



# HURRICANE HELENE

Preparedness, Response, and Recovery

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December 4, 2024

# Overview of Hurricane Helene

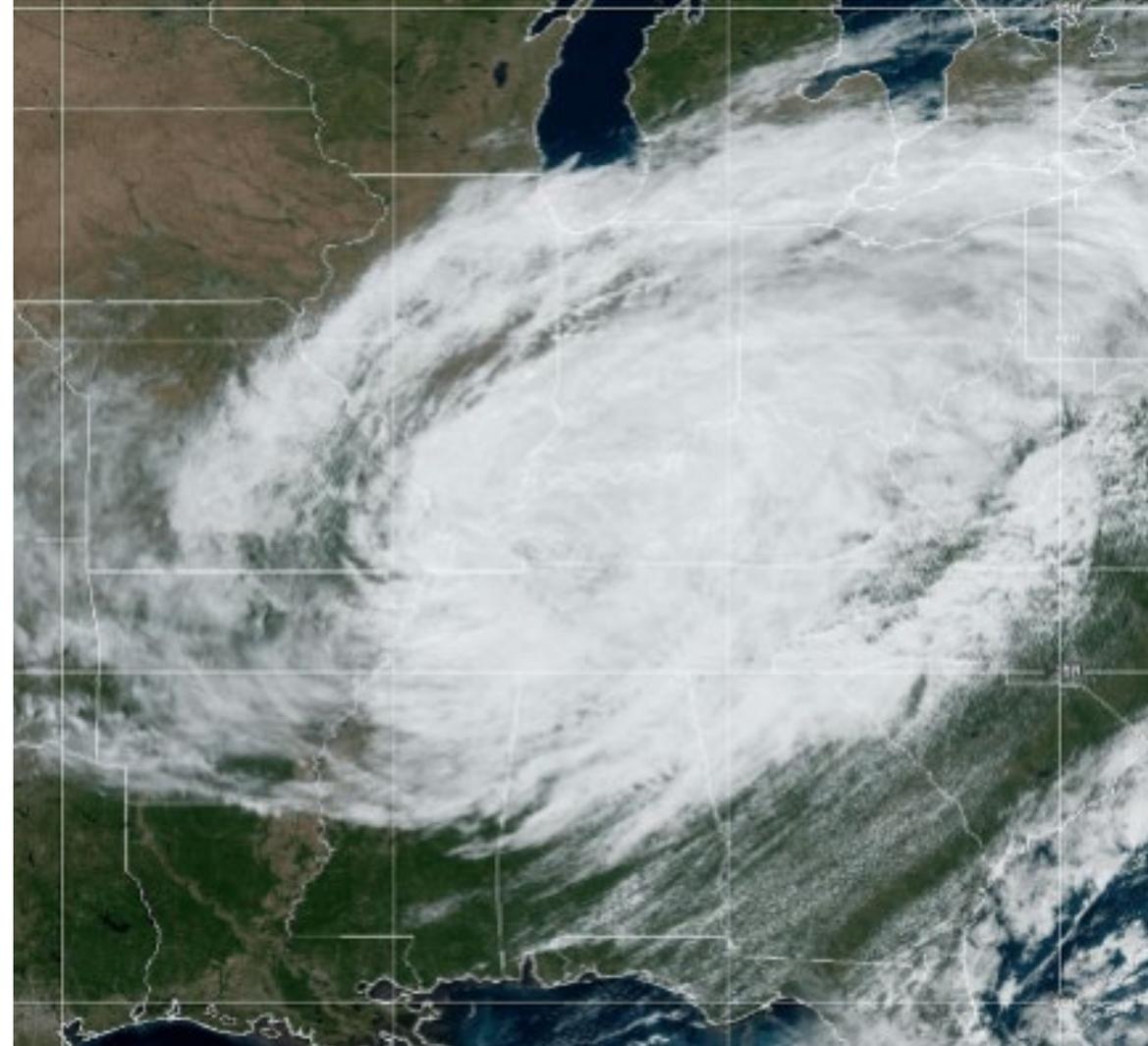


<https://www.wtsp.com/article/weather/hurricane/helene/hurricane-helene-storm-path-track-map/67-0dcefd0d-5e64-43cc-8366-2766ae103256>

