

Plan Integration: Linking Local Planning Efforts Part 2

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Outline

1. Introduction to Plan Integration
2. Plan Integration Document
3. Plan Integration Phase 2
4. Local and State Perspectives
 - ▶ 2015 Cecil County, Maryland, HMP Update
 - ▶ 2016 State of Maryland HMP Update
5. Examples of Successful Plan Integration
 - ▶ 2010 State of Pennsylvania All-Hazards Mitigation Plan
 - ▶ 2013 Schuylkill County Hazard Mitigation Plan Update
 - ▶ 2010 Lycoming County Hazard Mitigation Plan Update
 - ▶ 2009 University of Maryland Eastern Shore DRU Plan

What is Plan Integration?

- ▶ A two-way exchange of information
- ▶ Community specific
- ▶ Blending your community's plans, policies, programs and people
- ▶ Planning initiatives related to sustainability, natural resource protection, climate change, and economic development



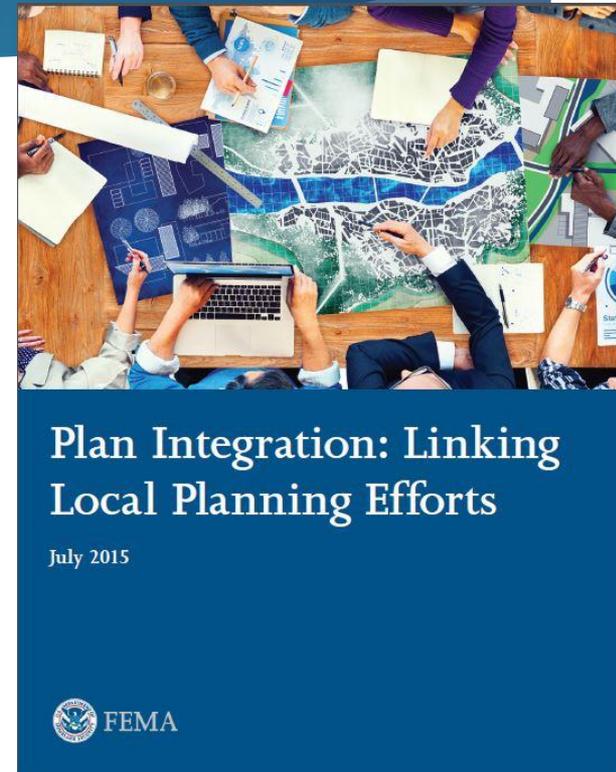
Plan Integration: Linking Local Planning Efforts

Part 1- Integration of Hazard Mitigation Principles into other Local Planning Mechanisms

Part 2- Integration of Hazard Mitigation Principles into Comprehensive Plan elements

Part 3- Integration Across Agencies

<http://www.fema.gov/media-library/assets/documents/108893>



Plan Integration Document Icons

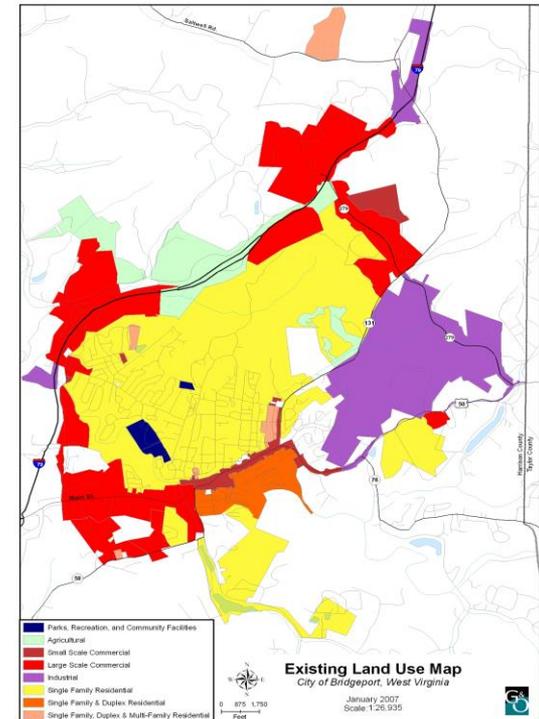


Integration Questions

Land Use

Does the land use plan include policies:

- ▶ for adequate space for projected future growth outside of these high hazard areas?
- ▶ to restrict the density of new development in high hazard areas or guide new development away from high-hazard areas?
- ▶ to relocate vulnerable existing development to less vulnerable areas?
- ▶ for existing structures and facilities to be strengthened, elevated, or relocated during the redevelopment process?



