



NRV Hazard Mitigation Plan 2016 Update Working Group: High Winds (non-rotational) and Tornadoes

October 6, 2016, 10:30 am - 12:00 pm

New River Room, New River Valley Business Center
Fairlawn, VA

Agenda

1. Welcome..... Christy Straight
New River Valley Regional Commission
2. High Winds (non-rotational)
and Tornadoes..... William Perry
National Weather Service
3. 2011 Pulaski Tornado.....Pete Huber
Pulaski County

Janet Jonas
Community Planning Partners
4. Data Review..... Christy Straight
New River Valley Regional Commission
5. Regional Mitigation Strategy
Review Christy Straight
New River Valley Regional Commission
6. Wrap Up
 - a. Question and answer
 - b. Next meeting- November 3, 2016
(Please check your calendars to see if we might be able to
reschedule to November 10th)



Regional Hazard Mitigation Plan Update

Working Group - Winds

October 6, 2016

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Definition

- Hazard Mitigation

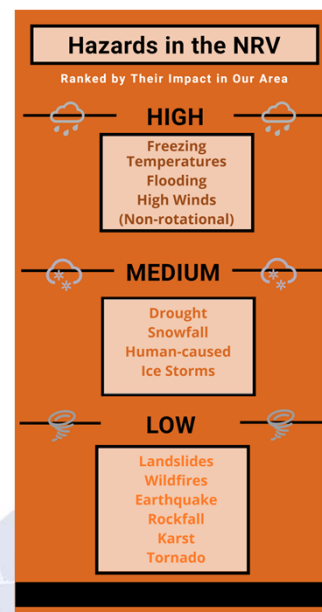
...is a sustainable action that will reduce or eliminate injury to citizens, damages to structures and allow continuity of critical society functions...

This is different from response and recovery.

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Project overview

- Update every 5 years
- Must be FEMA-approved
 - Maintains participants' eligibility for mitigation funds
- Covers natural hazards with potential impact in NRV
 - Floods, drought, wildfire, geologic hazards, severe weather, etc.
 - And considers human-caused hazards
- Project website - <http://nrvc.org/hazardmitigation/>



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Working groups

- Steering committee and staff will
 - Invite stakeholders with technical expertise
 - Invite community representatives to participate
- Participants will
 - Provide input on hazard issues and impacts
 - Develop mitigation goals and regional strategies
 - Further identification and input on
 - Mitigation options
 - Resources



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Working groups



- High Wind and Tornado Hazards | October 6, 2016
- Winter Hazards | November 3, 2016
- Geologic Hazards | December 1, 2016
- Human-caused, Wildfire, & Drought Hazards | January 5, 2016
- Flooding Hazards | February 2, 2016

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Today we will



- Hear presentations on
 - High Winds and Tornadoes
 - William Perry, National Weather Service
 - 2011 Pulaski Tornado
 - Pete Huber, Pulaski County
 - Janet Jones, Community Housing Partners
- Consider the risk assessment process
- Review latest available data
- Review and update mitigation strategies

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Presentation



- High Winds and Tornados
 - William Perry, National Weather Service

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Presentation



- 2011 Pulaski Tornado
 - Pete Huber, Pulaski County
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Risk Assessment



- Probability (area affected & frequency)
- Impact to & vulnerability of community assets
- Risk to population & property

