



Integration with Local Planning Efforts: Linkages with Community Planning

2 April 2013

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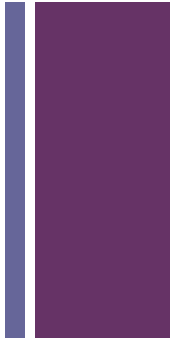


+ Our Agenda for Today

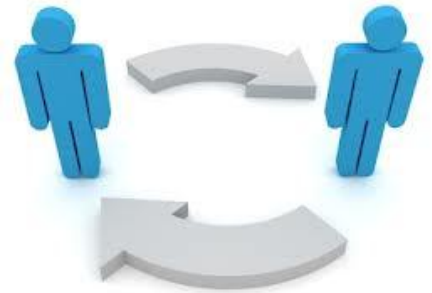
1. Provide an Introduction to Plan Integration
2. Identify what has been done at the Federal level on Plan Integration
3. Learn about Plan Integration and its applications in various fields
4. Discuss APA's Safe Growth Audit
5. Discuss examples of how other communities in MD and PA have successfully done plan integration.



What is Plan Integration?

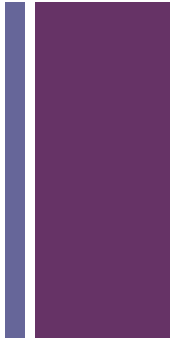


- A **two-way exchange** of information where State and local Hazard Mitigation Plans inform and are informed by other planning processes.
- Specific to your community and depends on the hazards as well as **vulnerability of your built environment** to those hazards.
- **Blending** your community's plans, policies, codes and programs that guide development and the **roles of people and government** in implementing these capabilities.





Why Plan Integration?



To Reduce Risk by:

- Providing a greater understanding of plan integration concepts and mechanisms as they pertain to hazard mitigation in your community.
- **Integrating** hazard mitigation into areas such as land use, transportation, climate change, sustainability, natural resource protection, watershed management, and economic development.
- Gathering and synthesizing information from a number of other professionals in these fields.
- Soliciting more participation and provide an opportunity for **various departments** within local government to work together on a regular basis.



+ Objectives of Plan Integration

- Better define roles of planners, emergency managers, and other local government staff in planning for safety
- Create an awareness of mitigation planning and advocates within local governments for mitigation planning
- Garner examples of effective integration of hazard mitigation solutions and seek communities within the State that are using best management practices
 - What works and doesn't work in communities
 - Any best management practices currently used
 - What innovative approaches can be used and adapted from other communities and the local and state levels
- Pave the way for the development of a 'safety element' as part of the comprehensive planning process.

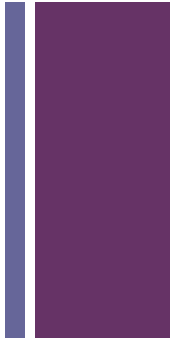
+ What factors are most important for effective integration?

- Strong **intergovernmental coordination**, especially between emergency management and community planning
- Support and direction from elected and/or executive leaders
- Knowledge and understanding of community hazard risks
- An understanding of the **benefits** of hazard mitigation
- **Incentives** for the inclusion of hazards in community planning