Integration Questions

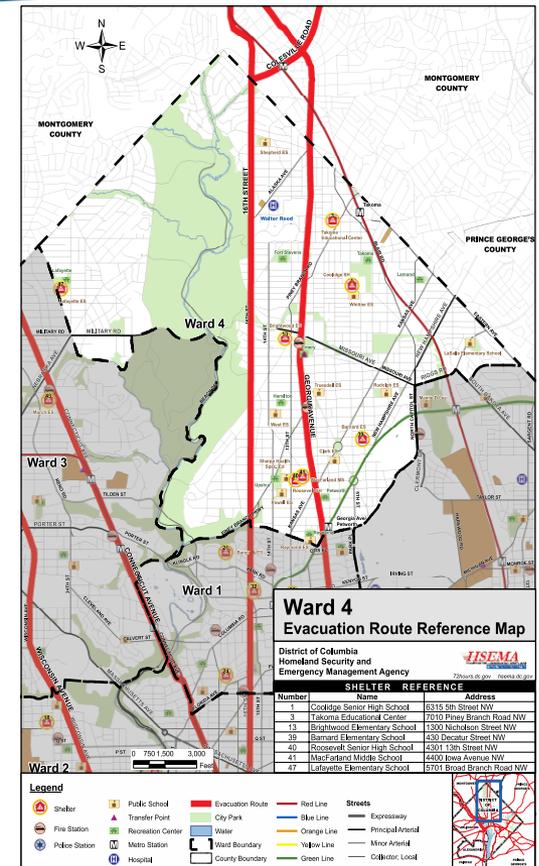
Transportation and Infrastructure

- ▶ Does the transportation network provide redundancy (i.e. alternate routes) if certain key nodes or routes are affected by disaster?
- ▶ Are there policies to protect transportation facilities (airports) from hazard events and to locate them outside of high hazard areas?
- ▶ Are there any public transit stations/lines and highways in close proximity to flood prone areas?

Integration Questions

Emergency Management

- ▶ Has your community adopted an evacuation and shelter plan to deal with emergencies from natural hazards?
- ▶ Does your EOP show major evacuation routes that are prone to flooding?
- ▶ Does your post-disaster redevelopment plan (PDRP) include policies reduce the exposure of life/property after a disaster?
- ▶ Does the PDRP include policies to address: short-term repair, clean-up actions, safety and relocation, or structural retrofitting of damaged infrastructure?



Integration Questions

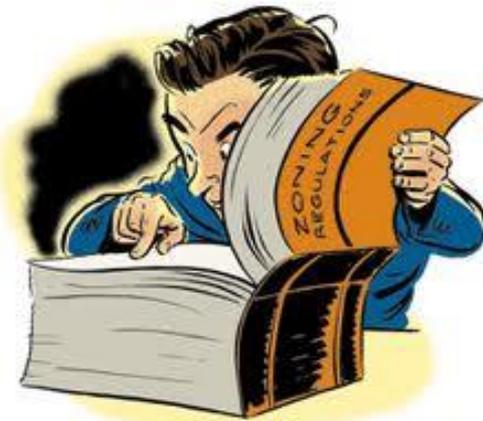
Environment and Open Space

- ▶ Is there a policy to utilize land unsuitable for development (floodplain, steep slopes) for recreational purposes?
- ▶ Are there policies to encourage development of waterfront areas for recreational purposes to serve as tourist attractions and provide an economic benefit to the community on land prone to hazards?
- ▶ Do environmental policies restore protective ecosystems and provide incentives to development that is located outside protective ecosystems?

Integration Questions

Plan Implementation

- ▶ Are there policies to reduce vulnerability to wind, fire, through regulating location, size, design, type, construction methods, and materials?
- ▶ Does the zoning ordinance conform to the comprehensive plan - discouraging development or redevelopment in natural hazard areas and contain natural hazard overlay zones that set conditions for land use within such zones?
- ▶ Does the CIP limit expenditures on projects that would encourage new development or additional development in vulnerable areas?



