

Need for an Integrated Oceans and Coastal Mapping Program

More than half of all Americans, 153 million people, currently live on or near a coast and an additional 12 million are expected to move to the coasts over the next decade. Coastal counties average 300 persons per square mile, compared with the national average of 98. In recent years, more than 1,540 permits for construction of single-family homes were issued in coastal counties on a daily basis, combined with other commercial, retail and institutional development to support this population. Yet despite this population density and economic development, much of the 95,000 miles of U.S. shoreline does not have current, accurate maps and geospatial information; moreover, much of what does exist pre-dates the 1970s. Of America's major ports, harbors and shipping areas, there is a 26,000 square nautical mile backlog that will take some 15 years to accurately update with current maps. Given the feverish pace of coastal growth and development, as well as natural and man-made phenomena that continually alter the characterization of the shoreline, the accuracy, consistency and currency of these coastal areas cannot be assured. Moreover, as Hurricane Katrina and the Asian tsunami demonstrated, the need for spatial data on our coasts is critical to emergency preparedness and emergency response.

Congress is working to enact legislation creating an integrated oceans and coastal mapping (IOCM) program. The bills (e.g. H.R. 365 & S. 174, and Sections 12201-12208 of S. 22) require the administrator of the National Oceanic and Atmospheric Administration (NOAA) to develop a plan to acquire, disseminate, establish standards and provide services in connection with various types of geospatial data. This legislation also provides an opportunity to help America's fragile oceans, coasts and shorelines by addressing serious issues raised by the U.S. Oceans Commission, the Pew Commission, as well as several National Academy of Sciences reports, all of which have one commonality -- the need for a comprehensive, integrated oceans and coastal mapping program. Although these bills are a step in the right direction, further legislation is needed to truly satisfy the robust concept of a "Digital Coast" as recommended by the National Academy of Sciences. Therefore, a new bill is necessary to truly achieve what the aforementioned commissions and reports envision.

MAPPS strongly believes this program should:

- improve coordination and support an annual mapping and charting inventory;
- identify priorities;
- define standards and standardize methods for data acquisition, processing and distribution to ensure broadest utility of data;
- contract for the collection and creation of feature data sets to include, shoreline delineation, satellite and aerial imagery, land use and land cover maps, benthic habitat mapping, terrestrial topography, bathymetry, aquatic vegetation and observations taken through the Integrated Ocean Observing System sponsored by NOAA;
- create a seamless geodetic framework; and
- arrive at a nationally consistent definition of shoreline in terms of a tidal datum.

The associated surveying, charting, remote sensing and geospatial data for America's coasts, harbors and ports, shoreline and ocean resources is critical to our nation's most basic activities. For example, safe marine navigation, borne of accurately mapped waterways and ports, is fundamental to the efficient movement of commerce. And, accurate data about coastal access and egress, as well as port infrastructure, is critical to homeland security.

ACTION REQUESTED:

MAPPS respectfully urges members of Congress to introduce and enact legislation to develop a comprehensive integrated ocean and coastal mapping plan for creation of a "Digital Coast." For more information, contact John Byrd, MAPPS Government Affairs Manager, at jbyrd@mapps.org or 703-787-6996.