- Hurricane Helene, a Category 4 storm, made landfall near Perry, Florida, on September 26, 2024, with maximum sustained winds of 140 mph. The storm's path and impact over the following days were as follows:
- **September 27, 2024:** The storm moved northward through Georgia, causing widespread flooding and wind damage. *Now a Tropical Storm*
- **September 28, 2024:** Helene continued its path through the Carolinas, leading to severe flooding in South West Virginia and North Carolina
- **September 29, 2024:** The storm weakened as it stalled over SW Virginia and Tennessee but continued to create significant rainfall and flooding.
- **September 30, 2024:** Helene dissipated, but the aftermath left many areas dealing with flooding and power outages.

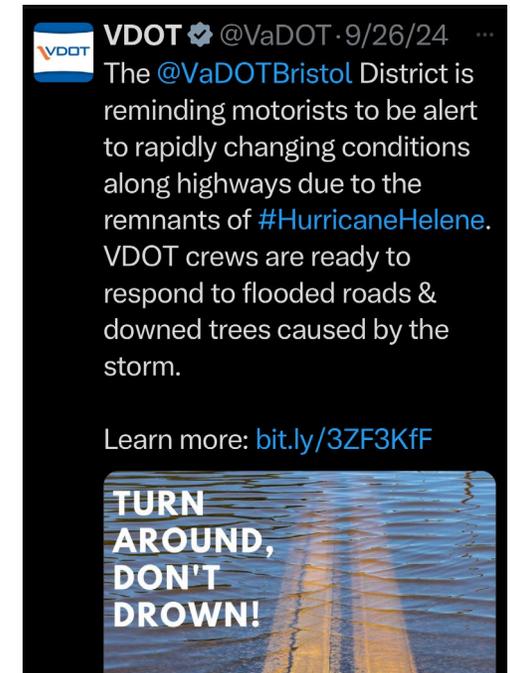
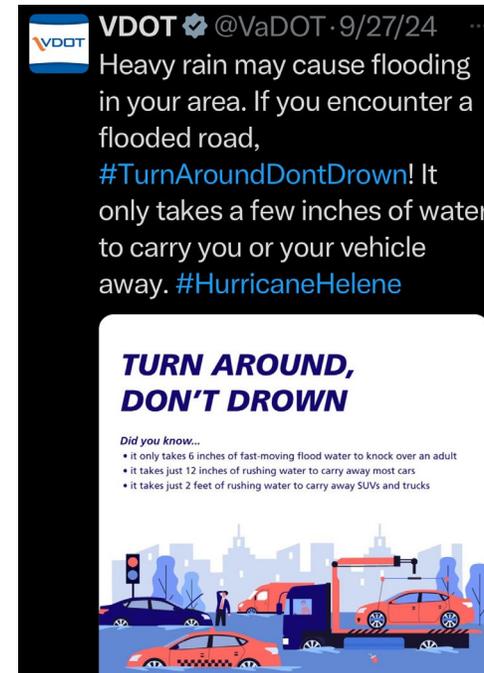
# Overview of Hurricane Helene

- **Hurricane Helene reached its maximum size with tropical storm-force winds extending out to 275 miles from its center.**
- **This expansive reach resulted in a storm diameter of approximately 550 miles, making Helene one of the largest hurricanes to make landfall in the continental United States.**



# Preparedness

- **Governor's Declaration of Emergency**
  - Coordination with North Carolina
- **Early preparation and mobilization by Virginia state agencies**
- **Agencies leaned forward to support local communities**
- **Public messaging ahead of impacts**
  - Press Releases
  - Social Media
  - Television Interviews



# Preparedness

- **Monday 9/23:**
  - VDOT Watch Center begins tracking the storm and issuing daily Situation Reports and Weather Updates.
- **Tuesday 9/24:**
  - VDOT participates in VDEM Helene Size-up Call and Regional Call.
- **Wednesday 9/25:**
  - Emergency declarations are issued at the Districts and Central Office. OSSEM establishes staffing plans for the Virginia Emergency Operations Center and VDOT Situation Room.
  - Districts begin to respond to clear downed trees, unblock flooded pipes, and detour traffic on impact roadways
  - Response equipment (e.g. trucks, saws, generators) is checked.