Plan Integration Pilot Phase 2 – District of Columbia

2015-2016

- ▶ Provides a unique opportunity to integrate city, state, and Federal level planning mechanisms
- ▶ Many different stakeholders and interests
- ▶ DC's State Hazard Mitigation Plan is currently being updated so this also provides a good opportunity to implement suggestions made



Local and State Perspectives

Cecil County, MD

- ▶ Hazard Mitigation Plan Update
- ▶ Threat Hazard Identification and Risk Assessment

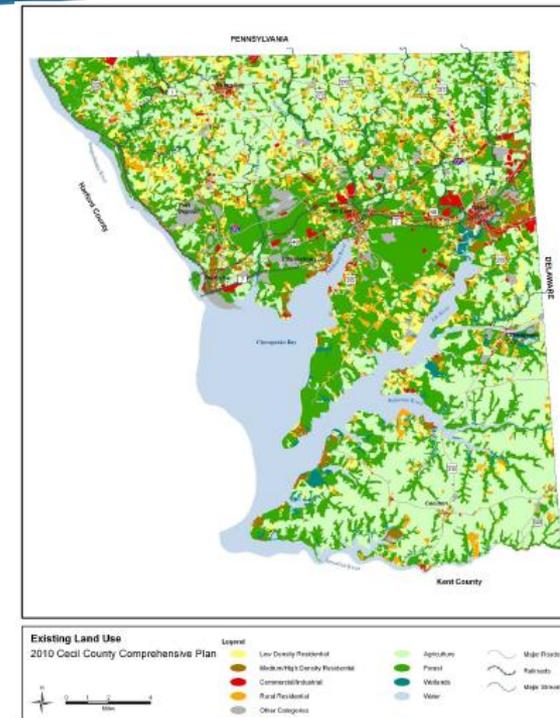
State of Maryland

- ▶ 2016 State Hazard Mitigation Plan Update



Case Study: Cecil County, MD

- ▶ County Plans and Ordinances
 - ▶ 2010 Cecil County Comprehensive Plan
 - ▶ 2011 Cecil County Zoning Ordinance/Subdivision Regulations
- ▶ Municipal Plans and Ordinances
 - ▶ 2003 Elkton Downtown Master Plan
 - ▶ 2013 Elkton Floodplain Ordinance - Title 15 – Ordinance 5
 - ▶ 2013 Port Deposit Floodplain Management Ordinance
 - ▶ Port Deposit Comprehensive Plan Water Resource Element
 - ▶ Charlestown Zoning Ordinance and Subdivision Ordinance
 - ▶ 2008 Charlestown Comprehensive Plan
 - ▶ 2013 Perryville ZO Forest Conversation Chapter 48 and Floodplain Management Chapter 46



Case Study Integration Example

2010 Cecil County Comprehensive Plan

- ▶ **Add Objective:** *Ensure all new development is resistant to current/future hazards*
- ▶ **Add 'land use policies** *require development or redevelopment according to existing codes to reduce impact from hazards, that discourage development or redevelopment within natural hazard areas – steep slopes, coastal areas, 100-year floodplain, wind speed zones over 100mph.*
- ▶ **Economic development policies and actions** – *Provide infrastructure including water sewer and roads to designated employment and mixed use areas with consideration of hazard areas.*
- ▶ **Other Policies** - *Develop an emergency access and evacuation network map that identifies county roadways that must be maintained for emergency access and evacuation during major hazard events.*

Case Study Integration Example

Threat Hazard Identification and Risk Assessment (THIRA)

- ▶ THIRA served as a pilot - identification of gaps and shortfalls in planning as well as recommendations.
 - ▶ Identify the Threats and Hazards of Concern
 - ▶ Give the Threats and Hazards Context – worst-case but most plausible situation to draft scenarios
 - ▶ Establish Capability Targets – estimated impacts and desired outcomes
 - ▶ Core capability targets – identify resources needed to manage risk in five mission area: prevention, protection, mitigation, response and recovery.

