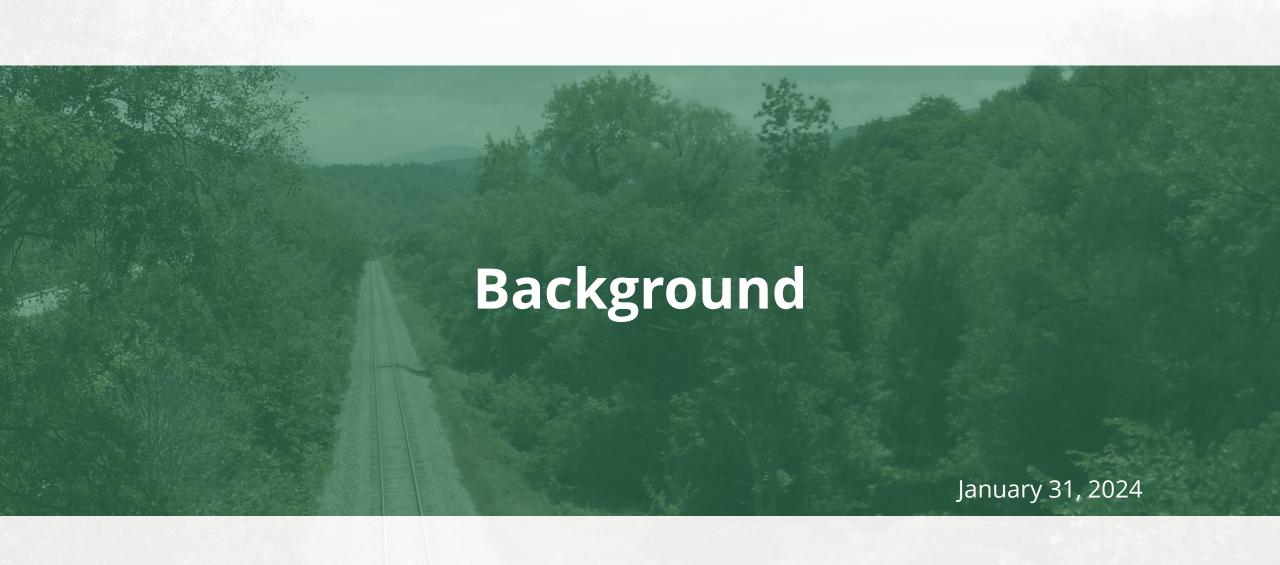
The July 7-17th 2023 Storm Response and Recovery

Presentation to the Vermont House Committee on Transportation

January 31, 2024







VT RAIL AND AVIATION BUREAU
DIRECTOR DAN DELABRUERE

In Inches 0.01 - 0.090.50 0.74 0.75 - 0.991.00 - 1.992.00 - 2.99 3.00 - 3.99400 - 499 500 - 5996.00 6.99

media, public, state & local officials

This map is an interpolation of actual reported values, but should be considered an

Sources: NWS observers & sooters



Created by the National Weather Service Forecast Office Burlington, Vermont

Background: Rainfall

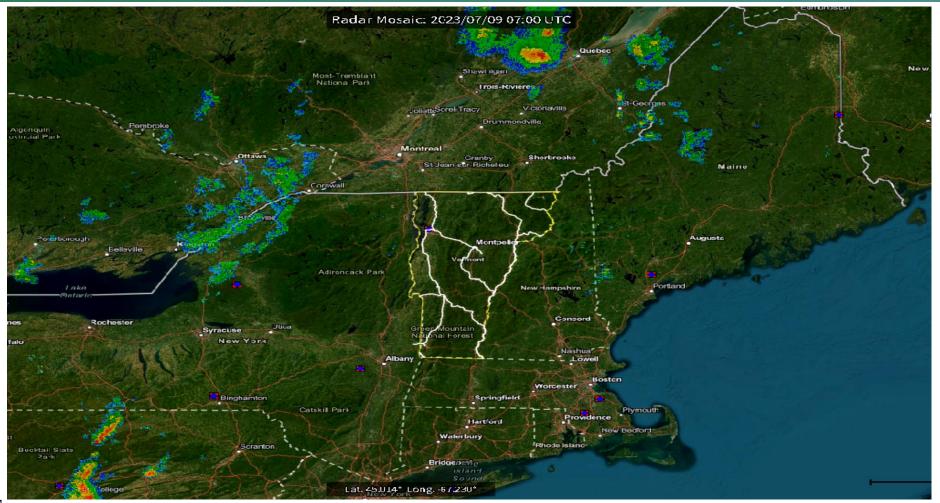
- Heavy rainfall occurred during July 10-11th.
- Rainfall amounts of 3 to 9 inches were observed across the state over 48 hours.
- The 5.28" rainfall at the airport in Berlin beat the previous record of 5.27" set with Tropical Storm Irene on 28 August 2011, setting a new record for rainfall in a single day.

Source: National Weather Service (NWS)
White lines are Rail Lines overlay

weather.gov



Background: Radar, July 9-10th





Background: Damage Apps



- Statewide State-owned Rail Lines had damage at 225 sites. There were 65 sites with debrisonly damage. There were 160 sites that had individual damage solicitations given to contractors. Of those 160 sites, 105 sites are completed and 55 sites are ongoing.
- Rail Damage Occurred in 23 VT Towns
- Damage spanned 123 miles out of the 298 miles of state-owned Rail Lines, or 41%.
- 25 Bridges and 32 Culverts were affected. 6 Culverts required replacement.



Background: Damage Apps



Open / Closed Status Dashboard

- Using GPS data inherit in collection methods, GPS Coordinates, Town, Rail Line and Milepost are derived automatically
- GIS Dashboards were used to communicate Open / Closed Status of the Rail Lines to Vermont Emergency Management and Incident Command



Background: Amtrak Service



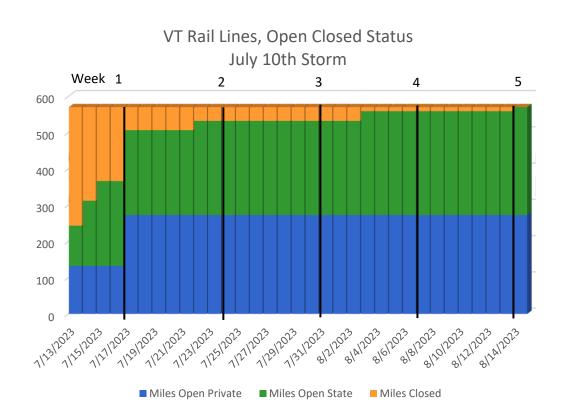
Photo by Vermont Rail System (VRS) 7/15/23

Amtrak Service was restored within 10 days

- Ethan Allen restored on July 15th
- Vermonter restored on July 19th



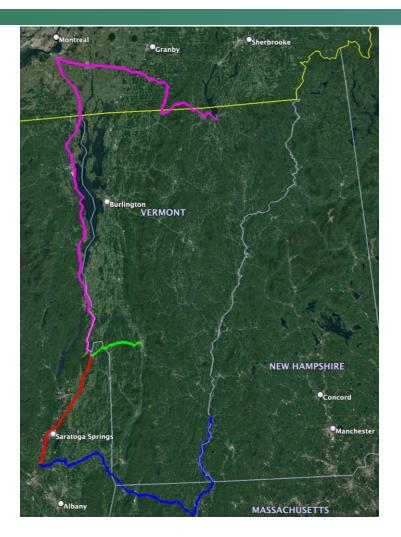
Background: Timeline



- After the storm, 58% of all VT Rail Lines were closed.
- In less than a week, only 11% of all VT Rail Lines were still closed.
- It took a total of 5 weeks to reopen all of VT Rail Lines.

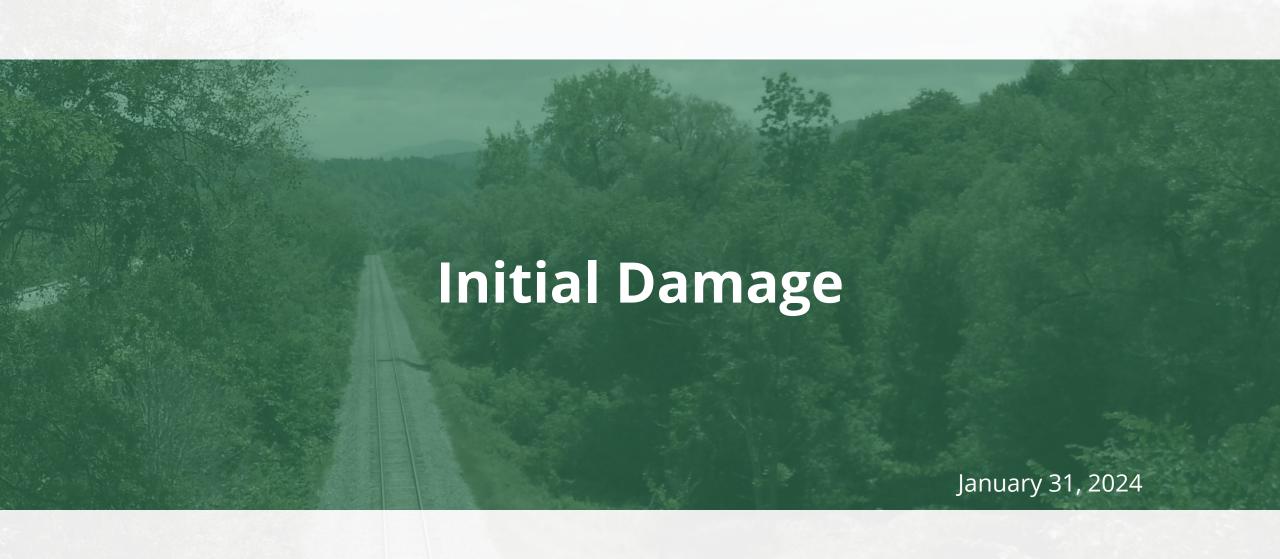


Keeping Vermont Businesses Supplied



Vermont Rail Systems (VRS)
Freight Detour

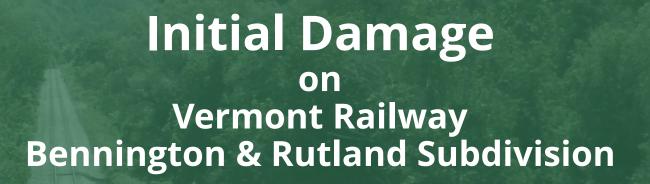






VT RAIL AND AVIATION BUREAU
DIRECTOR DAN DELABRUERE

July 10th, 2023 Storm



January 31, 2024

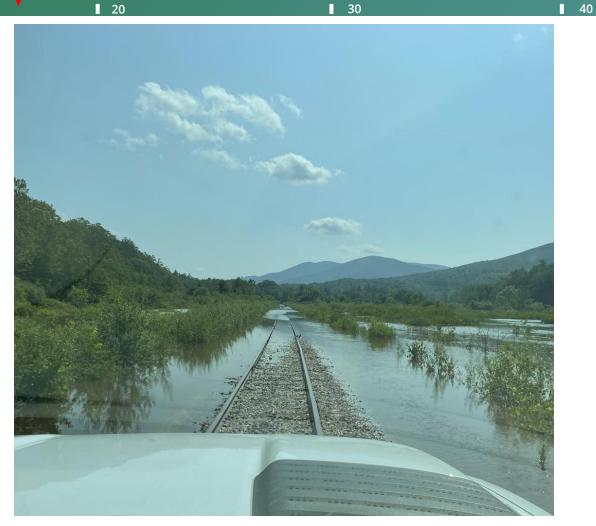


Initial Damage – July 10th – 13th

Town: Sunderland

MP 16.2

Bennington





The July 7-17th, 2023 Storm - Response and Recovery

Initial Damage – July 10th – 13th

Town: Manchester

MP 18.9 MP 0 MP 54.22 NORTH **1** 10 **1** 20 30 **4**0 **5**0 Bennington Rutland Rail Bridge #65



I 10

Initial Damage – July 10th – 13th

Town: Manchester

MP 21.4

20

MP 0

■ 30 **■** 40 **■** 50

Bennington

NORTH





The July 7-17th, 2023 Storm - Response and Recovery

MP 54.22

Initial Damage – July 10th – 13th

Town: Manchester

MP 22.4

MP 0

■ NORTH → 10

■ 20

■ 30

■ 40

■ 50

Bennington

13' long, 3' x 5' Concrete Culvert





The July 7-17th, 2023 Storm - Response and Recovery

1 10

Initial Damage – July 10th – 13th

Town: Dorset

MP 29.0

30

MP 0

MP 54.22

Bennington

NORTH

Y

1 20

Rutland

40





The July 7-17th, 2023 Storm - Response and Recovery

50

Initial Damage – July 10th – 13th

Town: Dorset

MP 31.75

MP 0

I NORTH → I 10

I 20

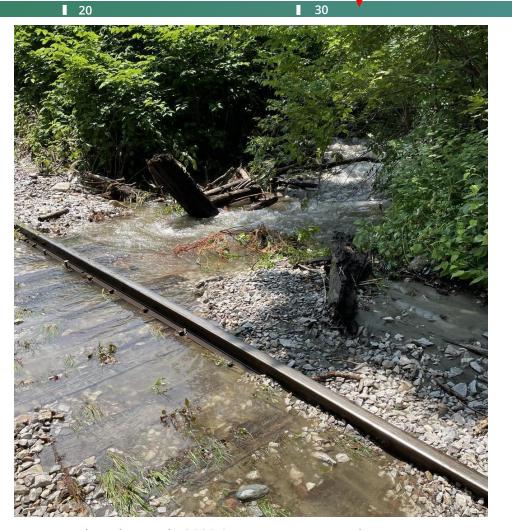
I 30

I 40

I 50

Bennington

Rail Bridge #80





The July 7-17th, 2023 Storm - Response and Recovery

Initial Damage – July 10th – 13th

Town: Mount Tabor

MP 35.0

MP 0

■ NORTH → 10

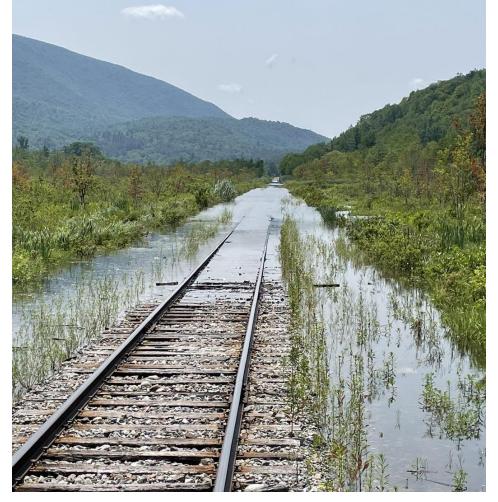
■ 20

■ 30

■ 40

■ 50

Bennington





The July 7-17th, 2023 Storm - Response and Recovery

Town: Danby

OWII. Dailby

20

Initial Damage – July 10th – 13th

MP 37.7



MP 54.22

Rutland

Bennington

NORTH

MP 0

30

■ 40 **■** 50

Rail Bridge #85

1 10





The July 7-17th, 2023 Storm - Response and Recovery

Wallingford Town:

Initial Damage – July 10th – 13th

MP 40.6

MP 54.22 50

Rutland

MP 0

NORTH

I 10

20

30

Bennington

Rail Bridge #87





The July 7-17th, 2023 Storm - Response and Recovery

20

Initial Damage – July 10th – 13th

MP 42.67

MP 54.22

MP 0

Town:

NORTH **I** 10

Wallingford

30

40

Rutland

50

Bennington

Rail Bridge #89





The July 7-17th, 2023 Storm - Response and Recovery

■ 20

Initial Damage – July 10th – 13th

Clarendon Town:

MP 48.9

MP 54.22

Rutland

NORTH

30

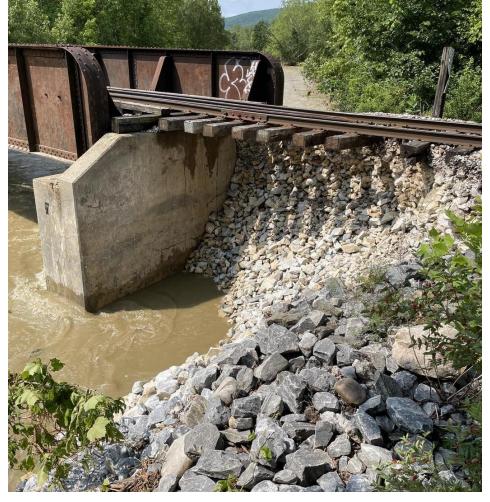
40 50

Bennington

MP 0

Rail Bridge #94

I 10





The July 7-17th, 2023 Storm - Response and Recovery

Initial Damage – July 10th – 13th

40

Town: Clarendon

Bennington

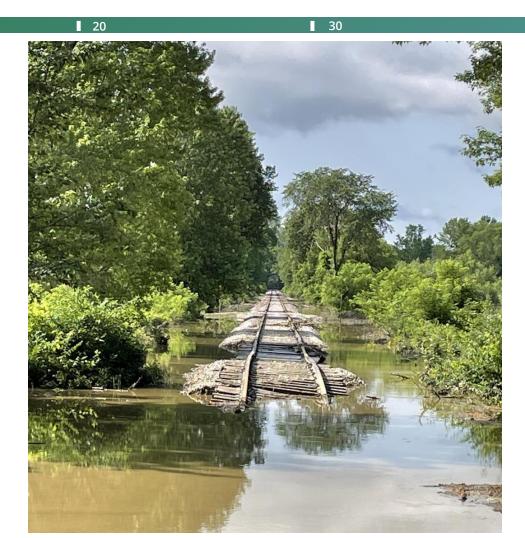
MP 0

MP 49.7



MP 54.22

NORTH → 10





The July 7-17th, 2023 Storm - Response and Recovery

Initial Damage – July 10th – 13th

Town: Clarendon

Bennington

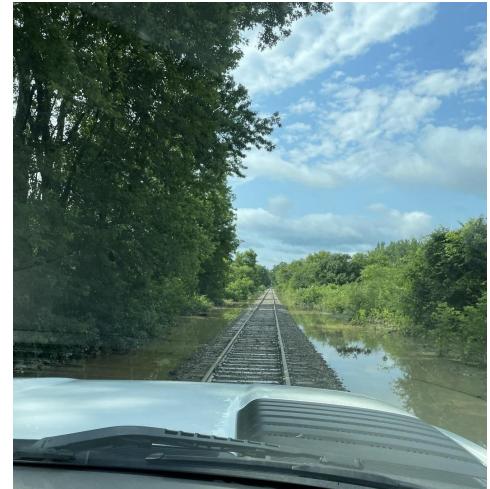
MP 50.15

MP 0

MP 54.22

Rutland

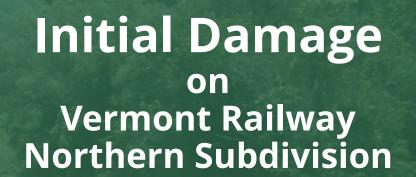
NORTH → 1 10 1 20 1 30 1 40





The July 7-17th, 2023 Storm - Response and Recovery

July 10th, 2023 Storm



January 31, 2024



VT RAIL AND AVIATION BUREAU
DIRECTOR DAN DELABRUERE

Initial Damage – July 10th – 13th

Town: Proctor

MP 58.65

MP 54.22 **V**

MP 123

■ 60 NORTH → ■ 70 ■ 80 ■ 90 ■ 100 ■ 110 ■ 120

Rutland





Initial Damage – July 10th – 13th

Town: Proctor

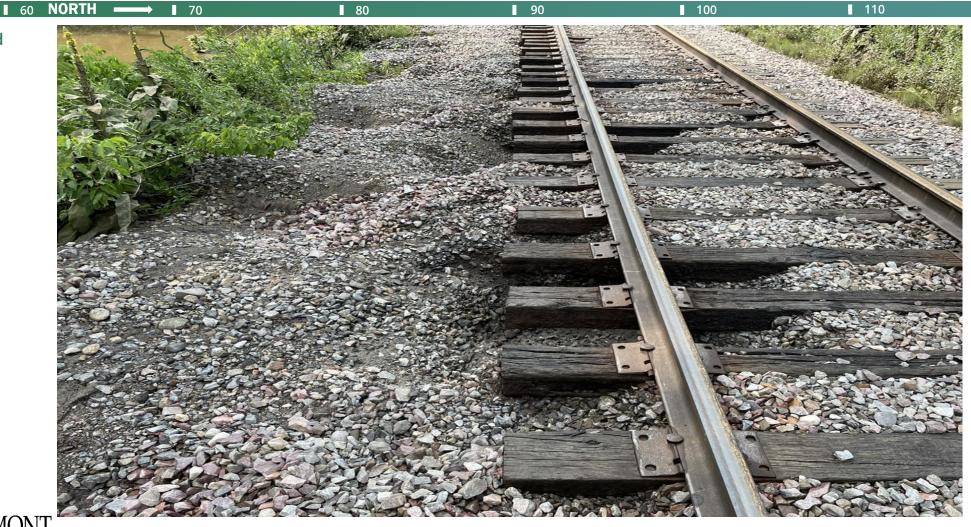
MP 58.66

MP 54.22

MP 123

Burlington

120





Initial Damage – July 10th – 13th

Town: Proctor

MP 59.53

MP 54.22

■ 60 **NORTH** ■ 170 ■ 80 ■ 90 ■ 100 ■ 110 ■ 120

Rutland





MP 123

Initial Damage – July 10th – 13th

Town: Proctor

MP 59.58

MP 54.22

60 **NORTH** → **1** 70 **1** 80 **1** 90 **1** 100 **1** 110 **1** 120

Rutland





MP 123

Initial Damage – July 10th – 13th

Town: Proctor

MP 60.11

MP 54.22

50 **NORTH 100 110 120**

Rutland





MP 123

Initial Damage – July 10th – 13th

Town: Proctor

MP 60.17

MP 54.22

Rutland





MP 123

Initial Damage – July 10th – 13th

Town: Proctor

MP 60.19

MP 54.22

Rutland





MP 123

Vermont Railway (VTR) – Northern Subdivision Rail Line:

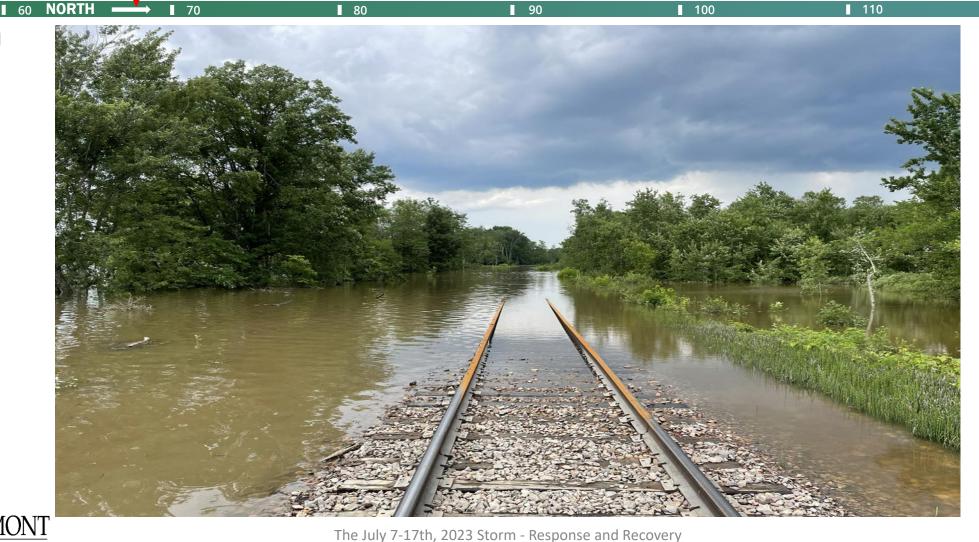
Initial Damage – July 10th – 13th

Brandon Town:

MP 68.10

MP 54.22 MP 123 120

Rutland





Initial Damage – July 10th – 13th

Town: Brandon

MP 68.30

MP 54.22 MP 123

■ 60 **NORTH** → ■ 70 ■ 80 ■ 90 ■ 100 ■ 110 ■ 120







The July 7-17th, 2023 Storm - Response and Recovery

July 10th, 2023 Storm



January 31, 2024



VT RAIL AND AVIATION BUREAU
DIRECTOR DAN DELABRUERE

Green Mountain Railroad (GMRC) Rail Line:

Initial Damage – July 10th – 13th

Rockingham MP 8.60 Town: **Bellows Falls**

NORTH

MP 0



20 30 40



Rail Bridge #112



Rutland

MP 52.2

Green Mountain Railroad (GMRC) Rail Line:

Initial Damage – July 10th – 13th

Rockingham MP 8.66 Town: **Bellows Falls**

NORTH

MP 0

20 30 40





Rutland

Town: Chester

Bellows Falls

MP 12.80

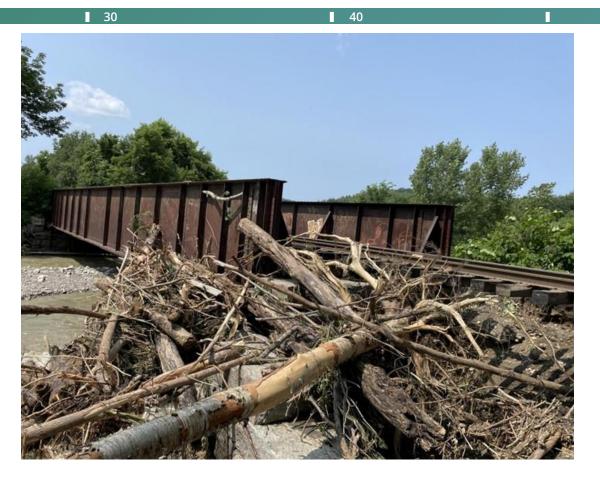
MP 0

 ∇

Rutland MP 52.2

Initial Damage – July 10th – 13th

NORTH 1 20 10



Rail Bridge #119



10

Initial Damage – July 10th – 13th

Town: Chester

Bellows Falls

MP 16.90

Rutland MP 52.2

MP 0

NORTH

 ∇

■ 20 ■ 30 ■ 40





I 10

Initial Damage – July 10th – 13th

Town: Chester

Bellows Falls

NORTH

MP 0

MP 18.28

20

Rutland MP 52.2





Chester Town:

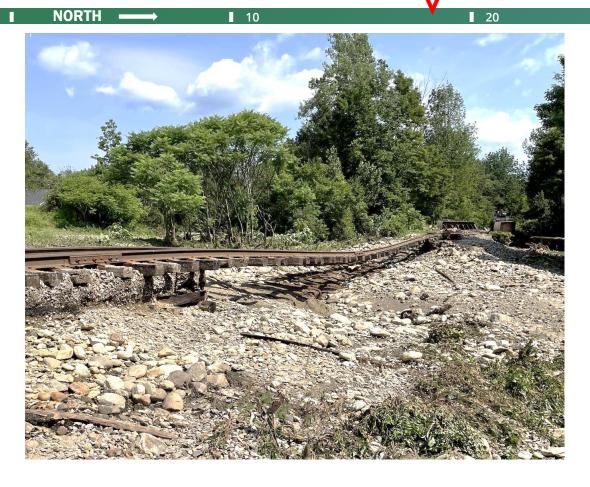
Bellows Falls

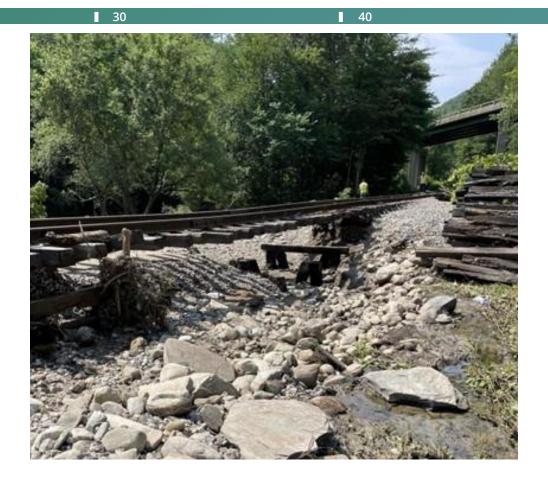
MP 18.60

MP 0

Rutland MP 52.2

Initial Damage – July 10th – 13th







1 10

Initial Damage – July 10th – 13th

40

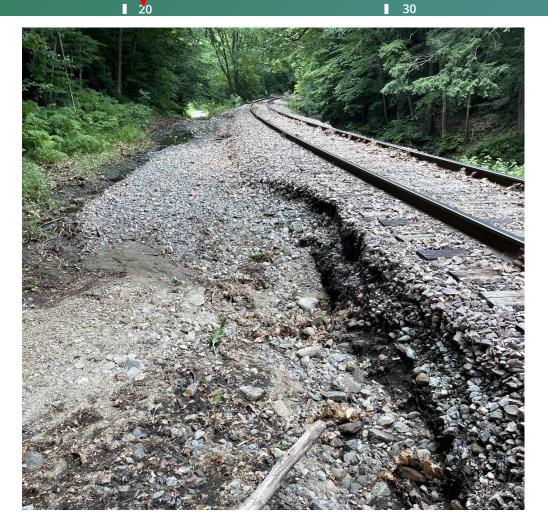
Town: Cavendish

Bellows Falls

NORTH ----

MP 0

MP 21.09





Rutland

Green Mountain Railroad (GMRC) Rail Line:

Initial Damage – July 10th – 13th

Cavendish Town:

Bellows Falls

MP 0 NORTH ----**1** 10

Rutland MP 52.2 40 30



MP 21.20



1 10

Initial Damage – July 10th – 13th

Town: Cavendish

NORTH ----

Bellows Falls
MP 21.38

MP 0

20

▼30
40





Rutland

1 10

Initial Damage – July 10th – 13th

40

Town: Cavendish

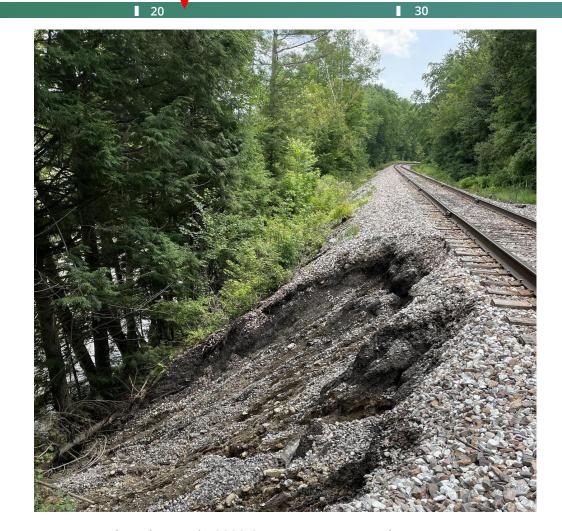
NORTH ----

Bellows Falls

MP 22.64

Rutland

MP 52.2





1 10

Initial Damage – July 10th – 13th

Town: Cavendish

Bellows Falls

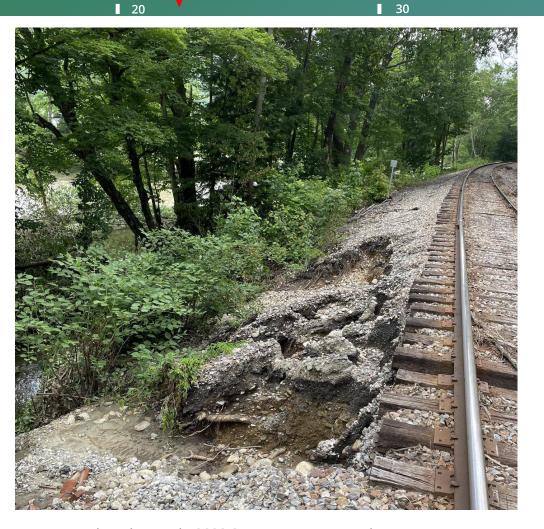
NORTH ----

MP 0

MP 23.51

V

30 40





Rutland

Initial Damage – July 10th – 13th

Cavendish Town:

Bellows Falls

MP 0

MP 23.54



NORTH ----**1** 10 ■ 20 30

40





Rutland

Initial Damage – July 10th – 13th

Town: Cavendish

Bellows Falls

MP 0

MP 23.55

Rutland MP 52.2

NORTH → I 10 I 20

■ 30 **■** 40





Initial Damage – July 10th – 13th

40

Town: Cavendish

TOWIT. Caveriuis

Bellows Falls

MP 0

MP 23.60

Rutland MP 52.2

NORTH 10

- V

■ 20

■ 30





1 10

Initial Damage – July 10th – 13th

Town: Cavendish

Bellows Falls

NORTH ----

MP 0

MP 23.75



1 20

■ 30 ■ 40





Rutland

Cavendish Town:

Bellows Falls

MP 0

MP 23.80

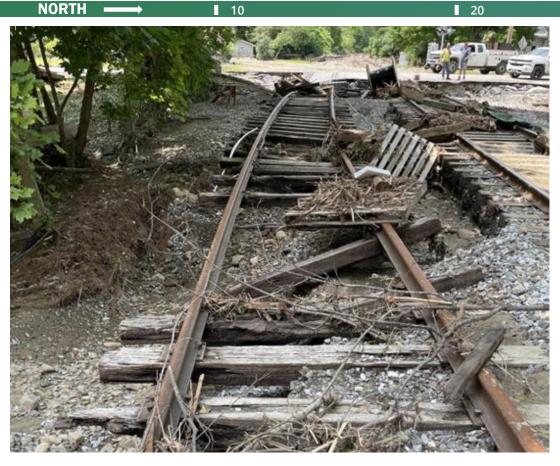
Initial Damage – July 10th – 13th

Rutland MP 52.2



30

40







Town: Cavendish

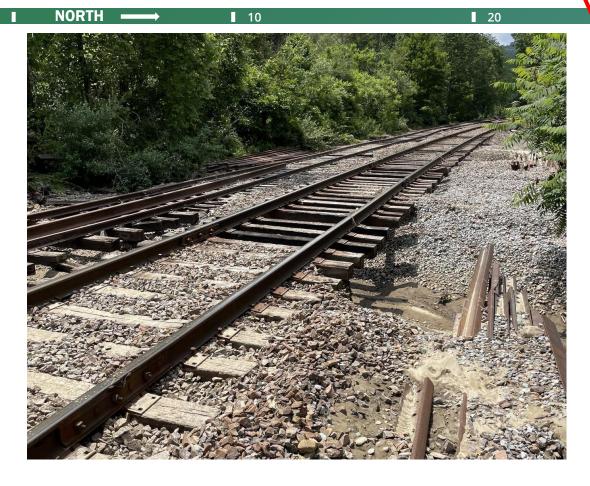
Bellows Falls

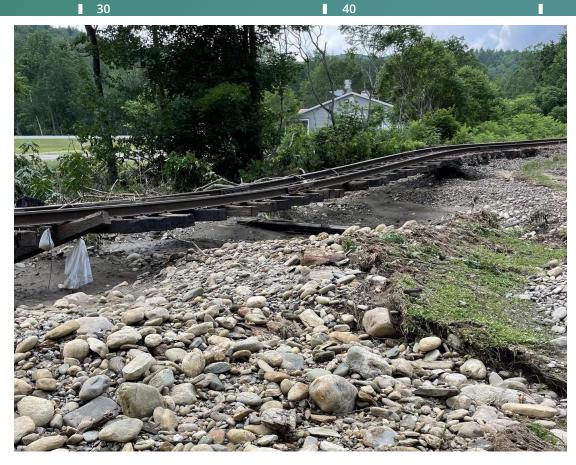
MP 0

MP 24.05

Initial Damage – July 10th – 13th

Rutland MP 52.2







Town: Cavendish

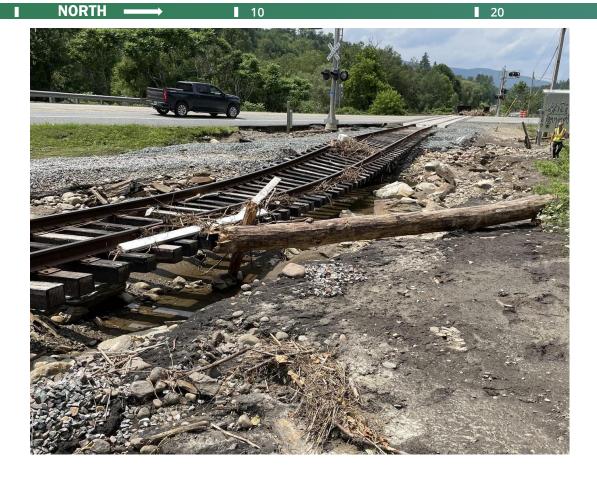
Bellows Falls

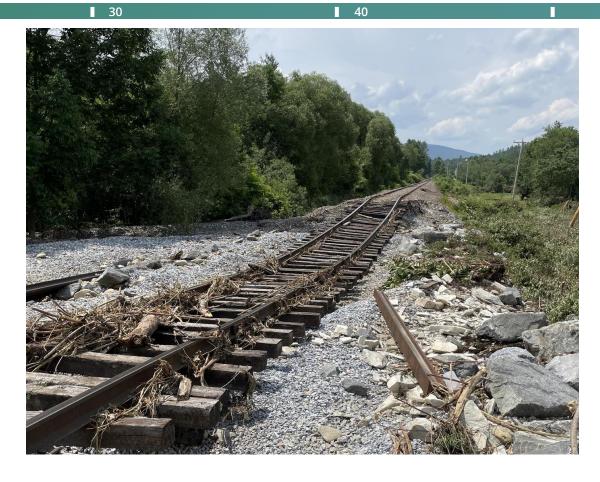
MP 0

MP 24.35

Initial Damage – July 10th – 13th

Rutland MP 52.2







1 10

Initial Damage – July 10th – 13th

40

Town: Cavendish

Bellows Falls

NORTH ----

MP 0

MP 24.37 **Rutland** MP 52.2

30

■ 20





Town: Ludlow

Bellows Falls

MP 0

■ NORTH → ■ 10 ■ 20

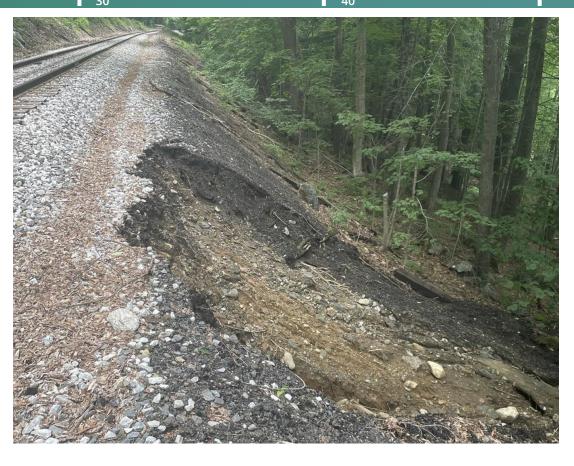


Initial Damage – July 10th – 13th

MP 28.45

Rutland

MP 52.2





Initial Damage – July 10th – 13th

Town: Ludlow

Bellows Falls

MP 0

■ NORTH → ■ 10 ■ 20 ■ 30 ■ 40



MP 28.55



Rutland

Town: Ludlow

Bellows Falls

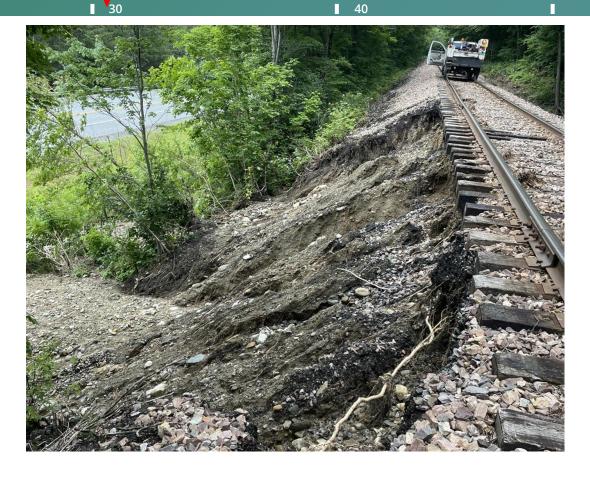
MP 0

■ NORTH → ■ 10 ■ 20



Initial Damage – July 10th – 13th

MP 30.70 Rutland MP 52.2





Ludlow Town:

Bellows Falls

MP 0 NORTH ----**1** 10 **2**0



MP 30.81 Rutland MP 52.2

40





Town: Mount Holly

Bellows Falls

MP 0

NORTH → 1 10 1 20



MP 31.68 Rutland MP 52.2

40



The July 7-17th, 2023 Storm - Response and Recovery



Town: **Mount Holly**

Bellows Falls

MP 0

NORTH ----**1** 10 20

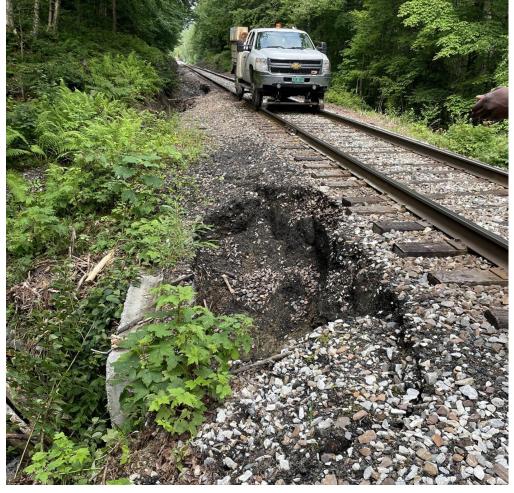


MP 32.42

Rutland MP 52.2

30

40





Green Mountain Railroad (GMRC) Rail Line:

Mount Holly Town: **Bellows Falls**

MP 0

NORTH -**1** 20 **I** 10

Initial Damage – July 10th – 13th

MP 32.72 **Rutland** MP 52.2

40



30



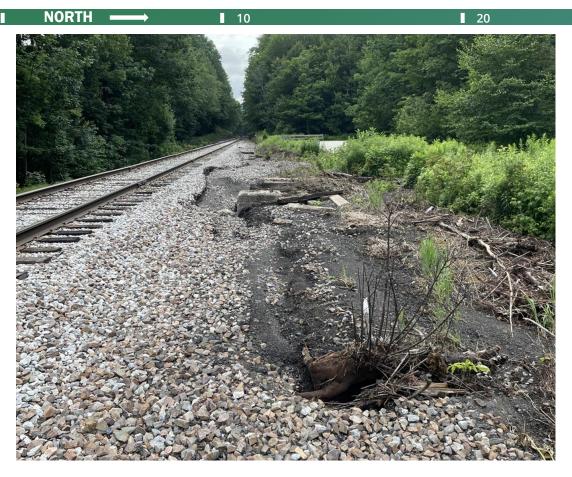
Town: Mount Holly

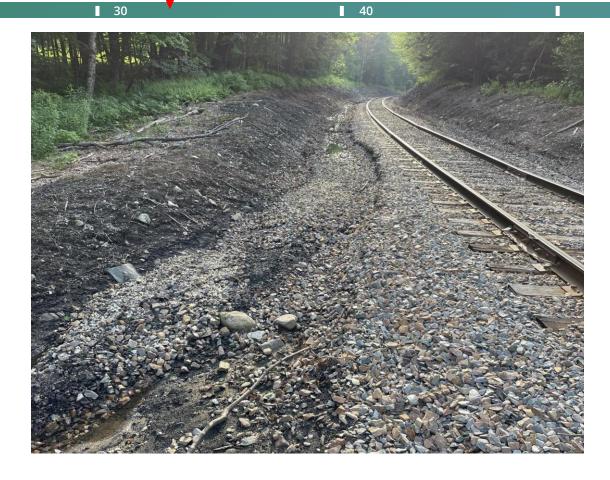
Bellows Falls

MP 0

Initial Damage – July 10th – 13th

MP 32.75 Rutland MP 52.2







Green Mountain Railroad (GMRC) Rail Line:

Town: **Mount Holly**

MP 32.85 **Bellows Falls** MP 0 NORTH -30 **1** 10 **2**0 40





Initial Damage – July 10th – 13th

Rutland

Green Mountain Railroad (GMRC) Rail Line:

Mount Holly Town:

Bellows Falls MP 0 NORTH -**1** 10 **2**0



MP 33.28 **Rutland** MP 52.2

40



30



Initial Damage – July 10th – 13th

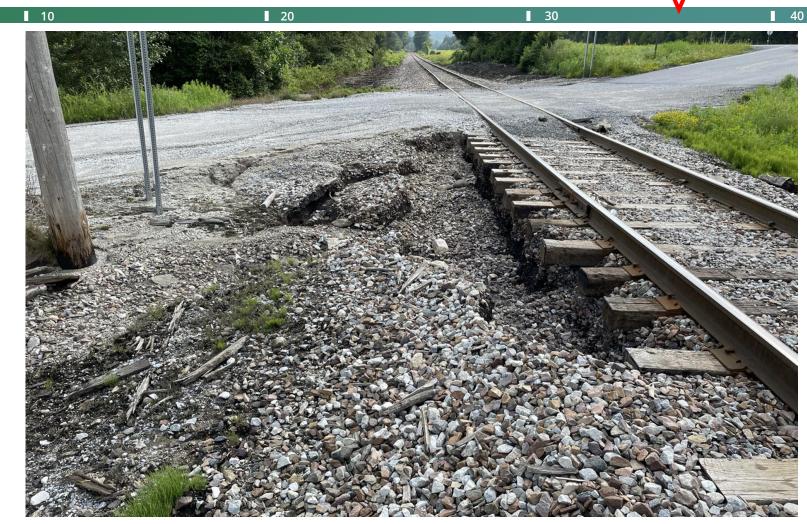
Town: Mount Holly

Bellows Falls

NORTH

MP 0

MP 35.67 Rutland MP 52.2





Initial Damage – July 10th – 13th

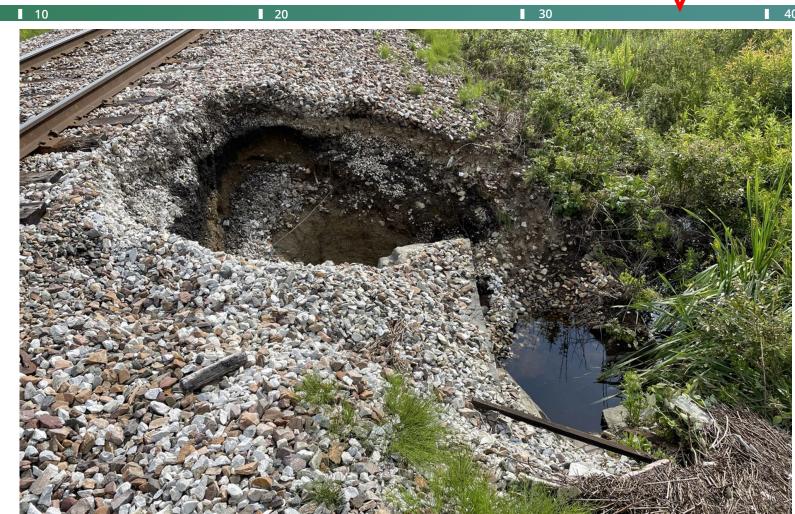
Town: Mount Holly

Bellows Falls

NORTH

MP 0

MP 35.87 Rutland MP 52.2





Initial Damage – July 10th – 13th

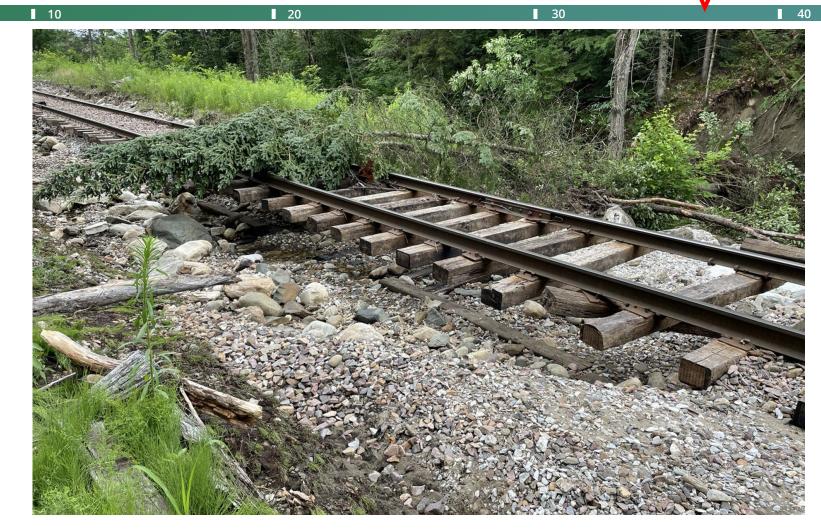
Town: Mount Holly

Bellows Falls

NORTH

MP 0

MP 36.59 Rutland MP 52.2





Town: **Mount Holly Bellows Falls**

MP 0

NORTH ----**1** 10 **2**0 Initial Damage – July 10th – 13th

MP 37.60 **Rutland** MP 52.2



Rail Bridge #142



Mount Holly Town: **Bellows Falls**

MP 0

NORTH ----**1** 10 20



MP 37.70

Rutland MP 52.2





Initial Damage – July 10th – 13th

Town: Wallingford

Bellows Falls

NORTH

MP 0

MP 40.09 Rutland
MP 52.2

10 30 40





Green Mountain Railroad (GMRC) Rail Line:

Initial Damage – July 10th – 13th

Shrewsbury Town:

Bellows Falls

NORTH

MP 0

MP 45.58 **Rutland** MP 52.2

I 10 20 30 40



Initial Damage Washington County Railroad Montpelier & Barre Subdivision January 31, 2024



Initial Damage – July 10th – 13th

Town: Berlin

MP 3.45

MP 0

4 6 8 10

Montpelier

EAST







MP 11.17

Initial Damage – July 10th – 13th

Town: Berlin

MP 5.04

MP 0

MP 11.17

Montpelier

EAST







Initial Damage – July 10th – 13th

Town: Barre City

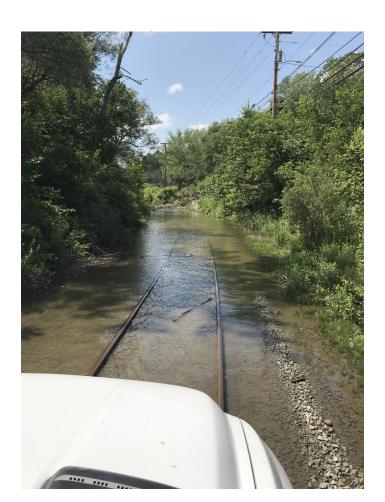
MP 6.35

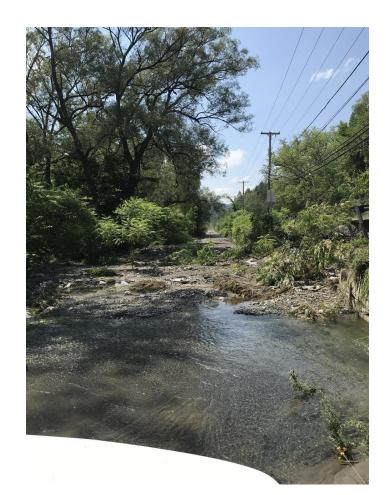
MP 0

MP 11.17

EAST → 2

Montpelier







Initial Damage – July 10th – 13th

Town: Barre City

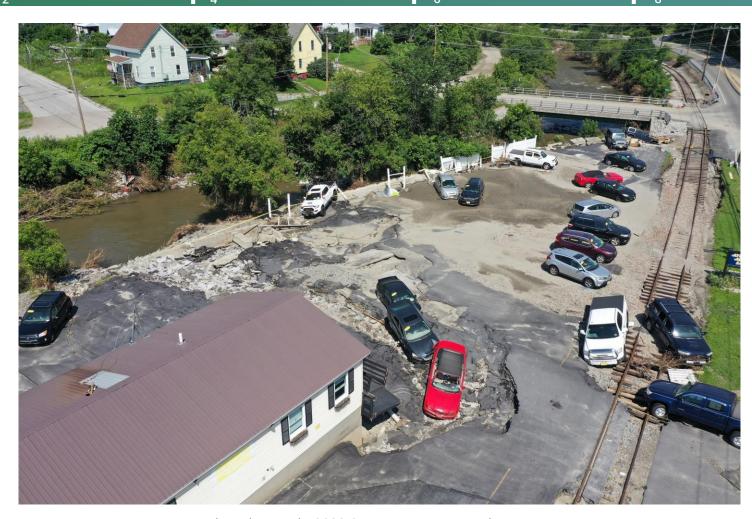
MP 6.8

MP 0

MP 11.17

Montpelier

EAST





Initial Damage – July 10th – 13th

Town: Barre City

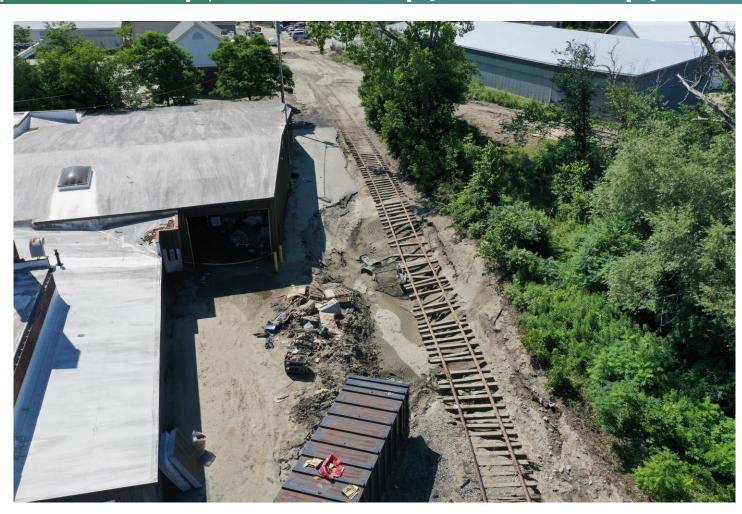
MP 6.9

MP 0

■ EAST → ■ 2 ■ 4 ■ 6

MP 11.17

Montpelier





Initial Damage – July 10th – 13th

Town: Barre City

MP 6.9

MP 0

MP 11.17

■ EAST → 2

■ 4

■ 6

■ 8

■ 10

Montpelier







Initial Damage – July 10th – 13th

Town: Barre City

MP 7.1

MP 0

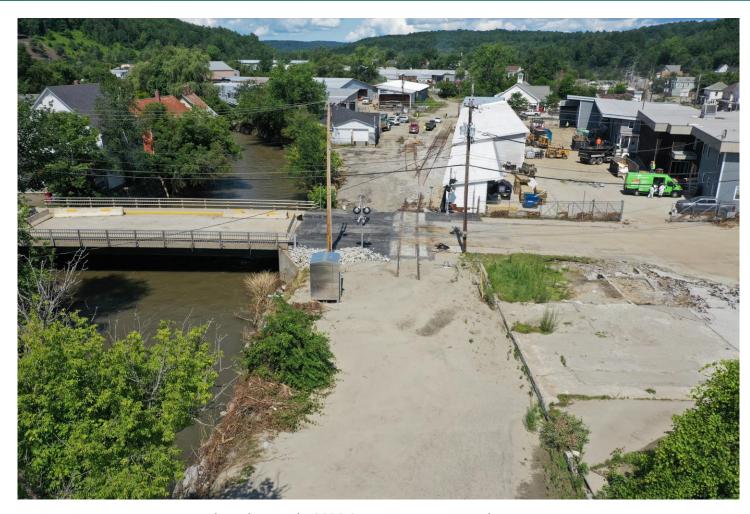
■ EAST → 1 2 4 4 6

V

MP 11.17

Barre Town

Montpelier





Barre City Town:

EAST

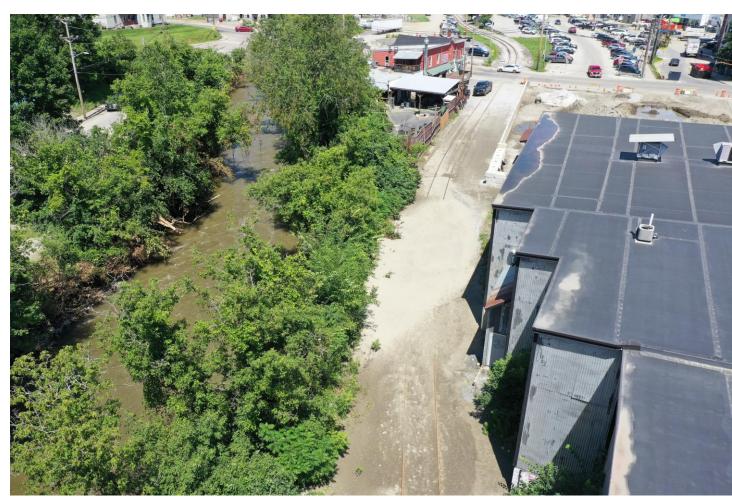
Montpelier

MP 0

Initial Damage – July 10th – 13th

MP 8.0

MP 11.17





The July 7-17th, 2023 Storm - Response and Recovery

Initial Damage – July 10th – 13th

MP 9.31

Town: **Barre Town**

MP 0

MP 11.17

Barre Town

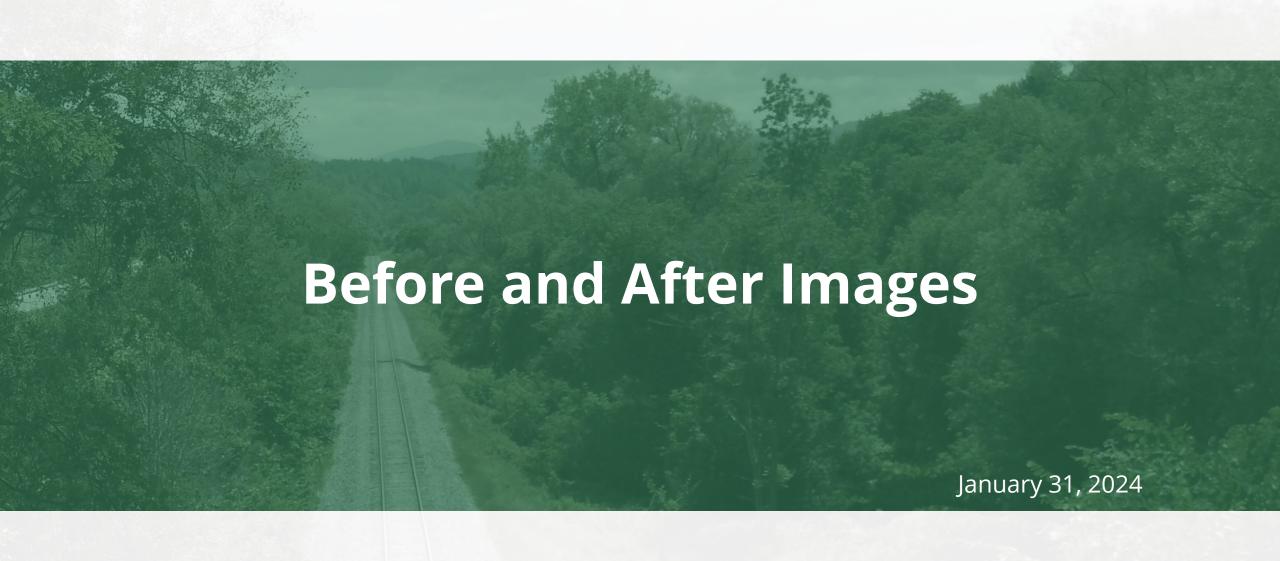
Montpelier

EAST



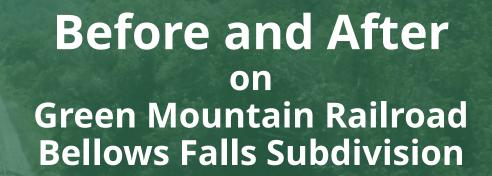








July 10th, 2023 Storm



January 31, 2024



Rockingham MP 8.6 Town:

MP 0

1 20

MP 52.2

40

Bellows Falls

NORTH







Recovery

30

After Recovery **Initial Damage**



Rockingham Town:

MP 11.6

MP 0

1 20

30

40

Recovery

MP 52.2

Bellows Falls

NORTH



Rutland



Initial Damage

After Recovery



1 10

Rockingham Town:

MP 16.8

MP 0

30 **2**0 40

Bellows Falls

NORTH



Initial Damage



Recovery

After Recovery



MP 52.2

1 10

Rockingham

MP 18.18

MP 0

Town:

20

30

MP 52.2 **4**0

Rutland

Bellows Falls

NORTH



Initial Damage



Recovery

After Recovery



Town: Cavendish

Recovery

MP 21.10

MP 0

→ I 10

1 20

30

40

Rutland

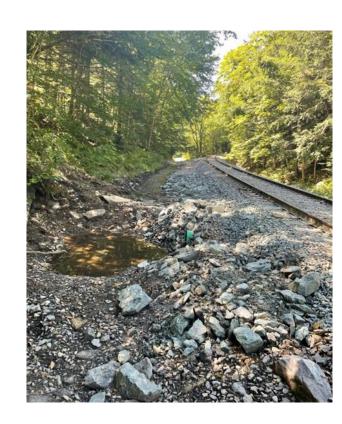
MP 52.2

Bellows Falls

NORTH



Initial Damage



After Recovery



Town: Cavendish

Recovery

MP 24.30

MP 0

NORTH → 10

■ 20

 $-\mathsf{V}$

30

40

Rutland

MP 52.2





Initial Damage



After Recovery



Town: Cavendish

Recovery

MP 28.50

MP 0

■ NORTH → 10

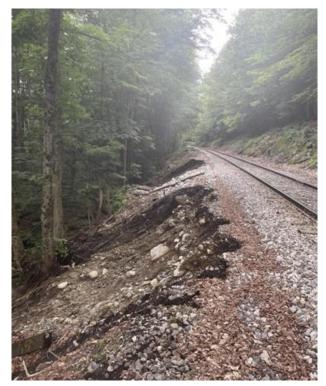
■ 20

■ 30

■ 40

■ 40

Bellows Falls



Initial Damage



After Recovery



Before and After Washington County Railroad Montpelier & Barre Subdivision January 31, 2024



Recovery

Town: Berlin

MP 3.4

MP 0

 ∇

MP 11.17

Montpelier

EAST



Initial Damage



After Recovery



Recovery

Town: **Barre City**

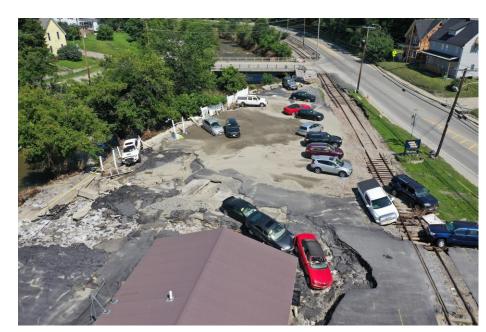
MP 6.8

MP 0 MP 11.17 **EAST**

Montpelier







Initial Damage After Recovery



Recovery

Town: Barre City

MP 6.92

MP 0

 ∇

MP 11.17

Barre Town

Montpelier

EAST



Initial Damage



After Recovery



Recovery

Town: Barre City

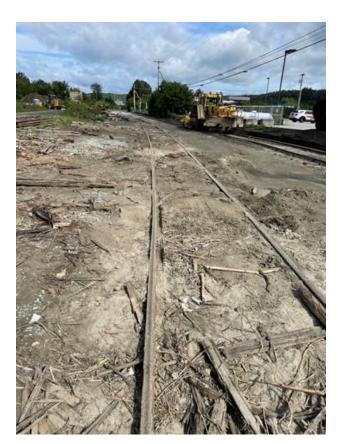
MP 0

MP 7.55

MP 11.17

Montpelier

EAST



Initial Damage



After Recovery



Recovery

Town: Barre Town

MP 9.30

 ∇

MP 11.17

MP 0

EAST -

1 2

4

6





Initial Damage



After Recovery



Recovery

Town: Barre Town

MP 11.3

Barre Town

MP 0 **■ EAST** → ■ 2 ■ 4 ■ 6 ■ 8 ■ 10

Montpelier

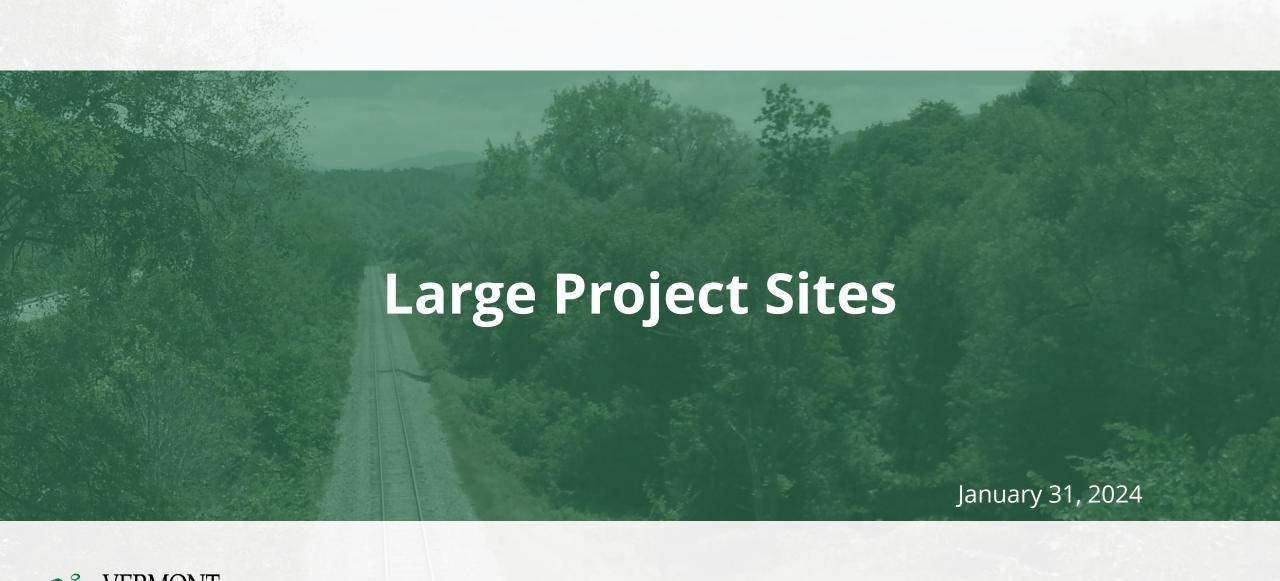


Initial Damage



After Recovery





AGENCY OF TRANSPORTATION

VT RAIL AND AVIATION BUREAU

DIRECTOR DAN DELABRUERE

Project Site in Chester, Bridge 119 at MP 12.8 on Green Mountain Railroad Bellows Falls Subdivision

January 31, 2024



Recovery

Town: Chester July 18th

MP: 12.80 BR119

July 10th

I WEEK



Storm Event Present





MP: 12.80 BR119

Chester July 19th

July 10th

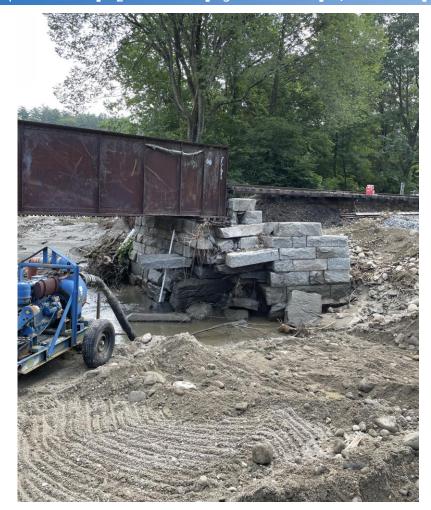
Sept. 21st

Present

Storm Event

■ WEEK

Town:





Recovery



Town: Chester MP: 12.80 BR119

July 20th

July 10th Sept. 21st

Storm Event Present





Recovery

Recovery

Town: Chester MP: 12.80 BR119 July 20th

July 10th Sept. 21st

Storm Event Present





MP: 12.80 BR119

July 21st

Chester

Town:

July 10th Sept. 21st

| WEEK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10

Storm Event Present





Recovery

Town: Chester MP: 12.80 BR119

July 21st

July 10th Sept. 21st

| WEEK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10

Storm Event Present





Green Mountain Railroad (GMRC) Rail Line:

Recovery

Chester Town:

MP: 12.80 BR119

July 24th

July 10th Sept. 21st

I WEEK

5

Storm Event Present





Project Site in Chester, Bridge 123 at MP 17.82 on Green Mountain Railroad Bellows Falls Subdivision

January 31, 2024



Recovery

Chester Town:

MP: 17.82 **BR123**

July 26th

Sept. 21st

■ WEEK

5

Storm Event

July 10th

Present





Town: Chester MP: 17.82 BR123

July 27th

July 10th Sept. 21st

■ WEEK ■ 1

Storm Event

2

3 4 5

5

▮ 7



Recovery

Sept. 2







Town: Chester MP: 17.82 BR123

July 28th

July 10th Sept. 21st

I WEEK

2

4 5

6

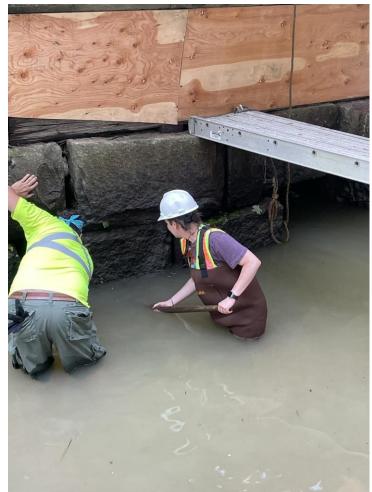
8

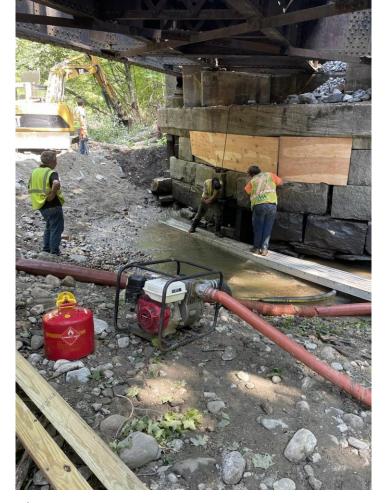
Recovery

10

Present

Storm Event







Town: Chester MP: 17.82 BR123

July 29th

July 10th Sept. 21st

■ WEEK ■ 1

4 5

1 7

■ 8

Recovery

Present

Storm Event







MP: 17.82 BR123

July 31st

July 1

Chester

Sept. 21st

Recovery

Storm Event

■ WEEK

Town:

July 10th





Green Mountain Railroad (GMRC) Rail Line:

Recovery

Chester Town: MP: 17.82 **BR123**

August 1st

Sept. 21st

Storm Event

■ WEEK

July 10th





Green Mountain Railroad (GMRC) Rail Line:

> **BR123** 17.82

Chester Town:

MP: August 3rd

July 10th

Recovery

Sept. 21st

Present

Storm Event

■ WEEK





17.82 BR123

Recovery

Chester MP: 17.82
August 4th

 July 10th
 Sept. 21st

 I WEEK
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 9
 10

Storm Event

Town:





Project Site in Ludlow at MP 28.07 on Green Mountain Railroad Bellows Falls Subdivision

January 31, 2024



MP:

3

28.07

Recovery

Town: Ludlow

July 10th - 13th

July 10th WEEK

Sept. 21st

Storm Event





MP:

28.07

Recovery

Town: Ludlow

Ludiow

July 10th - 13th

July 10th WEEK

Storm Event





Recovery

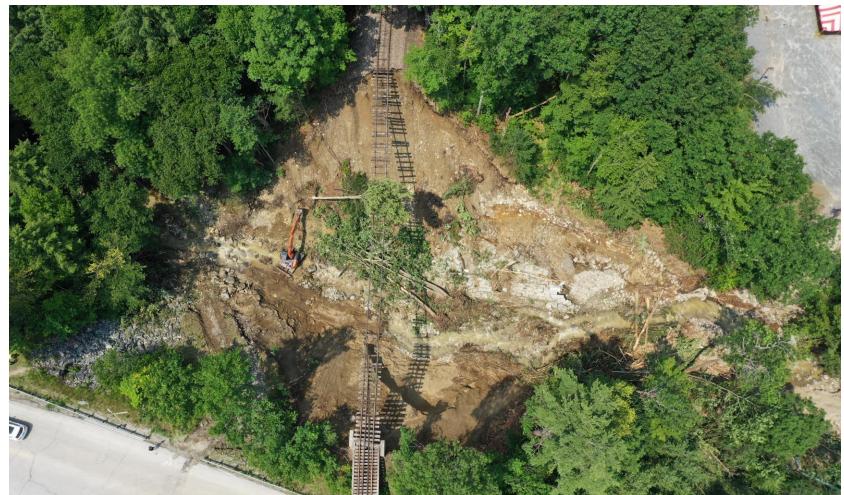
Town: Ludlow

July 10th – 13th

28.07

MP:

Storm Event



7/11/23

Sept. 21st



Recovery

Town: Ludlow

Ludiow

MP: 28.07

July 10th – 13th
July 10th

Storm Event



7/11/23



MP: 28.07

Ludlow July 10th - 13th

July 10th **■** WEEK

Town:

Sept. 21st

Present

Storm Event





Recovery

7/11/23



Recovery

Town: Ludlow

MP: 28.07

July 15th

July 10th WEEK

Storm Event



3





MP: 28.07

Ludlow July 17th Town:

July 10th I WEEK

Sept. 21st 5

Storm Event





Recovery



Ludlow MP: 28.07

July 19th

 July 10th
 Sept. 21st

 I WEEK
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Storm Event

Town:





Recovery



Recovery

Town: Ludlow

July 19th

MP: 28.07

July 10th

 ∇

Sept. 21st

Storm Event

■ WEEK





Ludlow MP: 28.07

July 20th

 July 10th
 Sept. 21st

 | WEEK
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 | 7
 | 8
 | 9
 | 10

Storm Event Present





Town:

Recovery

Town: Ludlow MP: 28.07

July 21st

July 10th

Sept. 21st

I 10

Present

Storm Event

■ WEEK





Recovery



5

Recovery

Town: Ludlow

MP: 28.07

July 25th

July 10th

Storm Event

I WEEK





MP: 28.07

Town: Ludlow

July 26th

 July 10th
 Sept. 21st

 WEEK
 1

 2
 3

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 6
 7

 8
 9

 10

Storm Event





Recovery

Recovery

Town: Ludlow

MP:

28.07

July 26th

July 10th

Sept. 21st

Present

I WEEK I

 $\bigcup_{i=1}^{2}$

3 4 5 6 7 8 9

Storm Event





Recovery

Ludlow Town:

July 27th

28.07

MP:

July 10th Sept. 21st **■** WEEK

Storm Event





Ludlow

Town:

MP: 28.07

July 27th

July 10th Sept. 21st I WEEK

Storm Event



Recovery

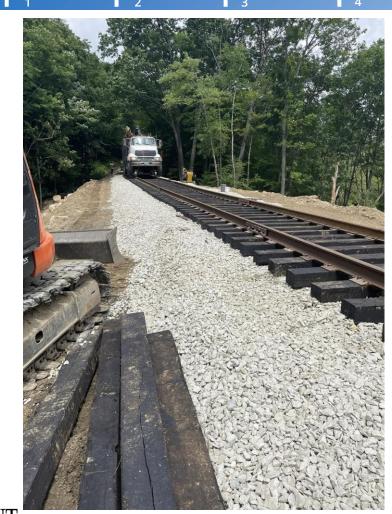
Town: Ludlow MP: 28.07

July 27th

July 10th Sept. 21st

Storm Event

■ WEEK





Recovery



Town: Ludlow MP: 28.07

July 31st

July 10th Sept. 21st

■ WEEK ■

Storm Event

¥ 3 4



Recovery





Green Mountain Railroad (GMRC) Rail Line:

Ludlow Town: MP: Aug. 3rd 28.07

July 10th

■ WEEK

Recovery

Sept. 21st

Present

Storm Event







Recovery

Town: Ludlow

MP: 28.07 Aug. 4th

3

July 10th

Sept. 21st

Storm Event

■ WEEK





2

Recovery

Town: Ludlow

MP: 28.07 Aug. 4th

3

July 10th

Sept. 21st

Storm Event

I WEEK





The July 7-17th, 2023 Storm - Response and Recovery

Ludlow Town: MP: 28.07 Aug. 7th

July 10th

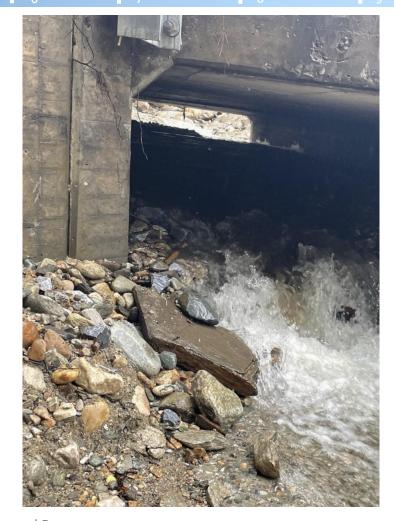
Sept. 21st

Present

Storm Event

■ WEEK





Recovery



Green Mountain Railroad (GMRC) Rail Line:

Ludlow Town: MP: 28.07 Aug. 7th

July 10th

Recovery

Sept. 21st

Present

Storm Event

■ WEEK







Ludlow Town: MP: 28.07 Aug. 7th

July 10th

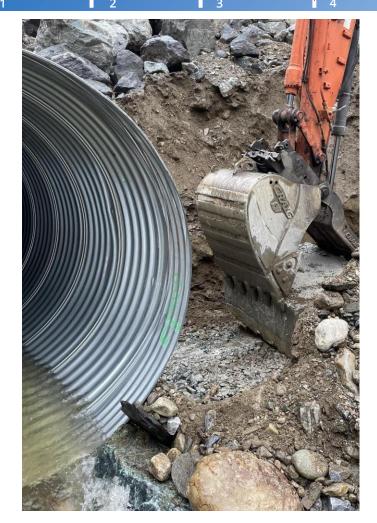
Recovery

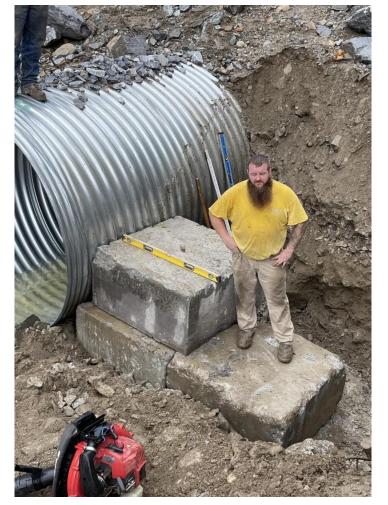
Sept. 21st

Present

Storm Event

■ WEEK







Green Mountain Railroad (GMRC) Rail Line:

Ludlow Town: MP:

28.07 Aug. 8th

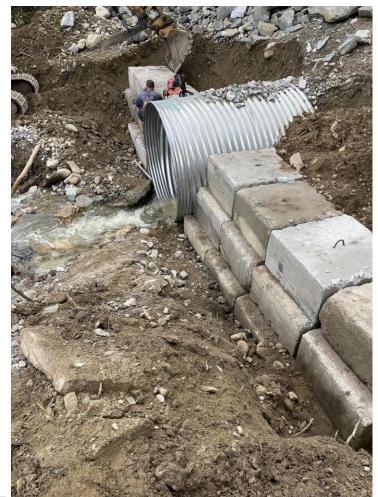
July 10th

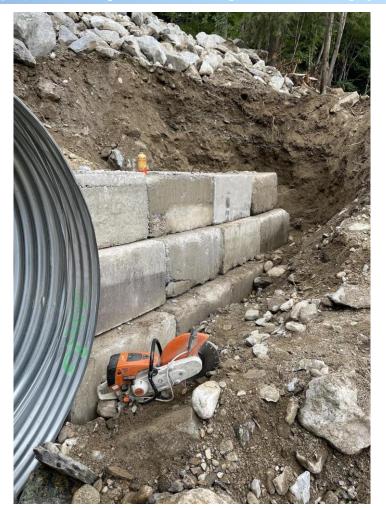
Sept. 21st

Recovery

Storm Event

■ WEEK







Green Mountain Railroad (GMRC) Rail Line:

> MP: 28.07 Aug. 9th

3

Ludlow Town:

July 10th

Recovery

Storm Event

■ WEEK





Sept. 21st

Recovery

Town: Ludlow

MP: 28.07

28.07 Aug. 11th

July 10th

Storm Event

■ WEEK





Sept. 21st

Ludlow

MP: 28.07 Aug. 14th

July 10th

Town:

Sept. 21st

Recovery

Storm Event

■ WEEK





Recovery

Town: Ludlow

MP: 28.07 Aug. 15th

Aug.

July 10th

WEEK 1 1 2 1 3 1 4 5 1 6

Sept. 21st

Present

Storm Event





Recovery

Town: Ludlow

Aug. 22nd

MP:

28.07

Sept. 21st

Storm Event





Ludlow Town: MP: 28.07

Aug. 22nd

July 10th **■** WEEK 3

Sept. 21st

Storm Event

Present

Recovery





Recovery

Town: Ludlow MP: 28.07

Aug. 24th

July 10th

3

Sept. 21st

Storm Event

■ WEEK





MP: 28.07

Ludlow Town:

Aug. 24th

Sept. 21st

Recovery

Storm Event

■ WEEK

July 10th





Town: Ludlow MP: 28.07

July 10th

WEEK I 1 2 I 3 I 4 I 5 I 6

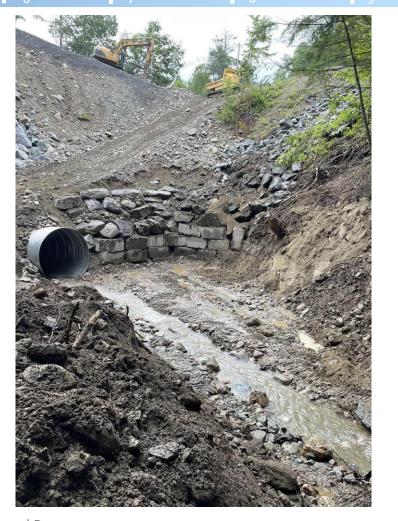
Aug. 28th

Sept. 21st

Recovery

Storm Event







Ludlow MP: 28.07

3

Aug. 28th

July 10th

Town:

Sept. 21st

Storm Event

■ WEEK

Present

Recovery





Town: Ludlow MP: 28.07

Recovery

Sept. 6th



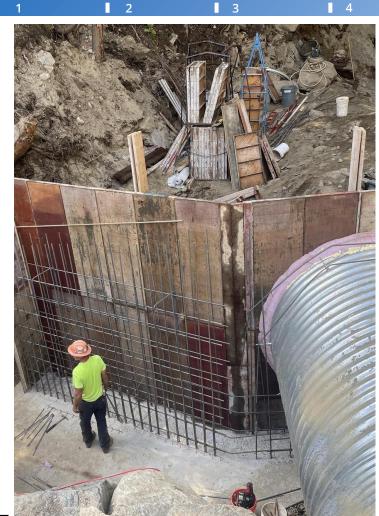
Sept. 21st

Present

Storm Event

■ WEEK

July 10th







Town: Ludlow MP: 28.07

20.0

Recovery

Sept. 7th



Sept. 21st

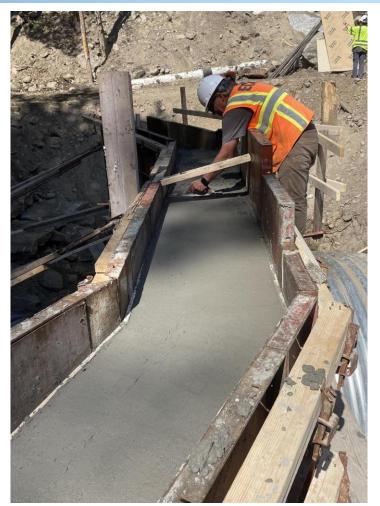
Present

Storm Event

■ WEEK

July 10th







Town: Ludlow MP: 28.07

Recovery

Sept. 12th

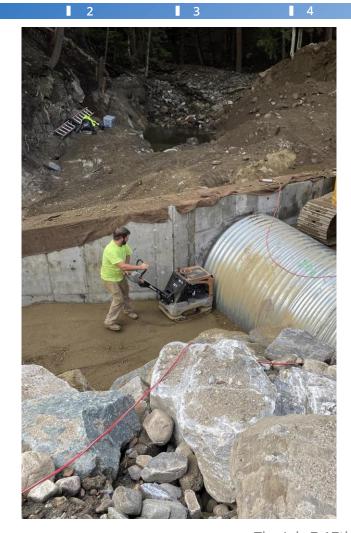
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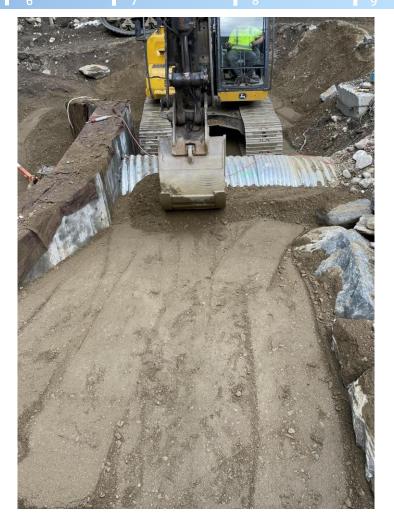
Sept. 21st