# Preparedness

- **Thursday 9/26**

- VDOT Conducts Statewide Weather Call; Districts establish mobilization plans.
- Districts put VDOT and Contract crews on Notice.
- Drainage infrastructure is checked and cleared along flood-prone roads.
- Districts pre-stage equipment for overnight response operations (e.g., wreckers along interstates, traffic barricades for flood-prone areas, cut-and-toss crews, etc.).
- VDOT Highway Emergency Response Teams (HERT) rostered and prepared to mobilize and respond as needed.
- Commissioner issues Emergency Transportation Waiver.
- VDOT begins issuing situation reports twice a day.

# Response



# Response

- **Peak closures - 414 roads and 99 structures**
- **Estimated 511,000cy of debris**
  - **VDOT Collected over 110,000 cy**
  - **Contractors collected 6,000 cy (ongoing)**
- **173,176 Hours of Labor**
- **\$20M spent as of November 20<sup>th</sup>**
- **Approximately 2,500 VDOT staff engaged in the initial response operations**
  - **9 HERT Teams consisting of 150 staff members deployed for 30 Days**
  - **Teams from Fredericksburg, NoVa, Richmond, Hampton Roads and Staunton**
- **7 locality requests for assistance fulfilled**

District	Primary Closures by District		Secondary Closures by District	
	Peak	Current	Peak	Current
Bristol	23	1	175	3
Culpeper	0	0	26	3
Lynchburg	3	0	35	0
Richmond	1	0	11	0
Salem	3	0	84	0
Staunton	0	0	53	1
<b>Total</b>	<b>30</b>	<b>1</b>	<b>384</b>	<b>6</b>

