 23, 2013

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), as implemented by 44 C.F.R. pt. 206, I request that you declare a Major Disaster for the State of Vermont as a result of flooding and severe storms from June 25, 2013, through July 11, 2013.

Beginning on June 25, 2013, and continuing through the incident period, the State of Vermont was repeatedly impacted by multiple storms that dumped extremely heavy rainfall on already saturated soils, resulting in widespread and recurring flooding and flash flooding. The National Weather Service (NWS) has provided the explanation behind these unusual meteorological conditions in a memorandum attached to this letter. The primary cause was a stationary boundary draped across Vermont that trapped a tropical air mass and fed moisture from the Gulf of Mexico up the eastern seaboard on a north-south flow. Rainfall accumulations during this period were 400% of normal for this time of year. These storms came on the heels of the wettest May on record in Vermont and the second wettest June. Antecedent conditions combined with the stationary boundary created flash flood dangers due to rainfall every day during the incident period. Damages that occurred throughout the incident period were a direct result of daily rainfall, as described in the NWS Weather Summary, and the antecedent conditions that the rainfall created. The cumulative impact of continuous rain resulted in eight towns having a per capita estimated damage assessment ranging from greater than $47 to greater than $450 (detailed below).

As the repeated storms continued to impact Vermont, many local jurisdictions experienced significant damage. While the counties of Caledonia, Chittenden, Orange, Orleans, Rutland, Washington, and Windsor bore the majority of the flooding, damages also were reported in towns in Addison and Windham counties. These storms primarily occurred in the early to late afternoon timeframe and some lasted through the night, creating dangerous conditions while people slept. In one circumstance in Williamstown, 25 families were awoken from their beds to be evacuated due to danger presented by flooding on downtown streets. The American Red Cross conducted a damage assessment in Williamstown and confirmed that five homes were affected and three homes sustained major damage from the storm. Many of these storms presented such an immediate danger in a short time that swift water assets were deployed quickly to assist local fire departments with rescuing stranded residents and people in vehicles. The City of Burlington discovered a large sinkhole on July 1, 2013, related to the flooding in a highly trafficked street in downtown. The storms in Huntington and Hinesburg on July 3, 2013, took the towns by surprise and responders quickly sought to ensure the safety of people who were caught on roads when the Huntington River jumped its banks. A mudslide in Huntington cut the water supply to 19 homes. The town submitted a request for assistance to the State Emergency Operations Center (SEOC) for the provision of supplemental water supplies. Other local evacuations were carried out throughout the incident period in towns such as Brookline and Windsor. The recurring rains caused large road washouts, exposing bedrock and creating ongoing issues for towns while they struggled to stay ahead of storms. Highways in Williamstown, Roxbury, Williston, Windsor, Richmond, St. Johnsbury, Jericho, Huntington, Granville, and Pomfret experienced severe damage and were closed for extended periods while crews worked to repair them. Unfortunately, there were two drowning deaths in Vermont during the incident period due to the high, fast river conditions. One drowning occurred in Barre and the other in Bristol. Both incidents occurred when people were swimming and became overwhelmed by the force of the swollen rivers.

Throughout this incident period, the SEOC as well as many state and local responders maintained vigilance and were activated to support local jurisdictions. The SEOC was activated to a Level 3 during the overnight hours of June 27, 2013, and into the day on June 28, 2013, in anticipation of forecasted heavy rains. It was activated to a Level 3 once again on July 3 in support of the flash flooding in the Chittenden county area. The facility was reactivated late that night due to swift-water rescue needs of 15 people in Braintree. Throughout the incident period, when the SEOC was not activated beyond Level 1, the Division of Emergency Management and Homeland Security (DEMHS) staff diligently maintained situational awareness, hosted conference calls with State Support Functions and Emergency Management Directors, issued press releases warning the public of the dangers of the high rivers and the potential for flash flooding with every passing storm, and responded to resource requests. DEMHS Radio Amateur Civil Emergency Services (RACES) operators deployed to the SEOC several times to provide communications support. The repetitive nature of the storms each day and the saturated soil conditions did not allow emergency responders any rest throughout the incident period.

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 $2.5 million in damage to highways on the Federal Highway Administration system. The railways also sustained damage to varying degrees in Rutland county, and the town of Roxbury.

The Division of Fire Safety assisted the town of Williamstown by inspecting homes and businesses for safety before residents returned. Several homes had damage to electrical systems that required repair.

The Agency of Human Services coordinated resources with several Community Action Program Agencies, Local Long Term Recovery Committees, Voluntary Organizations Action in Disasters, Vermont 211, the American Red Cross and others to ensure needs of displaced people were met. This effort is ongoing through the recovery process. The American Red Cross provided emergency assistance by opening a shelter in Williamstown. Additionally, the chapter provided 20 clean-up kits and opened three cases for survivors in the town. The Red Cross provided 40 breakfast meals and 30 lunch meals to the emergency responders. Mass care workers traveled around the affected area delivering meals, water, and cleaning supplies to affected residents of the area. They completed Disaster Assessments in Northfield and Williamstown. The Vermont Chapter of the Red Cross is also responsible for the Upper Valley in New Hampshire and therefore was involved in the shelter operations in response to the flooding in Lebanon, New Hampshire.

The Vermont Department of Health assisted the DEMHS Public Information Office with issuing information about river and swimming safety while rivers were high. Several Swift Water Mobile Support Units provided support to towns by performing rescues and ensuring the safety of residents during flash flooding. The Northern and Southern Urban Search and Rescue Task Forces were deployed to the towns of Huntington, Hinesburg, Braintree, Hartford, and Richmond to assist local first-responders. They also staged either in-station or strategically around the state in anticipation of needs.

The Agency of Agriculture is coordinating with the Farm Services Agency to ensure farmers connect with resources to help recover from destroyed crops and fields. The wet weather this early summer has hampered the growing season and several farms lost crops to the flooding.

The Agency of Natural Resources assisted the town of Williamstown after the flooding to clean up fuel oil contamination in local homes and businesses. They also consulted on water supply and dam issues that arose during the incident period.

Vermont State Police (VSP) assisted several towns in response to storms. In Chittenden county, VSP helped ensure residents were safe when the storms came through Huntington and Hinesburg on June 27, 2013, by providing traffic control and

management. They also provided security during the Williamstown flooding when agitated residents wanted to return to homes that were potentially still unsafe. The VSP Dive Team was deployed to recover the drowning victims in Barre and Bristol. The NWS provided timely and relevant information on the weather throughout the incident period that was essential to response operations.

In addition to maintaining continuous situational awareness at the Joint Operations Center, the Vermont National Guard assisted the town of Huntington with the provision of a water trailer for residents whose water had been disrupted due to a landslide.

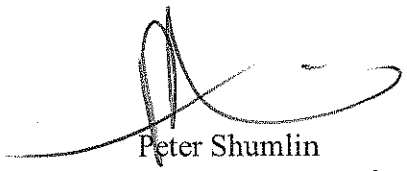
Based on an on-the-ground assessment, I did not declare a State of Emergency but activated the State Emergency Operations Plan (SEOP) to facilitate the provision of state resources to support local response and recovery operations through the state multi-agency coordination system. As previously stated, there were two confirmed storm-related deaths. Based on local and state initial damage assessments, the Director of DEMHS requested a joint Preliminary Damage Assessment (PDA) from DHS, FEMA Region 1 on Wednesday, July 3, 2013. The joint PDA was conducted in the counties of Chittenden, Caledonia, Orange, Orleans, Rutland, Washington, and Windsor beginning on Tuesday, July 9, 2013. The PDA teams were composed of local, state and federal representatives. The PDA was completed on Thursday, July 18, 2013.

Based on the results of the PDA, the great majority of the damage was to roads, bridges and culverts. Statewide, 92% of the estimated damages surveyed were in Category C and 4% were in Category F. Although the impact of this incident is widespread with damages reported in nine of fourteen counties (seven counties qualifying for Public Assistance), much of the damage was concentrated in the towns previously indicated. Significant impact to State Route 100 in the town of Warren accounted for the bulk of the Federal Highway Administration estimated damage of $2.5 million. Individual towns with high per capita impact were: Williston ($47.12), Barton Village ($59.49), Brookfield ($76.98), Williamstown ($118.88), Duxbury ($168.29), Huntington ($191.09), Windsor ($241.77), and Roxbury ($453.11).

Within the last year, Vermont has experienced two presidentially declared major disasters – DR4066 and DR4120. Additionally, the ongoing recovery efforts associated with DR4022 (TS Irene) continue to stress local and state resources with respect to implementation of public assistance and hazard mitigation projects. During this incident period there was a negative impact on recently completed emergency repairs from DR4120. Further, the Vermont Disaster Relief Fund and several local long term recovery committees are still managing cases associated with DR4022.

I realize that the extended incident period requested is unusual but believe it is supported by the attached NWS memo and that it fully meets the standard established by the DHS, FEMA Memorandum, Subject: Governor's Request, Regional Summary, and Recommendation, Stafford Act Declarable Event, dated October 1, 2009. Thank you for your continuing support of Vermonters still recovering from Tropical Storm Irene and two recent major disaster declarations.

Sincerely,



Peter Shumlin
Governor, State of Vermont

Enclosures

A: Individual Assistance
B: Public Assistance
C: Requirements for Other Federal Agency Programs
OMB No. 1660-0009/FEMA Form 010-0-13
Weather Summary for the Heavy Rainfall and Flood Events across Vermont from June 23 – July 11th.

ENCLOSURE A TO MAJOR DISASTER REQUEST

Estimated Requirements for Individual Assistance
under the Stafford Act

The State of Vermont does not anticipate a request for Individual Assistance at this time.

ENCLOSURE B TO MAJOR DISASTER REQUEST

Estimated Stafford Act Requirements for Public Assistance
Enclose Public Assistance Preliminary Damage Assessment Cost Estimate Worksheet

DAMAGE ASSESSMENT WORKSHEET
VERMONT

State $1.37
County $3.45

Date: 07/18/2013	PUBLIC DAMAGE											
Report #:	A	B	C	D	E	F	G	TOTAL	POP. '10	$/CAP	$3.45/CAP	SHORT
Addison Co	$0	$0	$0	$0	$0	$0	$0	$0	36,821	$0.00	$127,032	($127,032)
Bennington Co	$0	$0	$0	$0	$0	$0	$0	$0	37,125	$0.00	$128,081	($128,081)
Caledonia Co	$0	$0	$259,771	$0	$0	$0	$0	$259,771	31,227	$8.32	$107,733	$0
Chittenden Co	$0	$30,000	$921,867	$0	$0	$125,000	$0	$1,076,867	156,545	$6.88	$540,080	$0
Essex Co	$0	$0	$0	$0	$0	$0	$0	$0	6,306	$0.00	$21,756	($21,756)
Franklin Co	$0	$0	$0	$0	$0	$0	$0	$0	47,746	$0.00	$164,724	($164,724)
Grand Isle Co	$0	$0	$0	$0	$0	$0	$0	$0	6,970	$0.00	$24,047	($24,047)
Lamoille Co	$0	$0	$0	$0	$0	$0	$0	$0	24,475	$0.00	$84,439	($84,439)
Orange Co	$0	$0	$406,194	$0	$60,000	$0	$39,000	$505,194	28,936	$17.46	$99,829	$0
Orleans Co	$2,000	$1,000	$82,457	$0	$0	$46,000	$0	$131,457	27,231	$4.83	$93,947	$0
Rutland Co	$0	$0	$323,700	$0	$0	$0	$0	$323,700	61,642	$5.25	$212,665	$0
Washington Co	$0	$0	$655,811	$0	$0	$0	$0	$655,811	59,534	$11.02	$205,392	$0
Windham Co	$0	$0	$0	$0	$0	$0	$0	$0	44,513	$0.00	$153,570	($153,570)
Windsor Co	$0	$0	$1,000,500	$0	$0	$0	$0	$1,000,500	56,670	$17.65	$195,512	$0
State Agencies	$0	$0	$0	$0	$0	$0	$0	$0	State POP	$/CAP	$1.37/CAP	SHORT
TOTALS	$2,000	$31,000	$3,650,300	$0	$60,000	$171,000	$39,000	$3,953,300	625,741	$6.32	$1,000,000	$0
									625,741	State Population total check-sum		

NOTES:	DEBRIS CLEARANCE	PROTECTIVE MEASURES	ROAD SYSTEM	WATER CONTROL	BUILDINGS & EQUIPMENT	PUBLIC UTILITY	PARKS & OTHER
PDA Percentages	0.05%	0.78%	92.34%	0.00%	1.52%	4.33%	0.99%

DAMAGE ASSESSMENT WORKSHEET

Date: 07/18/2013	PUBLIC DAMAGE - STATE AGENCIES							
Report #:	A	B	C	D	E	F	G	TOTAL
DOT	$	$	$	$	$	$	$	$0
ANR	$	$	$	$	$	$	$	$0
Forest & Parks	$	$	$	$	$	$	$	$0
VEM	$	$	$	$	$	$	$	$0
VAST	$	$	$	$	$	$	$	$0
Rails to Trails	$	$	$	$	$	$	$	$0
	$	$	$	$	$	$	$	$0
	$	$	$	$	$	$	$	$0
Totals	$0	$0	$0	$0	$0	$0	$0	$0

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
Caledonia	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Chittenden	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Orange	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Orleans	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Rutland	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Washington	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Windsor	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		
Totals	***TBD***	***TBD***	***TBD***	***TBD***	***TBD***		

Note: Provide numbers and amounts, as appropriate.

DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

OMB No. 1660-0009 Expires December 31,2012

REQUEST FOR PRESIDENTIAL DISASTER DECLARATION MAJOR DISASTER OR EMERGENCY

1. Request Date July 23, 2013

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 requesting declaration (as defined in Stafford Act 102, 42 U.S.C. 5122)	2b. State Population (as reported by 2010 Census)
Vermont	625,741

3. Governor's Name	4a. Designation of State Coordinating Officer upon declaration (if available) and phone number
Peter Shumlin	Ross Nagy, 800 347-0488

4b. Designation of Governor's Authorized 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: Jun 25, 2013 — End Date: Jul 11, 2013 — 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)

☐ Drought ☐ Earthquake ☐ Explosion ☐ Fire ☒ Flood ☐ Hurricane ☐ Landslide ☐ Mudslide

☒ Severe Storm (rain, high water, wind-driven rain, hail, lightning) ☐ Snowstorm (Must include Enclosure D: Historic and Current Snowfall Data) ☐ Straight-Line Winds

☐ Tidal Wave ☐ Tornado ☐ Tropical Depression ☐ Tropical Storm ☐ Tsunami ☐ Volcanic Eruption ☐ Winter Storm

☒ Other (please specify) Flash Flooding

8. Description of damages (Short description of impacts of disaster on affected area and population). Include additional details in enclosed Governor's cover letter.

Throughout the incident period, public infrastructure damage occurred to roads, bridges, municipal properties and buildings, and railways. In some cases repairs made due to one storm had to be redone when additional storms hit the same area. There were damages to businesses especially in the Williamstown area as well as flooded homes. Several farms sustained crop damage or loss due to flooding as well as the saturated soils. Some of the towns that sustained much of the impact include Windsor, Williamstown, Underhill, Jericho, Williston, Hinesburg, Huntington, Richmond, Essex, Pomfret, Braintree, Roxbury, Granville, Barton, Fairlee, Brookfield, and Duxbury.

9. Description of the nature and amount of State and local resources which have been or will be committed. Include additional details in enclosed Governor's cover letter.

First responders and response support personnel from impacted local jurisdictions addressed life, property and environmental safety issues as a first priority followed by ensuring citizen accountability and addressing emergency access challenges. Regional state swift water resources supported numerous local temporary evacuations. State Agency of Transportation (AOT) crews worked tirelessly to restore the state transportations system and towns. The SEOC incident coordination team conducted multi-agency coordination with local EOCs and Incident Command Posts, as well as the Transportation Operations Center, Joint Operations Center and Red Cross Regional Disaster Operations Center and was staffed by DEMHS, AOT, SAR & HAZMAT Coordinator, Agencies of Human Services, Natural Resources and Agriculture as well as State Police. Coordination is ongoing with the Agency of Human Services, the American Red Cross, existing local long term recovery committees and the Vermont Disaster Relief Fund to address ongoing individual and household survivor needs.

10. Joint Preliminary Damage Assessment*

☐ Individual Assistance Dates Performed **Requested** _____ **Start** _____ **End** _____

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

☒ Public Assistance Dates Performed **Requested** Jul 3, 2013 **Start** Jul 9, 2013 **End** Jul 18, 2013

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

11. Programs and Areas Requested

Individual Assistance ☐ N/A ☐ Individual and Households Program ☐ Crisis Counseling Program ☐ Disaster Unemployment Assistance

☐ All ☐ Disaster Case Management ☐ Disaster Legal Services

For the following jurisdictions (specify counties, parishes, independent cities) If additional space is needed, please enclose additional documentation.

Identify Federally recognized Tribes in the requested counties.

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 counties, parishes, independent cities) If additional space is needed or your request includes different categories of work for different jurisdictions, please enclose additional documentation.

Caledonia, Chittenden, Orange, Orleans, Rutland, Washington, Windsor Counties

Identify Federally recognized Tribes included in the requested counties.

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 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 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 governments cannot perform, or contract for, required work and services.

c. In accordance with 44 C.F.R. 206.208, the State 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 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).

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.

12. Mitigation Plan Information*

a. Mitigation Plan Expiration Date Nov 13, 2013 b. Type of Plan ☐ Enhanced ☒ Standard

13. Other Federal Agency Programs

☐ I do not anticipate requirement from Other Federal Agencies. ☒ I do anticipate requirement 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 and that supplementary federal assistance is necessary.

b. In response to this incident, I have taken appropriate action under State law and have directed the execution of the State Emergency Plan on Jun 23, 2013 in accordance with the Stafford Act.

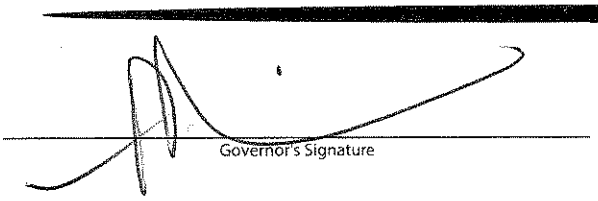
c. The State and local governments will assume all applicable non-Federal share of costs required by the Stafford Act.

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 National Weather Service Summary



Governor's Signature

7/23/13
Date

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

Not Required for Emergency Declaration Request

U.S. Department of Homeland Security
500 C Street, SW
Washington, DC 20472

FEMA

OCT 0 1 2009

MEMORANDUM FOR: Regional Administrators
Acting Regional Administrators
Disaster Assistance Division Directors

FROM: Elizabeth A. Zimmerman
Assistant Administrator
Disaster Assistance Directorate

SUBJECT: Governor's Request, Regional Summary, Analysis, and Recommendation, and Stafford Act Declarable Event

Over the course of the past several months, I have become aware of the challenges you all face when completing the requirements associated with declaration request packages submitted from the Regional Offices. I recognize the complexities involved in preparing the packages, which are oftentimes being prepared while you are also addressing the numerous and competing resource demands of response operations.

In an effort to process the declaration requests as expeditiously as possible and to assist you in reducing or eliminating deficient declaration request packages, I want to ensure that you have the tools necessary to provide timely, well-articulated analyses of your recommendations, which include all required elements. My staff has identified three key items that frequently involves additional follow-up from Headquarters back to the Regions, which in turn delays the process:

1. Gubernatorial requests submitted to Headquarters from the Regional Offices that are deficient in required statutory information set forth in Section 401 or Section 501 of the Stafford Act, and the regulatory information outlined in 44 C.F.R. § 206.35 or 44 C.F.R. § 206.36.
2. Regional write ups that are submitted absent complete information.
3. Gubernatorial requests with protracted incident periods encompassing multiple, unrelated weather events scattered across different areas of the State.

For clarification purposes, a Stafford Act major disaster declaration for a storm event is limited to (1) a single storm, or (2) a series of storms that are deemed to be part of the same storm system that impact the same geographical areas, such that the impacts from the separate storms are indistinguishable, and are separated by three days or less.

Successive storms systems separated by more than 72 hours are generally, and by practice, considered separate storm systems, and will be evaluated separately to determine whether they independently meet the statutory and regulatory requirements for a declaration. Furthermore, the damage and impacts from each distinct and separate storm system must be of the severity and magnitude that would warrant a separate declaration.

I look forward to working with your staff in an effort to streamline, standardize, and create virtually seamless processing of all gubernatorial requests for supplemental Federal assistance. Attached are the templates and guidelines that will assist you and your staff in the review of such requests and the preparation of the Regional Summary, Analysis, and Recommendation. Additionally, my staff will be conducting training for and outreach to your personnel in the coming months to further assist you in addressing the requirements associated with gubernatorial requests.

Please provide Peggy Miller, Chief, Declarations Unit, Disaster Assistance Directorate with the name of the individual whom she should contact to arrange for training.

If you have any questions related to the declaration process, or the preparation of the Regional Summary, Analysis, and Recommendation, please do not hesitate to contact Peggy at (202) 646-3886.

Attachments: Request Templates
Request Checklist
Regional Summary, Analysis, and Recommendation Templates
Guidelines

National Oceanic and Atmospheric Administration
National Weather Service
Weather Forecast Office Burlington, VT
1200 Airport Dr
South Burlington, VT 05403
www.weather.gov/btv

7/22/2013

MEMORANDUM: FOR THE RECORD

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

SUBJECT: Weather Summary for the Heavy Rainfall and Flood Events across Vermont from June 23 – July 11th.

Late May through early July was abnormally wet across much of Vermont with record producing rainfall in some locations (Figure 1). Widespread rainfall of 4 to 6 inches with localized 8+ inches occurred in May with an additional 5 to 7 inches and localized 10+ inches being observed in June (Figure 2,3). These rainfall values represent 150-250 percent of normal observed rainfall (Figure 4) and have had a cumulative effect on antecedent conditions with extremely moist soils, "primed" for flooding.

The first half of June continued the wet trend established in late May across Vermont with rainfall of 150 percent of normal. This was followed by nearly a week of relatively dry conditions (scattered showers and thunderstorms), but that didn't matter to antecedent conditions across the state as they remained wetter than normal.

A unprecedented stretch of heavy rainfall, both in duration and amounts began in earnest on June 22nd with rainfall nearly every day through July 11th (Figures 5,6,7). The tremendous rainfall for late June-early July was the result of a **series of storms** that was entrenched within an overall unrelenting "blocking pattern" in the atmosphere. This blocking pattern involved an unusually long duration of available deep layered atmospheric moisture, measuring some 150-200 percent of normal feeding into Vermont from the Gulf of Mexico and sub-tropical Atlantic Ocean.

Heavy rainfall welcomed the beginning, "transition phase" of the blocking pattern from June 22nd through June 28th with multiple disturbances traveling along a **stationary boundary** draped across Vermont. The air mass across Vermont was tropical in nature with surface dew points around 70 degrees and 150-200 percent of normal atmospheric moisture.