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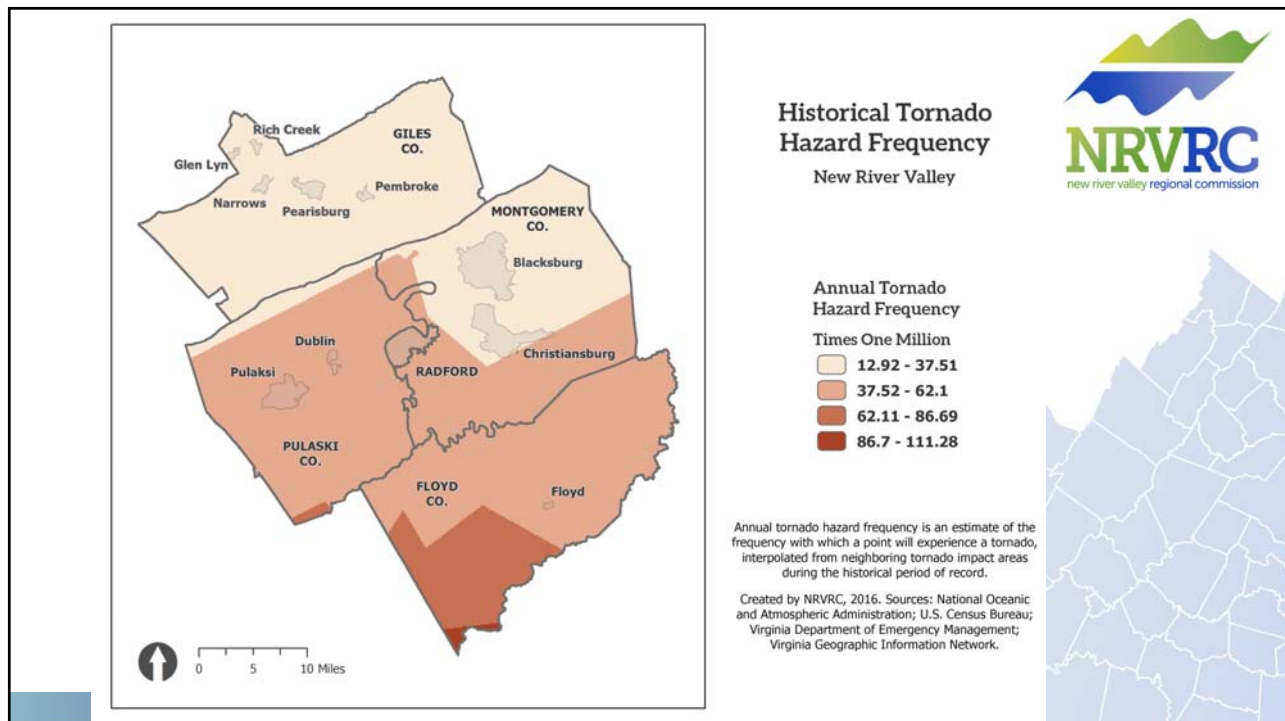
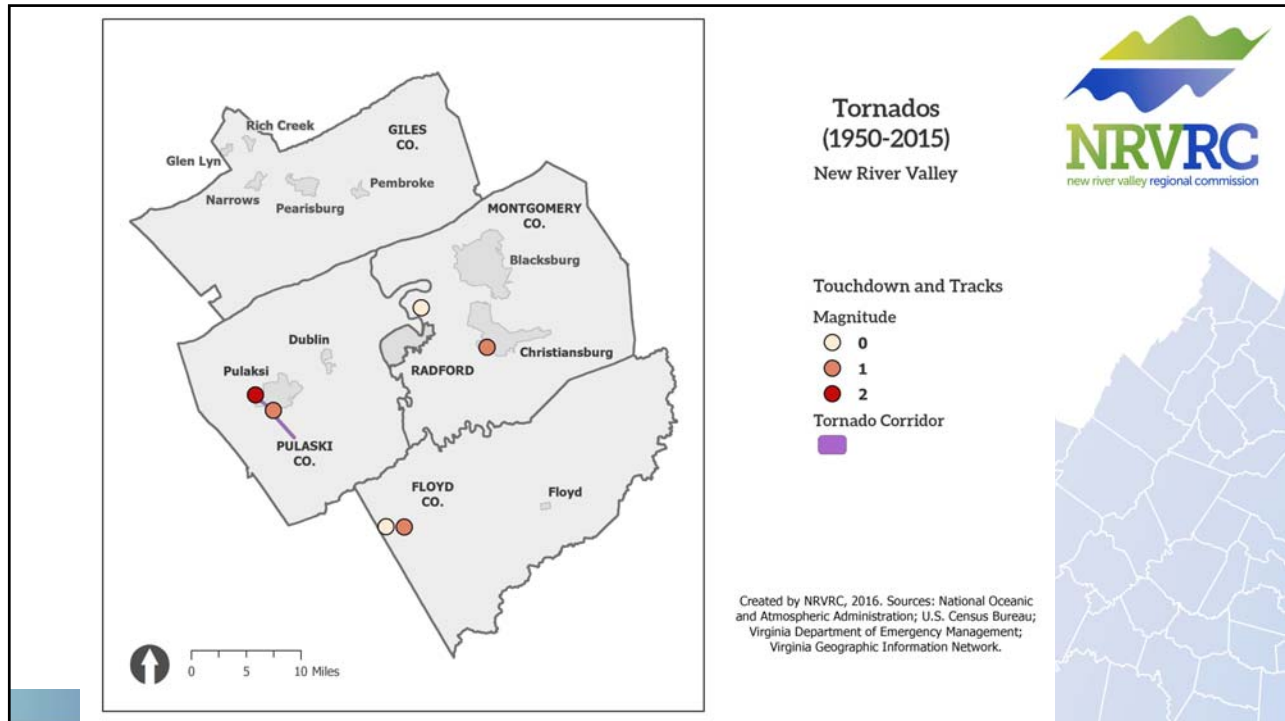
History of Tornado Events