Total Roadways Closed At Peak	Current Roadway Closures
<b>414</b>	<b>7</b>

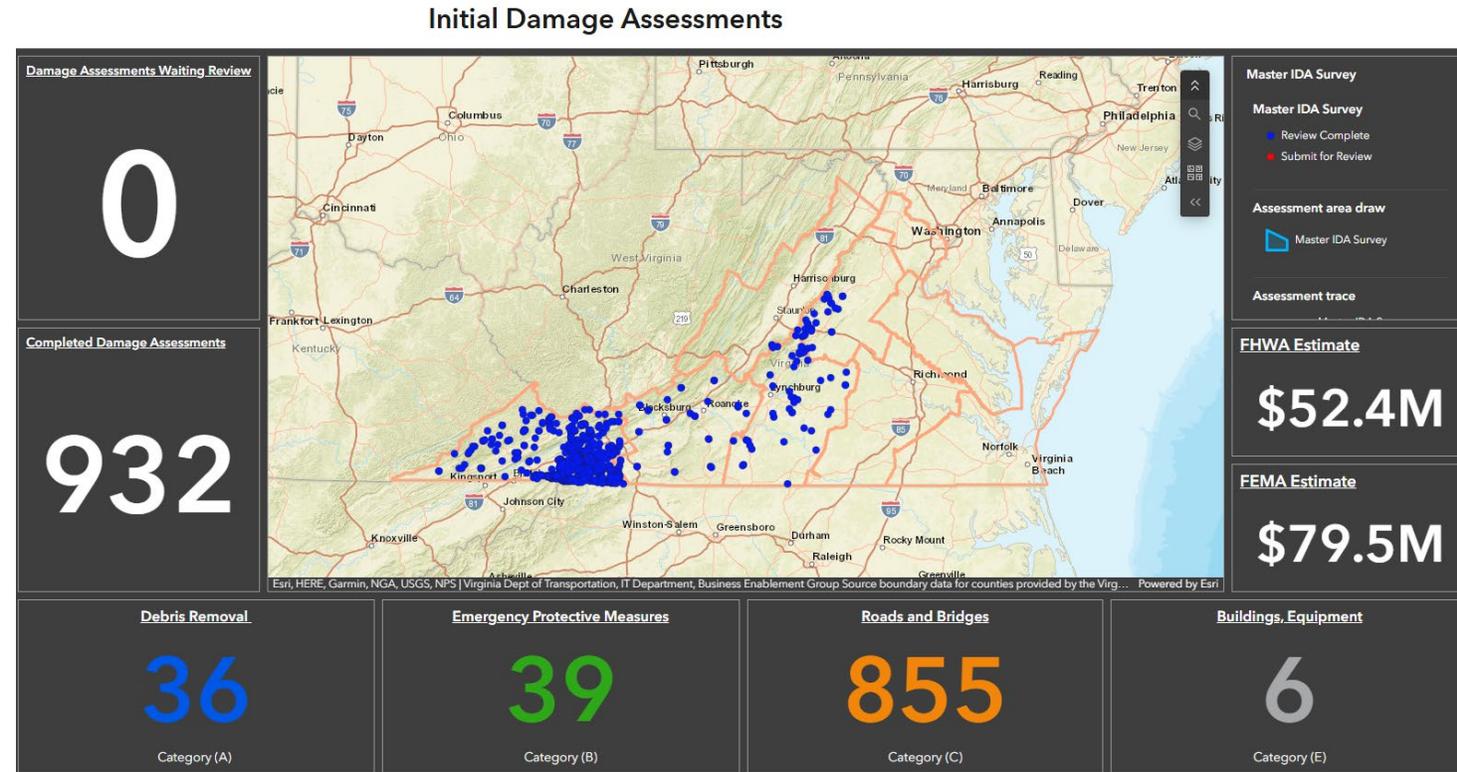
Bridge Closure By District		
	Peak	Current
Bristol	43	4
Culpeper	21	0
Lynchburg	23	0
Richmond	6	0
Salem	6	0
Staunton	0	0
<b>Total</b>	<b>99</b>	<b>4</b>

# Response

- **Response Activities:**
  - Clearing downed trees from roadways
  - Cleaning ditches and structures of debris
  - Closing and monitoring overtopped roads and establishing detours
  - Inspecting roads and structures for damage
  - Making emergency repairs to roadways, where possible
  - Communicating road closures and priorities to the public
  - Staffing Virginia Emergency Operations Center and VDEM Regional Coordination Center

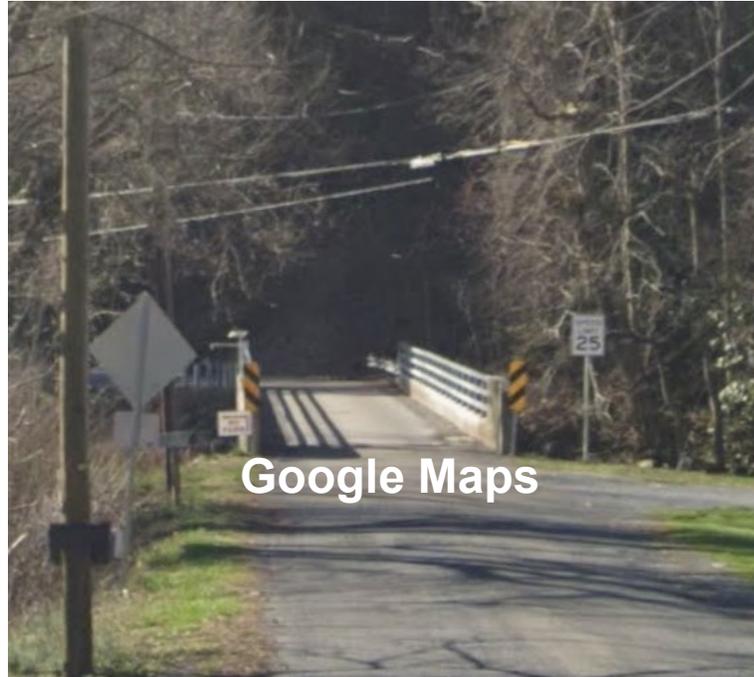
# Recovery

- **Estimated Damages:**
  - Estimated \$132m
- **Roadway and structure repairs needed:**
  - Bristol - 744
  - Culpeper - 25
  - Lynchburg - 24
  - Salem - 12
- **Funding Areas:**
  - Maintenance and Operations Program
- **Federal Assistance Programs:**
  - FEMA Public Assistance (75-100%)
  - FHWA Emergency Relief (80-100%)

