

Chapter 5 Mitigation Strategies

Disaster Mitigation Act of 2000

§201.4(c)(ii): *The State mitigation strategy shall include a] description of State goals to guide the selection of activities to mitigate and reduce potential losses.*

§201.4(c)(3)(iii): *An identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.*

§201.4(c)(3)(iii): *The State mitigation strategy shall include an] identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.*

§201.4 (d): *Review and updates. Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Director every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible. We also encourage a State to review its plan in the post-disaster time frame to reflect changing priorities, but it is required.*

5.1 Virginia Hazard Mitigation Strategies

The Commonwealth of Virginia Hazard Mitigation Plan is structured with a traditional hierarchy that begins with a Mitigation Vision supported by four major goals. The 4 major goals are supported by categories, and the categories are supported by mitigation strategies, each of which contribute to reducing risk in the Commonwealth and support the Mitigation Vision.

As Chapter 2 outlines, the Commonwealth of Virginia Hazard Mitigation Steering Committee (CVHMSC) was divided into 4 sub-committees, structural, planning, HIRA, and outreach and education. Each of the four goals and their objectives from the previous plan were reviewed by each of the four sub-committees via conference call and/or in person meetings. During this process each goal and objective from all 27 local hazard mitigation plans were reviewed by each sub-committee for consideration in the revised goals and objectives. The second CVHMSC meeting involved a review and discussion of the deferred hazard mitigation strategies from the 2007 plan. Strategies that were not considered relevant were removed and many have been modified, these strategies can be found on Table 5.3. It wasn't until after the second CVHMSC meeting that a decision was made by the CVHMSC to change the objectives to broad categories to simplify the process and to eliminate objectives without strategies. The revised goals and categories can be found on Table 5.1. The third CVHMSC meeting resulted in a selection of prioritization criteria, and the overall ranking of the differed and new strategies. The prioritization process is discussed in section 5.3.



5.2 Vision, Goals, and Categories

VISION:

It is one of the Commonwealth's visions to reduce the impacts of hazards on human, economic and natural resources throughout the state.

Table 5.1 - Mitigation Goals and Categories

GOAL 1: Structural Mitigation Projects		
Identify and Implement projects that will eliminate long-term risk, directly reduce impacts from hazards, and maintain continuity of operations.	Category 1:1	<u>Warning and Detection</u> (projects to include but not limited to river gauges, rain gauges, water quality gauges, security cameras, NOAA weather radios, tidal gauges, cameras, fire alarms, and any other early warning/detection equipment)
	Category 1:2	<u>Construct Hazard Resistant Buildings and Infrastructure</u> (projects that are constructed using hazard resistive methods including low hazard site selection)
	Category 1:3	<u>Mitigation of Existing Facilities and Infrastructure</u> (to include but not modifying structures, installation of fire suppression systems; generator hook-ups; flood, wind, and seismic retrofitting; wastewater, storm water, and utility improvements)
	Category 1:4	<u>Mitigation of Flood Prone Properties</u> (to include but not acquisition, elevation, relocation, and dry and wet floodproofing of flood prone structures)
	Category 1:5	<u>Maintain functionality of emergency and communication systems and critical facilities</u> (projects to include but not limited to underground wiring, emergency backup generators/systems, reverse 911, interoperability of communication lines, security cameras to maintain redundancy)
	Category 1:6	<u>Contract Development</u> (To involve but not limited to debris removal/clearing, evacuation vehicles, sheltering, long term housing)

