

## **Map Modernization Advisory Team**

### **Meeting Notes**

January 4, 2007

PSATS, Enola, PA

#### **Meeting Overview:**

The Map Modernization Advisory Team formed as a result of the Map Modernization Workshop in March, 2006 met on Thursday, January 4, 2007. This was the third meeting of the group, the second meeting having been held on July 20, 2006. Eric Jespersen of Pa MAGIC, and Kerry Wilson from the DCED Governor's Center for Local Government Services led the meeting, which was held at PSATS in Enola, PA. Others in attendance are listed at the end of this report.

#### **Meeting Notes:**

Kerry began the meeting by explaining the agenda for the day. He explained that a number of representatives from the group would be providing an update on their work with mapping, and that open discussion could be held following each of their presentations. Eric asked that the group consider how to engage more people in the initiative.

#### **Presentations:**

The following people, listed in order of their presentation, took a few moments to speak to attendees during the meeting. At the conclusion of each presentation, the speakers engaged in question and answer sessions as needed.

##### *Governor's Center for Local Government Services/DCED – Dan Fitzpatrick*

Dan reported on that five counties' FIRM will be finalized in 2007 and the Center's hopes that 170 designated municipalities are compliant by the end of 2007. He explained their work with county conservation districts to get them in compliance with the Map Mod requirements. He also provided an outline of training efforts conducted in 2006, which included post-flooding recovery workshops and regional floodplain meetings; a primary use of the Center's manpower throughout the end of 2006 involved post-flood evaluations in six counties damaged by floods in June and July. Lastly, Dan reported that the Center is working on legal opinions allowing replacing paper maps with digital ones, approving a Floodplain ordinance automatic adoption clause and developing a Map Mod municipal compliance timeline for the state to work from.

##### *Bureau of Waterways Engineering/DEP – Ray Zomak*

Ray discussed the department's interaction with floodplain mapping, including levee inspection assistance and technical assistance including guidance and funding for repairs of flood-damaged properties. Considerable discussion occurred on DEP's work with FEMA and the Army Corps of Engineers on flood control structures, including re-certification (about 100 exist in PA that will have to be re-certified), and new rules for provisional accreditation of levees. DEP is seeking funding for the next fiscal year to assist communities. Re-certification may require new hydrologic analysis of the 100-year event, detailed survey of structure elevations, and geotechnical analysis of stability. Ray emphasized the importance of the statewide LIDAR, which can be used to provide more reliable elevations for flood protection projects.

Doug Diehl remarked that it would be advantageous for municipalities to have certified structures mapped, as well as areas where municipalities accept flood height exceptions for new development

*DCNR – Jay Parrish*

Jay presented a PowerPoint presentation (attached) on DCNR's LIDAR schedule, which included forecasting plans for the coming years (1/3 of the state at a time). Discussion was held on the specifics of the work, including DCNR's proposed deliverables, which includes a series of workshops on LIDAR (DCED stated that they may be able to help with these). Although the exact methods for delivering the LiDAR data have not been finalized, plans include public access through PASDA and perhaps at the PSU ESSC, with long-term archiving at the USGS EROS Data Center.

*FEMA – Dave Bollinger*

Dave reported that All Hazard Plans must be approved by FEMA and PEMA to receive funding (there are currently 10 plans in process). He agreed to provide the Team with a list of counties with All-Hazard Plans in place or in-process. DCNR closed its grant application deadline on December 31, 2006 for June Flooding Buyout applications. A review team is being assembled and will submit their recommendations to FEMA in March, with grants awarded in April. Dave also mentioned that PA is now authorized to receive 15% federal aid for disasters rather than the 7.5% previous rate. He noted that municipal applications for disaster aid are generally weak.

*FEMA – Jon Janowicz*

Jon presented a current funding cycle chart for FEMA Map Mod for everyone's review. He also shared a sample of data inaccuracies from current non-county (pre Map-Mod) Flood Insurance Studies, which illustrate a dramatic data shift when overlaid with current mapping. The new LiDAR data is critical to MapMod moving forward. He explained that we must set and coordinate priorities, and educate local government officials..

*Governor's Office – Art Stevens*

Art began by explaining his role within the Governor's Office, which is to coordinate public safety issues. The Public Safety priority areas for the second term of the Rendell Administration are: Food Safety, Information Fusion, and Flooding. He is working with state agencies to understand their current involvement with flood mapping and floodplain management in order to set plans to improve their coordination.

*Office of Administration/OIT - Jim Knudson*

Jim discussed HB 936, which proposed that PEMA be responsible for floodplain mapping; the bill did not pass. He did report that of the \$4 million proposed for the PAMAP project, \$3.5 million was approved for in this fiscal year, and that funding to complete the LiDAR is being proposed for each of the next two years. PASDA is being funded to provide data storage, particularly for LIDAR programs. Jim highlighted the Public Safety benefits of geospatial Web Services provided by GTO, and mentioned increased staffing within GTO to improve service.

Doug Diehl asked that Jim consider development of a boilerplate website and imagery viewer for municipalities.

#### *SRBC - Ben Pratt*

Ben began by explaining that SRBC is looking for new uses for current historical data represented on paper-based inundation maps created in the 1980's. He provided example flood stage forecasting maps, and reviewed a pilot project in the upper Susquehanna, which could ultimately include tools for mitigation planning, evacuation routes and reverse 9-1-1. Thus far, the results look promising - they are working on cost projections.

Fran Jones added that Lycoming County has the ability to validate the 1980's inundation maps with actual data.

