



Flood Map Modernization Initiative

Funded at almost \$250 million per year nationwide, the Federal Emergency Management (FEMA) Multi-Hazard Flood Map Modernization Program (**MapMod**) offers the most benefits to states with well-documented and supported plans. State and federal guidance for MapMod are well developed and logical. Pennsylvania's program would benefit from a reinvigorated community to pursue the existing goals:

Federal

- Establish and maintain a premier data collection and delivery system
- Achieve effective program management
- Build and maintain mutually beneficial partnerships
- Expand and better inform the user community

State

- Develop a statewide priority list for MapMod.
- Establish statewide floodplain mapping advisory committee to bring together local, state, and federal agencies to develop and utilize base flood information and mapping.
- Partner with other state agencies including the state GIS Coordinator in identifying and accessing GIS data for use by FEMA and municipalities to improve the mapping component of local floodplain management regulations.
- Develop floodplain data inventory that includes gathered state agency data, Letters of Map Amendment (LOMA), etc. for distribution to municipalities for use in supplementing FEMA existing data or use in MapMod activities.

On March 14 and 15, 2006, the Pennsylvania Department of Community and Economic Development (DCED), the PA Mapping and Geographic Information Consortium (PaMAGIC), and FEMA Region III held a 2-day planning workshop. The session's primary goal was to develop a set of recommendations for the enhancement of Pennsylvania's role in the FEMA Map Modernization Program. A list of workshop attendees and related contact information is included in Appendix A. Each participant briefed the rest of the group on their perspective or on technical advances related to floodplain management.

On July 12, 2006 DCED and PaMAGIC briefed the state agency GTAC on the MapMod initiative and to begin work on Goal #2 – Integrate State Programs. An initial listing of agencies with related roles or programs is included as Appendix B.

On July 20, 2006 DCED and PaMAGIC invited the original workshop attendees to a follow up session to define the Advisory Panel (Goal #1) and to determine the next steps. The group agreed to three (3) meetings a year, and to produce a white paper on floodplain management in the Commonwealth. The group reviewed a tentative calendar for the overall initiative; the calendar is included here (Appendix C) but subject to change depending on limits of volunteer availability.

Goals Established during March Workshop

Based on discussions the consensus priorities are:

1. **Integrate map modernization process with PA MAP, storm water management planning, flood warning, and storm water plan. (25)**
2. **Form a board (ongoing, but temporary for now). Start by reviewing MHIP and providing comments to FEMA before June 2006. After that, address DFIRM flood plain management and criteria for setting priorities. (25)**
3. **Secure stable funding from legislature through lobbying and outreach by end of map modernization phase I (2009). (24)**
4. **Organize a Pennsylvania conference on flood plain management (perhaps a PASFPM chapter?). (17)**
5. Provide outreach to the local level. (6)
6. Achieve accurate and detailed flood mapping and studies across Pennsylvania by December 2016. (6)
7. Quantify current spending on flood plain management in Pennsylvania. Identify what needs to be spent to improve mapping. (5)
8. Develop a single data needs and tools process to transfer information up and down. (4)
9. Create a long-term (20 year) plan for mapping activities. (1)

Notes:

1. Top four (4) goals will be addressed first.
2. Points of Contact

DCED – Center for Local Government Services
Kerry Wilson
717-720-7445
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PaMAGIC
Eric Jespersen
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Appendix A
List of Invitees and Opening Topics - March Workshop

Mr. Dante C. Accurti
Pennsylvania DOT
“National Trends in Floodplain Management”

Lee Brancheau
Senior GIS Analyst
Michael Baker Inc/ FEMA Region III RMC
“Status of Technical Information and Tools for MapMod in PA”

Dave Bollinger
State Hazard Mitigation Officer
Pennsylvania Emergency Management Agency
“PEMA Hazard Mitigation Activities – 1995-2006”

Paul A. DeBarry P.E.
Hydrology / Hydraulics / GIS
Borton-Lawson
“Technical Advances in Hydraulic Modeling”

Doug Diehl
Borough of Milton
“Coordination among Local, State, and Federal Governments – Municipal Perspective”

Andrew DeHoff
Susquehanna River Basin Commission
“Susquehanna Basin – Activities and Interest in Flood Modeling”

Kim Dunn
Dewberry
“Evolution of DFIRM Products”

Dan Fitzpatrick
Department of Community & Economic Development
“Outreach to PA Municipalities – Status and Plans”