Table 5.1 - Mitigation Goals and Categories

GOAL 2: Planning Projects		
Incorporate mitigation concepts and objectives into existing and future policies, plans, regulations, and laws in the Commonwealth.	Category 2:1	Comprehensive State Plan Integration (to include state and local planning processes in which mitigation integration would be appropriate)
	Category 2:2	Disaster Resistant University Plans (to include universities wishing to develop or update their DRU plan)
	Category 2:3	Evacuation Plans (to include state, regional, and local evacuation plan initiatives)
	Category 2:4	COOP Planning (to include COOP planning on a state, local, and university level)
	Category 2:5	New State Legislation and State Agency Policy (to include new legislation and policies regarding mitigation practices/methods)
	Category 2:6	Emergency Operations Plans (to include state agency, local government, university, and the Commonwealth Emergency Operation Plans)
GOAL 3: Hazard Identification and Risk Assessment (HIRA)		
Improve the quality of the data and analyses used in the hazard identification and risk assessment process	Category 3:1	Accuracy and Completeness of Data (to include but not limited to improved hazard mapping, data collection sources, format of data, historical occurrences, geographical location, as well as state owned facility data)
	Category 3:2	State and Local Data Improvement (improve the integration of local plans and the state plan by means of standardized forms and required fields)
	Category 3:3	Ongoing Data Collection (including methods to keep hazard data current on a quarterly or semi-annual basis)
GOAL 4: Outreach and Education		
Through training, education and outreach, promote awareness of hazards and potential mitigation strategies in order to increase resiliency.	Category 4:1	Target State Agencies, Universities, and Local Governments for Outreach and Education Materials.
	Category 4:2	Improve on Current and New Training Development
	Category 4:3	Develop Hazard Specific Awareness Campaigns (to be based on need and the time of year, i.e, hurricane season, snowstorms in winter, tornados in spring)



5.4 Strategy & Project Prioritization

In 2004 the strategies and projects were developed within the context of the vulnerability assessment conducted for more than 10,000 Commonwealth of Virginia facilities. The same thought process was in the background for this revision as the state facility analysis has been updated. At the end of the second CVHMSC meeting the committee agreed upon reducing the fourteen prioritization criteria from the previous plan to nine criteria to reduce repetition and commonalities. In the previous version of this plan, each sub-committee selected five of the fourteen criteria to use as a baseline to rank the strategies.

At the beginning of the third CVHMSC each sub-committee broke into groups and selected three of the nine criteria to use to rank strategies that fell within the four goals and categories. Each strategy that had not been completed or canceled were ranked based on the criteria in Table 5.2. Strategies that were completed or canceled were not ranked for this plan revision. The strategies were organized by sub-committee and the three criteria were reviewed before each new sub-committee's strategies were presented.

The ranking process for the 2010 update followed a similar method as the previous plan. Strategies were presented and broken out by sub-committee. Every committee member had slips of paper in which they would score the strategies, and every committee member voted. The committee members were instructed to vote based on the following score system:

- 0: Strategy met none of the criteria
- 1: Strategy met some of the criteria
- 2: Strategy met all of the criteria

The slips of paper were then collected and put in an envelope with the strategy name and number on it. The scores were then tallied and the range of scores is as follows:

- Low: 15 - 26
- Medium: 27 - 30
- High: 31 - 36



CVHMSC September 22, 2009



Table 5.2 Prioritization Criteria

Number	Criteria	Description	Sub-Committee Selection
1	Maintenance of critical communication, critical infrastructure and key resources, transportation or supply chain management operations	Project protects the Commonwealth's ability to maintain continuity of operations and emergency management functions during a disaster	Structural, Planning
2	Beneficial impacts for multiple agencies and organizations	Project benefits a number of groups, communities, or state agencies covering a large geographic area	Planning, Outreach and Education
3	Cost and Feasibility	Project is feasible in terms of cost effectiveness, ability to be completed in a timely fashion, availability of expertise and technical support and ease of implementation	Structural
4	Preparedness	Strategy enhances the Commonwealth's ability to plan for and be prepared for a disaster	Planning, Outreach and Education
5	Economic Recovery	Strategy will reduce economic risk and promote rapid economic recovery	Not Selected
6	Multi-Hazard Mitigation	Strategy mitigates damage to critical resources from more than one hazard	Not Selected
7	Human Health and Safety	Project protects human health, enhance public safety, protect vulnerable populations, or mitigate significant damage potential	Structural, HIRA
8	Information and Data Quality and Security	Project provides ability for information to be collected and maintained, is appropriately protected and secure, and has integrity/validity/high quality information	HIRA
9	Focused Educational Efforts	Strategies for educational efforts will be carried out in a timely and relevant manner, messages are consistent, simple, and straightforward and in the appropriate media format, including alternative formats for people with special needs, and are directed toward people and property that are located within high hazard areas	Outreach and Education