Local Challenges and Barriers

- ▶ Local capacity limitations- staff volunteers
- ▶ Various plan follow various schedules
- ▶ States may lack a state agency to ensure local implementation or provide technical assistance
- ▶ Lack of state-based funding for cities and counties for land use planning
- ▶ Non-existent budgets for planning staff.



Plan Integration Pilot Obstacles and Potential Solutions

Integration Obstacles	Potential Integration Solutions
Unsure of what hazard mitigation is and how it can be used	<p>Education and outreach about how mitigation can be done on a daily basis using existing processes and creative funding sources, not just after a disaster occurs or by using FEMA funding.</p> <p>Demonstrate how mitigation projects can save the community money in the long run.</p>
Lack of understanding about how local government, businesses, and organizations can integrate hazard mitigation on a daily basis	
No (or not enough) funding, capacity, or resources to implement mitigation measures	
Hazard mitigation is not a priority because of other pressing needs	<p>Provide outreach and education to community stakeholders about what mitigation involves and how they can help reduce risk (e.g., stormwater management, construction using less or no pervious surface, including mitigation into routine maintenance or new construction using capital improvement funds).</p>
Misperception that hazard mitigation is the role of emergency management	
Not enough inter-community coordination or sharing of information	
Community is fully built out and land use changes are not realistic	<p>Explore other ways to mitigate, other than land use measures (e.g., project identification, outreach and education for business and residents, interdepartmental coordination). It can also be a factor in redevelopment.</p>
Unawareness of how mitigation can be integrated in community initiatives other than local comprehensive (land use) planning	
The possible perception that hazard mitigation is not business-friendly	<p>Provide sample business continuity plans and conduct workshops on the benefit of having a plan to reduce business interruption after a disaster.</p>
	<p>Include businesses in the local hazard mitigation planning process and invite them to submit project ideas.</p> <p>Show how mitigation is a way to protect investments and reduce interruption to businesses after hazard events.</p>

Benefits of Plan Integration

Enhances risk reduction through community-wide planning by:

- Improving inter-departmental coordination
- Developing specific recommendations for integration into community-wide plans
- Compiling existing plan measures to include in your Hazard Mitigation Plan to illustrate that integration is being performed and meeting the Local Mitigation Plan Review Tool requirement to integrate hazard mitigation, per Elements A4 and C6
 - *A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information?*
 - *C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate?*

2016 Maryland State Hazard Mitigation Plan Update

Phase 1 - Technical Workshops (Local)

- Create an awareness and educate jurisdictions on concepts of plan integration.
- Improve coordination between municipalities and counties and between counties and State.
- Incorporate input from the local plan integration workshops into the Maryland State Plan Integration element.
- Conduct workshop at five locations - northern, southern, eastern, western, and central parts of state.
- Attendees: local representatives from Planning, Public Works/Transportation, Emergency Management, Environmental Planning, and Parks and Recreation.



2016 Maryland State Hazard Mitigation Plan Update

Phase 2 - State Technical Workshops (State)

- MAC Workshop 1- Promote intergovernmental coordination and identify synergies between various state agencies
- MAC Workshop 2- Focus on integration of hazard mitigation principles into comprehensive plan and other state planning mechanisms.
 - Identify State's objectives in light of hazard mitigation
 - Develop recommendations to address objectives
 - Identify departments for coordination and implementation
- Add a 13th vision “to incorporate safety and add a ‘Safety’ element to Comprehensive Plan: *Become a disaster-resistant community that can prepare for and thrive after a hazard.*”



2016 Maryland State Hazard Mitigation Plan Update

Document Review

- ▶ Plan Maryland 2012 (MDP)
- ▶ Smart Growth and Priority Funding Areas (MDP)
- ▶ 2008 Climate Action Plan (DNR)
- ▶ Climate Change and Coast Smart Construction Executive Order (2012)
- ▶ Climate Change and Coast Smart Construction: Infrastructure and Design Guidelines (2014)
- ▶ 2012-2016 MEMA Strategic Plan (MEMA)
- ▶ Emergency Operations Plan (MEMA)
- ▶ Continuity of Operations Plan (MEMA)
- ▶ Maryland's 2013 Plan to Reduce Greenhouse Gas Emissions (MDE)
- ▶ 2009 Maryland Stormwater Management Ordinance (MDE)



Examples

Summary of Local, State, and Federal Planning Mechanisms

2010 State of Pennsylvania All-Hazards Mitigation Plan

Summary of other Local, State and Federal Planning Mechanisms.