On June 29th, the blocking pattern matured and firmly locked into position through July 11th. The blocking pattern consisted of a strengthening Atlantic Ocean ridge (Bermuda High) that retrograded to the East Coast of the United States, a strengthening ridge in the southwest United States (responsible for Record Heat in SW USA) and a deep trough in the Mississippi River Valley (Figure 8). This blocking pattern prevented systems from moving the normal west to east across the United States. In this pattern, the eastern third of the country (including Vermont) was locked into a very deep, south-north flow that

was feeding tropical moisture (200 percent of normal) from the Gulf of Mexico and sub-tropical Atlantic into the northeast (Figure 9) for days. Rainfall during this period was 2-4+ inches widespread with areas of 4-7+ inches with localized 7-10+ inches (Figure 10, Table 1), which is up to 400 percent of normal (Figure 11). Additional flooding, mainly localized flash flooding, occurred as a result of this significant and prolonged series of heavy rainfall events.

On the afternoon of **June 23rd**, "training" showers and thunderstorms moved across much of Chittenden county as well as portions of Lamoille and Washington counties and produced 1.5-2+ inches of rainfall in a 60-75 minute timeframe (Figure 12). This lead to significant flash flooding largely centered in the Williston, Richmond and surrounding communities.

On the afternoon of **June 29th**, another series of storm produced 1 to 1.5 inches of rainfall in less than 60 minutes across similar portions affected by the flash flooding of June 23rd (Figure 13). This caused more urbanized flooding in Burlington, South Burlington and Williston as well as brook, creek and small stream flooding in Williston, other flooding but not quite as severe.

During the evening of **July 2nd**, training showers and thunderstorms moved across northern Bennington and southern Windsor counties then lifted northeast through Woodstock and Hartland before impacting the Claremont/Lebanon, New Hampshire region. Rainfall amounts of 2 to 3+ inches occurred within a few hours and leads to numerous road closures and flash flooding (Figure 14).

On July 3rd, two distinct areas of flooding rainfall materialized across Vermont. The first occurred during the early to mid-afternoon as several thunderstorms with torrential rains "trained" across southern and eastern Chittenden into the Huntington, Hinesburg, Richmond and Camel's Hump State Park region. There were several reports of 2-3+ inches outside of the region that NWS Burlington Dual-pol radar estimated 4 inches of rainfall in less than 2 hours (Figure 15,16). The end result was flash flooding with road washouts in Huntington and nearby communities.

During the night of July 3rd, training thunderstorms produced a larger footprint of 2 to 4 inches of rainfall across the Warren, Granville, Roxbury and West Brookfield region of southern Washington and western Windsor counties (Figures 15,16). Significant road washouts and other flash flooding were observed.

On July 4th, more thunderstorms "trained" across Chittenden as well as portions of Washington and Lamoille counties with .5 to 2+ inches of rainfall in less than 90 minutes (Figure 17). The end result was more flash flooding in areas that have been impacted by flash flooding once or twice before within the past 10 days.

On July 5th, training thunderstorms moved through southern sections of Addison county, with radar estimated and ground truth observations of 2.5 to 3 inches of rainfall in a two hour timeframe (Figure 18). Lots of ponding of water in roads, fields but relatively flat terrain prevented any flash flooding.

During the early morning hours of **July 9th**, a heavy rain shower with occasional thunder developed across the Williamstown area and remained stationary for nearly 2 hours. NWS Burlington Dual-pol radar estimated 2-3+ inches of rainfall occurred during that timeframe over a very hilly, mountainous terrain (Figure 19). The end result was significant flash flooding that washed out roads, flooded basements, businesses and forced the evacuation of dozens of residents.

Another stalled heavy rain shower and thunderstorm remained quasi-stationary across portions of Caledonia county during the early morning hours of July 9th as well. Localized 1 to 2+ inches of rainfall resulted in flash flooding in the Wheelock/Sutton vicinity (Figure 20).

During the late afternoon/evening of **July 9th**, several showers and thunderstorms formed and remained nearly stationary in and along the Green Mountains of Vermont. Some of these storms regenerated over the same spot and delivered very localized heavy rainfall that produced localized flash flooding, including mudslides in Barton and Wallingford. NWS Burlington Dual-pol radar estimated 2-3+ inches of rainfall occurred during that timeframe over hilly, mountainous terrain (Figure 21).

Once again during the afternoon and evening hours of **July 10th**, a series of thunderstorms, with rainfall rates of 1.5 to 2 inches per hour, traversed portions of Addison, Rutland, Orange and Windsor counties, some in the very same communities that had witnessed earlier torrential rains and flooding.. These heavy rainfall rates and the cumulative effect on the saturated soils, quickly created flash flooding of roads, streams as well as isolated mudslides (Figure 22). Some specific communities that experienced road washouts and closures on July 10th into the morning hours of July 11th included, the towns of Bethel, Brookfield, Brookline, Fairlee, Orwell, Randolph, Thetford and Tunbridge.

The **Lake Champlain** lake level rose considerably since late May in response to this unprecedented rainfall, from 96.0 feet on May 20th to its maximum level of 99.72 on July 10th (Figure 23), within 3 inches of the flood stage of 100 feet. The lake level was nearly 4 feet above normal and the highest lake level ever for the month of July (Figure 24).

Lastly, this unprecedented rainfall since late May has had a substantial impact in the agricultural community as well. Spring-early summer crops like strawberries have been damaged and many summer and fall crops either not germinated or not planted due to flooded fields. Also, hay yields have been down due to lack of proper amount of time for cutting and drying as well as crop spoilage, rot and mold.

Rainfall Records for May/June 2013 at NWS Burlington

May

Rank	Precipitation	Year(s)
1	8.74″	2013
2	8.67″	2011
3	7.10″	2006
4	6.31″	1983
5	6.13″	2000
6	6.12″	1890
7	5.90″	1945
8	5.86″	1976
9	5.58″	1909
10	5.55″	1912

June

Rank	Precipitation	Year(s)
1	9.92″	1922
2	9.86″	2013
3	8.66″	1998
4	7.69″	1973
5	7.35″	1957
6	6.77″	2006
7	6.73″	2002
8	6.72″	1892
9	6.58″	1935
10	6.52″	1972

Wettest Two Consecutive Months All-Time

18.60 inches – May/June 2013

17.97 inches – July/August 1998

16.55 inches – April/May 2011

Figure 1 – Rainfall Records at Burlington, Vermont

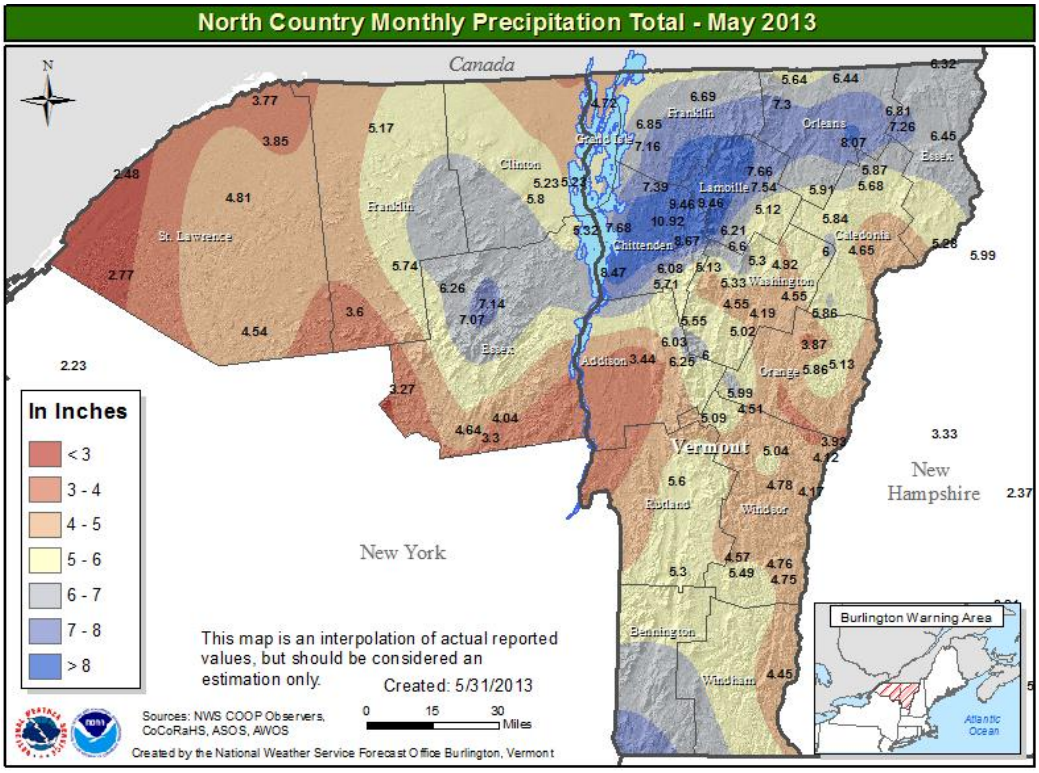


Figure 2 – May 2013 Total Rainfall (Normal – 3 to 4 inches)

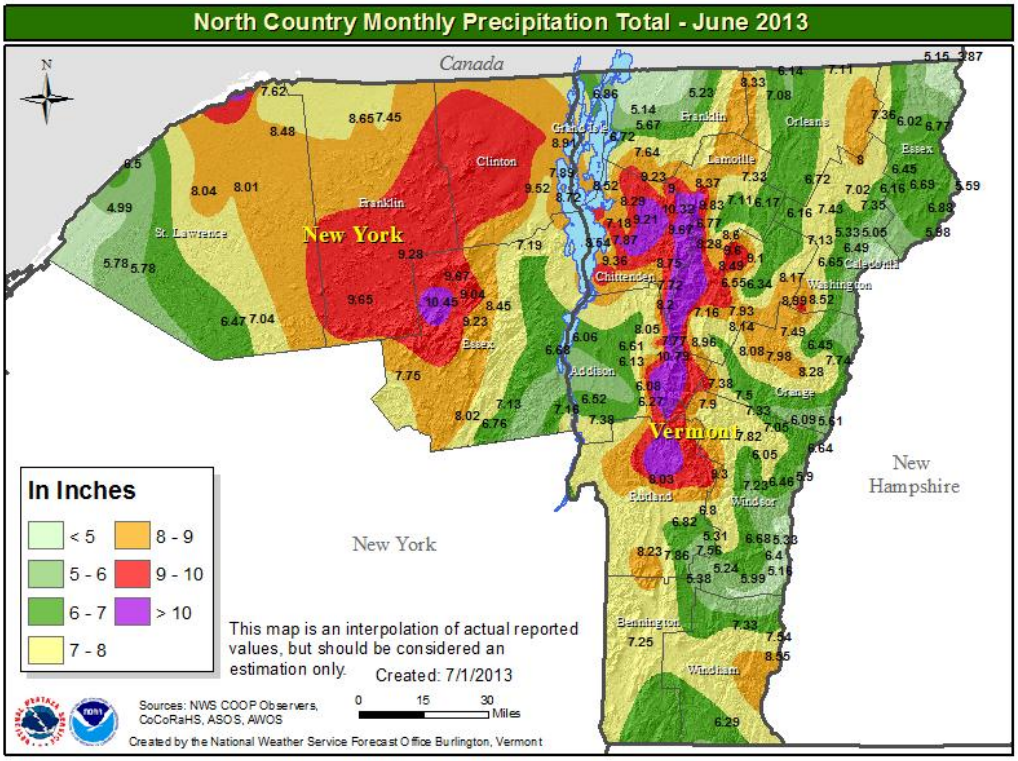


Figure 3 – June 2013 Total Rainfall (Normal 3 to 4 inches)

