

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. Every day, more than 1,540 permits for construction of single-family homes are issued in coastal counties, 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.

The current law (33 USC 892) known as the "Hydrographic Services Improvement Act" (HSIA), is up for reauthorization in 2008. The HSIA bills (H.R. 3352 & S.1582) provide broad authority for the administrator of the National Oceanic and Atmospheric Administration (NOAA) to acquire, disseminate, establish standards and provide services in connection with various types of hydrographic data. This reauthorization 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.

This geospatially reliant program should: improve internal coordination and support an annual mapping and charting inventory; identify priorities and identify needs for coordinated programs; define standards; enhance interagency and private sector opportunities; standardize methods for data acquisition, processing and distribution to ensure broadest utility of data; improve grant programs by requiring agencies to utilize, consolidate, and manage geospatial products and services that are commercial in nature, thereby allowing agencies to leverage geospatial data to the maximum extent in a cost effective manner to benefit both the entire scientific community and the public; 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, a seamless geodetic framework, including the collection of real-time tide data and the development of more sophisticated hydrodynamic models for the entire US coastline, as well as the establishment of protocols and tools for merging bathymetric and topographic datasets and a nationally consistent definition of shoreline in terms of a tidal datum; work in cooperation with coastal state agencies to coordinate and encourage state partnerships in data collection activities to reduce duplication of effort and to increase data utilization and new technique development. This should extend to the sharing of financial resources for data collection so that state funds could be applied to federal contracts and federal funds could be applied to state contracts.

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 include MAPPS supported provisions within the 2008 HSIA Reauthorization (H.R. 3352 & S. 1582) to develop a comprehensive integrated ocean and coastal mapping plan. For more information, contact John Byrd, MAPPS Government Affairs Manager, at jbyrd@mapps.org or (703) 787-6996.