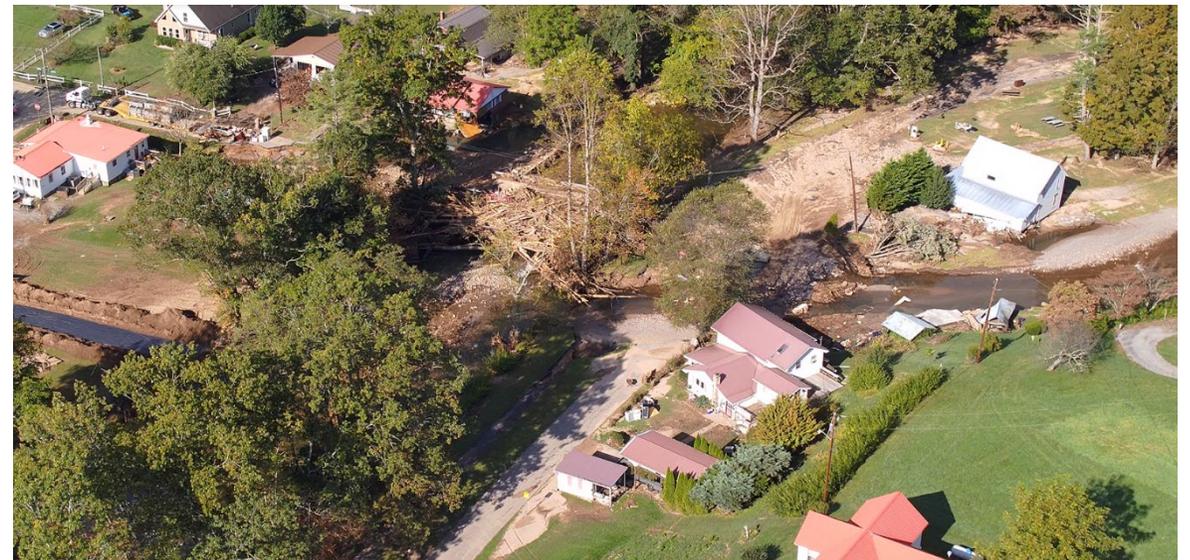
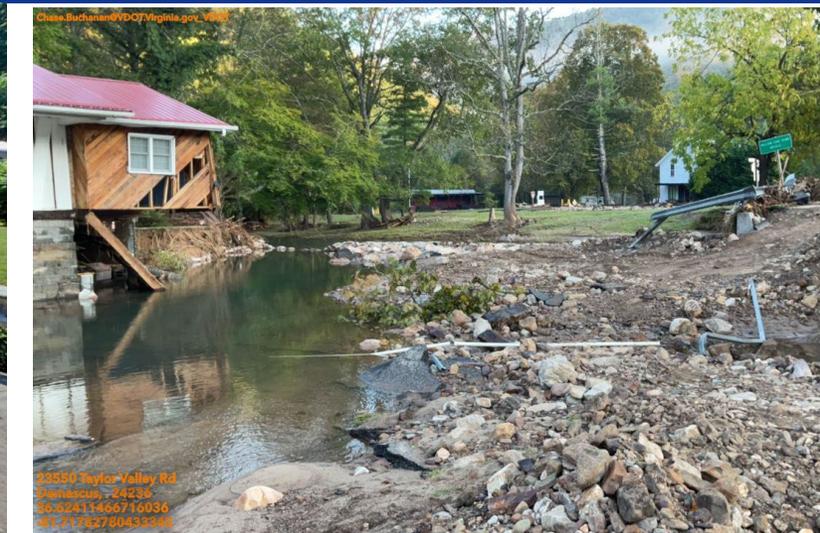
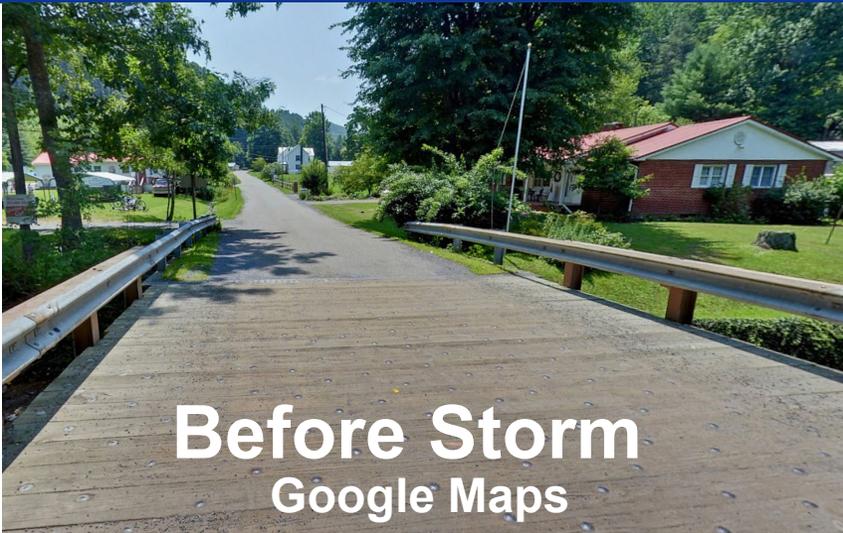