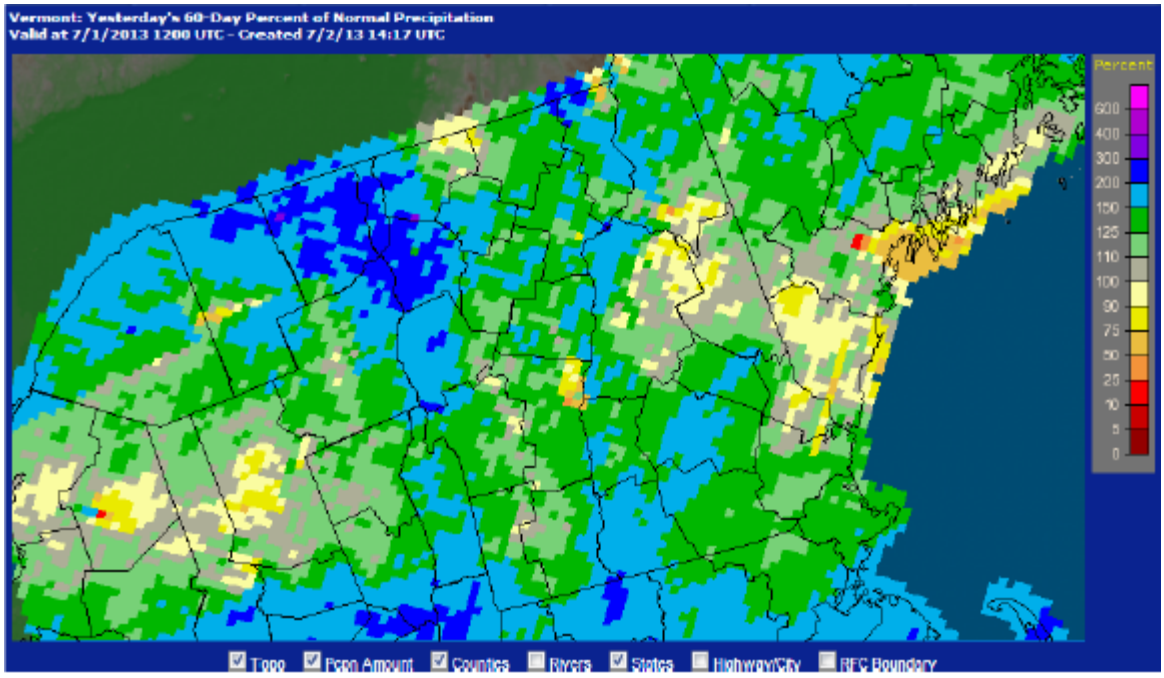


Figure 4 – Percent Normal Precipitation: May-June 2013

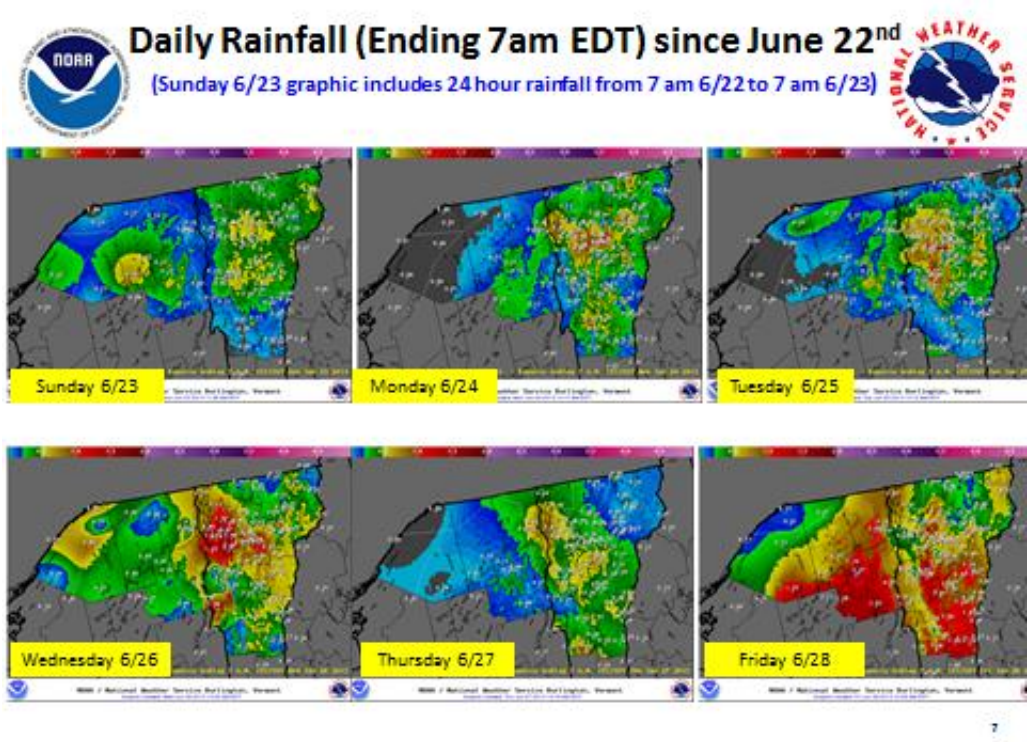


Figure 5 – Daily Rainfall ending 7 am (June 23rd – June 28th)

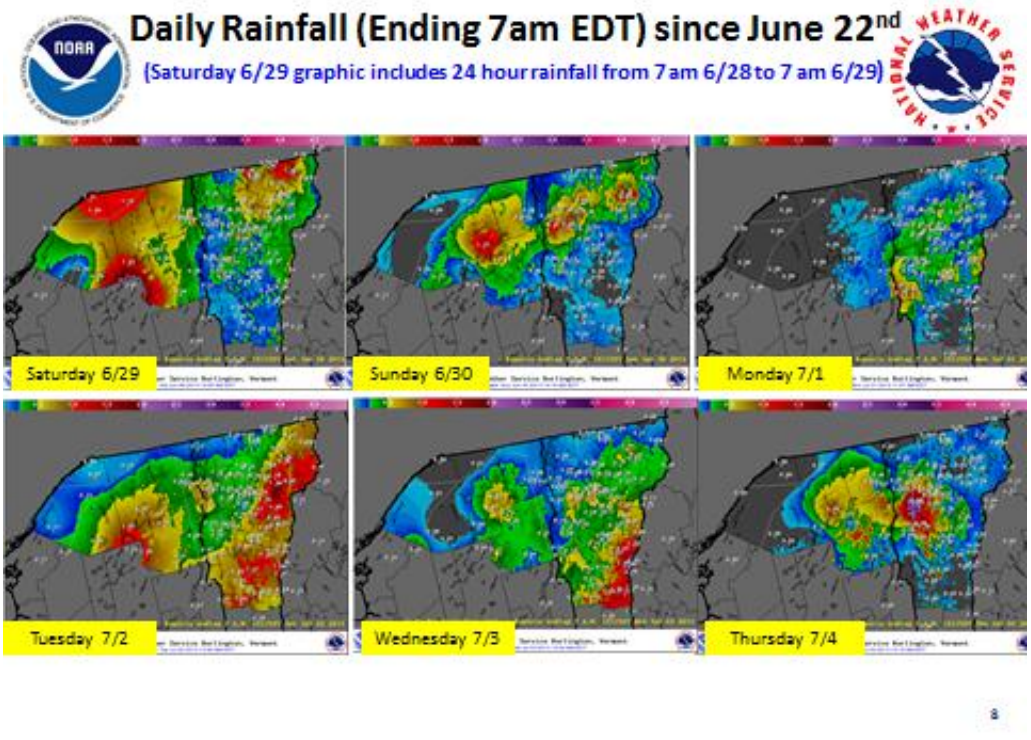


Figure 6 – Daily Rainfall ending 7 am (June 29th – July 4th)

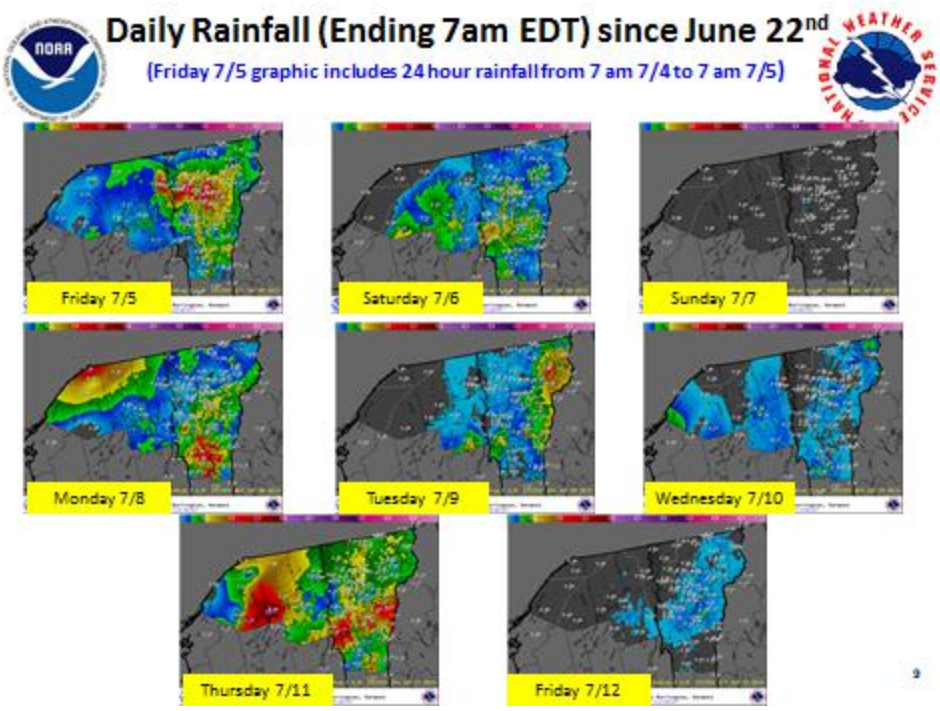


Figure 7 – Daily Rainfall ending 7 am (July 5th – July 12th)