PLANNING MECHANISM NAME	LEAD AGENCY/AGENCIES	DATE OF APPROVAL	SCOPE	SUMMARY OF MECHANISM APPLICATION TO HAZARD MITIGATION
Comprehensive Plan for the Water Resources of the Susquehanna River Basin	Susquehanna River Basin Commission (SRBC)	Dec-08	Susquehanna River Basin (Eastern and Central Pennsylvania)	Provides a framework for the Susquehanna River Basin Commission to manage and develop the basin's water resources and serves as a guide for all SRBC programs and activities. This plan is also intended as a resource for the SRBC's member jurisdictions, water resource managers, private sector interests, and others in the basin. Flooding is a key focus of the plan, and flood damage reduction is a key program area of the SRBC. The SRBC is a member of the State Planning Team.
Delaware River Basin Interstate Flood Mitigation Task Force	DRBC	Dec-08	Delaware River Basin (Eastern PA)	The Task Force establishes areas of priority funding for acquisition, elevation, flood-proofing; develops interoperable reservoir operating plan; develops and implements comprehensive floodplain regulations across the entire Delaware River Basin; and enables stormwater utilities. DRBC sits on State Planning Team, and DRBC members hosted an outreach presentation for the plan and provided feedback on plan goals, objectives, and actions.
Disaster-Resistant Universities	FEMA	Jul-07	Delaware River Basin (Eastern PA)	The Disaster-Resistant Universities initiative is a joint effort between higher education institutions and FEMA to define and address issues that will improve the ability of campuses to withstand disaster threats. Fifteen state schools in PA have created mitigation plans through this initiative. The State System of Higher Education administered this program, and was an active member of the 2010 Plan update.

2010 Pennsylvania All-Hazards Mitigation Plan

Summary Matrix of Highest Priority Mitigation Action Identified from Current County Hazard Mitigation Plans throughout Pennsylvania

COUNTY	HIGHEST PRIORITY MITIGATION ACTION
Adams	Adoption of International Building Code
Allegheny	Owners of existing buildings located in areas identified as hazardous and very hazardous for landslides should be informed of their risk. The general public should be aware of the possible repercussions of development on slopes.
Armstrong	Promote denser development (e.g., clustered, small lot single-family residential development) to reduce the amount of land used for development.
Beaver	Encourage municipal offices to review regulations pertaining to their jurisdiction to make sure that adequate zoning regulations are in place to reduce future development in high hazard areas in their jurisdiction. Planning department to review Subdivision and Land Development Ordinance.
Bedford	Create and maintain a database and map of all critical facilities in the County.
	Develop evacuation routes and an evacuation plan to be used in the event of a disaster.
Berks	Highest priority mitigation action(s) not identified.
Blair	Obtain updated detailed flood studies & FIRMs: Apply to PEMA for funding to update the outdated FIRMs and undertake detailed flood studies for County's high-hazard areas to determine BFE and potentially a full range of flood-recurrence intervals (2, 5, 10, 25, 50 and 100-year events) for use in future refinements of the mitigation plan.
Bradford	Develop evacuation routes and an evacuation plan to be used in the event of a disaster.
	Create and maintain a database and map of all critical facilities in the County.
Bucks	Identify existing critical facilities with the highest relative vulnerability; conduct cost- benefit analysis of protection of those assets; collect detailed information on critical facilities using National Flood Mitigation Data Collection Tool.
	Identify existing repetitive-loss properties (w/ and w/o insurance); conduct cost-benefit analysis of protection of repetitive-loss assets.
Butler	When funds become available for mitigation projects, the county plans to hold meetings to identify high-risk properties in the county and to determine potential participation in future acquisition and relocation projects.
Cambria	Highest priority mitigation action(s) not identified.
Cameron	Review existing floodplain management ordinance, zoning ordinances, comprehensive plan.
	Develop flood mitigation project proposals which are eligible for state and federal mitigation grant funding programs.
Carbon	No FEMA-approved hazard mitigation plan currently in place.
Centre	Coordinate to conduct prescribed burns as necessary to reduce wildfire/urban interface

2013 Schuylkill County HMP Update

Incorporating HM Principles into the 2010 County Zoning Ordinance:

- ▶ Restrict development on steeply sloped lands that would require steep roads and driveways, in order to improve emergency vehicle access during snowy and icy conditions.