#### *DRBC – Laura Tessieri*

Laura provided information on the Delaware Flood Mitigation Task Force, which is made up of federal, state and elected officials, regional agencies, emergency management professional and the public, including citizens and academia. Draft recommendations are divided into six areas – Reservoir Operations, Structural and non-structural measures for flood mitigation, Stormwater management, Floodplain mapping, Floodplain regulations, and Flood warning. The Task Force was created by the Governors of the four Delaware Basin states and the draft report is being reviewed in a series of public meetings throughout February, with one meeting in each state.

#### *USGS – Curtis Schreffler*

Curtis began with a review of the 100- year flood discharge curves. He also explained that the Delaware River Basin was hit with 100-year floods three years in a row. USGS is looking to go statewide with studies such as this; their 30-site gauge data shows higher discharge rates over time. DCED and FEMA are helping with the funding for regression modeling necessary to update the curves.

Karen Basset asked whether current stream gauge networks are adequate and coordinated. Jay Parrish mentioned a DCNR study (ongoing) of stream gauging.

### **Map Mod Advisory Team Report**

Eric Jespersen handed out copies of the proposed report for the DCED/PaMAGIC MapMod initiative, which stemmed from the March, 2006 meeting which began this process. Discussion on the report centered on how and when to expand the initiative to a larger audience. Eric will capture the comments provided in the meeting as well as other information the group returns to him and prepare a revised report. Some key items to be addressed included adding the title of executive summary, and the need for a stronger link between mapping and floodplain management to be covered in the report.

### **Action Planning**

In the afternoon, the entire group was divided into four smaller work groups for a planning session. Each of the groups was given a topic to discuss:

*PA Data Coordination in the short-term*

*PA Data Coordination in the long-term*

*Broadening Participation in Map Modernization Initiatives in the short-term*

*Broadening Participation in Map Modernization Initiatives in the long-term*

Each group was given a period of time to discuss their topic, **focusing on the resources already available and how to coordinate our actions**. At the end of the allotted time period, the sub groups focusing on the short and long term actions for each topic got together to discuss their comments, which then led to presentations and discussion of the entire group.

Key actions recommended as a result of the breakouts are as follows (those without leaders/commitments are listed as **open**):

***PA Data Coordination in the Short- and Long-term***

Need ready access to data from PennDOT on bridge and bridge scour data  
**DCED** to check with Frank Desendi to check on availability and any restrictions on distribution

GIS inventory update – add flood structure questions (**open**)  
Work with CCAP (**DCED**) to update county survey for what parcel and existing elevation data is available

Review Chapter 105 database from DEP to make sure that we have updated data (encroachment data in or close to floodway) (**open**)

PA MAP program – create a more granular schedule – instead of what is done, provide expected completion dates for upcoming work by county , and especially for LIDAR data (**Parrish**)

Establish goal to create statewide levee database by the end of 2007; **Ray Zomok** would provide intern and **Jim Knudson** could procure code-based GPS equipment

Work with FEMA and DCED on Region III flood mapping contractors’ (Gannett Fleming/Greenhorne and O’Mara and AMEC) process to see if there are tools that the agencies could provide to make data better (**open**)

***Broadening Participation in Map Modernization Initiatives in the Short-term***

**Assumption** – existing process in terms of contacting municipalities is severely inadequate

Use **Governor’s Center** as initial resource to identify “players” on county basis  
Enlist, through conference call, and get stakeholders to go to municipalities to get buy-in. Each county’s list will be unique to the county

Turn FEMA MapMod process into an educational process for the municipalities - show them what is in it for them to get their buy in – show them why they should invest in the MapMod program – what is the outcome (**open – needs a team**)

**Fran Jones** volunteered to inventory existing materials available from FEMA – use them to mail/supply to counties to trickle down through municipalities

***Broadening Participation in Map Modernization Initiatives in the Long-term***

Get on local government conference schedule with unified voice (**open – needs a team**)

PSATS Annual Conference is an opportunity

PSAB will give training opportunities (**Ed Troxell**)

PPA will get them on (**open**)

**Dave Reed** suggested Conservation Districts’ Annual meeting in July

CCAP – need to establish contact (**Colton Weber** volunteered)

Northern Tier Coalition - **Fran Jones**

Working with local government associations and state agencies on getting info into publications

Lycoming County already has a presentation that we can modify to use at all of these (**open**)

Need to answer question – why should locals be involved? What is that impact?

Overcome the perception of local control vs. mandate

PSAB magazine offered by **Ed Troxell; DCED and Dan Accurti** suggested they put together presentation on how PA wants to be a MapMod leader but the current policy of digitizing maps is not going to get us in the forefront. – needs more updated studies

Look at moving away from static mapping to more dynamic map modeling – forecasting during an event, etc. (**open**)

Push toward watershed district planning (watershed -based maps) (**open**)

Moving from Map Mod to comprehensive plans – nutrient trading program as an incentive for conservation district planning on updates (compensation for perceived or real loss of tax base) (**open**)

### **Next Steps**

**MapMod Advisory team members** agreed to make modest commitments to advance the initiative; they agreed to select opportunities still open from the above list of recommended actions once they receive the meeting notes.

Next MapMod Advisory Team meeting to be held at PA GIS Conference – May 17, 2007

**Eric Jespersen** got site and time established – Radisson Camp Hill, 2-4 PM

Also added a one-hour technical track to GIS Conference schedule

Need technical presentations on technologies (**open**)

Engage all three ACE Districts in future MapMod Team meetings (**open**)

**Dave Bollinger** agreed to provide the Team with a list of counties with All-Hazard Plans in place or in-process.

**Jay Parrish** mentioned a DCNR study (ongoing) of stream gauging.