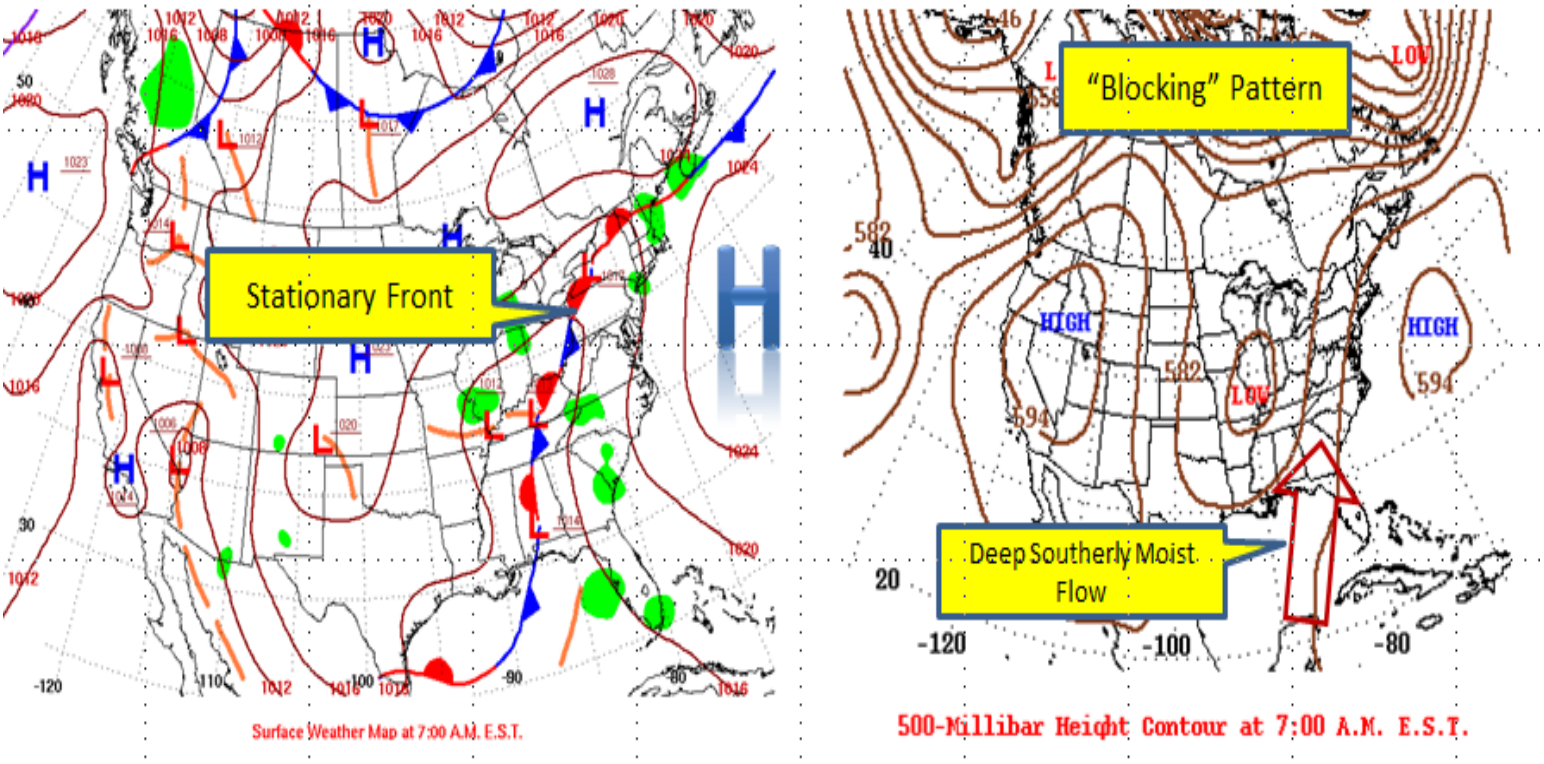


Figure 8 – Blocking Pattern and Stationary Front on July 2, 2013

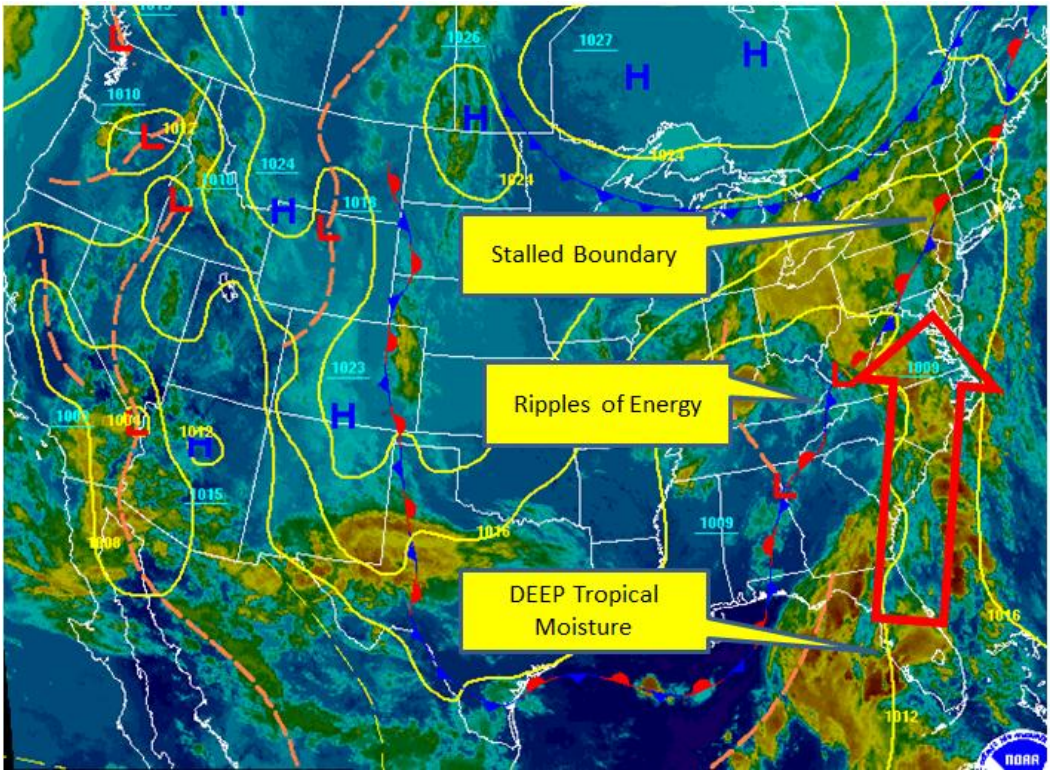


Figure 9 – Sat Pix from July 2, 2013

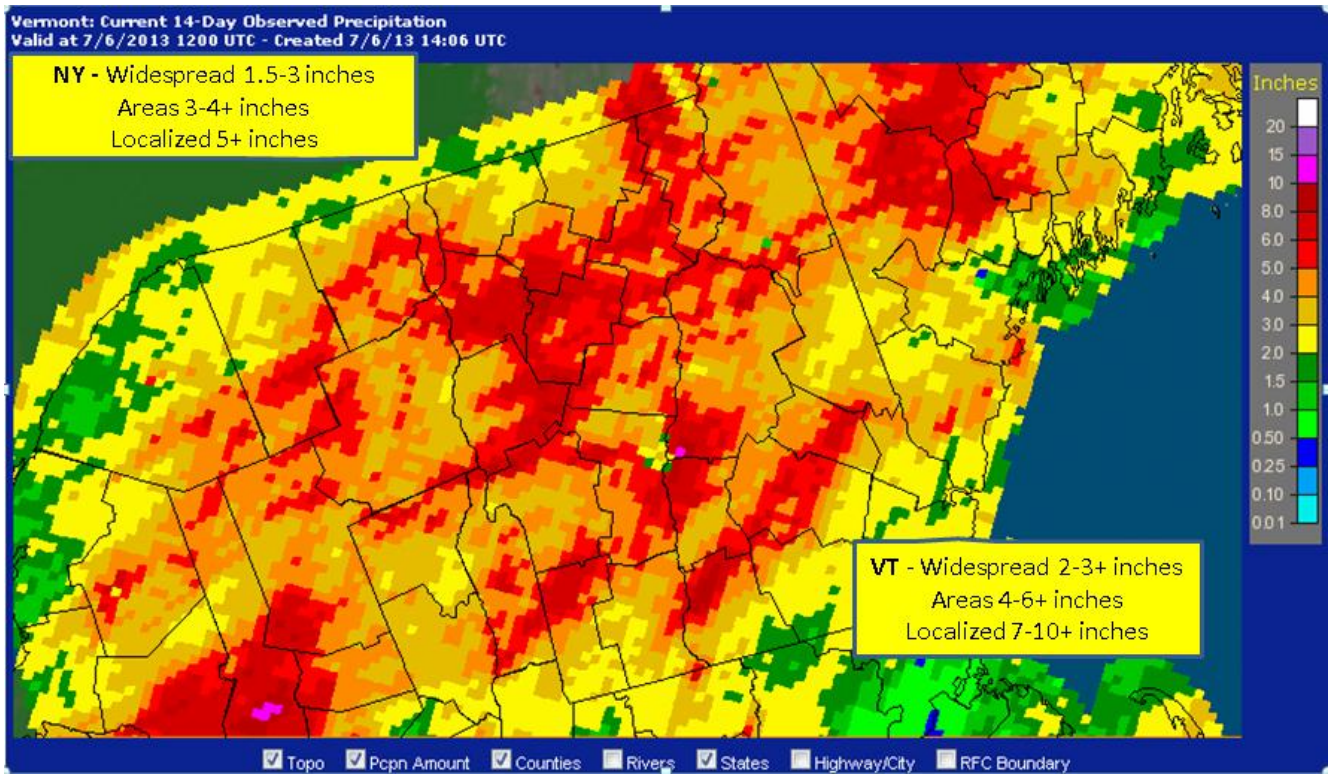


Figure 10 – Cumulative Rainfall since June 22nd (June 22nd – July 5th)

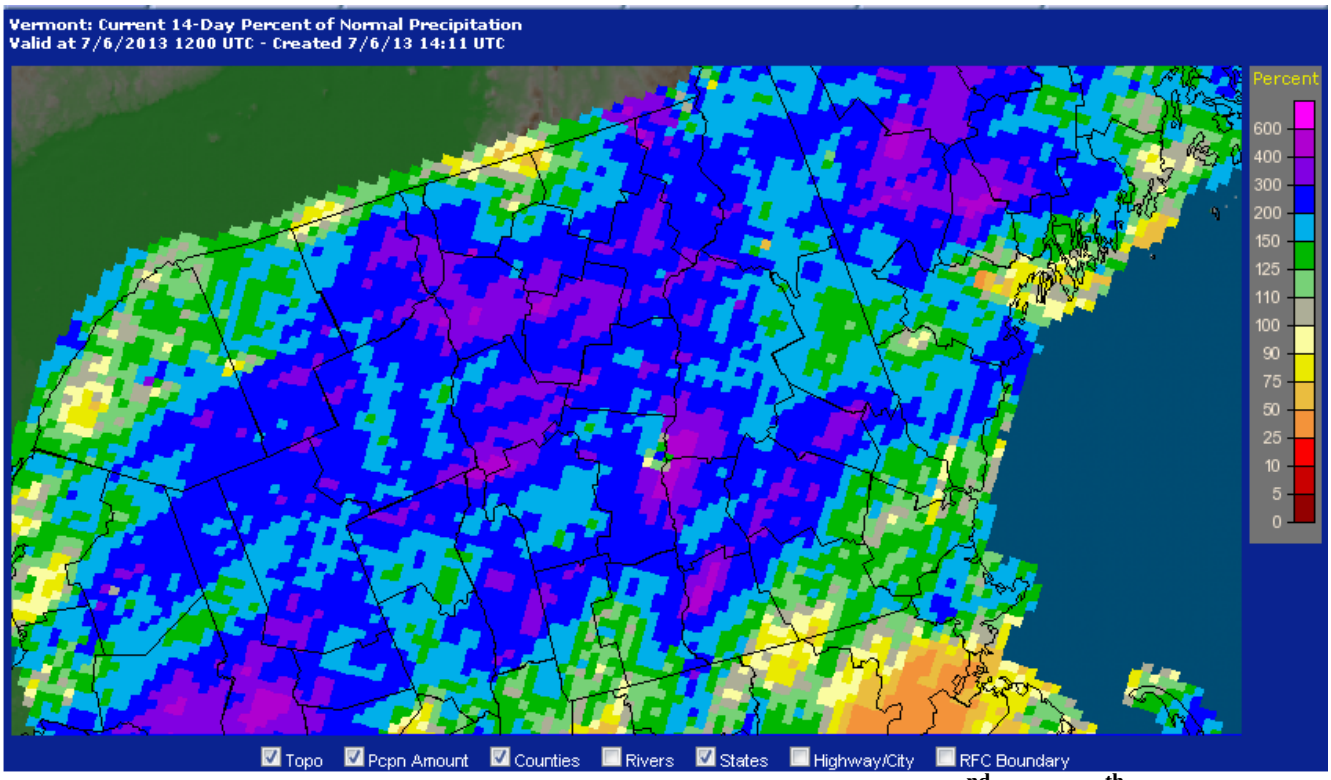


Figure 11 – Percentage of Normal Precipitation (June 22nd – July 5th)

