

COASTAL ENVIRONMENTAL SENSING NETWORKS III- POLICY AND MANAGEMENT-RELATED INFORMATION AND TECHNOLOGY NEEDS

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Ocean and coastal resources constitute vital components of complex ecosystems that support and enhance the lives and livelihoods of millions of people in the United States.

Yet the attraction of the sea and its bounty also poses certain threats to marine ecosystems. Environmental managers face the daunting dual challenge of maintaining access to ocean and coastal resources for use and development while also protecting those resources from overexploitation. Advances in sensor technology and data networks provide some hope in addressing those challenges.

A series of three Panel Sessions on Coastal Environmental Sensing Networks will explore sensor network technology, sensor applications, and policy and management-related information and technology needs. This Panel Session (CESN III: Policy and management-related information and technology needs) will examine recent efforts to enhance resource managers' ability to measure, monitor, and manage the ocean and coastal resources.

Four panel presenters will address examples of using sensor-derived information in management practices, including: 1) Monitoring sound to manage protected areas of the marine environment; 2) the use of in-situ and remote sensing to manage state coastal resources; 3) efforts to increase the utility of the Integrated Ocean Observing System to coastal managers; and, 4) the employment of ground penetrating radar and marine seismic equipment to determine long-term shoreline changes.

In doing so, each panelist will be addressing one or more of the following points:

- 1) What coastal/ocean/environmentally related resource/system/condition you are examining/measuring;
- 2) Who (resource manager/ user group/impacted community) has sought this information;
- 3) What devices/methods are being employed to engage in the examination/measurement;
- 4) How those devices/methods are 'networked';
- 5) What form the data will take;
- 6) How will the data be transformed into relevant/usable information;
- 7) How will the data/info be integrated into a larger data network (or at least made 'reachable'); and,
- 8) Whether/how the information has been integrated into any decision-making and if so has it proven to be helpful.

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