- Five tornados since 1996
 - Pulaski 4/8/2011 EF2
 - Draper 4/8/2011 EF1
 - Indian Valley 5/3/2009 EF0
 - Indian Valley 1/23/1999 F1
 - Radford 6/11/1998 F0
- Fujita Scale and Operational EF Scale wind estimates

F Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	45-78	0	65-85
1	79-117	1	86-110
2	118-161	2	111-135
3	162-209	3	136-165
4	210-261	4	166-200
5	262-317	5	Over 200

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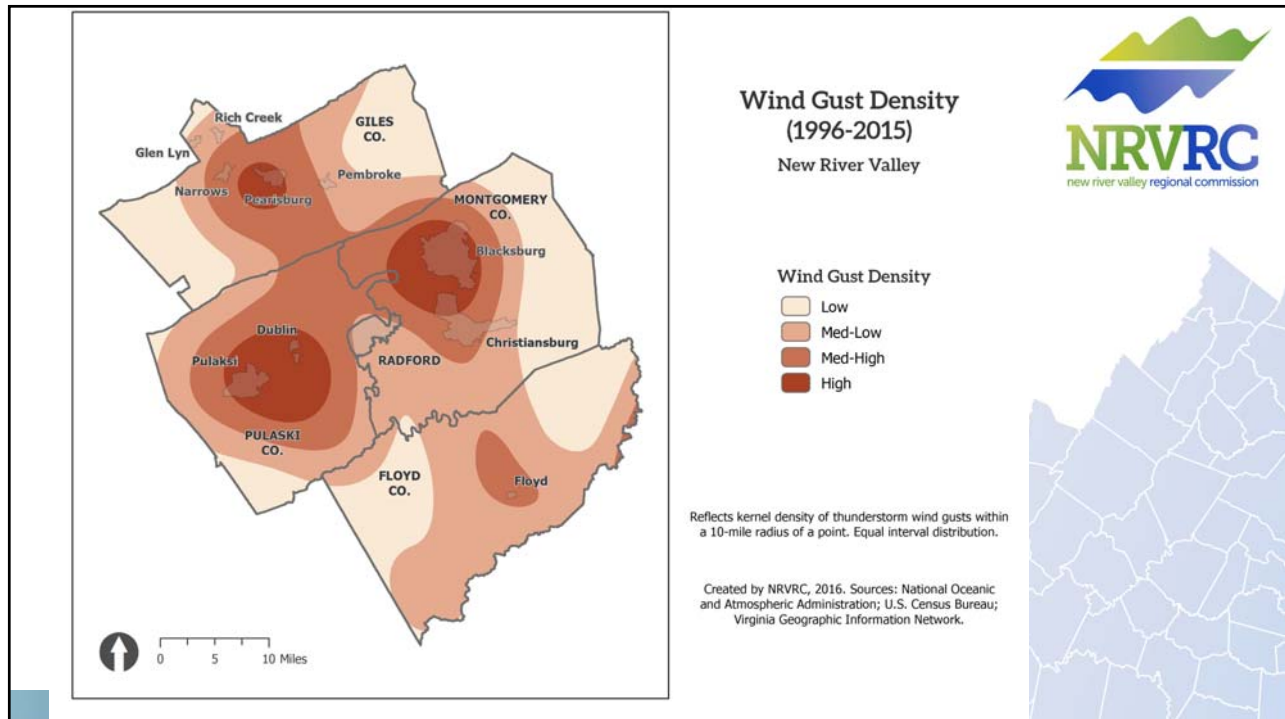
History of Wind Events