Incorporating HM Principles into the Uniform Code:

- ▶ Explore requirements for older buildings more vulnerable to damage from natural hazards to be brought up to current code's standards.
- ▶ Consider adopting and enforcing International Property Maintenance Code which requires installation of working smoke detectors and requires proper repair of building walls, windows, roofs and porches.

2013 Schuylkill County HMP Update

Incorporating HM Principles into 2006 County Comprehensive Plan:

- ▶ Develop a goal and a policy to discourage development in high hazard areas and environmentally sensitive areas.

Incorporating HM Principles into 2000 Schuylkill County Water Supply Study:

- ▶ Encourage municipalities to enact zoning regulations that will help to protect public water supplies:
 - ▶ 1) requiring minimum setbacks for buildings, paving and storage from river and creek banks
 - ▶ 2) minimizing new business development that involves use and storage of hazardous substances in locations near public water wells and reservoirs.
- ▶ Ensure local fire departments are well trained and equipped to quickly contain hazardous material spills in order to protect water supplies.

2008 DRU Plan for University of Maryland Eastern Shore

Incorporating HM Principles into the 2008 UMES Master Plan

- ▶ Facility Master Plan Concept - include “The nature of the buildings and open spaces should reflect the existing patterns and work around natural barriers and topography and consider the potential effects of natural hazards such as wildfires and floods”.
- ▶ Include a reference to the DCFS, indicating that the location of future structures on campus will conform to DCFS guidelines and be located away from high hazard areas and/or those that are vulnerable to the effects of wind and water.

2008 DRU Plan University of Maryland Eastern Shore

Options for Coordination between UMES and Somerset County Comprehensive Plan

- ▶ County, City and University should collaborate on grant applications and work closely with State for the allocation of mitigation dollars from the state for project development
- ▶ City and University should collaborate on applying for joint funding for emergency management equipment.



University of Maryland
Eastern Shore

HAZARD MITIGATION PLAN

December 2009

Prepared by:



2010 Lycoming County Hazard Mitigation Plan

Lycoming County Emergency Operations Plan

- ▶ Method – Risk assessment information presented in the existing HMP was used to update the hazard vulnerability assessment section of County EOP. The updated risk assessment information will affect subsequent updates to the EOP.
- ▶ Maintenance Schedule - The EOP is reviewed at least biennially. County EMA should consider the County's HMP during EOP review. Recommended changes to the HMP will be coordinated with the Steering Committee.

2010 Lycoming County Hazard Mitigation Plan

Lycoming County Act 167 SWM Plan

- ▶ Method – County HMP's hazard profile on floods, flash floods was consulted to identify the location, extent of flooding, range of magnitude, past occurrences, likelihood of future occurrences, and vulnerability assessment due to flooding for the County Act 167 SWM Plan.
- ▶ Maintenance Schedule – Both HMP and SWM plans must be reviewed/revised every 5 years. The SWM plan was adopted in May 2010, so its updates will coincide with HMP update. Both plans are maintained by the County Planning and Community Development Department - information gathered in the revision of one plan will be incorporated into the other.

Maryland County HMP Update

A 3-prong approach

1. Update to the 2009 Hazard Mitigation Plan – PDM grant - EM
2. Update to the 2009 Flood Mitigation Plan – FMA grant - Planning
3. Integration of historic and cultural resources into HMP – HMGP grant-Visitor's Bureau
 - ▶ Survey and assessment of vulnerable cultural resources within hazard area
 - ▶ Public outreach opportunities
4. Benefits of Plan Integration
 - ▶ Time efficiency
 - ▶ Resource efficiency
 - ▶ Avoid meeting fatigue
 - ▶ Ensure cross pollination
 - ▶ Facilitate buy-in from officials