l 10 Present

I WEEK
Storm Event

July 10th







Town: Ludlow MP: 28.07

July 10th

■ WEEK

Recovery

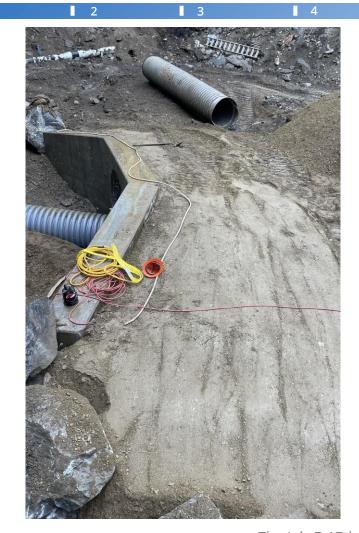
Sept. 13th

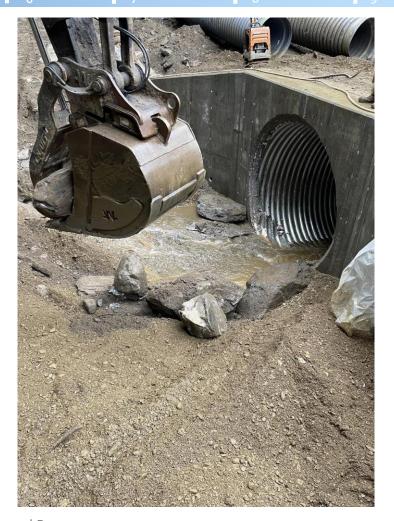
Sept. 21st

10

Present

Storm Event







Town: Ludlow MP: 28.07

2

July 10th

20.07

Sept. 13th

Recovery



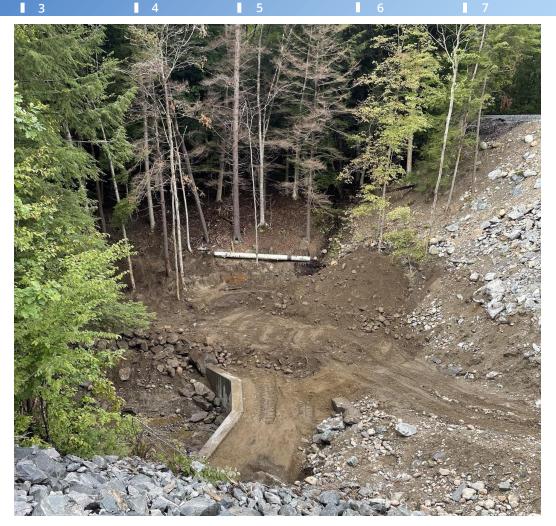
Sept. 21st

Present

10

Storm Event

■ WEEK





The July 7-17th, 2023 Storm - Response and Recovery

Project Site in Wallingford at MP 39.94 on Green Mountain Railroad Bellows Falls Subdivision

January 31, 2024



Recovery

Town: July 11th Wallingford

MP: 39.90

July 10th

■ WEEK

Storm Event

3

Sept. 21st





Recovery

: Wallingford July 13th Town:

MP: 39.90

July 10th ■ WEEK

Sept. 21st

Storm Event





Recovery

Wallingford July 17th Town:

MP: 39.90

July 10th I WEEK



3

Storm Event





Sept. 21st

Recovery 39.90

Wallingford July 19th Town:

MP:

July 10th

■ WEEK

Storm Event





The July 7-17th, 2023 Storm - Response and Recovery

Sept. 21st

Wallingford July 22nd Town: MP: 39.90

July 10th

Sept. 21st

Present

I WEEK 5

Storm Event





Recovery



> Wallingford July 24th MP: 39.90

July 10th Sept. 21st

I WEEK

Storm Event

Town:





Recovery

Town: Wallingford MP: 39.90

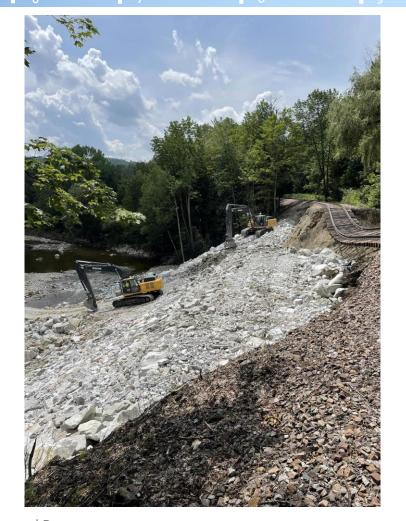
July 25th

 July 10th
 Sept. 21st

 I WEEK
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Storm Event





Recovery



Wallingford

Town:

MP: 39.90

July 28th

July 10th Sept. 21st

| WEEK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1

Storm Event Present





Recovery

Town: Wallingford MP: 39.90

July 28th

July 10th Sept. 21st

■ WEEK ■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9 ■ 1

Storm Event





Recovery



Town: Wallingford MP:

July 29th

39.90

July 10th

Sept. 21st

Recovery

Storm Event

■ WEEK







Recovery 39.90

Wallingford July 31st

MP:

July 10th Sept. 21st

| WEEK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 1

Storm Event

Town:





Town: Wallingford MP: 39.90

July 31st

July 10th Sept. 21st

■ WEEK ■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9

Storm Event





Recovery



Wallingford Town: MP: August 2nd 39.90

July 10th

■ WEEK

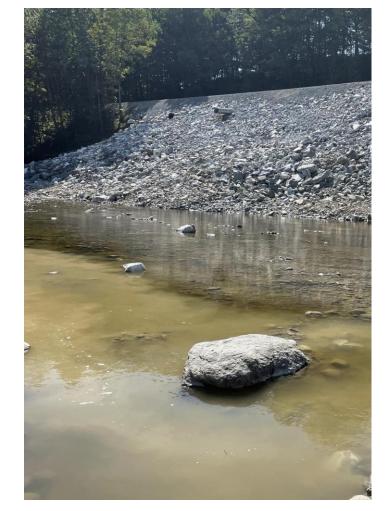
Recovery

Sept. 21st

Present

Storm Event







Wallingford

MP: 39.90 August 4th

3

July 10th

Town:

Sept. 21st

Recovery

Storm Event

■ WEEK





The July 7-17th, 2023 Storm - Response and Recovery

Wallingford

MP: 39.90 August 4th

July 10th

Town:

3

Sept. 21st

Recovery

Storm Event

■ WEEK





Recovery

Town: Wallingford

MP: 39.90 August 4th

3

July 10th

Sept. 21st

Storm Event

■ WEEK





Project Site in Berlin, Bridge 307 at MP 3.5 on Washington County Railroad Montpelier & Barre Subdivision

January 31, 2024



Rail Line: Washington Country Railroad (WACR) – Montpelier & Barre

Recovery

Town: Berlin MP: 3.5 BR307

July 15th

July 10th

Storm Event



Sept. 21st

Rail Line: Washington Country Railroad (WACR) - Montpelier & Barre

Recovery

Berlin Town: MP: 3.5 BR307

July 23rd

July 10th Sept. 21st

■ WEEK

Storm Event Present





Rail Line: Washington Country Railroad (WACR) - Montpelier & Barre

MP:

Recovery BR307

Berlin July 24th

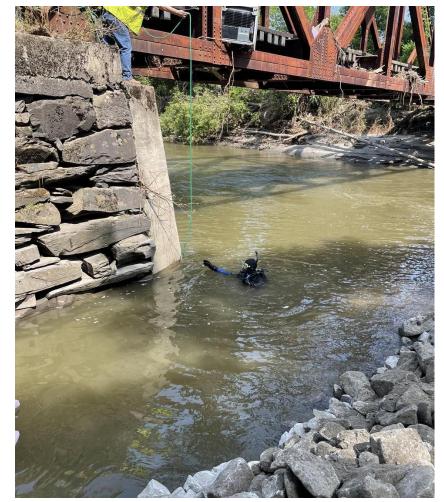
July 10th Sept. 21st

■ WEEK 5

Storm Event

Town:







Rail Line: Washington Country Railroad (WACR) - Montpelier & Barre

Recovery **BR307**

Berlin Town:

July 25th

July 10th Sept. 21st

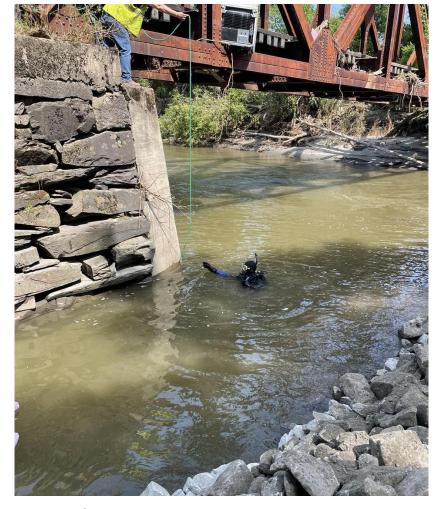
■ WEEK

Storm Event

MP:

5







Washington Country Railroad (WACR) - Montpelier & Barre Rail Line:

> MP: 3.5 **BR307**

July 27th

July 10th Sept. 21st

■ WEEK

Berlin

Storm Event

Town:





Recovery

Rail Line: Washington Country Railroad (WACR) – Montpelier & Barre

Recovery

Town: Berlin MP: 3.5 BR307

July 28th

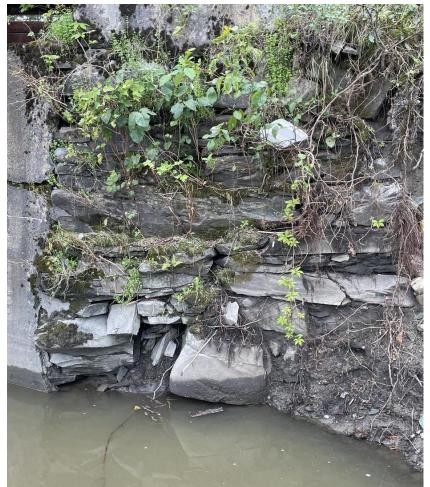
July 10th Sept. 21st

■ WEEK

I 3 **I** 4

7 8 9 Present

Storm Event







Recovery

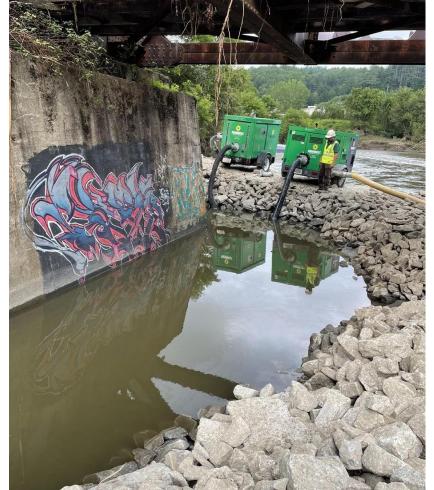
Berlin Town: MP: BR307

July 29th

July 10th Sept. 21st I WEEK

Present

Storm Event







Recovery

Town: Berlin MP: 3.5 BR307

July 31th

July 10th Sept. 21st

■ WEEK ■ 1

Storm Event







Recovery

Town: Berlin MP: 3.5 BR307
August 4th

July 10th Sept. 21st

Storm Event







Recovery

Town: Berlin MP: 3.5 BR307
August 7th

 July 10th
 Sept. 21st

 I WEEK
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Storm Event Present





Recovery

Town: Berlin MP: 3.5 BR307
August 7th

 July 10th
 Sept. 21st

 I WEEK
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 9

 10

Storm Event







> 3.5 BR307 August 9th MP:

Berlin Town:

July 10th Sept. 21st **■** WEEK

Storm Event





Recovery



Recovery

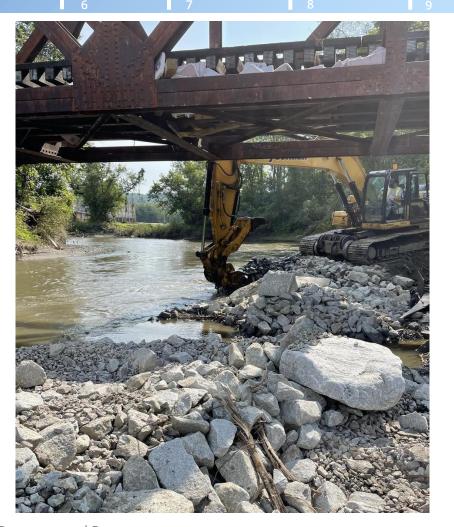
Town: Berlin MP: 3.5 BR307
August 10th

 July 10th
 Sept. 21st

 I WEEK
 I 1
 I 2
 I 3
 I 4
 I 5
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 I 7
 I 8
 I 9
 I 10

Storm Event







Recovery

Town: Berlin MP:

August 21st

July 10th

■ WEEK

3 4 5

6

Sept. 21st

Storm Event Present





3

Recovery

Town: Berlin MP: 3.5 BR307

August 21st

July 10th

■ WEEK

Sept. 21st

Storm Event Present





Project Site in Barre City, Rail Yard at MP 6.8 – 7.9 on Washington County Railroad Montpelier & Barre Subdivision



