

Rappahannock-Rapidan Regional Hazard Mitigation Plan Update

Steering Committee Meeting
August 28, 2017



Meeting Agenda

- Introductions
- Plan Update Status Report
 - Complete: Draft revisions to Chapters 1, 3, 4
 - Ongoing: Mapping/GIS updates for Chapters 5, 6
- Presentation on iFlows & Rappahannock River Stream Gauge Monitoring
- Local Input Roundtable
 - Unique Hazards
 - Significant Events since 2012
- Next Steps

Plan Update Status

- RRRC staff have completed draft updates for:
 - Chapter 1: Introduction & Background
 - Chapter 3: Community Profile
 - Demographics & Socio-economic data updated
 - Additional mapping and data included from 1-meter resolution Land Cover data collected by Virginia Geographic Information Network
 - Chapter 4: Hazard Identification
 - Combined Erosion & Landslide sections
 - Tornadoes & Severe Thunderstorms are now considered separately
 - Mapping updated
 - Data Tables updated

Plan Update Status

- Ongoing Updates:
 - Chapter 5: Hazard Analysis
 - Analysis and mapping of hazards directly affecting the Rappahannock-Rapidan region
 - Floodplain mapping updates using most recent floodplain data from FEMA
 - New earthquake data obtained from Department of Mines, Minerals, and Energy (DMME) from recent statewide earthquake analysis
 - Communication with Department of Forestry on updated wildfire information
 - Coordination with Department of Conservation & Recreation on Dam information
 - How many of your jurisdictions have Dam Inundation Zone maps and/or GIS available?
 - Additional discussion of Karst per FEMA recommendation from 2012 review
 - Historic Hazard Events updated (2011-present)
 - Recent Tornado/Microburst events (April, August 2017)
 - Hurricane Sandy (2012)
 - Derecho (2013)
 - Other significant events in past five years?

Plan Update Status

- Coordination with State Hazard Mitigation Plan
- State Plan most recent update in 2013
 - Staff reviewed the Hazard types identified in the existing regional plan versus Statewide Plan
 - Addition of Karst (into existing sinkholes section) ensures that the hazards identified in the Statewide Plan are also those addressed in the regional plan
 - Several other hazards are included in other sub-state plans
 - Lightning, Hail, Extreme Heat, Extreme Cold, Tsunami, HazMat, Terrorism
 - Those hazards are discussed as part of other identified hazards or are outside the scope of this update