L. Brad Foltz
PennDOT
Chief - Photogrammetry and Surveys Section
“Height Modernization and its Relation to Map Modernization”

Martin Frengs, P.E.
Mitigation Engineer
US Department of Homeland Security - FEMA
“FEMA Region III Current Plans for Map Mod in the Commonwealth”

Robert Hainly
Assistant Director
US Geological Survey WRD - New Cumberland
“USGS Modeling Activities”

Keith High, C.F.M.
PBS&J
“HAZUS and Map Mod – Present and Future”

Eric Jespersen
PaMAGIC/RETTEW
“Breadth of Planning Framework Needed”

Fran Jones
Flood Hazard Specialist
County of Lycoming
“Flood Hazard Mitigation – Impact of Individuals and Communities”

Dave Kolojechick
PA Department of Environmental Protection
Bureau of Waterways Engineering
“DEP Design and Permitting Activities – 1995-2006”

Jim Knudson, OCP
State Geospatial Technologies Director
“Data Access Policies and Plans for the Commonwealth”

Shawn McLaughlin
Union County Planner
“Coordination among Local, State, and Federal Governments – County Perspective”

Jason F. Miller
US Army Corps of Engineers - Philadelphia
“USACE Supported Flood Studies – 1995-2006”

Tim Murphy
E911/GIS Coordinator
Columbia County
“Technical Comparison – Phase 1 and Phase 2 DFIRM’s”

Jay Parrish
State Geologist
DCNR Bureau of Topographic and Geologic Survey
“High-resolution Imagery and Elevation Data – Status and Plans”

Dave Reed
Conservation Program Specialist
PADEP Bureau of Watershed Management
“Role of Conseravtion Districts in Floodplain Management”

Curtis Schreffler
US Geological Survey
“USGS Activities in Flood Modeling in PA – 1995-2006”

Paul Weilage, PLS
Planning Director Wyoming County
“Coordination among Local, State, and Federal Governments – Municipal Perspective”

Kerry Wilson
Department of Community & Economic Development
“FEMA’s Cooperating Technical Partners in PA – Present and Future”

Laura Tessieri
Delaware River Basin Commission
“MapMod Activities within the Delaware River Basin 1996-2006”

David Terrell
Liaison to PA Topographic and Geologic Survey
USGS Geospatial Program Office

Appendix B

Agency Roles and Programs

DCED - Center for Local Government Services is the Cooperative Flood Insurance Program (CFIP) lead for Pennsylvania.

- archive of effective Flood Insurance Rate Maps (FIRM)
- outreach to over 2000 affected communities
- ordinance review for proposed floodplain management rules
- FEMA Liaison for Map Modernization Program

PEMA – Emergency Alert System

Emergency Response

Hazard Mitigation Grant Program

- property buyouts (dependent on location within 100-year floodplain)

DEP – Bureau of Waterways Engineering

-design of flood-control projects

-inventory of levees and dams for safety (annual)

DCNR – Bureau of Topographic and Geologic Survey.

-Current aerial imagery (PAMAP)

-Statewide LiDAR Topography (PAMAP)

OA/OIT – Geospatial Technologies Office

-Coordinated Planning (Communities of Practice)

-Geospatial Enterprise Architecture

Appendix C
DCED/PaMAGIC Floodplain Mapping and Management Initiative
Tentative Calendar

- March 2006 – Exploratory Workshop
Co-sponsored by PaMAGIC and DCED
About 30 participants
- May 2006 - Draft Workshop Report – found at www.pamagic.org
Presented at PAGIS Conference
- July 12, 2006- MapMod Integration Intro to GTAC
- July 20, 2006 - Workshop Followup
Finalize Report
Initiate MHIP Advisory Panel
- September 2006 -Report and Interest Survey to Community
- September 2006-Return to GTAC
Exploring Program Integration
- January 2007- Whitepaper – “Improving Floodplain Management in PA”
- March 2007- Community Workshop
- May 2007- Technical Developments in Floodplain Management
Presentation track at PAGIS Conference
- October 2007- Floodplain Management Conference???

PaMAGIC Contacts:

Paul DeBarry – pdebarry@borton-lawson.com
Tim Murphy - tmurphy@columbiapa.org
Eric Jespersen – ecj@epix.net

DCED Contacts

Kerry Wilson – kerwilson@state.pa.us
Dan Fitzpatrick – dafitzpatr@state.pa.us
Colton Weber – cweber@state.pa.us