5.4 Mitigation Strategies

Table 5.3 identifies the status of mitigation strategies identified in previous versions of this plan, as well as new strategies that were submitted under this revision. The strategy description, status, priority ranking from 2007 and for the 2010 update, expected timeline, hazard to be mitigated, lead agency, and the category (s) in which the strategy belongs. The strategies also include the new strategy number as well as the strategy number from the 2007 plan so that the viewer of this document will be able to determine what changes were made. The following information will can be used as a legend for Table 5.3. Each of the following mitigation strategies contribute towards satisfying the mitigation goals, and therefore contribute to the overall Mitigation Vision. Completed strategies are displayed first, followed by the four mitigation goals and their supporting strategies. A more detailed description of each strategy can be found in Appendix H.

Priority Ranking

- C = Critical
- H = High
- M = Medium
- L = Low
- NR = Not Ranked

Timeline

- Short Term = Less than 3 years
- Long Term = More than 3 years
- As Funding Becomes Available = Project Timeline Dependant on Funding
- Ongoing = Project is Continuous with No Designated End Date

Table 5.3 - Commonwealth of Virginia Mitigation Strategies

New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
Completed Strategies									
C-1	1.1.1	Evacuation Interstate Ramp Barrier Gates	Completed	NR	C	Short Term	Hurricane	VDOT	1:1, 2:3
C-2	1.2.1	Evaluation of DEQ Buildings for Flooding	Completed	NR	H	Short Term	Flood	DEQ	3:1
C-3	1.5.2	Emergency Power Systems for 9 Regional Agency Cooler Facilities	Completed	NR	C	As Funding Becomes Available	All Hazards	DOF	1:5
C-4	1.5.3	Supplemental Power for Government Data Centers	Completed	NR	C	Short Term	All Hazards	DGS	1:5



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
Completed Strategies									
C-5	1.5.5	Provide uninterruptible power source (UPS) for DCLS	Completed	NR	H	As Funding Becomes Available	All Hazards	DGS	1:5
C-6	2.1.3	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-7	2.1.4	Hazard Mitigation Planning	Completed	NR	H	As Funding Becomes Available	All Hazards	Radford University	2:3
C-8	2.1.5	Hazard Mitigation Planning	Completed	NR	H	As Funding Becomes Available	All Hazards	Virginia State University	2:3
C-9	2.1.7	Jamestown Settlement Electrical Surge Protection	Completed	NR	H	As Funding Becomes Available	All Hazards	Jamestown-Yorktown Foundation	1:5
C-10	2.1.8	Jamestown Settlement Emergency Generators	Completed	NR	H	As Funding Becomes Available	All Hazards	Jamestown-Yorktown Foundation	1:5
C-11	2.1.9	Development of a Plant Pest Emergency Action Plan	Completed	NR	M	Short Term	Human-Caused	VDACS	2:6
C-12	2.1.10	Yorktown Victory Center Surge Protection	Completed	NR	M	As Funding Becomes Available	All Hazards	Jamestown-Yorktown Foundation	1:5
C-13	2.1.11	Yorktown Victory Center Emergency Generator	Completed	NR	M	As Funding Becomes Available	All Hazards	Jamestown-Yorktown Foundation	1:5
C-14	2.1.12	Jamestown Settlement Tree Trimming and Removal	Completed	NR	L	As Funding Becomes Available	Hurricane, Winter Storm, Tornado	Jamestown-Yorktown Foundation	1:3, 1:6