January 31, 2024

3

Recovery

Town: July 11th **Barre City**

MP: 6.8 – 7.9



Sept. 21st

Storm Event







Recovery

Town: Barre City MP: 6.8 – 7.9 July 11th

July 10th

Storm Event

■ WEEK







Recovery

Barre City July 20th Town: MP: 6.8 - 7.9

July 10th Sept. 21st

■ WEEK

Storm Event





Recovery

Barre City July 20th Town: MP: 6.8 - 7.9

July 10th Sept. 21st

■ WEEK

Storm Event Present



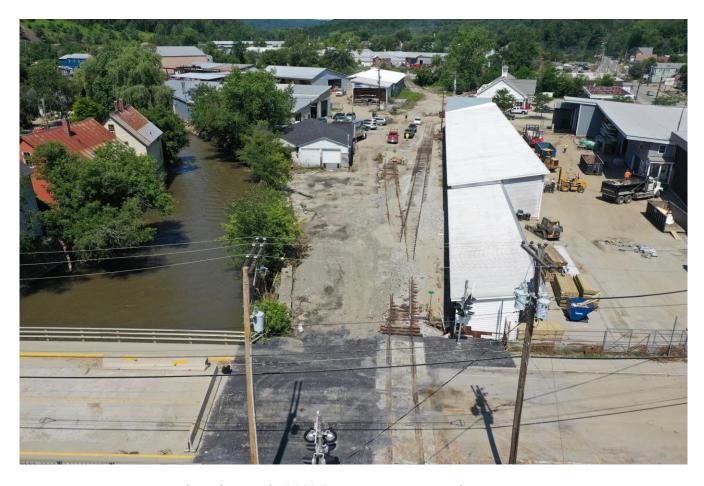


Recovery

Barre City July 20th Town: MP: 6.8 - 7.9

July 10th **■** WEEK

Storm Event





Sept. 21st

Recovery

Barre City July 20th Town: MP: 6.8 - 7.9

July 10th Sept. 21st

■ WEEK

Storm Event Present





Recovery

Town: Barre City MP: 6.8 – 7.9 July 20th

July 10th



Sept. 21st

Storm Event

■ WEEK







Recovery

Barre City July 22nd Town: MP: 6.8 - 7.9

Sept. 21st

■ WEEK

Present

Storm Event

July 10th





Recovery

Town: Barre City

MP: 6.8 – 7.9

July 25th

 Sept. 21st

10

Present

Storm Event







3

Recovery

Town: Barre City

MP: 6.8 – 7.9

July 25th

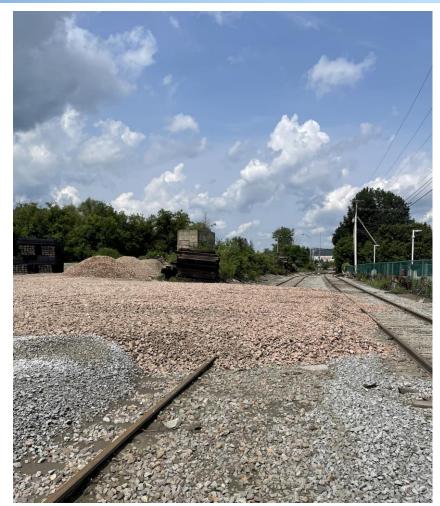
July 10th

Sept. 21st

Storm Event

I WEEK







Recovery

Town: Barre City MP: 6.8 – 7.9

July 30th

 July 10th
 Sept. 21st

 I WEEK
 I

 1
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 10

Storm Event







Recovery

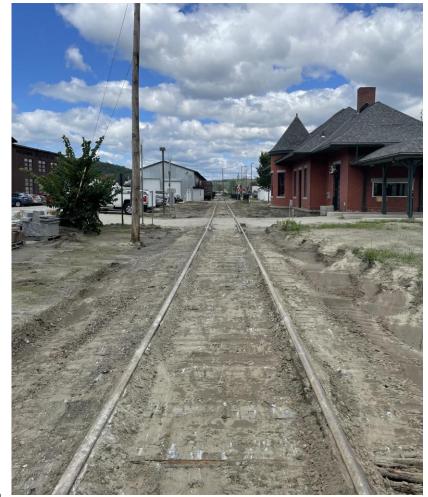
Town: Barre City MP: 6.8 – 7.9
August 1st

July 10th

WEEK I 1 I 2 I 3

Sept. 21st

Storm Event







Recovery

Town: **Barre City** MP: August 2nd 6.8 - 7.9

Sept. 21st

Storm Event

■ WEEK

July 10th







Recovery

Barre City Town: MP: August 2nd 6.8 - 7.9

July 10th

I WEEK

Storm Event







Sept. 21st

Recovery

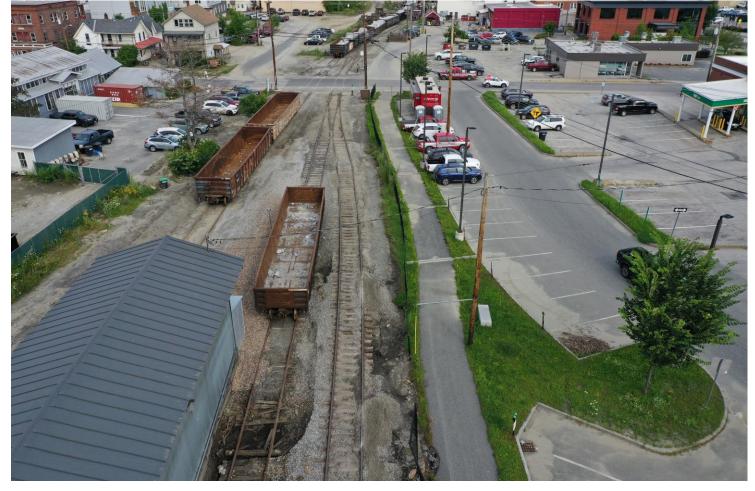
Town: **Barre City** MP: 6.8 – 7.9 August 4th

July 10th

Sept. 21st

Storm Event

I WEEK





Recovery

Barre City Town: MP: August 4th 6.8 - 7.9

July 10th Sept. 21st

■ WEEK

3

Present

Storm Event





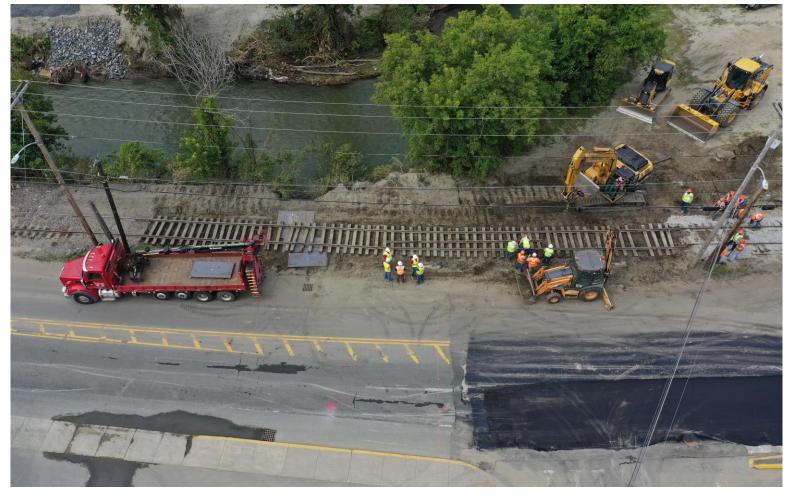
Recovery

Town: Barre City MP: 6.8 – 7.9 August 4th

July 10th Sept. 21st

■ WEEK ■ 1 ■ 2 ■ 3 ■ 4 ■ 5 ■ 6 ■ 7 ■ 8 ■ 9 ■ 10

Storm Event





Recovery

Town: Barre City MP: 6.8 – 7.9
August 9th

 July 10th
 Sept. 21st

 I WEEK
 I 1
 I 2
 I 3
 I 4
 I 5
 I 6
 I 7
 I 8
 I 9
 I 10

Storm Event







Washington Country Railroad (WACR) - Montpelier & Barre Rail Line:

Recovery 6.8 – 7.9 August 13th

Barre City Town: MP:

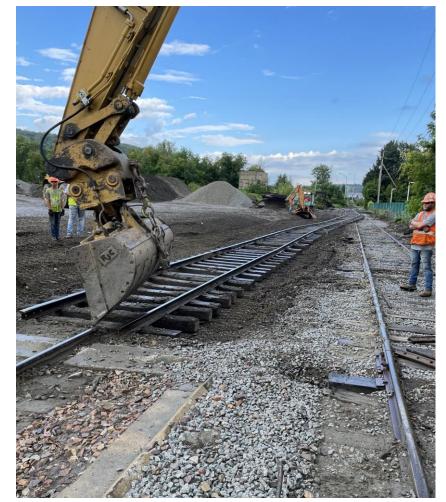
July 10th

Sept. 21st

Storm Event

■ WEEK







3

Recovery 6.8 – 7.9 August 15th

Town: **Barre City** MP:

July 10th

Sept. 21st

Storm Event

■ WEEK







Project Site in Barre Town at MP 9.3 on Washington County Railroad Montpelier & Barre Subdivision

January 31, 2024



Recovery

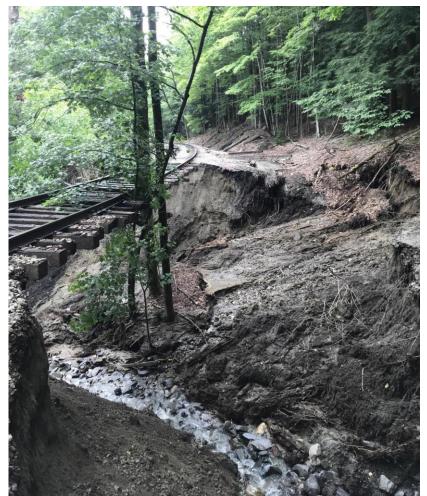
Town: Barre Town MP: 9.3

July 13th

 July 10th
 Sept. 21st

 I WEEK
 1
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 8
 9
 10

Storm Event







Recovery

Town: Barre Town

July 23th

MP: 9.3

July 10th



Storm Event

■ WEEK





Sept. 21st

> MP: 9.3

Barre Town Town: July 25th

July 10th Sept. 21st **■** WEEK

Storm Event





Recovery



Recovery

Town: Barre Town MP: 9.3

July 25th

 July 10th
 Sept. 21st

 I WEEK
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 5

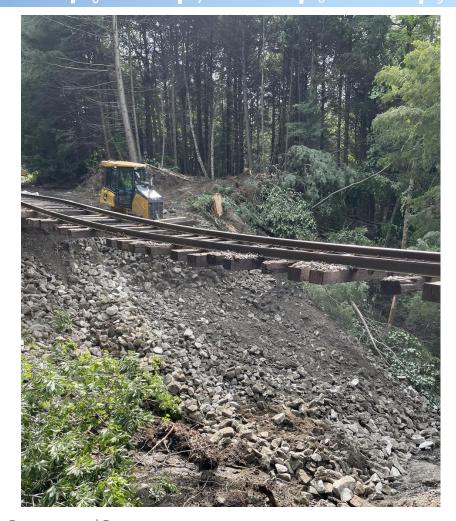
 6
 7

 8
 9

 10

Storm Event







Recovery

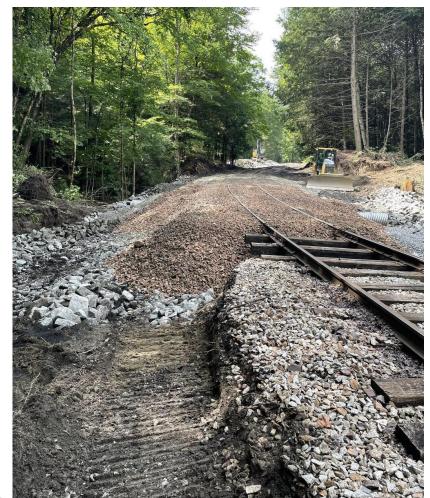
Town: Barre Town MP: 9.3

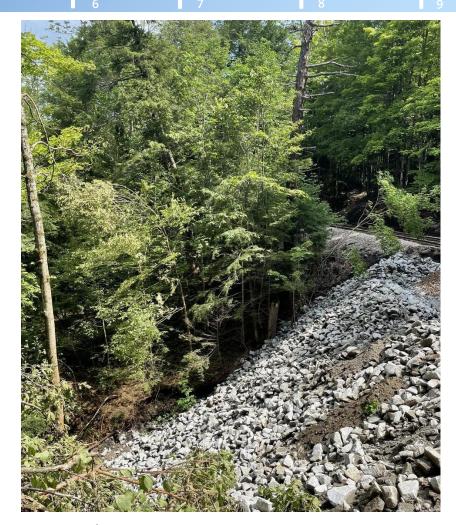
July 28th

 July 10th
 Sept. 21st

 I WEEK
 1
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 7
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 9
 10

Storm Event







Recovery

Barre Town Town: MP: 9.3

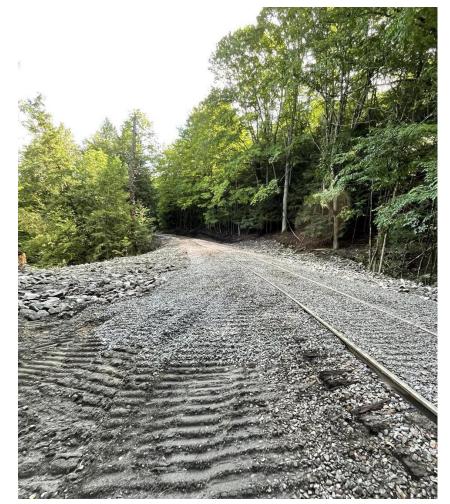
July 30th

Sept. 21st

July 10th **■** WEEK

Storm Event







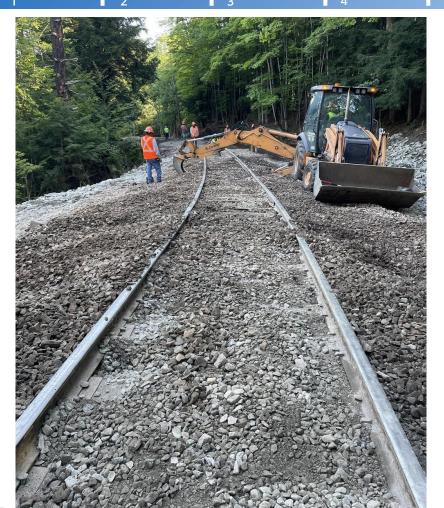
Recovery

Town: Barre Town MP: 9.3
August 2nd

July 10th Sept. 21st

Storm Event

I WEEK









VERMONT RAIL SYSTEMS
PRESIDENT SELDEN HOUGHTON

AGENCY OF TRANSPORTATION