

New Hampshire and Southern Maine Ocean Uses Atlas Project

Coastal Response
Research Center

www.crrc.unh.edu

www.mpa.gov/science_analysis/atlas.html

Introduction

Environmental emergencies in coastal waters, whether caused by extreme weather or accidents such as oil spills, require responders to make quick decisions about where and how to deploy available resources to protect sensitive areas and the human uses they support. The Ocean Uses Atlas Project is an innovative partnership between the Coastal Response Research Center (CRRC) and NOAA's Office of Ocean and Coastal Resource Management (OCRM). The project fills a critical information gap for response efforts in the coastal and offshore waters of New Hampshire and southern Maine by mapping the full range of significant human uses of the ocean in their state and federal waters. Spatial data on ocean use patterns will be gathered from regional ocean experts through a participatory Geographic Information System (GIS) process in a workshop environment. The resulting data, maps, and analytical products will be used in emergency response planning and made available to state and federal ocean management agencies and all other interested parties.

How Will It Be Produced?

Ocean Uses Workshop – Working with federal and state agencies and private organizations throughout New Hampshire and Southern Maine, the Coastal Response Research Center will convene a participatory 3-day GIS mapping workshop.

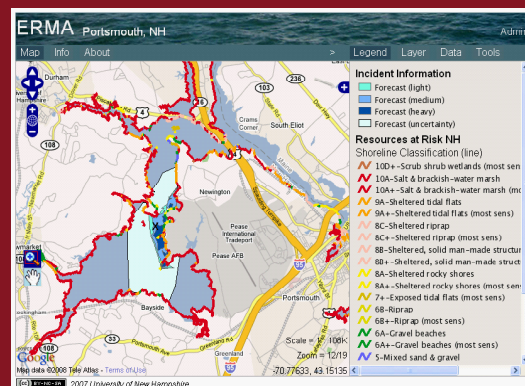
Participatory Mapping – Human uses data will be gathered using a participatory mapping process that relies on expert regional knowledge gathered in a workshop setting. This approach provides a neutral forum for discussion of use patterns, intensity and potential conflicts among the 28 identified ocean uses by those who know them best.



How Will The Maps Be Used To Inform Emergency Response?

Data Integration - The human uses data captured throughout the mapping process will be integrated into the Environmental Response Management Application (ERMA™) for visualization and data assimilation. ERMA offers a mapping interface to access a wide range of environmental and administrative spatial information important for emergency response actions.

Key Design Features of ERMA - Using exclusive notations, various formats and sources of spatial data can be displayed simultaneously with the human uses data to enhance decisions in planning and response. When developed for New Hampshire and southern Maine, the atlas data will be integrated with the Environmental Response Management Application developed by the CRRC and NOAA's Office of Response and Restoration (OR&R). ERMA is a secure data platform, capable of interfacing diverse spatial datasets and real-time data in a web-based mapping format. As an online application, it provides reliable access for multiple users from disparate locations (e.g. command center, field, office) to receive up-to-date spatial resource information for planning, response, assessment, and restoration.



Who Gets To Use The Data and Products?

The Ocean Uses Atlas Project is designed to inform many kinds of ocean management. Flexible in scope and scale depending on local needs, the Atlas provides insight on patterns of human use that are important for enhancing environmental emergency response and other ocean management decisions such as fisheries management actions, ocean energy siting, and regional ocean governance. To this end, all data and products will be delivered to key agencies as they are completed and will be made available to any interested parties via digital data and printed maps.



Planning

Displaying human uses data on ERMA gives decision makers access to more information, allowing for interactions of many types to be investigated with just a few clicks. By applying the functions of ERMA such as a diverse legend, and the ability to overlay information, maps can be created that will enhance the overall ocean planning and response processes.

Response

By combining the knowledge and expertise of local ocean stakeholders with the capabilities of ERMA, responders will be able to quickly identify user groups potentially affected by environmental conditions during spills. Responders will be able to better prepare for conditions and events at or en route to an incident. Re-openings and the status of clean-up efforts can also be available to stakeholders in real-time as ERMA tracks recovery and restoration efforts.

The Project Partners

NOAA – Located in the Office of Ocean and Coastal Resource Management, NOAA's National Marine Protected Areas Center developed the Ocean Uses Atlas project for a wide variety of management applications, including emergency response. Flexible in scope and scale, the Atlas project can be conducted anywhere in US waters where there is a need for insight into how and where people use the ocean.



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CRRC - The Coastal Response Research Center was established as a partnership between the National Oceanic Atmospheric Administration (NOAA), through its Office of Response and Restoration (OR&R), and the University of New Hampshire (UNH) in 2004. The Center is administered by and located at the UNH campus in Durham, NH. This partnership stimulates innovation in spill preparedness, response, assessment, and implementation of optimum spill recovery strategies. The primary purpose of the Center is to bring together the resources of a research-oriented university and the field expertise of OR&R to conduct and oversee basic and applied research, conduct outreach, and encourage strategic partnerships in spill response, assessment and restoration.



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