

**ASFPM Mapping & Engineering Standards Committee
2003-2004 Report - May 10, 2004
Alan Lulloff, Chair
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The Mapping & Engineering Standards committee resolution on quality standards for published floodplain maps and flood map modernization implementation was approved by the ASFPM Board of Directors on May 12, 2003. FEMA provided a response to ASFPM on January 16, 2004. Following is an update related to the major components of the resolution:

Following the necessary whereases, ASFPM recommended FEMA:

- A. Provide feedback to the states on the 2002 State Implementation Plans. ***FEMA's focus has shifted to State Business Plans.***
- B. Adopt technical standards that ensure maps published:
- Match best available topo. ***It appears that the revised metrics continue to encourage digitizing existing FIRMs without ensuring the DFIRMs match available topographic data. The NSP has expressed concern that meeting the first metric (50% of the population with GIS data by the end of 2005) will be difficult.***

ASFPM has indicated that converting FIRMs to digital (GIS) FIRMs is useful. However, digital conversions should not prompt a change in the date of the map. ASFPM continues to assert that prior to submitting an updated map to communities for adoption, the DFIRMs should be QA/QCed to ensure that they match best available topographic data.

- Match best available aerial photography. ***FEMA has adopted a new map format that uses an aerial photograph as the base and has developed an acceptable minimum standard for the horizontal accuracy of this base map.***
 - Are based on hydrology that still reasonably reflects the flood hazard and meets local, regional, state and federal standards. ***FEMA is proposing a quality standard that would be dependent upon the population at risk. For determinations as to where detailed studies are needed or where H&H needs to be updated, establishing criteria based on population at risk seems appropriate. FEMA is establishing a committee to address the quality issue and ASFPM has been invited to participate.***
- C. Provide an annual base level of funding adequate to support a position (Map Coordinator) in each state (\$100k). ***FEMA has indicated that they welcome State and local participation and anticipate that the State***

Business Plans will document the level of involvement States are willing to undertake as well as justify the funding needed.

The most positive change to the performance metrics is that the revised performance metrics include a metric related to the % of the Map Mod funding that goes to CTPs – with the % increasing each year.

ASFPM has indicated to FEMA that the 25% match requirement associated with CAP-MAP will limit State involvement. In FY03, FEMA budgeted \$30k per state and issued guidance that allowed match requirements to be deferred. For FY04, FEMA the funding mechanism for States to oversee the map mod effort has been renamed - Map Modernization Management Support (MMMS) instead of CAP-MAP. Preliminary indications are that this funding mechanism will be similar to CTP (will have a 20% cost share goal instead of the 25% match required under CAP-MAP). This should address ASFPM's concerns.

Regarding funding levels, FEMA has allocated \$100k per state for FY04 Map Modernization Management Support and set the minimum for participating States at \$25k. It appears that this funding level is significantly less than the funding levels requested in the State Business Plans. On a positive note, FEMA has indicated that they recognize that funding to States that are meeting their commitments for MMMS should not be reduced in subsequent years.

- D. Provide State and local governments the opportunity to manage as many activities for which they have capability and be provided the flexibility in the selection of mapping priorities. **FEMA feels the State Business Plans will identify the activities States desire to undertake. Regarding priorities, FEMA indicates that they have been directed by Congress to update the flood hazard maps efficiently. They state in their January 16, 2004, letter to ASFPM: "FEMA intends to balance project selection flexibility with production efficiency and the accomplishment of program goals to meet Congress's challenge."**

The resolution further recommended the President and Congress to:

- A. Provide long-term funding, sufficient to ensure completion of the entire country. **The President and Congress continue to support the Flood Map Modernization Initiative. When ASFPM has had opportunities to discuss Flood Map Modernization with members of Congress we continue to stress the importance of generating quality maps and the need to continue the funding until the country's flood hazards are adequately mapped.**
- B. If necessary, authorize and fund an advisory group similar to the Technical Mapping Advisory Council. **No action to date.**

2003-2004 Goals and Objectives - Status

Goal #1 - Monitor FEMA implementation activities for the **Map Modernization Plan** and related federal objectives. Specifically focus on: 1) the development of state implementation plans and 2) the development of a means to fairly distribute funding. Develop recommendations to be offered to FEMA, states and local governments for the preparation, distribution, and utilization of floodplain maps, including FIRMs, in a digital environment.