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
C-15	2.1.13	Yorktown Victory Center Tree Trimming	Completed	NR	L	As Funding Becomes Available	Hurricane, Winter Storm, Tornado	Jamestown-Yorktown Foundation	1:3, 1:6
C-16	2.1.14	Hazard Mitigation Planning (Pre-Disaster Mitigation Grant Program, Disaster Resistant University Grant)	Completed	NR	NR	Ongoing	All Hazards	Virginia Tech, CGIT, and VDEM	2:2
C-17	2.3.3	Continuity of Operations Planning	Completed	NR	C	Short Term	All Hazards	VDACS	2:4
C-18	2.3.4	Continuity of Operations Planning	Completed	NR	C	Short Term	All Hazards	VDACS	2:4
C-19	2.3.5	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-20	2.3.6	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-21	2.3.7	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-22	2.3.8	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-23	2.3.9	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-24	2.3.10	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-25	2.3.11	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-26	2.3.12	Continuity of Operations Planning	Completed	NR	H	Short Term	All Hazards	VDACS	2:4
C-27	3.1.3	Mitigation: Security of Data & Assets	Completed	NR	C	Short Term	Human-Caused	VHDA	1:3
C-28	3.3.3	Floodplain Management Plan	Modified - Completed	NR	NR	Ongoing	Flood	DCR, Local Jurisdictions	3:1, 3:2
C-29	3.5.1	Incorporation of Handheld GIS-based Data Collection into Emergency Response	Completed	NR	C	As Funding Becomes Available	Fire	DOF	3:1, 3:3, 1:1
C-30	4.2.2	Development of a Business Disaster Guide	Completed	NR	H	Ongoing	All Hazards	VDEM	4:1



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
C-31	4.3.3	Preplanned and Developed Informational Campaigns for Natural Disaster Response	Completed	NR	M	As Funding Becomes Available	Wildfire	DOF	4:1, 4:3
C-32	4.3.4	Bioterrorism Training for Microbiologists	Completed	NR	NR	Ongoing	Human-Caused	VDACS	4:3
C-33	4.3.6	Monitor Food Security in Meat and Poultry Slaughter and Processing Plants	Completed	NR	NR	Ongoing	Human-Caused	VDACS	1:1
C-34	4.4.1	Educate Insurance Industry re: NFIP	Completed	NR	C	Short Term	Flood	DCR and SCC	4:1
Goal 1: Structural Mitigation									
S-2	1.1.3	Real time flood warning system	Not Started	M	H	As Funding Becomes Available	Flood	USGS, VDEM, NWS, DEQ, FEMA, local jurisdictions	1:1
S-3	1.1.4	Reduce Impact of Flooding on Virginia Tech Campus	Not Started	M	L	As Funding Becomes Available	Flood	Virginia Tech	1:3, 1:4
S-4	NEW	TIDEWATCH	New Strategy	M	NR	Short Term	Flood, Hurricane	VIMS	1:1, 2:2, 2:3, 3:1, 3:3
S-7	1.3.7	Install smoke detection and fire alarms systems in Virginia Tech buildings	In Progress	M	L	As Funding Becomes Available	Fire, Human-Caused	Virginia Tech	1:1



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
S-9	1.2.4	Relocation of VDOF – Big Stone Gap office facility to mitigate recurring flood losses	Not Started	M	AF	Not Started	Flood	DOF	1:2, 1:4
S-10	NEW	Relocation of the existing facility	New Strategy	M	NR	As Funding Becomes Available	Human-Caused, Flood	UVA	1:2, 1:3, 1:4, 1:5, 2:2, 2:4
S-11	NEW	Implement appropriate access control systems	New Strategy	M	NR	As Funding Becomes Available	Human-Caused	UVA	1:2, 1:3
S-12	1.2.5	Replace cottages at Southeast Virginia Training Center	In Progress	L	L	Short Term	All Hazards	DBHD	1:2
S-13	1.2.3	Install fire alarm and sprinkler systems at Western State Hospital	In Progress	H	M	Short Term	Fire, Human-Caused	DBHD	1:3
S-14	1.3.6	Install fire sprinkler and alarm systems at Central Virginia Technical Center	In Progress	L	L	Short Term	Fire, Human-Caused	DBHD	1:3
S-15	1.3.5	Install fire sprinkler and alarm system at Northern Virginia Technical Center	Not Started	M	L	As Funding Becomes Available	Fire, Human-Caused	DBHD	1:3
S-16	1.3.4	Improve fire safety in certain Virginia Tech multi-story buildings	In Progress	L	L	As Funding Becomes Available	Fire, Human-Caused	Virginia Tech	1:3
S-17	1.3.8	Install sprinkler systems in vulnerable buildings on the Virginia Tech campus	Not Started	M	L	As Funding Becomes Available	Fire, Human-Caused	Virginia Tech	1:3
S-18	1.2.7	Structural Mitigation	Ongoing	H	C	Ongoing	Flood	VDEM Hazard Mitigation Committee, Local Project Sponsors	1:3, 1:4