Damage assessments numbers include emergency protective measures, debris estimates by county, damage to VDOT facilities and vehicles as well as roadway repairs.

# Recovery – Route 1212 (Damascus)



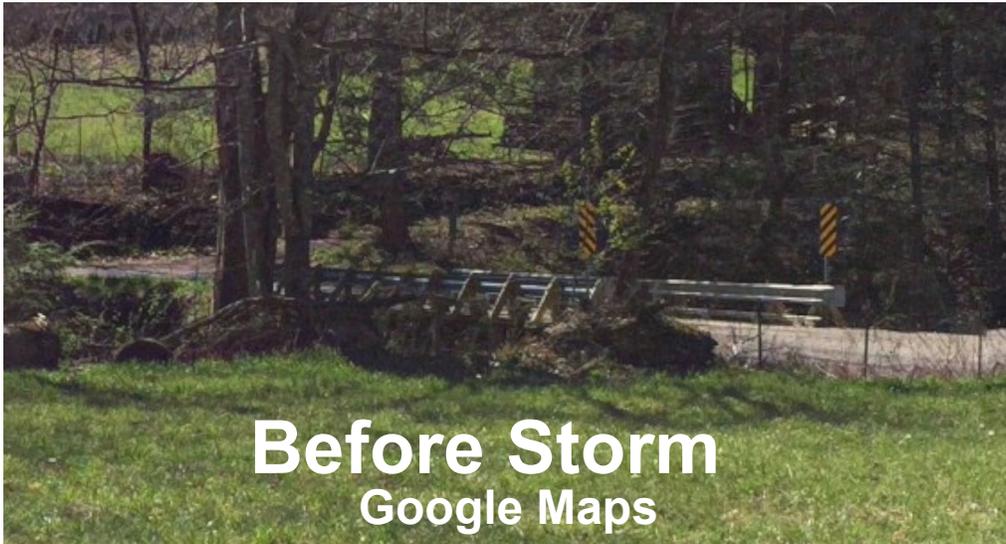
# Recovery – Taylor’s Valley – Route 725 Bridge



