State of the Town Infrastructure: Impact & Recovery After Tropical Storm Helene

Jamey Matthews, Public Works Director

Purpose of Today's Presentation

- Explain the impacts of Tropical Storm Helene
- Summarize emergency response and repairs
- Discuss long-term recovery and infrastructure resilience

Pre-Storm System Performance

- Functioning within capacity
- Producing 40% of town's water needs
- Ongoing maintenance program
- Aging infrastructure in select locations flagged for replacement prior to storm, programmed into capital projects in the Water Fund
- No major known system-wide vulnerabilities

Tropical Storm Helene - Impact Timeline

- September 27, 2024
- Flash flooding and landslides
- Power outages and surges
- Widespread debris
- Infrastructure submerged or compromised
- Distribution charged with nonpotable water, more damage located
- Distribution system functioning on October 9th with non-potable water.

Immediate Impacts to the Water System

- Extensive erosion and washouts at key line locations
- Exposed and broken water lines
- Damaged meter boxes and service connections
- SCADA system failures
- Power outages
- Pump stations and tanks offline
- Access to wells destroyed

Coping with Water Outage

- Existing relationships with Davis water proved a critical resource to Black Mountain residents.
- Town Council acted quickly to approve funding to secure safe water delivery.
- Black Mountain had water onsite before any jurisdiction in Buncombe County


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Water Service
1-800-234-8845
www.daviswaterservice.com
Davis
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BLACK MOUNTAIN
INSURANCE
&
REALTY
MAYOR SOBOL
IS WORING TO
GET A PLAN
FOR WATER

Major Water System Repairs Completed

- Water Line Replacements
- Ductile iron line replacements (6", 8", 10")
- Cast iron line replacements
- PVC line replacements (2", 4")
- Galvanized line replacements with PVC or poly
- Poly service line replacements (¾”)
- Valve Replacements
- Service Line Repairs
- Repair or backfill of exposed service lines
- Replacement of short segments of service lines
- Pump Station and SCADA Repairs
- Debris removal from pumps
- Piping repairs at pump station
- Repair of SCADA system wiring
- Flood-Related Repairs
- Backfilling of exposed lines
- Stabilization of infrastructure impacted by flooding
- Temporary or Emergency Repairs
- Installation of repair bands on galvanized lines


DEERE

Major Road System Repairs Completed


DEERE



Challenges Encountered

- Access to remote damage sites due to debris
- Delays in material procurement, parts availability
- Limited equipment
- No communication
- Interuption to Sanitation Scheduling
- Limited space to house employees







Recovery Partnerships

- Town staff coordinated emergency repairs
- Contractors and engineering teams mobilized
- Collaboration with:
  - NC DEQ
  - FEMA & NCEM
  - NCWaterWarn (Mutual Aid)