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
S-19	NEW	Install and implement the antiterrorism mitigation measures	New Strategy	L	NR	As Funding Becomes Available	Human-Caused	UVA	1:1, 1:2, 1:3, 1:5, 2:1, 2:2, 2:4
S-20	1.3.2	Provide emergency power for vulnerable Virginia Tech properties	In Progress	H	M	As Funding Becomes Available	All Hazards	Virginia Tech	1:5
S-22	1.4.2	UVA-Wise Utility Replacement	In Progress	L	L	Ongoing	Hurricane, Tornado, Winter Storm	UVA - Wise	1:5
S-23	1.5.1	Electrical wiring for future emergency generator hook-up	Not Started	H	C	As Funding Becomes Available	All Hazards	Dept of Military Affairs	1:5
S-24	1.5.6	Installation of Emergency Power System	Not Started	L	M	As Funding Becomes Available	All Hazards	VCACS	1:5
S-25	1.5.7	Installation of Emergency Power System	Not Started	L	M	As Funding Becomes Available	All Hazards	VDACS	1:5
S-26	1.5.8	Installation of Emergency Power System	Not Started	L	M	As Funding Becomes Available	All Hazards	VDACS	1:5
S-27	1.5.9	Installation of Emergency Power System	Not Started	L	M	As Funding Becomes Available	All Hazards	VDACS	1:5
S-28	1.5.10	Installation of Emergency Power System	Not Started	L	M	As Funding Becomes Available	All Hazards	VDACS	1:5
S-29	NEW	Conduct a campus-wide assessment of generator needs and capacities for existing buildings.	New Strategy	L	NR	Short Term	All Hazards	UVA	1.5



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
Goal 2: Planning									
P-1	1.2.6	Structural Mitigation of Repetitive Loss Structures	Ongoing	H	H	Ongoing	Flood	VDEM Hazard Mitigation Committee Local Government Project Sponsors	2:1
P-2	2.1.15	Incorporate repetitive loss property strategies into local, regional and state hazard mitigation plans	Ongoing	H	H	As Funding Becomes Available	Flood	VDEM CVHMSC Local Jurisdictions	2:1
P-3	2.5.1	Encourage use of Hazard Assessment data from this EOP to update other state plans	Modified - Ongoing	H	C	Ongoing	All Hazards	VDEM, OCP, PDC's, Local Governments	2:1
P-4	NEW	Local Hazard Mitigation Worksheets	New Strategy	M	NR	Ongoing	All Hazards	VDEM	2:1
P-5	NEW	PDC Regional Hazard Mitigation Plan Implementation and Maintenance	New Strategy	M	NR	Ongoing	All Hazards	RRPDC, VAPDC	2:1, 2:2, 2:3, 2:4, 2:5
P-6	NEW	Promote Disaster Resistant University Planning	New Strategy	M	NR	Ongoing	All Hazards	VDEM	2:3
P-7	2.1.6	Hazard Mitigation Planning	Not Started	H	NR	As Funding Becomes Available	All Hazards	Norfolk State University	2:3
P-8	2.1.1	Identify a number of specific facilities that can be designated as "all hazard" reception shelter centers	Modified - Ongoing	H	C	Ongoing	All Hazards	VDEM and Local Governments	2:3, 1:6
P-9	2.3.1	State Agency COOP Planning	Ongoing	H	H	Ongoing	All Hazards	All State Agencies	2:4, 2:5



