

**Summary of Outcomes of the  
INTEGRATED OCEAN OBSERVING SYSTEM (IOOS) /  
PACIFIC DATA MANAGEMENT CENTER WORKSHOP  
at the All Islands Coastal Zone Conference**

**June 21, 2004**

**Saipan, Commonwealth of the Northern Mariana Islands**

**Objectives:**

A two-hour workshop was held in conjunction with the 2004 All Islands Coastal Zone Conference in Saipan, Commonwealth of the Northern Mariana Islands.

The objectives of this workshop were to:

- Provide background information on current activities related to the establishment of sustained Integrated Ocean Observing System (IOOS) and a Data Center for the Pacific Region;
- Undertake group breakouts to brainstorm on the following key discussion items:
  - (1) Identification of the top 5 overarching goals for the establishment of a Pacific Region IOOS/Data Center with respect to providing useful data and information that addresses local issues and priority needs.
  - (2) Identification of the top 5 critical information needs that should be addressed through the establishment of a regional IOOS that would allow for the rapid detection and timely predictions of changes in our region's coastal and ocean waters (e.g., sea surface height, water column currents, salinity, temperature, sedimentation rates, rainfall, water quality, beach sand management and erosion, hazards, etc.)?.
- Build a networked partnership for continued region-focused discussions regarding the establishment of a sustained IOOS and associated Data Management Center for the Pacific Region.

**Discussion:**

Following brief presentations on IOOS and Data Management initiatives in the Pacific, participants were divided into four small groups tasked with answering two questions.

**Question 1: What are the top 5 overarching goals for the establishment of a Pacific Region IOOS/Data Center with respect to providing useful data and information that addresses local issues and priority needs?** (Note: Participants were provided examples of sets of priority themes/areas identified previously in related national and regional efforts.)

**Question 2: What are the top 5 critical information needs that should be addressed through the establishment of a regional IOOS that would allow for the rapid detection and timely predictions of changes in our region's coastal and ocean waters (e.g., sea surface height, water column currents, salinity, temperature, sedimentation rates, rainfall, water quality, beach sand management and erosion, hazards, etc.)?**

**Discussion Results:**

The results of each of the facilitated small group discussions were recorded on flip charts, summarized, and then presented to the entire group. What follows is a summary of information contained on the flip charts interpreted in the context of the two questions each of the small groups were asked to address.

**Question 1- Priority Areas for IOOS and an associated Data Management Center:**

The following areas were identified by all of the small groups.

- Ecosystem/Environmental Health, Health of Living Resources
- Climate Change and Variability (including sea level rise)

The following areas were identified by more than one of the small groups.

- Safe Navigation in Support of Transportation/Commerce
- Natural Hazard Prediction and Mitigation (including weather forecasts)
- Public Safety/Health (including water quality)
- Sustainable Fisheries

The following areas were identified by at least one of the small groups.

- Economic Development (tourism, transportation, agriculture)
- National Security
- Alternative Energy
- Enforcement of EEZ
- Protection of Cultural Resources
- Protection of Submerged Land

**Question 2- Critical Information Needs associated with Priority Themes** (Note: As recommended at the meeting, these are grouped into the following categories - Physical, Chemical, Biological, Human.):

**Physical**

- Sea surface/ocean temperature, salinity
- Water levels and wave heights
- Weather patterns (wind speed/direction, precipitation, stream flow)
- Circulation patterns (e.g., tidal/coastal and ocean currents)

- Coastal erosion/sedimentation patterns and rates
- Topography and bathymetry (including geodetic control)

#### Chemical

- Water quality
- Near shore nutrient/bacteria levels and pathways

#### Biological

- Coastal habitat type and habitat change
- Coastal fish populations
- Pelagic animal migration patterns
- Coral health

#### Human

- Land use and land cover
- Marine and beach debris
- Recreational activities
- Economic impacts/evaluations
- Oil spills
- Plutonium shipments

#### **Other comments/considerations of note:**

- Need for greater emphasis on coastal (nearshore) versus ocean (offshore) observations
- Need for higher density, higher frequency observations
- Need for flexibility, mobility of observing systems
- Need to incorporate human (low tech) observations
- Need for access to data/information to be web-based and user-friendly
- Need to support/include analysis and modeling
- Need to provide standardized, customized products
- Need for access to 'hotline' for technical assistance, data interpretation
- Need to include training

**Conference Participants:** Attendees at this workshop can be characterized as primarily consisting of federal, state and territorial coastal resource managers and planners. For a list of conference participants, see the conference Proceedings and Appendices.