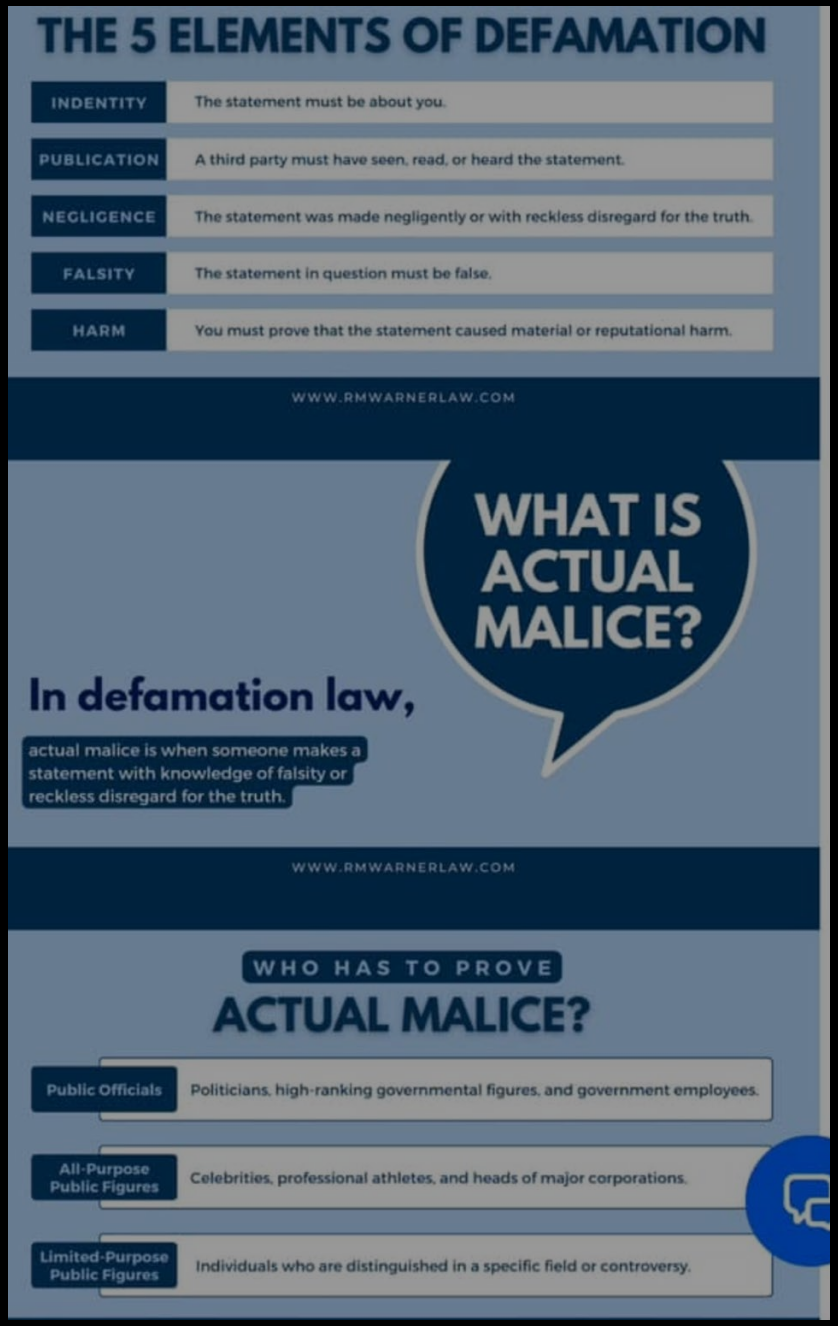


Funding Repair Costs

- NC DEQ Loan used to pay mutual aid invoices totaling $457,887.91.
- Preparing documentation for FEMA to reimburse distribution repairs.
  - Reimbursement will allow repayment of the NC DEQ loan
  - Expenses for staff, materials and equipment will be reimbursed by FEMA.
  - Total small project request approximately $####.

What We've Learned

- Faster access to emergency funding needed
- Importance of documentation and asset mapping
- Build redundancy and elevation into vulnerable assets
- Public education is key
- Misinformation/Disinformation



Richard Hudson Author
All-star contributor

Michael Small, most of the board members believe what ever he says for some reason. You are correct that the garbage trucks and golf course equipment are enough to summarily fire him, but they obviously don't care what his decision making costs the taxpayer. He also is a known liar. He told a whopper to the mayor this week, trying to keep information that is public from the leader of our town.