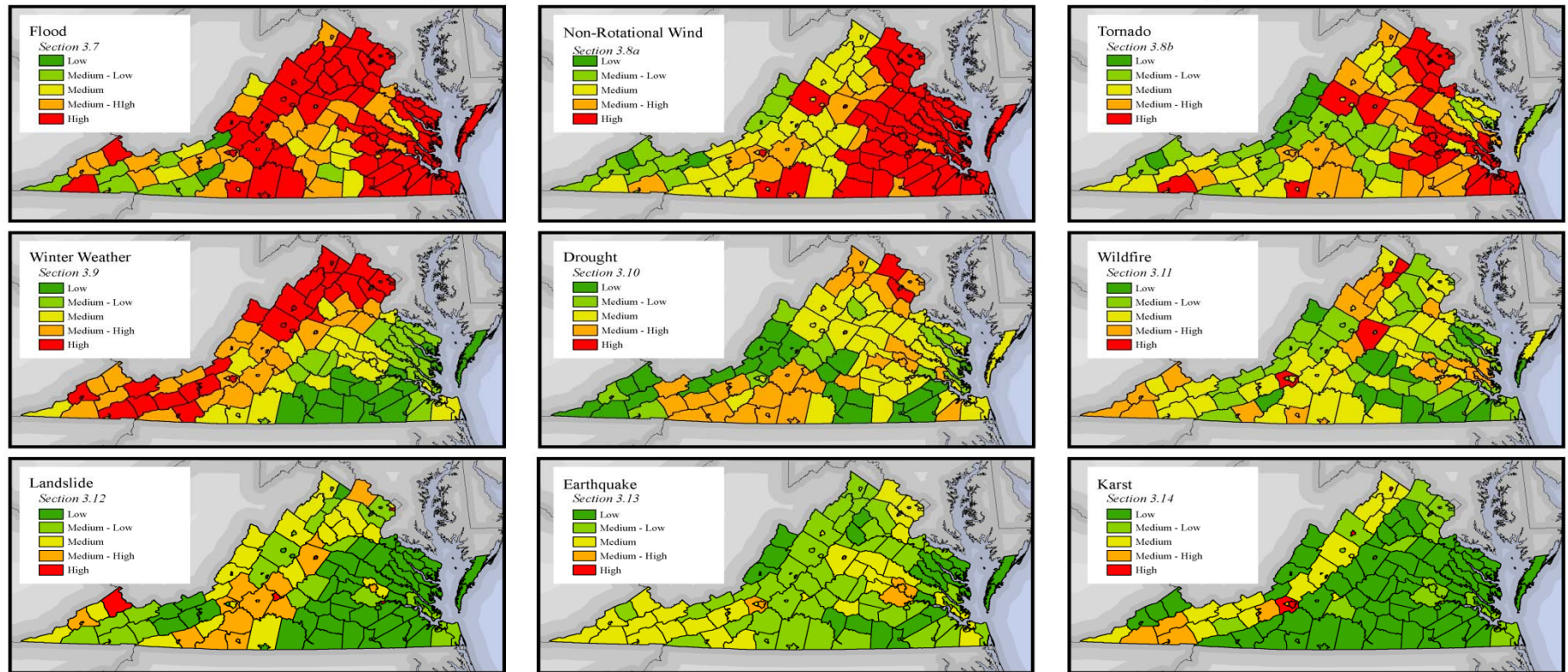
Plan Update Status

- Comparison of State Hazard Rankings with R-R Hazard Rankings

Hazard	Existing 2012 Plan	March 29 Meeting	2013 Statewide Plan
Dam/Levee Failure	Low	Low (Locally Higher for Town of Culpeper)	Low
Drought	Medium	Medium	Medium
Earthquake	Low	Low (Locally Higher in Culpeper)	Medium-Low
Erosion & Landslide	Low	Low	Medium-Low
Flood	High	High	High
Hurricane/Tropical Storm (Non-Rotational Wind)	High	Medium	Medium-High
Severe Thunderstorm/Tornado	Medium	High	Medium-High
Sinkholes/Karst	Low	Low	Low
Wildfire	Medium	Medium (Locally Higher in Madison/Rappahannock)	Medium
Winter Storm	High	High	Medium-High

Statewide Plan Hazard Rankings

Figure 3.16-1: Hazard Ranking Risk Maps



PROJECTION:
 VA Lambert Conformal Conic
 North American Datum 1983

DATA SOURCES:
 CGIT Ranking Methodology
 VGIN Jurisdictional Boundaries
 ESRI State Boundaries

HAZARD RANKING:

This is a summary of the individual hazard risk maps found in Section 3.7 through Section 3.14. The parameters used to create the Hazard Ranking Parameters and Risk Maps are explained in Section 3.5.



DISCLAIMER: Majority of available hazard data is intended to be used at national or regional scales. The purpose of the data sets are to give general indication of areas that may be susceptible to hazards. In order to identify potential risk in the Commonwealth available data has been used beyond the original intent.

Commonwealth of Virginia Hazard Mitigation Plan 2013

Local Data Requests

- RRRC requested the following in April/May
- GIS: Parcels, E-911 Address Points, Building Footprints as available
- Critical Facilities
 - List of facilities in existing plan – Please review locally
- Mitigation Strategies
 - Locally-identified Strategies in existing plan
 - Review and provide status of existing strategies (i.e., completed, in progress)
- If not already provided, please coordinate with RRRC staff as soon as possible

Need for Local Input

- Locally Unique Hazards
 - Opportunity to Identify hazards that may impact your locality to a greater degree than the regional hazard ranking
 - Existing Locally Identified Hazards
 - Wildfire: Madison & Rappahannock counties identify wildfire as a high-risk hazard for their jurisdictions due to western boundary with Shenandoah National Park
 - Earthquake: Culpeper County identifies earthquake as a high-risk hazard in response to the 2011 earthquake and aftershocks
 - Dam Failure: Town of Culpeper identifies dam failure as a high-risk hazard due to the location of dams at Lake Pelham and Mountain Run Lake and the potentially-impacted populations, property, and critical facilities
 - Haz Mat/Railroad: Town of Orange identifies the railroad and potential transport of hazard materials as a high-risk hazard impacting the Town.
- Other hazards that differ from regional hazard rankings as of today?

