

**Testimony before the United States
Commission on Ocean Policy
by
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Good afternoon. Thank you very much for the opportunity to come before the President's Commission on Ocean Policy to speak about the importance of the ocean sciences to our nation. I am Dr. Carolyn Thoroughgood, Chair of the Board of Governors for the Consortium for Oceanographic Research and Education (CORE). CORE is the Washington, DC-based association of U.S. oceanographic research institutions, universities, laboratories and aquaria. Our 67 members represent the nucleus of this Nation's ocean research and education institutions.

CORE believes that the work of the President's Commission on Ocean Policy will be crucial to the future quality of life for all Americans. We are pleased that our nation is once again reexamining our ocean and coastal policies with an eye towards what has been done since the Stratton Commission, and more importantly, what needs to be done in the future. As time is limited, I will keep my remarks short and ask that they be submitted for the official record. I am also submitting a packet of information that

contains more detailed information about the subject matter that I will discuss.

CORE believes that the following key issues need to be addressed by the Commission as we chart our nation's ocean future.

First, CORE believes that we need increased funding for basic research in ocean sciences.

In recent years, ocean and coastal issues have grown in number and complexity, but our national investment in understanding the oceans has failed to keep pace. The academic institutions represented by CORE have made the United States a world leader in oceanography and developed global scientific expertise. Ocean sciences currently represent less than 4 percent or approximately \$755 million annually, of federal spending for basic research. This percentage has stagnated for more than a decade and simply is not adequate to expand our knowledge and provide a sound basis for good public policies for our oceans and coasts. CORE recommends that seven percent of the federal basic research budget, or \$1.4 billion per year, be invested in the ocean sciences.

Second, the nation needs to implement an integrated and sustained coastal and ocean observing system

CORE supports immediate action to implement an integrated and sustained coastal and ocean observing system. Such a system is essential to improve our understanding and our ability to address a multitude of critical ocean issues including national security, health, homeland defense, weather and climate forecasts, and maritime safety. The observational problem we face today is quite simple; there are large areas of our world's oceans that are never observed or even sampled. As the noted English scientist Sir Arthur Stanley Eddington noted, "It is a good rule not to put overmuch

confidence in a theory until it has been confirmed by observation.” Many theories about our oceans today lack the needed observational rigor.

Third, our Nation must enhance ocean science education support and human resource development

The nation will only be able to adequately address marine issues if it has a cadre of well-educated ocean scientists. Current demographic trends suggest that with the graying of ocean experts, we may soon lose a large portion of the intellectual horsepower that has generated recent advances in the marine sciences. This force must be replenished. New ocean science education programs and support are needed from K through 12, and at both the undergraduate and graduate levels.

Fourth, we need to recapitalize scientific infrastructure and support systems

CORE supports maintaining and increasing our national investment in ocean science facilities and support systems. Highest priority must be given to recapitalization of the University- National Oceanographic Laboratory System (UNOLS) fleet, especially mid-size research vessels, and to provision of a dedicated supercomputing capacity for ocean sciences.

Fifth, CORE believes we need to improve the scientific basis for decisions about the use of marine resources and the protection of marine ecosystems and public health

CORE believes that the best way to enhance effective stewardship of marine resources and ocean and coastal environments is by ensuring that sound scientific information and analysis are readily available to resource managers and affected industries. This is essential to guide the sustainable use of the Nation’s rich living, mineral and energy resources; growing

demands for agricultural and aquaculture products; and the recreational and commercial use of the coastal zone.

Finally, we must improve interagency coordination and integration mechanisms

At present, 14 agencies participate in the National Ocean Research Leadership Council (NORLC). Under existing law, the NORLC responsibility is limited to ocean research and does not include operational oceanography and other ocean activities that are important to the ocean community. CORE supports legislative amendments that would rename and expand the authorities of the NORLC to include such activities. Due to our increasing awareness and knowledge about the relationship between the oceans and human health, it is also imperative that the National Institutes of Health (NIH) participate in the NORLC and become an active supporter of the basic ocean sciences.

In closing, CORE would like to offer the Commission on Ocean Policy any assistance we can provide. We would be more than happy to support the Commission's regional meetings and ask that you call upon our member institutions to contribute to your upcoming regional meetings. We look forward to working with members of the Commission and offer you best wishes for success in guiding our nation's ocean future.