

Flood & Emergency Mapping Reform

Flood maps identify areas at greatest risk of flooding and provide the foundation for the National Flood Insurance Program (NFIP). Nearly 70 percent of the country's flood maps are more than 10 years old and reflect outdated data that could affect the ability to accurately identify flood prone areas. FEMA is currently implementing a \$1 billion, 5-year map modernization program to update its flood maps.

Geospatial information is central to all aspects of emergency management (preparedness, prevention, protection, detection, response, recovery). Imagery, map data and other geospatial assets are of most critical value in emergency response during the initial hours and days immediately before and following a hurricane, flood or other disaster. When overlaid on accurate existing data, such as the FEMA Map Modernization data, imagery acquired immediately after an event can be an effective, efficient and life-saving tool. Hurricane Katrina also exposed the jeopardy levees face from breaching or topping-out, creating another natural catastrophe. Levees significantly complicate the process of proper identification and quantification of flood hazard risks and they should remain a map funding priority under FEMA.

MAPPS evaluated current and future mapping needs to support the Nation's flood insurance, risk, mitigation and response efforts. MAPPS recommends that the flood insurance rate maps include acquiring current and accurate elevation data from commercial geospatial technologies; mapping by watershed instead of political boundary; re-establishing the Technical Mapping Advisory Council (TMAC), with representation from the private mapping profession; creating a National Structure Inventory; emphasizing vertical positioning in addition to the current horizontal focus; revising the Title 13 privacy restriction of the Census; establishing a national licensing program for photogrammetry; conducting a National Levee Inventory with geospatial referencing; and, transitioning to digital mapping. MAPPS also found that current and accurate elevation data facilitates development of new engineering data (hydrologic and hydraulic modeling) using cost-effective, automated technologies, which serves to further improve the quality of the resulting flood maps Section 22 of H.R. 3121, the Flood Insurance Reform and Modernization (FIRM) Act, which passed the House on September 27, 2007, includes several of the MAPPS recommendations. Sections 18 and 19 of S. 2284, the Flood Insurance Reform and Modernization (FIRM) Act, which has been favorably reported by the Banking Committee and is awaiting Senate floor action, includes several more of the MAPPS recommendations.

In January 2007, The National Research Council/National Academy of Sciences (NRC/NAS) issued a report, "Base Map Inputs for Floodplain Mapping." This report recommended an "Elevation for the Nation" initiative. New data, generated using commercial geospatial platforms, would be archived in a 'National Elevation Dataset.' Not only would Flood Map Modernization be enhanced by this dataset, but this nationwide elevation dataset would be useful to dozens of other Federal, state and local government agencies. MAPPS fully supports such a data partnership program that furthers the concept of "capture data once, but use it for multiple applications," as an efficient and cost-effective approach that saves, and wisely invests, taxpayers' money. MAPPS believes this initiative should leverage existing commercial capabilities and not conflict with private sector initiatives. MAPPS also recommends that FEMA pre-position indefinite delivery/indefinite quantity (IDIQ) contracts on a contingency basis, instead of decisions and actions made "on the fly." The goal of developing a pre-awarded competitive contracting process for enhancing the utilization of geospatial assets (aerial photography, satellite imagery and geographic information or "Geospatial" activities for emergency response) was also endorsed and recommended by the NRC/NAS in a separate report, "Successful Response Starts With a Map."

ACTION REQUESTED:

MAPPS respectfully urges Members of Congress to work with the private geospatial community to improve our flood mapping and emergency response activities. MAPPS seeks members of the House and Senate to offer amendments to include all the MAPPS recommendations in S. 2284 on the Senate floor and in H.R. 3121 in conference. For more information, contact John Byrd, MAPPS Government Affairs Manager, at jbyrd@mapps.org or (703) 787-6996.