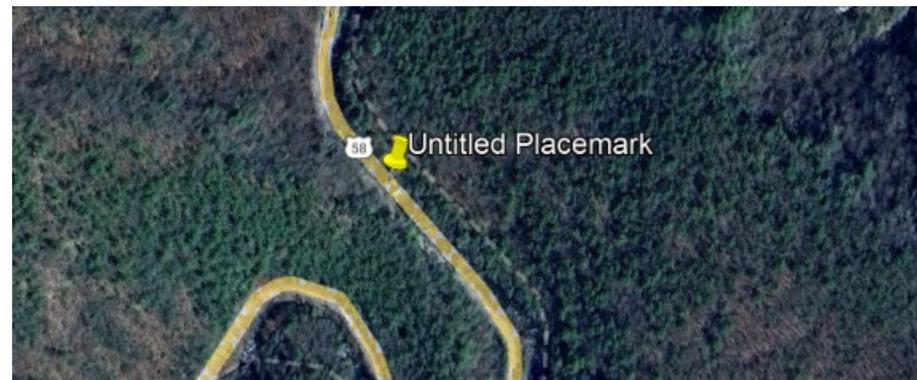
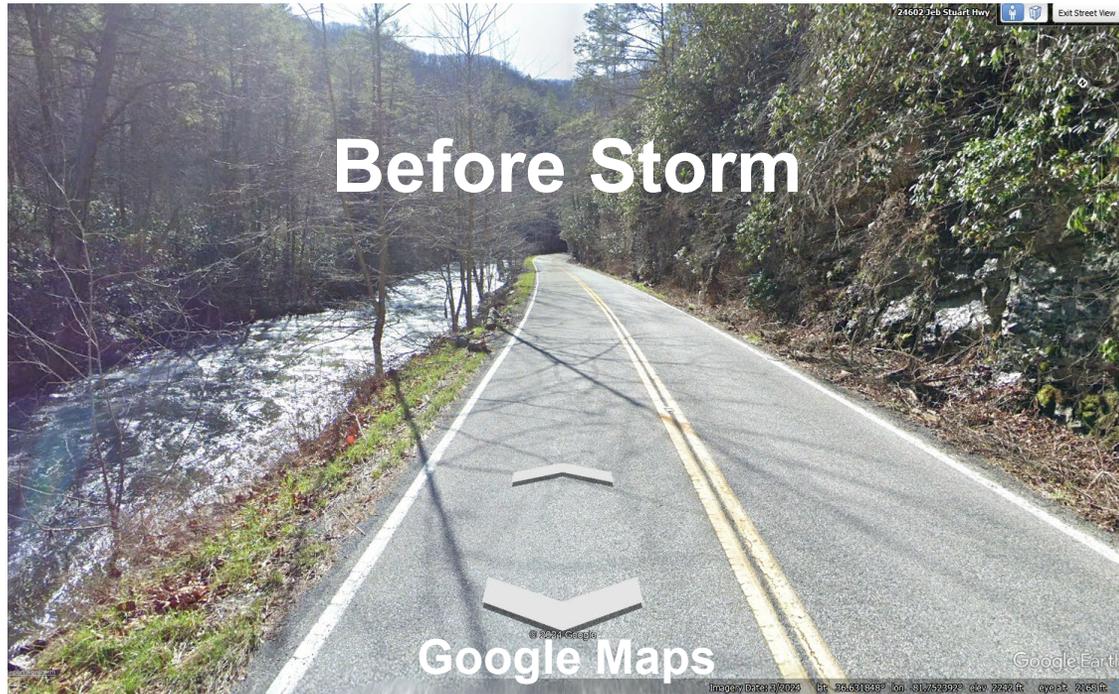
# Recovery – Taylor’s Valley – Route 725 (Temporary Bridge)



# Recovery – Taylor’s Valley - Route 725 Bridge



# Recovery - Route 58 Damages



# Recovery - Route 58 Damages

Before Storm

Google Maps



# Next Steps

- **We estimate 3-6 months to collect all the debris**
- **Approximately 12 months to rebuild damaged roads and structures**
- **Up to 3 years to receive all federal reimbursement**
- **Participating in the state Debris Task Force**