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
P-10	2.3.2	State Agency COOP Implementation (Continuity of Government)	Ongoing	H	H	Ongoing	All Hazards	All State Agencies, OCP, VDEM	2:4
P-11	2.6.2	Gain support to incorporate hazard mitigation planning into local comprehensive planning process	Modified - Not Started	M	C	Ongoing	All Hazards	VDEM	2:5
Goal 3: Hazard Identification and Risk Assessment									
H-1	2.1.2	Sensitive Data protection	Modified - Ongoing	M	C	Ongoing	All Hazards	VDEM	3:1
H-2	3.5.2	Comprehensive State Facility Inventory Database	Not Started	L	H	Ongoing	All Hazards	VDEM, DGS, Dept of Treasury Risk Management	3:1
H-3	3.1.1 and 3.1.2	Continued Natural Hazard Information Collection and Distribution:	Modified - Ongoing	H	C	Ongoing	All Natural Hazards	VDEM, State Climatology Office, National Weather Service, VDOF, DMME, DCR, DEQ, CGIT, FEMA, OCP	3:1
H-4	3.1.4	Real time flood inundation mapping program	Modified - Not Started	H	C	As Funding Becomes Available	Flood	FEMA, USGS, VDEM, NWS, DEQ, local jurisdictions	3:1



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
H-5	3.2.2	Incorporate updated flood frequency data into updated DFIRMs	Modified - Not Started	M	H	As Funding Becomes Available	Flood	FEMA, USGS, VDEM, NWS	3:1
H-6	3.2.4	Community Inventory Assessment Methods	Not Started	M	L	Long Term	All Hazards	Local Governments, VDEM, OCP, VGIN, VITA, PDC's, State Universities	3:2
H-7	3.1.5	Comprehensive Dam Information Database Development	Not Started	M	H	As Funding Becomes Available	Flooding due to Dam Failure	DCR and VDEM	3:1
H-8	3.1.6	Dam Inundation Areas Mapping and Risk Assessment	Not Started	M	M	As Funding Becomes Available	Flooding due to Dam Failure	DCR and VDEM	3:1
H-9	3.1.8	Delineation of Watersheds & Recharge Areas for Karst Aquifers in VA and Compilation of GIS-based Comprehensive Karst Hydrology for Virginia	Not Started	L	L	As Funding Becomes Available	Karst	DCR Natural Heritage	3:1
H-10	NEW & 3.17 Combined	Karst Hazard Mapping Program	New Strategy	L	NR	Short Term	Karst	DMME and DCR Natural Heritage	3:1, 3:3
H-11	3.3.4	Update Repetitive Loss Property lists As Needed	Ongoing	L	NR	Ongoing	Flood	FEMA Region III, DCR, VDEM	3:1, 3:2
H-12	NEW	Landslide Hazard Mapping Program	New Strategy	H	NR	Long Term	Landslide	DMME	3:1



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
H-13	NEW	Virginia Mine Mapping System	New Strategy	L	NR	Short Term	Human-Caused	DMME	3:1
H-14	NEW	Assessment of inundation hazards related to mining-related impoundments	New Strategy	L	NR	Short Term	Dam Failure, Flood	DMME	3:1, 3:3
H-15	NEW	Inventory and Characterization of Mines and Quarries for Emergency Water Supplies	New Strategy	M	NR	Short Term	Flood, Drought, Wildfire	DMME	3:1, 3:3
H-16	NEW	Statewide Inventory of Abandoned Mines and Quarries	New Strategy	L	NR	As Funding Becomes Available	Human-Caused	DMME	3:1, 3:3
H-17	NEW	Forestry Data	New Strategy	L	NR	Short Term	Wildfire	VDEM, DOF	3:2
H-18	NEW	Evaluation of State Owned and Critical Facilities in Coastal areas	New Strategy	L	NR	Short Term	Flood	DMME, VIMS	3:1
Goal 4: Outreach and Education									
O-1	NEW	Promote More Mitigation Strategies from State Agencies	New Strategy	H	NR	Ongoing	All Natural Hazards	VDEM, DGS, State Agencies	4:1
O-2	NEW	Continue holding annual HMA grant workshops in concurrence with the annual HMA application period.	New Strategy	H	NR	Ongoing	All Hazards	VDEM	4:1
O-3	4.3.1	Hazard Mitigation Toolkit	Modified - Ongoing	H	C	Ongoing	All Hazards	VDEM	4:1
O-4	3.3.1	State Hazard Mitigation Website Maintenance	Ongoing	M	C	Ongoing	All Hazards	VDEM	4:1