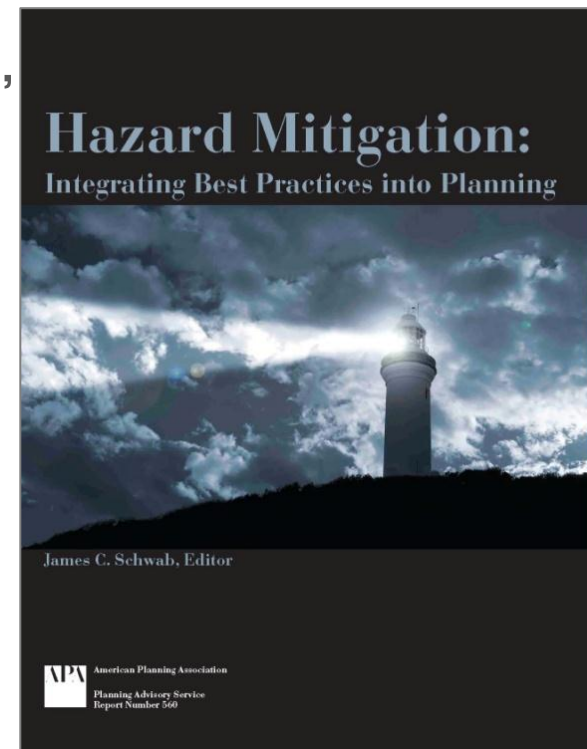
Federal Plan Integration Efforts



2009 APA's PAS Report: Hazard Mitigation: Integrating Best Practices into Planning

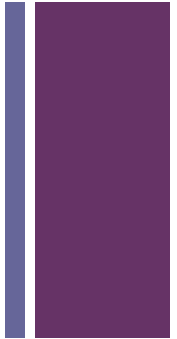
3-day Symposium of 11 national planners

- **Close the gap** that exists between hazard mitigation planning and other local planning and regulatory land-use processes.
- Provide guidance on how to integrate hazard mitigation strategies into comprehensive, area, and functional plans; and shows **where hazard mitigation can fit** into zoning and subdivision codes.
- Identify the roles of planners and other local government staff in planning for safety, and
- Document **case studies** of communities throughout the US that effectively integrated hazard mitigation into transportation, land use, and public works.





Federal Plan Integration Efforts

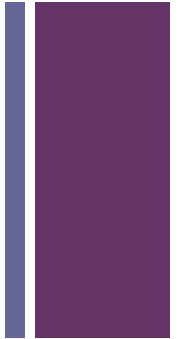


2012 FEMA's Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials (to be released April 2013)

- Supplement to Hazard Mitigation: Integrating Best Practices into Planning, prepared in 2009 by APA.
- **Guide** for incorporating risk reduction strategies into existing local plans, policies, codes, and programs that guide community development or redevelopment patterns.
- Contains:
 - Tools to assist with local integration efforts, along with ideas for overcoming possible problems.
 - Case studies to demonstrate successful integration in practice.
 - Fact sheets to provide guidance on specific integration topics.
- Stakeholder Involvement - State and Federal agencies, academic institutions, private sector companies, and non-profit organizations.



Who should be Involved?



■ State Agencies

- emergency management
- transportation
- public works
- planning
- environmental services



■ Representatives from county departments

- emergency management
- transportation
- public works
- planning
- environmental services
- public information



■ Representatives from municipalities (Town or Borough Manager, secretary, councilman)

+ Hazard Mitigation Principles in Comprehensive Plan Elements

Future Land Use

- **Growth management techniques** - land conservation, buffering
- **Clustering of development** to protect community from natural disasters by concentrating development outside high hazard areas.

Revitalization

- Redevelop and retrofit structures with deficiencies to ensure **structural integrity** to withstand hazards,
- Relocate out of hazard areas to maintain the continuance of county services after a natural disaster.

Housing

- Program to **rehabilitate housing** focused on structural measures that mitigate natural hazards, particularly for low income housing may help ensure an adequate supply of safe dwelling units.



+ Hazard Mitigation Principles in Comprehensive Plan Elements

Environmental Resources

- Policies that aim to restore and **protect natural resources** such as wetlands and **preserve their natural functions** that buffer and absorb the impacts of floodwaters.

Public Works/Infrastructure

- Analysis of the adequacy of the existing and projected **transportation system to evacuate the population** prior to an impending natural disaster.

Historic Preservation

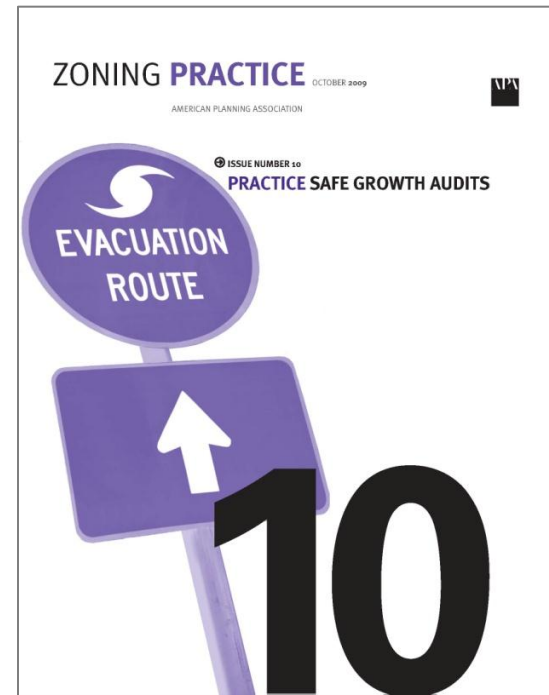
- Historic resource protection, including historic site identification and **establishing performance standards for development and sensitive reuse** of historic resources