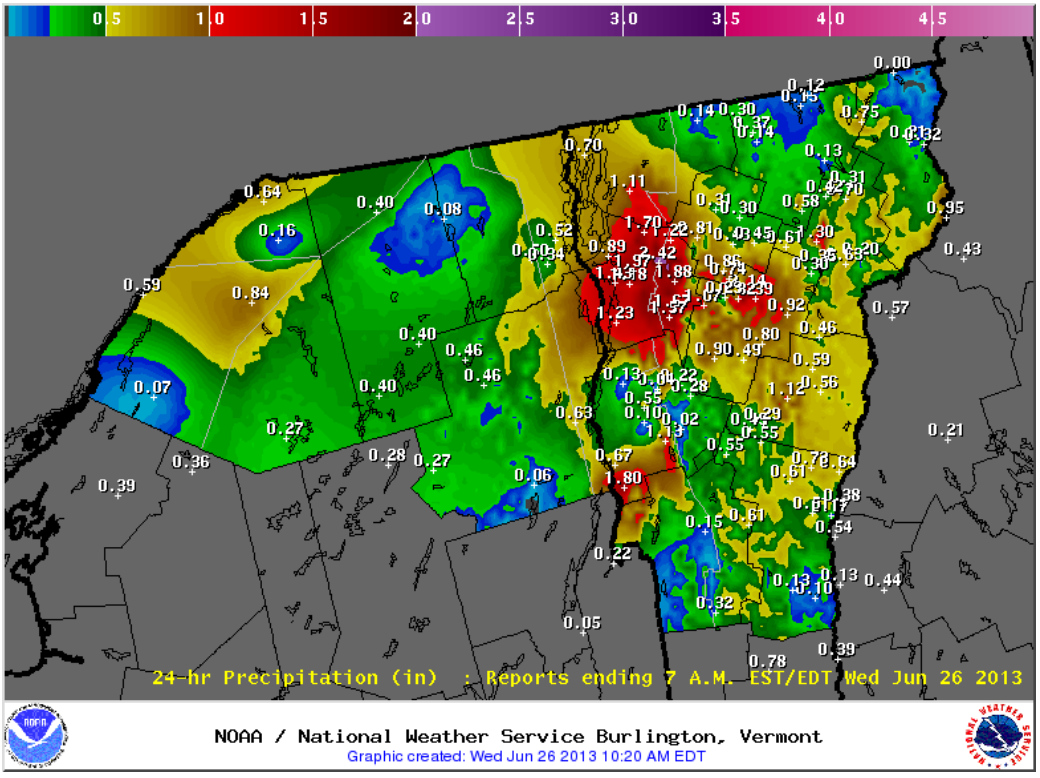


Figure 12 – 24-Hour Rainfall ending 7 am EDT June 26th

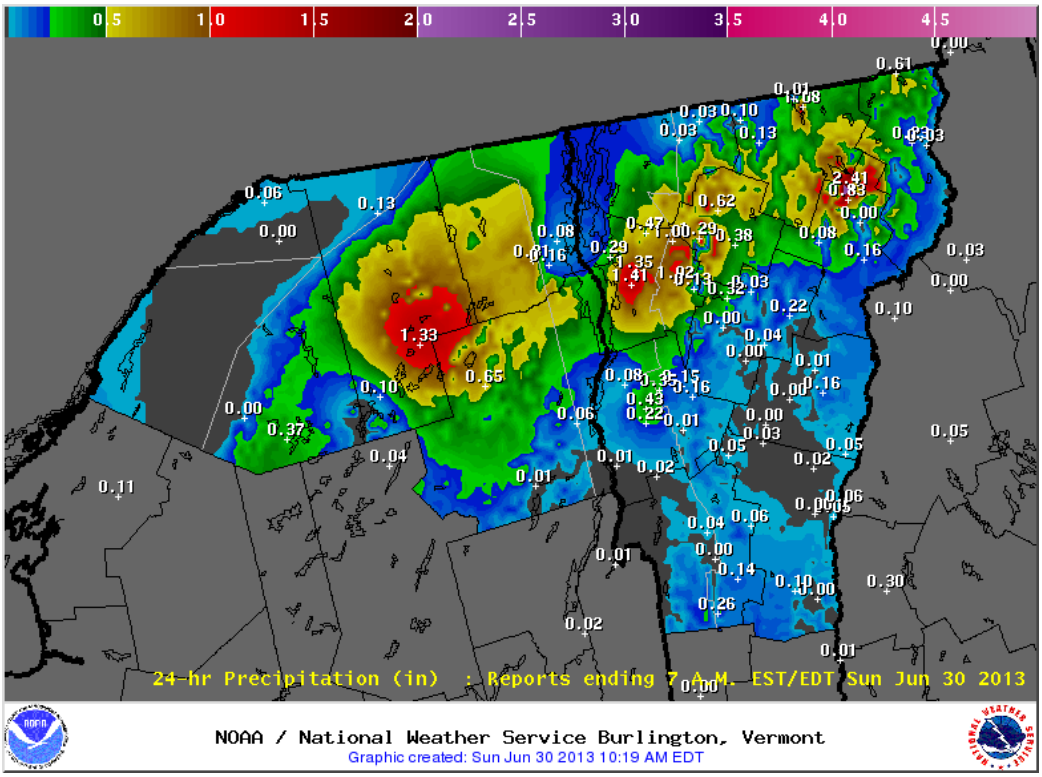


Figure 13 – 24-Hour Rainfall ending 7 am EDT June 30th

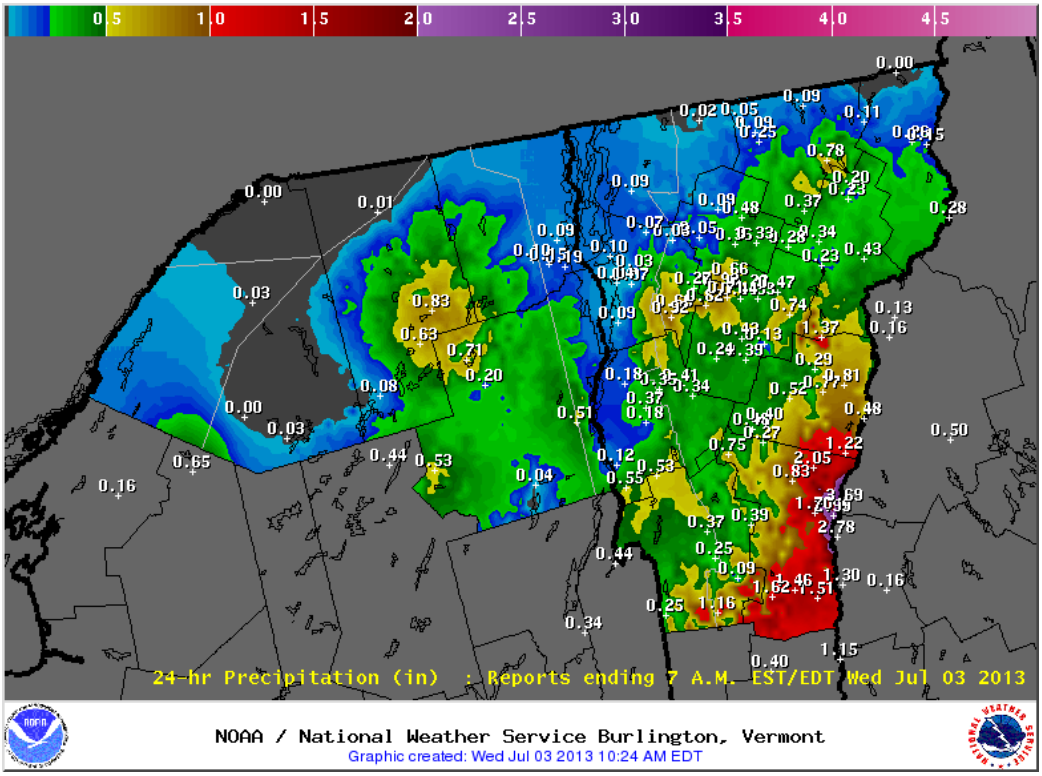


Figure 14 – 24-Hour Rainfall ending 7 am EDT July 3rd

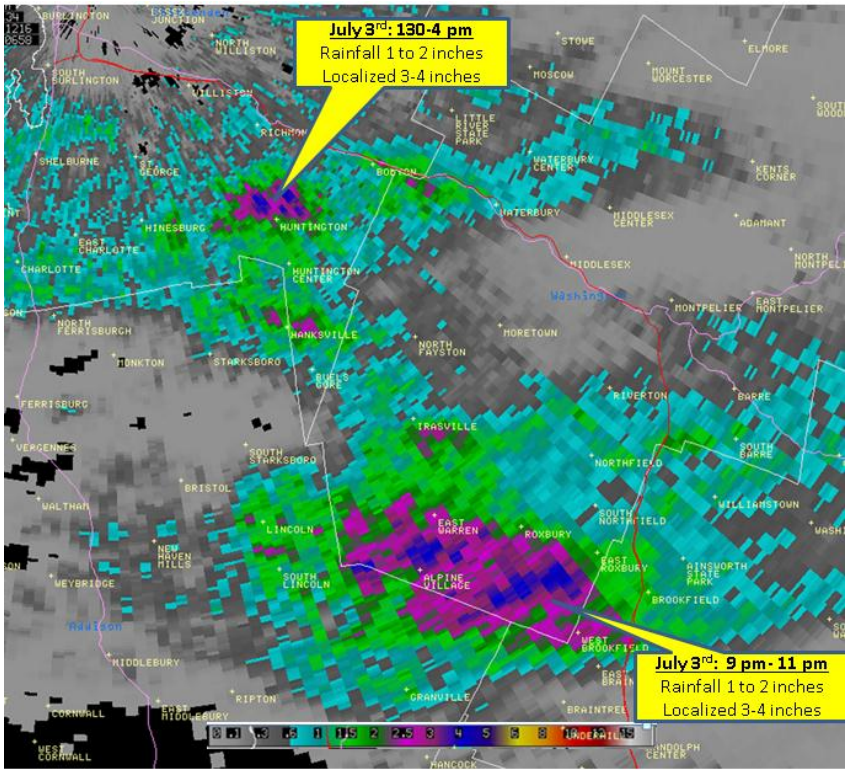


Figure 15 – KCXX Dual-Pol Radar Estimated Rainfall for July 3rd

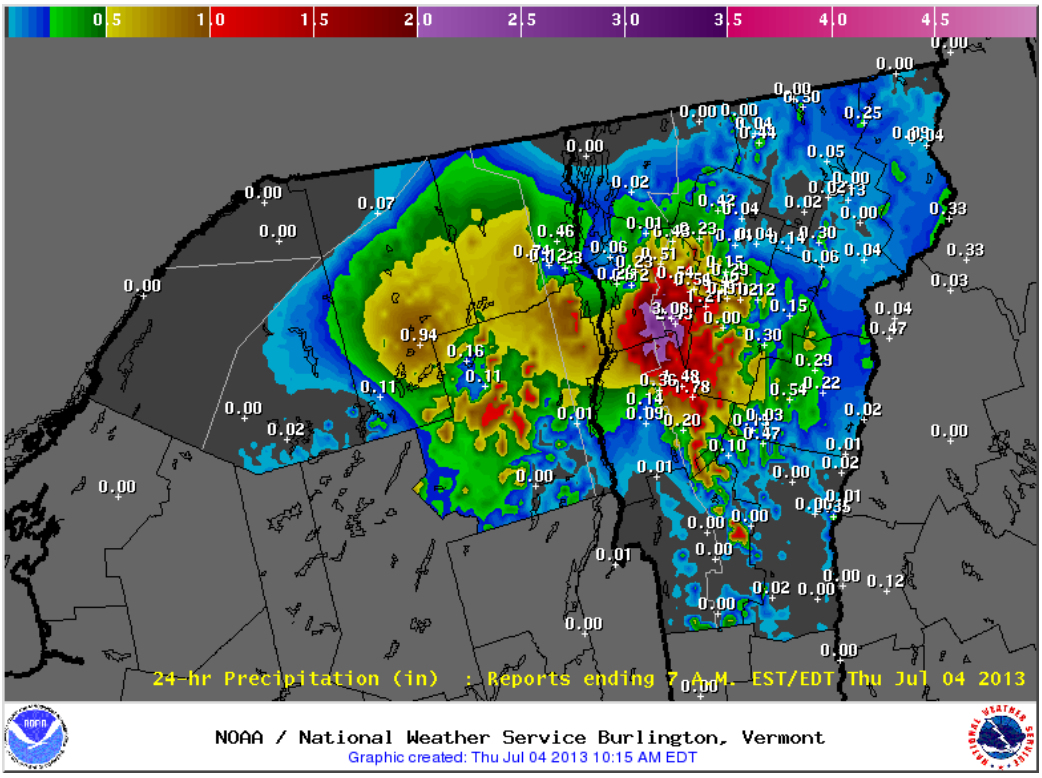


Figure 16 – 24-Hour Rainfall ending 7 am EDT July 4th

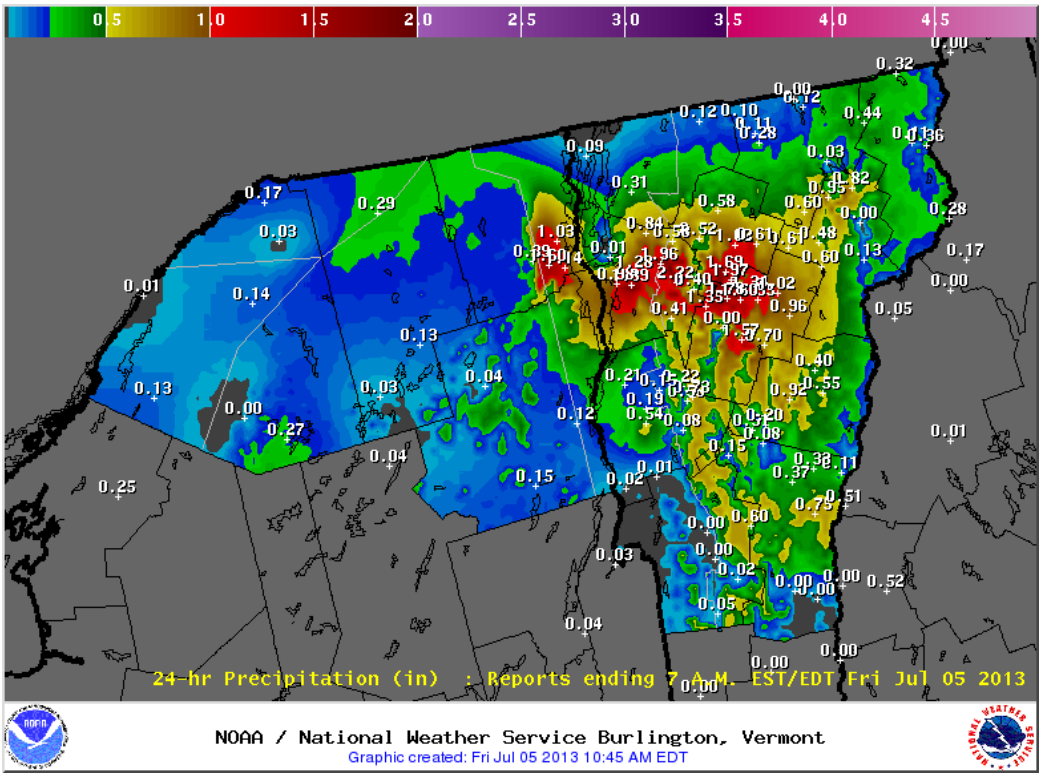


