

**A NATIONAL STRATEGY TO IMPROVE OCEAN LITERACY AND
STRENGTHEN SCIENCE EDUCATION THROUGH AN IMPROVED
KNOWLEDGE OF THE OCEANS AND COASTS**

**RECOMMENDATIONS FOR THE NEAR-TERM USE OF
NOPP EDUCATION AND OUTREACH FUNDS**

SEPTEMBER 2002

Funding contributed by member agencies to support the National Oceanographic Partnership Program (NOPP) should be used for programs that are overarching in scope and serve to augment and support, not duplicate or replicate, agency initiatives. Therefore, a dedicated budget for education and outreach is needed. It is recommended that NOPP focus its education and outreach resources toward initiatives that achieve objectives as outlined in the National Agenda. Items recommended for implementation include:

- (1) Establish an Education and Outreach Office in NOPP to coordinate coastal and ocean sciences educational efforts with exploration, observing, modeling, and information management initiatives;
- (2) Develop an implementation plan for the NOPP Ocean Education and Outreach Strategy;
- (3) Develop a database and on-going assessment that addresses current and future requirements of the ocean sciences workforce needed to support the interdisciplinary science, policy and economics communities;
- (4) Convene a workshop to identify realistic strategies and protocols for using real-time observatory data in educational settings;
- (5) Determine mechanisms to infuse coastal and ocean sciences concepts into K-16 textbooks;
- (6) Establish a task force that includes educators, ocean scientists, and technologists to define coastal and ocean sciences literacy concepts and establish linkages to the existing national standards that will strengthen science education;
- (7) Assess the need for and feasibility of creating standardized curricula and/or certification/licensing procedures for specific sub-professions within the ocean community, particularly those that relate to ocean observing systems;
- (8) Revise existing exemplary K-16 coastal and ocean sciences curricular materials and align these materials with the *National Science Education Standards*¹ (NSES); find opportunities to infuse technology and/or use observation data to strengthen the material; and,
- (9) Use the platform of the National Ocean Sciences Bowl as a vehicle, to pilot the use of ocean and coastal sciences curricular content, which aligns with NSES and to create questions that may serve as an effective assessment of improved science literacy.

¹ *National Science Education Standards*, 1996, National Committee on Science Education Standards and Assessment, National Research Council, 276pp.