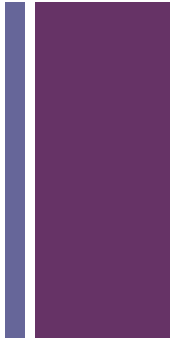
APA's Safe Growth Audit

- Provides a concise **evaluation** of the extent to which local communities are positioned to grow safely relative to natural hazards
- Allows planners to evaluate their communities' plans and regulations
- Identifies possible **safety issues, policy gaps or conflicts, and hazard mitigation opportunities** through new or improved development
- Provides questions focus on instruments that guide future growth:
 - Comprehensive Plan
 - Zoning Ordinance
 - Subdivision Regulations
 - Capital Improvements Program and Infrastructure Policies





Safe Growth Audit – Key Questions



Comprehensive Plan

Land Use

- Does the **future land-use** map clearly identify natural hazard areas?
- Do the **land-use policies** discourage development or redevelopment within natural hazard areas?

Transportation

- Does the transportation plan limit access to hazard areas?
- Are **movement systems** designed to function under disaster conditions (e.g., evacuation)?





Safe Growth Audit



Environmental

- Do environmental policies **maintain and restore protective ecosystems?**
- Do environmental policies provide **incentives** to development that is located outside protective ecosystems?

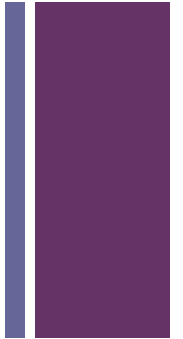
Public Safety

- Are the goals and policies of the comprehensive plan related to those of the FEMA Local Hazard Mitigation Plan?
- Is safety explicitly included in the plan's **growth and development policies?**





Safe Growth Audit



Zoning Ordinance

- Does the zoning ordinance conform to the comprehensive plan in terms of **discouraging development or redevelopment within natural hazard areas?**
- Does the ordinance contain natural hazard **overlay zones** that set conditions for land use within such zones?
- Do **rezoning procedures** recognize natural hazard areas as limits on zoning changes that allow greater intensity or density of use?
- Does the ordinance **prohibit development** within, or filling of, wetlands, floodways, and floodplains?





Safe Growth Audit

Subdivision Regulations

- Do the subdivision regulations **restrict the subdivision** of land within or adjacent to natural hazard areas?
- Do the regulations provide for conservation subdivisions or **cluster subdivisions** in order to conserve environmental resources?
- Do the regulations allow **density transfers** where hazard areas exist?





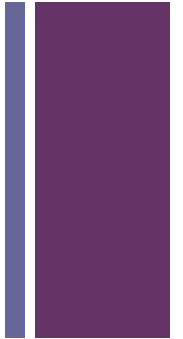
Safe Growth Audit

Capital Improvements Program and Infrastructure Policies

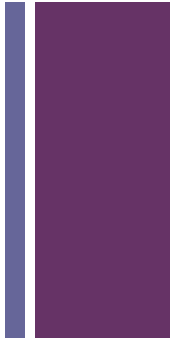
- Does the CIP encourage development in areas vulnerable to natural hazards?
- Does the CIP **provide funding** for hazard mitigation projects identified in the Mitigation Plan?

Other

- Does the building code contain provisions to **strengthen or elevate** construction to withstand hazard forces?
- Do **economic development or redevelopment** strategies include provisions for mitigating natural hazards?
- Is there an adopted **evacuation and shelter plan** to deal with emergencies from natural hazards?



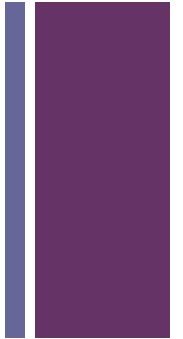
+ How do we go about this process?



- Develop a summary of the top 5-7 items that your community is interested in examining, in light of hazard mitigation
- Identify which departments need to coordinate with one other to implement each suggested action



Where can we “Integrate”?