Figure 17 – 24-Hour Rainfall ending 7 am EDT July 5th

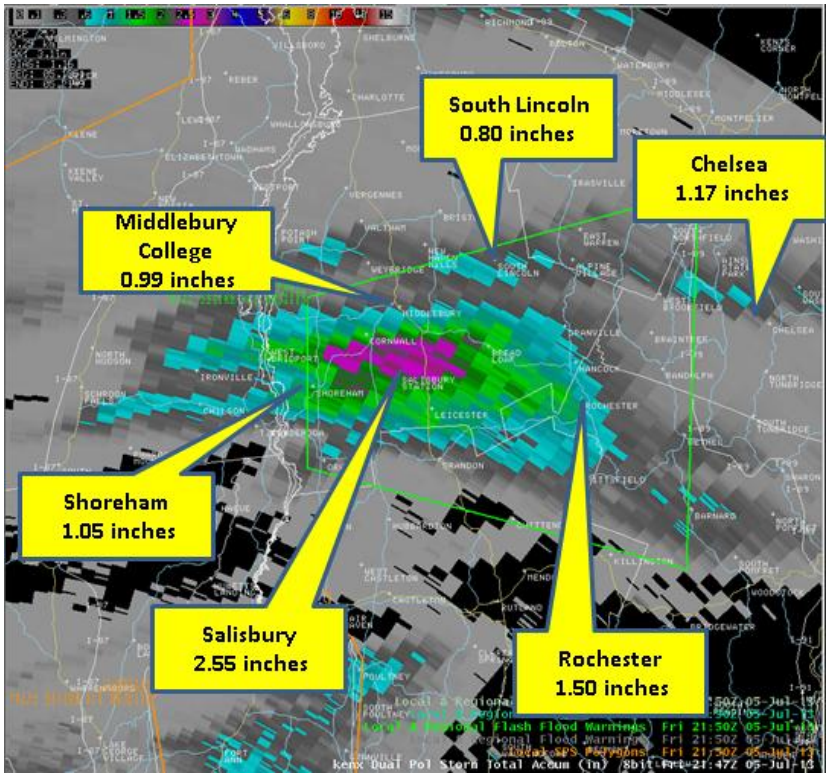


Figure 18 – KENX Dual-Pol Radar Estimate and Observed Rainfall for July 5th

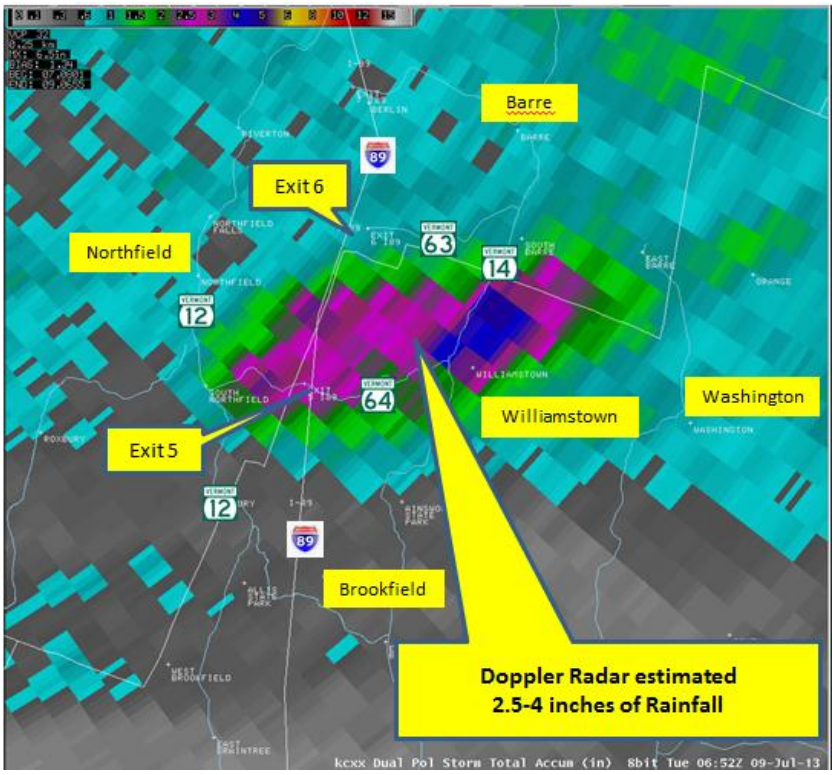


Figure 19 - KCXX Dual-Pol Radar Estimate 7/9/13

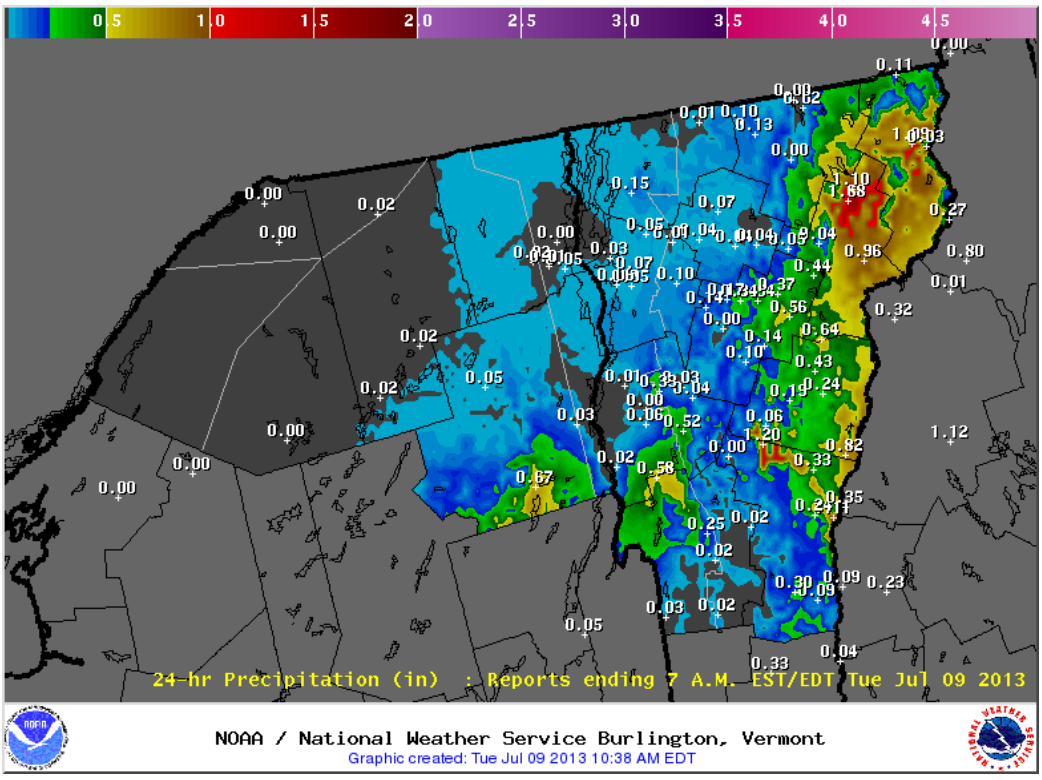


Figure 20 – 24-Hour Rainfall ending 7 am EDT July 9th

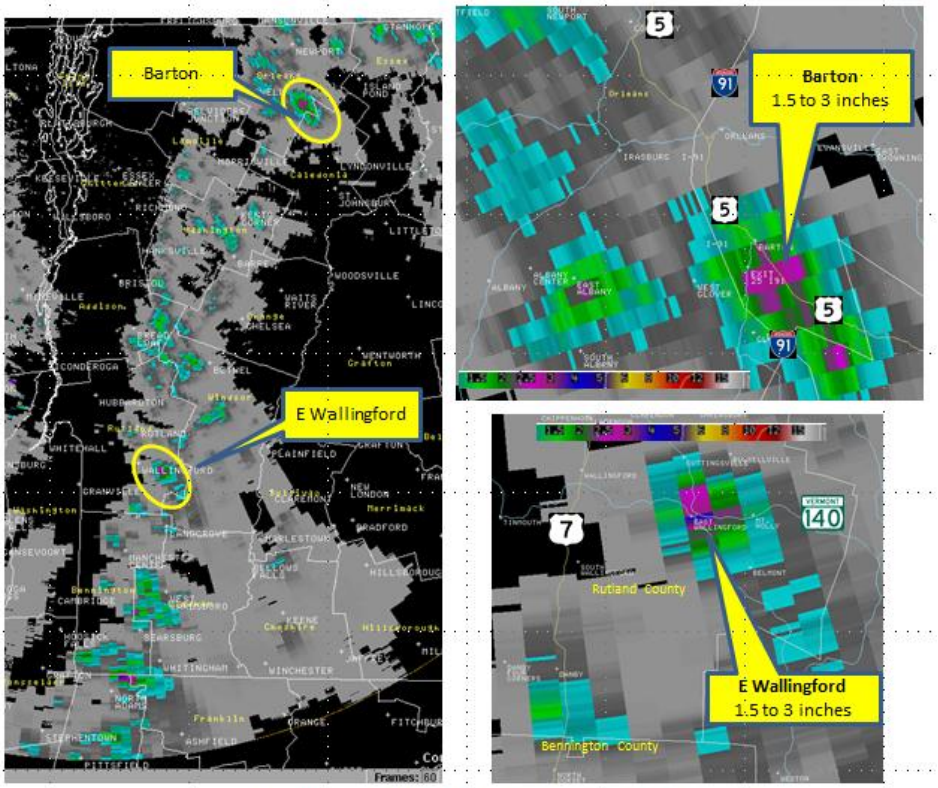


Figure 21 – KCXX Dual-POL Radar Estimates for July 9, 2013
Aftn/Evening Storms for Barton and East Wallingford