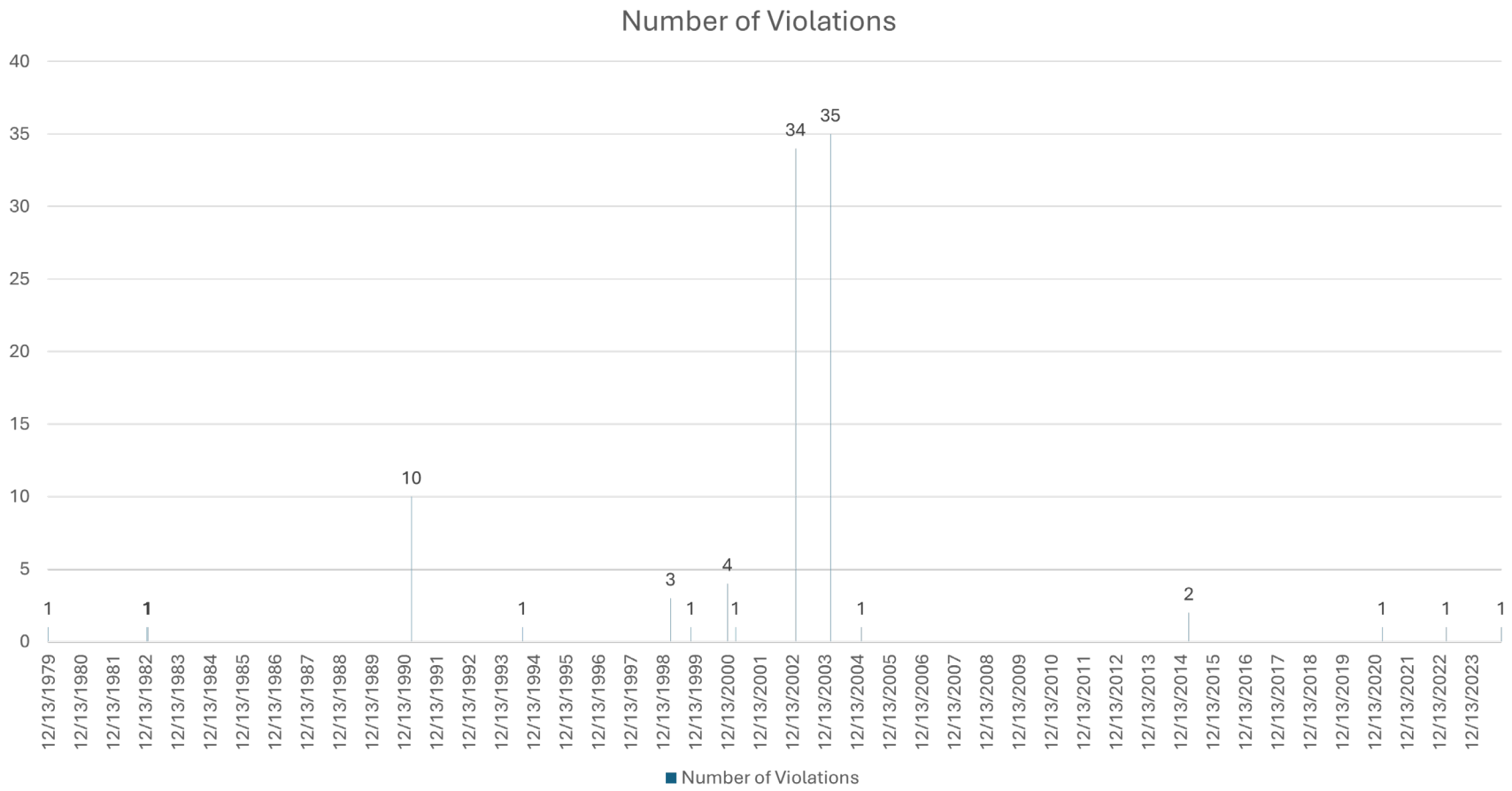
14h Like Reply

Julie Williams Shippey All-star contributor

Richard Hudson then why does the mayor not do something about it? Why does he not get on FB and say so himself? Why is it you are always the one who seems to speak for him. We all know who you are hinting about when you don't outright say it.

12h Like Reply

Write a reply


Number of Violations
40
35
30
25
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15
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12/13/2022
12/13/2023
Number of Violations

Looking Ahead

- Continue recovery and rebuild smarter
- Prioritize infrastructure resilience in CIP
- Explore regional emergency backup
- Inform and involve residents