Incorporate

- As a **text reference** into every element of the comp/master/general plan?
- By reference as **separate functional document**
- As a distinct ‘**safety**’ element of the comp/master/general plan?
- As an **appendix or annex** comprehensive/master/general plan





What to look for in these Planning Mechanisms



- **Capital Improvement Plans** - Decisions to extend **roads or utilities** to an area may increase exposure. Some communities may consider structural flood protection such as levees or floodwalls.
- **Zoning Ordinance** - Examples of zoning methods that affect flood hazard mitigation include: 1) adopting ordinances that limit development in the floodplain; 2) limiting the **density of developments** in the floodplain; 3) requiring that floodplains be kept as open space.
- **Subdivision Ordinance** - Can require **elevation data** collection during the platting process. Lots may be required to have buildable space above the base flood elevation.

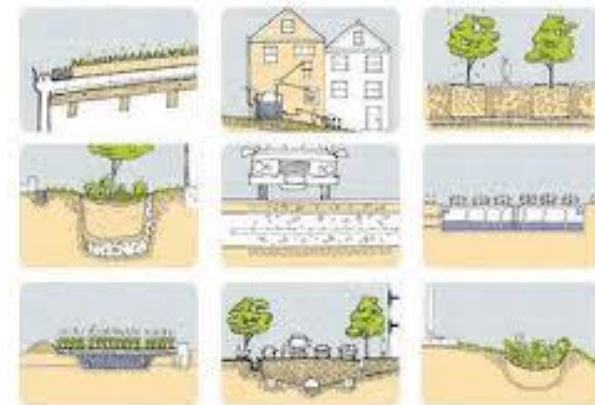




What to look for in these Planning Mechanisms



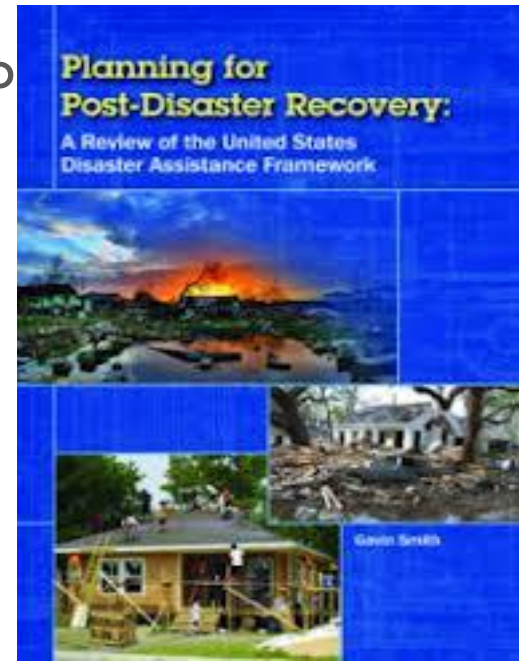
- **Building Code** - Requirements for **building design standards and enforcement** include the following possibilities: 1) that a residential structure be elevated; and 2) that a nonresidential structure be elevated or floodproofed.
- **Stormwater Management** - Stormwater ordinances may regulate development in upland areas in order to reduce stormwater run-off. Examples of **erosion control techniques** that may be employed within a watershed area include proper bank stabilization with sloping, terracing hillsides, installing riprap.





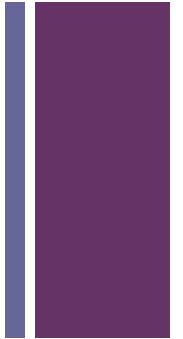
What to look for in these Planning Mechanisms

- **Post Disaster Recovery Ordinance** - Regulates **repair activity**, generally depending on property location. It prepares a community to respond to a disaster event in an orderly fashion by requiring citizens to obtain permits for repairs or make repairs using standard methods.
- **Floodplain Ordinance** - Communities that choose to participate in the NFIP Amendments must adopt ordinances that meet minimum Federal and state requirements. Some may pass more stringent ordinances to reduce risk further.





What to look for in these Planning Mechanisms

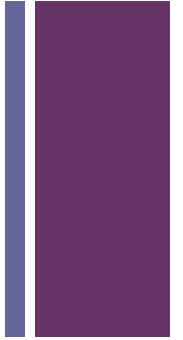


- **Wetland Protection** - Wetlands serve as **natural collection basins** for floodwaters. Acting like sponges, wetlands collect water, filter it, and release it slowly into rivers and streams. Protecting wetlands helps prevent flooding.
- **Manufactured Homes** - Manufactured or mobile homes should be **elevated** above the base flood elevation and anchored, or more preferably, kept out of the floodplain.