Create a communication pathway between ASFPM members regarding improved techniques to develop digital flood hazard mapping.
Develop a list of initiatives and contacts.

Status:

- development of state implementation plans. **ASFPM entered into a cooperative agreement with FEMA to develop enhanced guidance to States related on the State Business Plans. A work group was formed and the documents prepared are posted on the ASFPM web site.**
- development of a means to fairly distribute funding. **The ASFPM Mapping & Engineering Standards Committee participated in a FEMA workshop in Atlanta (February, 2003) where the performance metrics for map mod were revised. Concern had been expressed that the Age of the Map Metric in the initial performance measures would prompt FEMA to publishing digital versions of the existing maps on a new aerial photo base. The following list (which has subsequently become known as the Atlanta Factors) was developed: High Population Density, High Growth Areas, High Risk Areas – history of repetitive loss/claims/disasters, NFIP policy base, Funding Leveraged, Accuracy and adequacy of products, and Comprehensive Watershed Approach. After this meeting, FEMA developed a data base that focused on the quantifiable numbers that reflected the criteria developed in Atlanta. The percentage that each of the 3,146 counties in the nation contributes to the national total was calculated for each data element and added across the elements, totaled, and ranked from highest to lowest. In May, 2003, FEMA documented their methodology for selecting projects in FY 2003 in a report titled: FY2003 Budget Decisions Overview.**

Some have expressed concern that the data base used for FY2003 funding allocations had too heavy an emphasis on population. The NSP is tasked with developing proposed revisions to the funding allocations among States. The M&ES has a subcommittee working on this issue that will make recommendations on funding allocation.

Goal # 2. Work with FEMA staff on specific revisions and additions to the current MNUSS (Mapping Needs Update Support System) process to make it

responsive to state and local needs. ***ASFPM has recommended to FEMA that if funding is being made available to contact communities, request information regarding mapping needs and/or populate MNUSS; that States be given the opportunity to take in those funds and complete those tasks. In addition, we suggested that data upload mechanisms be created to avoid re-keying and fragmenting data from GIS systems to populate the non-spatial data base in MNUSS.***

Goal # 3. Review the need to develop draft procedures and technical standards for submitting to FEMA and having approved by FEMA proposed changes in methodology, new technical models and changed definitions concerning technical aspects of hydrology, hydraulics and sediment transport. ***The discussion regarding technical standards is occurring along two fronts:***

a. Neither the initial metrics nor the ones that have replaced them have a metric related to quality. It can be debated whether or not all streams should be mapped or the extent modeling should be updated under Flood Map Modernization. However, it is universally accepted that topographic information is necessary to accurately delineate floodplain boundaries. The most accurate nationwide topographic data are the USGS 7 and ½ minute quadrangle maps (commonly known as quads). The committee recommends that DFIRMs submitted to communities for adoption at the very least match the “quads”. To help people understand the issues associated with topographic data, the committee has drafted a white paper on topographic data (attached).

b. Current technical standards may not be adequately identifying the risk. In some instances, it may be due to FEMA regulations (e.g. FEMA’s 1 foot rise regulatory floodway) and in other instances, it may be that engineering standards have not kept up with technology (hydrologic modeling). A white paper has been developed on the floodway issue.

Goal # 4. Promote a two-part discussion within ASFPM and among other interested parties regarding LOMRs and CLOMRs. ***FEMA has expressed a desire to devolve map maintenance to the lowest level of government possible. However, the FEMA guidance to States associated with the development of State Business Plans did not include map maintenance components.***

ASFPM included the administration of LOMCs in the list of items that States can take on when we developed the enhanced guidance materials for the State Business Plans. Some States have indicated a willingness to take on LOMCs for counties completed under Map Mod provided federal funding are available.