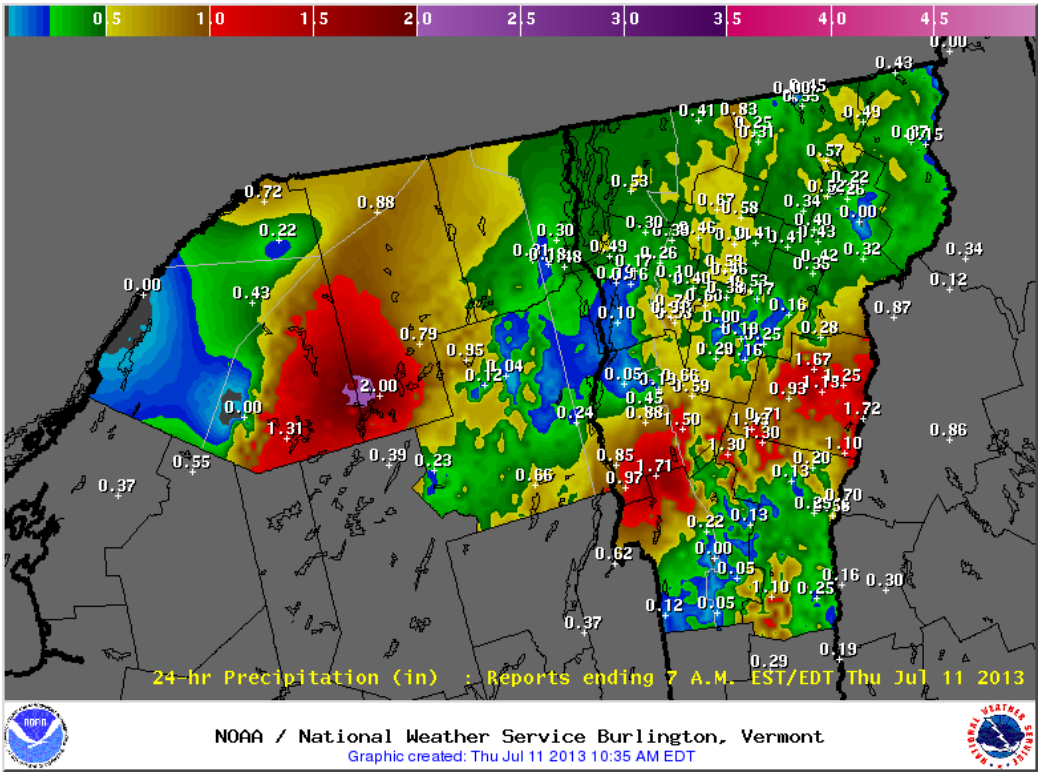


Figure 22 – 24-Hour Rainfall ending 7 am EDT July 11th

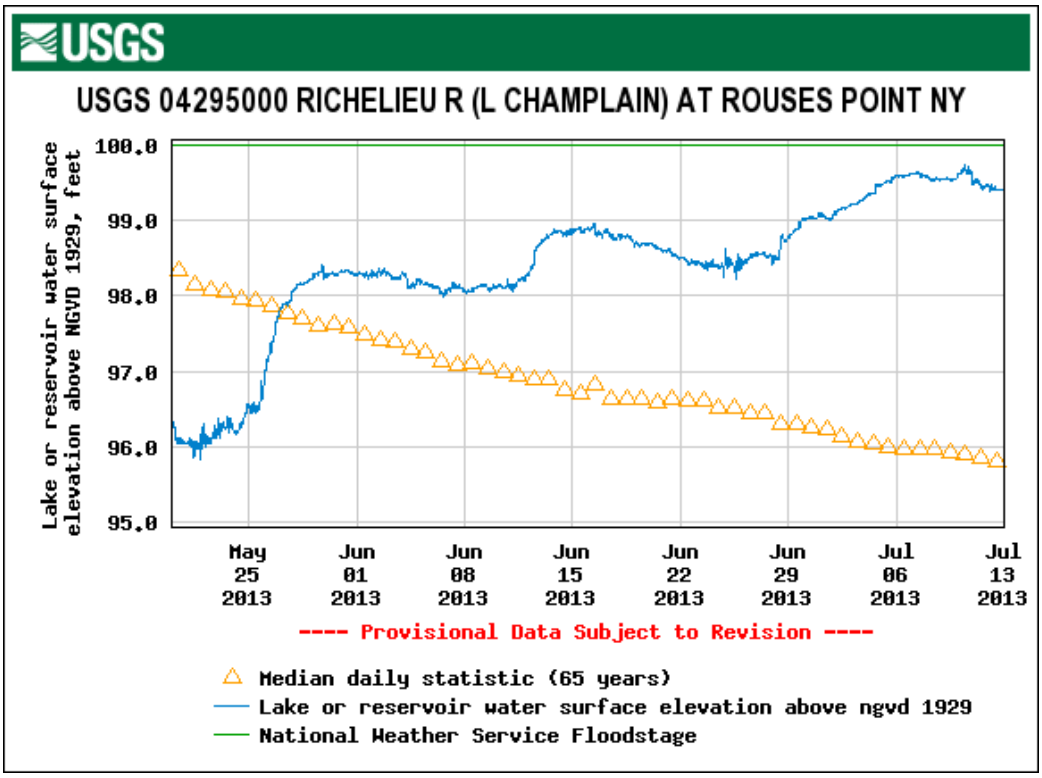


Figure 23 – Lake Champlain Lake Level May 20 – July 13, 2013

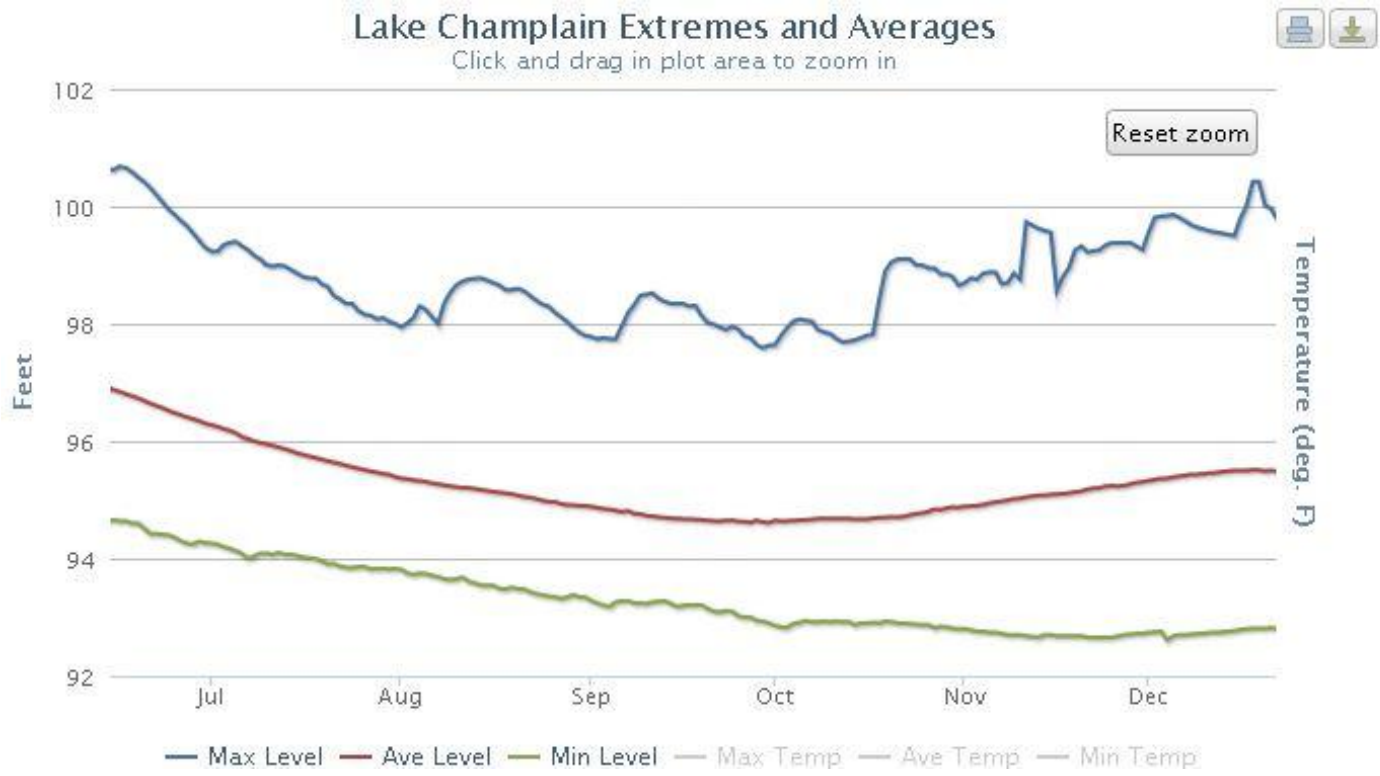


Figure 24 – Historic Lake Champlain Lake Level June 20 – December 20

Table 1 (Below) Individual Reports of Rainfall from ending 7 am June 23rd – July 11th (*No Data Available aft 7/8)

Addison	**Total**
Lincoln	**9.93**
Starksboro	**8.09**
Orwell	**8.05**
Caledonia	
Groton	**9.25**
Sutton	**8.56**
Walden	**6.73**
Sheffield	**6.53**
Hardwick	**5.72**
Chittenden	
Huntington	**11.41**
Richmond	**11.25**
Jericho	**10.11**
Burlington Int'l	**8.15**
Burlington	**8.06**
Underhill	**7.61**
Charlotte	**7.10**
Essex	
Gilman	**6.49***
Gallup Mills	**5.30***
Averill	**4.56**
Island Pond	**3.70**
Franklin	
Fairfax	**6.24**
St. Albans	**5.84**
Grand Isle	
Alburgh	**4.34**
Lamoille	
Stowe	**10.03**
Mount Mansfield	**9.38**

Jeffersonville	**8.30**
Morrisville	**7.15**
Johnson 2N	**6.32**
Orange	
Brookfield	**11.75**
Braintree	**11.65**
Bradford	**8.88**
Randolph	**8.59**
Chelsea	**8.23**
Corinth	**7.19**
Orleans	
Morgan	**6.82**
Greensboro	**5.45**
Derby	**5.36**
Newport	**4.57**
Jay Peak	**4.43**
Westfield	**4.38**
Barton	**4.38**
Rutland	
W Rutland	**8.32**
Mendon	**7.02**
Pittsford	**7.13**
Rutland	**6.07**
Washington	
Warren	**12.68**
Waterbury	**12.21**
Berlin	**8.55**
Waitsfield	**8.43**
Plainfield	**8.38**
Middlesex	**8.25**
Northfield	**7.87**
Cabot	**7.42**
Knapp Airport (Berlin)	**6.63**
Windsor	
Rochester	**8.62**
Bethel	**8.08**

Pomfret	**7.27**
Ludlow	**6.65**
Norwich	**6.21**
Woodstock	**6.00**
Springfield	**4.79**
Bennington	
Peru	**8.65***
Landgrove	**7.76**
Bennington	**3.05***
Windham	
Putney	**7.07**
Westminster	**5.87**
Marlboro	**4.54***
Grafton	**4.00***