Examples from Communities



- 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 Disaster Resistant University Hazard Mitigation Plan

+ Incorporation into Existing Plans, Studies, Reports, and Technical Information

- Commonwealth of Pennsylvania Standard All-Hazard Mitigation Plan
- Local Floodplain Management Ordinances
- Local Stormwater Management Plans (i.e. Act 167 Plans)
- County Comprehensive Plan
- Emergency Operations Plan
- County and Local Zoning Ordinances
- Applicable Watershed Plans

Source: 2010 SOG Commonwealth of Pennsylvania





Examples – Incorporation into Other Planning Mechanisms



- State HIRA can be used by state Exercise and Training staff as the basis for **scenario development**
- **After Action Reports**/Improvement Plans could be used to develop state mitigation actions.
- State HMP should be used **as one input into State Administrative Plans** for the HMGP post-disaster. The administrative plan outlines how HMGP funds will be allocated, which should be in line with the State HMP.
- Information in State HMP can be used as the **basis for other planning efforts** (e.g., DHS/FEMA required states as a condition of receiving State Homeland Security Grant Program funds to submit THIRAs).

+ Summary of Local, state, and Federal Planning Mechanisms

2010 State of PA 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.



Summary of Local, state, and Federal Planning Mechanisms

2010 State of PA 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
Land Use Planning and Technical Assistance Program	DCED	Ongoing	Statewide	The Land Use Planning and Technical Assistance Program (LUPTAP) provides grants for comprehensive plans and for the preparation of local zoning or subdivision. Funds are available to develop or amend a comprehensive plan to include an assessment of hazard vulnerability and take appropriate mitigation measures.
Local Hazard Mitigation Planning	County Officers	Various	Statewide	Local entities are encouraged to review the Commonwealth HMP; state mitigation planner reviews all local plans for consistency with state plan and federal planning requirements. Local plan data reviewed and integrated into the state plan.
NFIP and State	DCED	Ongoing	Statewide	Pennsylvania relies on the NFIP as the comprehensive flood protection/mitigation source available to assist with reconstruction, elevation, or buyout of floodprone properties. 2,460 Pennsylvania municipalities participate in the NFIP. NFIP principles are integrated closely with the Commonwealth's mitigation goals, objectives, and actions. The program coordinator from DCED sits on the SPT.
Nuclear/Radiological	PEMA	2008	Statewide	The Commonwealth Nuclear/Radiological Plan addresses the many components of mitigation planning for nuclear facilities. The data in this plan was integrated into the 2010 Plan update.

+ 2010 State of PA All-Hazards Mitigation Plan

In order to evaluate priority mitigation actions developed by local communities and link these actions with the 2010 HMP, mitigation action strategies from the 64 county Hazard Mitigation Plans currently adopted were reviewed.

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.
	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.
Blair	Develop evacuation routes and an evacuation plan to be used in the event of a disaster.
Bradford	Create and maintain a database and map of all critical facilities in the County.
	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.
Bucks	Identify existing repetitive-loss properties (w/ and w/o insurance); conduct cost-benefit analysis of protection of repetitive-loss assets.
	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.
Butler	Highest priority mitigation action(s) not identified.
Cambria	Review existing floodplain management ordinance, zoning ordinances, comprehensive plan.
Cameron	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



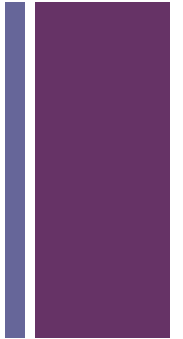
Incorporating HM Principles into the 2010 Schuylkill County Zoning Ordinance:

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

Incorporating HM Principles into the 2009 Subdivision Regulations:

- Work with the municipalities to ensure that their individual SALDO regulations and/or Stormwater Ordinances are robust and are in **keeping with the requirements in the County’s Subdivision and Land Development Ordinance.**

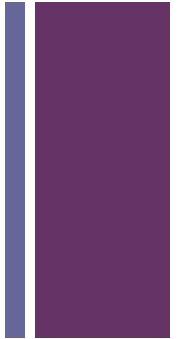
+ 2013 Schuylkill County HMP Update



Incorporating HM Principles into the Uniform Code:

- The UCC is not a retroactive code, and does not include older buildings. Only pre-existing structures are subject to the codes that exist at the time of construction. Therefore, when there are **major additions to structures, they must be brought up to the current code's standards.**
- Explore requirements for **older buildings** that are more vulnerable to damage from natural hazards to be brought up to the current code's standards.
- To ensure that existing buildings are properly maintained to reduce their vulnerability to hazards and to protect their occupants, municipalities should consider **adopting and enforcing part or all of the International Property Maintenance Code** which requires the 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 the 2006 Schuylkill County Comprehensive Plan:

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

Incorporating HM Principles into the 2000 Schuylkill County Water Supply Study:

- Encourage municipalities to enact zoning regulations that will help to protect public water supplies, such as: 1) requiring minimum setbacks for buildings, paving and storage from river and creek banks, and 2) minimizing new business development that involves use and storage of hazardous substances in locations near public water wells and reservoirs.
- Seek that 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

- In the Purpose of the Plan section (1.1), include a sentence (6) under ‘interrelated factors that need to be examined concurrently’ that states “Location in proximity to forested areas and the floodplain.”
- In Section 1.8 – Facility Master Plan Concept, expand the 1st point to 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.

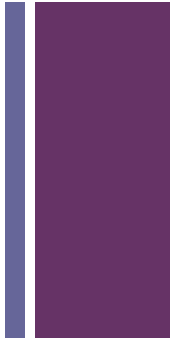
+ 2008 DRU Plan for University of Maryland Eastern Shore



Incorporating HM Principles into the 2005 UMES Design Criteria/Facilities Manual

- In Section 1.01 (Building Goals and Design Principles), include hazard mitigation as a design principle.
- In Section 1.03 (Codes), include references to FEMA engineering guidelines for shelters.
- Review and update Section 1.07 E1 (Exterior Cladding) to specify wind resistance standards, especially regarding window construction and details.
- In the Mechanical and Electrical Equipment subsection (1.07 F 2), as appropriate, include **language specifying standards for attaching mechanical and electrical equipment to roofs and exteriors.**

+ 2008 DRU Plan for University of Maryland Eastern Shore



Options for Coordination between UMES and the 2005 Somerset County Hazard Mitigation Plan

- As part of the 2010 update to Somerset Count's HMP, the planning process should allow for facility planners from UMES to be present on the Committee so they can jointly identify areas of cross reference between the County Plan and University Plan and ensure harmony.
- The campus could grow to more than 5,000 students by the year 2008 and that new student housing would be constructed adjacent to the campus within the growth corridor. The City of Princess Anne and University should work together in identifying suitable locations for off-campus student housing and identify properties outside high hazard areas/floodplain.

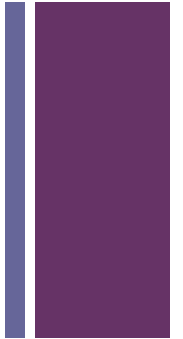
+ 2008 DRU Plan for UMES

Options for Coordination between UMES and Somerset County Comprehensive Plan

- The County, City and University should collaborate in preparing grant applications and work closely with the State to understand the mitigation program and allocation of mitigation dollars from the state for project development, particularly where the project is of interest to the local jurisdiction (City or County) as well.
- The City and University should collaborate on applying for joint funding for emergency management equipment.



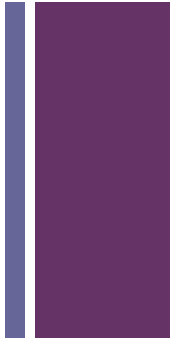
2010 Lycoming County HMP



Lycoming County Emergency Operations Plan

- **Method** - PA Code requires each county and municipality to prepare, maintain, and keep current EOP. The County EMA is responsible for preparing and maintaining the EOP. The risk assessment information presented in the existing **HMP was used to update the hazard vulnerability assessment section of the County EOP.** The updated risk assessment information will affect subsequent updates to the EOP.
- **Maintenance Schedule** - The EOP is reviewed at least biennially. Whenever portions of the plan are implemented in an emergency event or training exercise, **a review is performed** and changes are made where necessary. These changes are then **distributed to the County's 52 local Emergency Management Coordinators (EMCs)** for safekeeping. The County EMA should consider the County's HMP during its biennial review of the County EOP. Recommended changes to the HMP will then be coordinated with the Steering Committee.