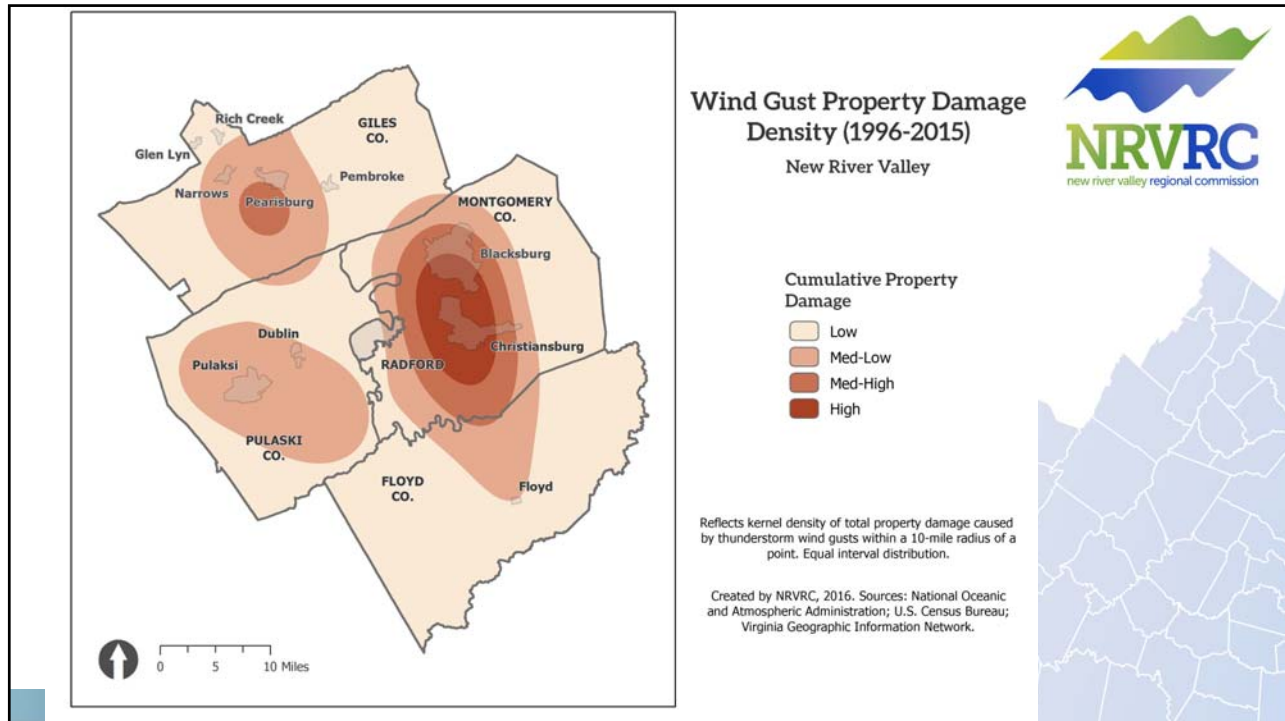


- 499 high wind events
 - thunderstorm winds
 - high winds
- Speeds typically over 50 knots (60.9 mph)
 - Beaufort scale

Force	Wind (Knots)	WMO Classification
0	Less than 1	Calm
1	1-3	Light Air
2	4-6	Light Breeze
3	7-10	Gentle Breeze
4	11-16	Moderate Breeze
5	17-21	Fresh Breeze
6	22-27	Strong Breeze
7	28-33	Near Gale
8	34-40	Gale
9	41-47	Strong Gale
10	48-55	Storm
11	56-63	Violent Storm
12	64+	Hurricane

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Annualized Loss

- Using HAZUS-MH (2013 data)
- Based on a 100-year simulation of anticipated high winds activity
- This is a number to gauge comparative risk

Locality	Loss
Floyd County	\$19,996
Giles County	\$13,893
Montgomery County	\$101,587
Pulaski County	\$54,601
City of Radford	\$18,441

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Goals & Strategies



- **Mission:** Minimize the loss of life and property to natural hazards by focusing on likely events, high-risks areas, and cost-effective mitigation opportunities.
- Regional and local strategies in support of goals
- Strategies can include
 - Education
 - Regional Cooperation
 - Capital improvement projects
 - Development and planning guidelines

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Wrap up



- Questions?
- Next steps
- Next meeting – November 3, 10:30 am – request to reschedule to November 10
- Contact information for NRVRC
 - Christy Straight (cstraight@nrvc.org)
 - Michael Gottfredson (michaelg@nrvc.org)
 - 540.639.9313

Thank you for coming!

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