Need for Local Input

- Local input meetings (RRRC with local staff in your jurisdiction)
 - Opportunity to review and report out on existing Mitigation Strategies from current Plan & begin formulating new strategies
 - FEMA review in 2012 requested that the next plan update include a “thorough report out on the progress of mitigation actions and activities.”
 - Strategies for each hazard analyzed in the Plan must be included, although can be addressed regionally
 - Review of Capability Assessment for each locality
 - Capability Assessment identifies the existing unique capabilities (planning/regulatory, administrative/technical, financial, education/outreach) available to each participating locality to reduce long-term vulnerability.
 - Current Plan includes:
 - National Flood Insurance Program participation
 - Community Rating System participation
 - Disaster Recovery Plan
 - Comprehensive Plan
 - Floodplain Management Plan
 - Stormwater Management Plan
 - Emergency Operations Plan
 - Continuity of Operations Plan
 - Radiological Emergency Plan
 - SARA Title III Plan
 - Evacuation Plan
 - Transportation Plan
 - Capital Improvement Program
 - Zoning Ordinance
 - Subdivision Ordinance
 - Flood Damage Prevention Ordinance
 - Building Code
 - Fire Code
 - Riparian Buffer/Wetland Preservation
 - Open Space Preservation

Next Steps

- Upcoming Tasks
 - RRRC to coordinate with local points of contact on local strategy/capability meetings
 - October/November timeframe
 - Would include participation by other staff, including planning/zoning
 - Plan updates
 - Chapter 5: Hazard Analysis
 - Chapter 6: Vulnerability Analysis (Need local GIS data for portion of this analysis)
 - Chapter 7: Capability Assessment (following consultation with local staff)
 - Chapters 2 & 9: Plan Process & Maintenance procedures
- Need for steering committee/local governments to share Survey links with public and other stakeholders
 - English: <http://www.surveymonkey.com/r/regionalhazards>
 - Spanish: <http://www.surveymonkey.com/r/disastros>
- October 11: Floodplain Management/DCR Dam Safety Division Workshop

Hazard Mitigation Update Timeline (As of 8/28/2017)

Project Tasks	Month											
	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017	1/2018	2/2018	3/2018
Hazard Analysis												
Hazard Identification	█	█	█	█	█							
Event Profiles	█	█	█	█	█							
Critical Asset Inventory	█	█	█	█	█	█						
Hazard Mapping		█	█	█	█	█						
Risk Assessment												
Loss Estimates		█	█	█	█	█	█					
GIS Analysis (HAZUS)		█	█	█	█	█	█					
Capability Assessment												
Plan, Policy, Program Review				█	█	█	█	█				
Resource Identification				█	█	█	█	█				
Mitigation Goals & Strategies												
Evaluate existing Goals & Strategies		█	█	█	█	█	█					
Research Alternatives		█	█	█	█	█	█	█	█			
Develop Updated Goals & Strategies			█	█	█	█	█	█	█			
Planning Coordination												
Plan Updates	█	█	█	█	█	█	█	█	█			
Public Outreach Activities	█	█	█	█	█	█	█	█	█	█		
Plan Adoption Process								█	█	█	█	█
Meetings, Progress Reports & Deliverables												
Kickoff Meeting	█											
Project Management Team Meeting or Local Meetings					█	█	█	█	█	█		
Draft Plan Review						█	█	█	█	█		
Progress Reports to VDEM/FEMA	█			█			█			█		
Final Plan Approval & Adoption								█	█	█	█	█