+ 2010 Lycoming County HMP



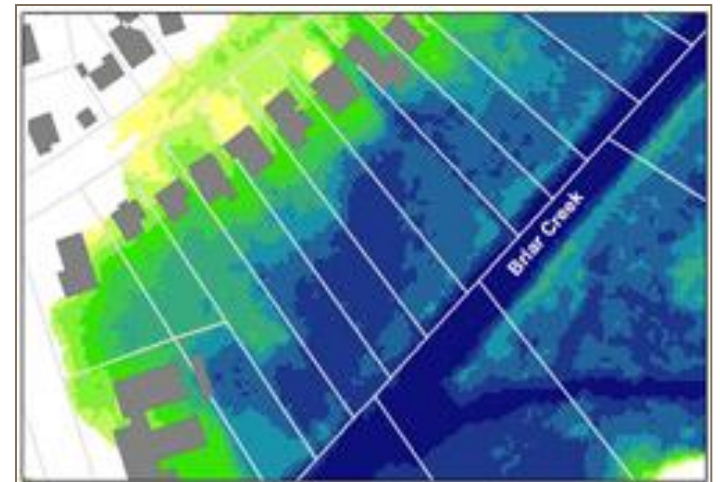
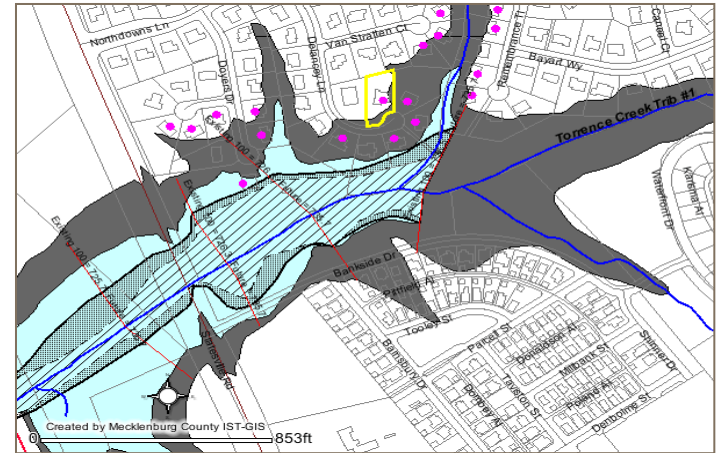
Lycoming County Act 167 SWM Plan

- **Method** - In drafting the Lycoming County Act 167 SWM Plan, the 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. The floodplain maps included in this HMP were referenced to meet Act 167 requirements.
- **Maintenance Schedule** - Like the HMP, SWM plans must be reviewed/revised every 5 years. The SWM plan was adopted in May 2010, so its updates will coincide with HMP updates. As both plans are maintained by the Lycoming County Planning and Community Development Department, information gathered in the revision of one plan will be incorporated into the revision of the other.



Planning for a Resilient Future

- Adopted “Community Floodplain” maps based on future conditions modeling
- Higher regulatory standards
 - Development standards apply to Community (future) Floodplain
 - Higher floor elevation requirement (freeboard)
 - Critical facilities must be located outside of 500-year floodplain
 - Cumulative substantial/damage improvement provisions
- Maps that better communicate risk (potential flood depths, probabilities, etc.)



+ Effective Incentives

■ Financial incentives

- Increased opportunities for **Federal grant funds**, reduction in non-Federal match requirements for existing grant programs
- Other market-driven, non-Federal incentives or punitive measures, such as changes to municipal bond ratings

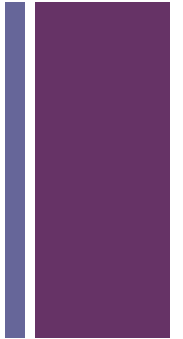
■ Regulatory or statutory mandates

- State planning enabling legislation
- Mandate relief incentives (modifying FEMA's 5-year update requirement for local mitigation plans)





Perceived Barriers to Plan Integration



- Lack of public support or political will
- Limited budgets
- Competing priorities
- Limited actionable data
- Disconnect with emergency managers/planners
- Existing development and property rights
- Bias in favor of growth



Hazard and Resiliency Planning: Perceived Benefits and Barriers Among Land Use Planners

Final Research Report

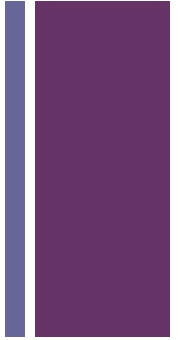
National Oceanic and Atmospheric
Administration Coastal Services Center

April 26, 2010

Submitted to:
Human Dimensions Program
NOAA Coastal Services Center
2234 South Hobson Ave.
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Submitted by:
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McLean, VA 22201

Booz | Allen | Hamilton

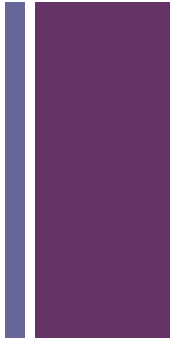


Some Things to Consider

- How can the **effectiveness** of plans that are considered “integrated”, be **measured**?
- What **specific information** might be necessary to demonstrate effectiveness?
- What hazard mitigation **principles are suitable for your community for integrating** into specific plans and ordinances such as the stormwater management plan, zoning ordinance, subdivision regulations, design guidelines, comprehensive plan, CIP, open space plan?