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
O-5	4.2.3 and 4.2.6	Local training on Hazard Mitigation Planning Process	Modified - Ongoing	H	H	Ongoing	All Hazards	VDEM, FEMA III & Local Jurisdictions	4:1, 4:2
O-6	4.3.10	Encourage local government sponsorship of grant projects to mitigate repetitive loss properties	Ongoing	NR	C	Ongoing	Flood	VDEM	4:1, 4:2
O-7	4.3.8	Train VDEM Divisions in Mitigation Project Development	Modified - Ongoing	L	NR	Ongoing	All Hazards	VDEM	4:1, 4:2
O-8	4.3.2	Encourage NFIP participation	Ongoing	M	H	Ongoing	Flood	DCR and VDEM	4:1, 4:3
O-9	3.1.9	Training: Virginia Fire Service	Ongoing	H	NR	Ongoing	Fire	VDFP	4:2
O-10	4.3.7	Newsletter to Virginia Food Industry on Food Security	Ongoing	L	NR	Ongoing	Human-Caused	VDACS	4:3
O-11	4.2.1	Enhanced Statewide Hurricane Public Education Program - Ready VA	Ongoing	H	C	Ongoing	Hurricane	VDEM	4:3
O-12	4.2.4	Mitigation Success Stories Development	Ongoing	M	H	Ongoing	All Hazards	VDEM Mitigation Staff	4:3, 4:1
O-13	4.3.5	Enhance Building Emergency Evacuation Program	Not Started	L	NR	As Funding Becomes Available	All Hazards	DGS	4:2, 2:3
O-14	NEW	Use State Facility HIRA to attempt to reduce insurance premiums for state owned facilities.	New Strategy	L	NR	Short Term	All Hazards	VDEM, Dept of Treasury	4:3, 2:5



New Strategy ID Number	Former Strategy ID Number	Strategy Description	Status	Priority 2010	Priority 2007	Timeline	Hazard to be Mitigated	Lead Agency	Category (s)
Canceled Strategies									
CL – 1	1.5.4	Emergency hardware and software procurement	Canceled	NR	H	AF	All Hazards	DMHMRSAS & VITA	2:4
CL – 2	2.3.13	Incorporation of Continuity of Operations Planning	Canceled	NR	H	ST	All Hazards	VDEM and PPF subcommittee	2:4, 2:1
CL – 3	2.6.1	Develop a Family of Public Health Emergency Preparedness and Response Plans	Canceled	NR	C	AF	Human-Caused	VDH	2:6
CL – 4	4.3.9	Vulnerability Assessments within Food Establishments	Canceled	NR	NR	OG	Human-Caused	VDACS	3:1
CL – 5	3.3.2	Provide field level GIS capabilities to support emergency incident response and mitigation	Canceled	NR	M	AF	Fire	DOF	3:1, 3:3
CL – 6	3.2.1	Human-caused hazards assessment methods development	Canceled	NR	C	ST	Human Caused	VDEM	3:1
CL – 7	2.8.1	Identify the basic information about all state agency grant and funding programs. Place this information into a comprehensive, online, keyword-searchable database for use by localities and other state agencies to identify other funding sources for mitigation projects.	Canceled	NR	NR	OG	All Hazards	VDEM	4:1
CL – 8	4.2.5	Web-Based Foreign Animal Disease Training	Canceled	NR	M	LT	Human-Caused	VDACS	4:1



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