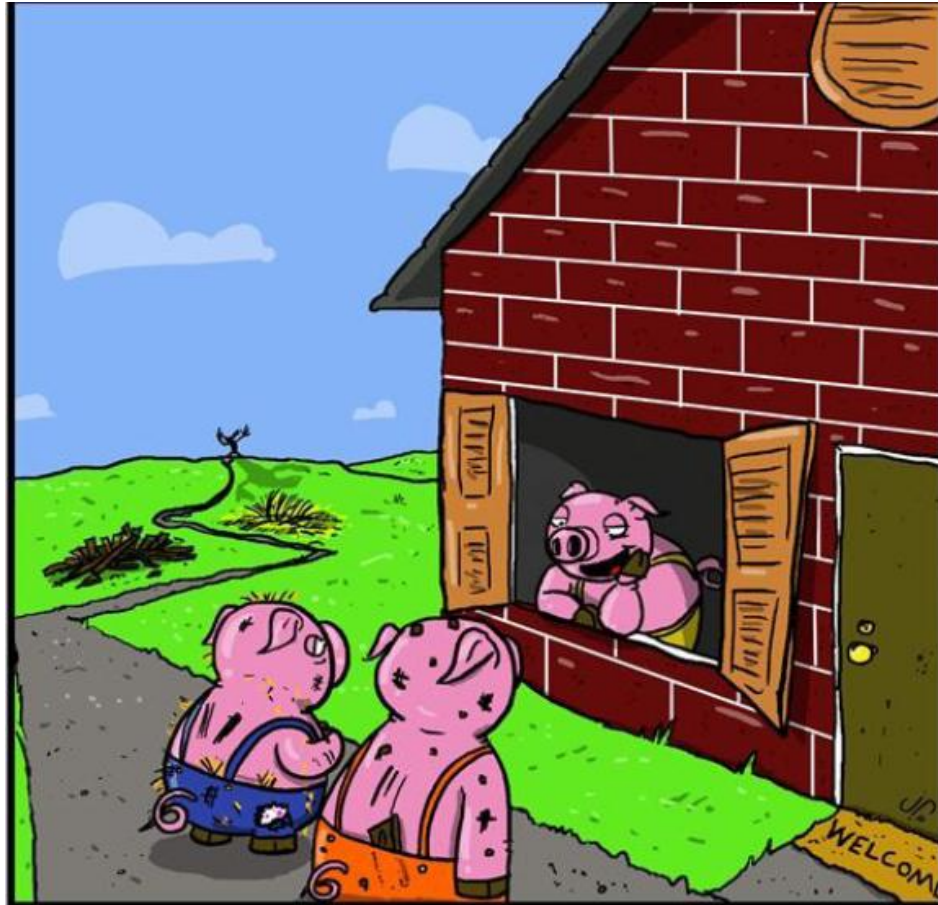
Resources



- APA's Zoning Practice – Practice 10 – *Practice Safe Growth Audits*
- Hazard Mitigation “*Integrating Best Practices into Planning*” 2009 Planning Advisory Service Report
- *FEMA's Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials*
- http://nhma.info/uploads/resources/sandy/APA_Commissioner_Article_Punchard.pdf
- 2010 PA Hazard Mitigation Plan Standard Operating Guide (Michael Baker Jr. Inc.)
- 2010 State of Pennsylvania All Hazards Mitigation Plan (Michael Baker Jr. Inc.)
- 2013 Schuylkill County Hazard Mitigation Plan Update (Vision Planning and Consulting)
- 2009 University of Maryland Eastern Shore Hazard Mitigation Plan (Vision Planning and Consulting Team)
- 2010 Lycoming County Hazard Mitigation Plan Update (Michael Baker Jr. Inc.)



So.....Hazard Mitigation and Community Planning are joint at the hip!



I told you so...mitigate, mitigate, mitigate!

Thank You!

Deepa Srinivasan, President

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