Calendar No. 791



SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

SECOND SESSION

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REPORT

108-400

108TH CONGRESS 2d Session

SENATE

NATIONAL OCEAN EXPLORATION PROGRAM ACT

OCTOBER 11, 2004.—Ordered to be printed

Mr. MCCAIN, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 2280]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 2280) "A Bill To establish a coordinated national ocean exploration program within the National Oceanic and Atmospheric Administration", having considered the same, reports favorably thereon without amendment without amendments and recommends that the bill do pass.

PURPOSE OF THE BILL

The purpose of S. 2280, the National Ocean Exploration Program Act, is to establish a national ocean exploration program within NOAA and authorize appropriations for the program for fiscal years 2005 through 2016. The program's main purpose would be to explore the oceans to "benefit, inform, and inspire" the American people, while facilitating the discovery of new living and non-living resources, documenting shipwrecks and submerged archaeological sites, and encouraging the growth of new technologies. The bill would also establish an interagency task force to coordinate Federal and non-government cooperation.

BACKGROUND AND NEEDS

Ocean exploration has encompassed charting ocean depth and bathymetry and identifying and studying marine organisms. Although ocean exploration has occurred since the 1800s, only 5 percent of the ocean floor has been explored to date and scientific understanding of undersea environments remains cursory. Current ocean exploration excursions continue to probe uncharted territory and locate and identify new species and resources, ranging from

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hydrothermal vents and deep sea corals to shipwrecks and other cultural artifacts. The potential for identifying new and profitable energy sources and biomedical resources in the oceans is significant, but it remains largely untapped. Progress has generally been limited due to the Federal government's narrow focus and limited financial and other support for ocean exploration.

For decades, the ocean science, research, and education communities have called for strengthening Federal ocean exploration programs and priorities in order to fill critical scientific knowledge gaps, develop potential economic resources, and inspire greater ocean literacy among the general public. The U.S. Commission on Ocean Policy's (the Ocean Commission) final report to Congress, released on September 20, 2004, reiterated these needs. Within its report, the Ocean Commission highlighted the need for a strong, comprehensive ocean exploration program, citing the persistent call for a national program from various commissions and expert panels since the 1970s.

For example, the Report of the Ocean Commission notes that in the 1970s, as the result of recommendations in the 1969 Report of the Stratton Commission, the United States led the International Decade of Ocean Exploration. In addition, in the 1980s and 1990s, NOAA and the United States Geological Survey (USGS) conducted a long-term exploration of the United States Exclusive Economic Zone in response to recommendations of the National Advisory Committee on Oceans and Atmosphere. This effort produced basic reconnaissance survey data, although NOAA and the USGS did not conduct more detailed explorations due to divergent agency missions and limited funding.

In June 2000, President Clinton charged the Department of Commerce with recommending a national strategy for launching a new era of ocean exploration. To develop this strategy, NOAA established the President's Panel on Ocean Exploration, which consisted of leading ocean explorers, scientists, and educators. This panel recommended a multidisciplinary, integrated national ocean exploration office with an annual budget of \$75 million (not including the cost of providing a dedicated exploration vessel and undersea vehicle). In response, NOAA established the Office of Ocean Exploration. Funding for this office started at \$4 million in FY 2001, and by FY 2004 it was funded at \$13,100,000. NOAA's ocean exploration program continues to be constrained by a narrow agency focus and limited discretionary funding.

Overall, the Ocean Commission considers the Federal government's past efforts on ocean exploration to be inadequately funded and not comprehensive enough in scope. Under Recommendation 25-4, the Ocean Commission calls for "significant funding" for "an expanded national ocean exploration program" with NOAA and the National Science Foundation serving as the lead agencies and the USGS and the Navy serving supporting roles. It recommends an additional \$30 million in the first year of implementation, rising to \$110 million in annual ongoing costs (including infrastructure costs).

LEGISLATIVE HISTORY

S. 2280 was introduced in the Senate on April 5, 2004, by Senator Stevens and referred to the Senate Committee on Commerce, Science, and Transportation. It is cosponsored by Senators Hollings, Inouye, and Dodd. On July 20, 2004, the bill was considered by the Committee in an open executive session. The Committee, without objection, ordered S. 2280 to be reported without amendment.

ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. CONGRESS, CONGRESSIONAL BUDGET OFFICE, Washington, DC, August 9, 2004.

Hon. JOHN MCCAIN,

Chairman, Committee on Commerce, Science, and Transportation, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 2280, the National Ocean Exploration Program Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Deborah Reis.

Sincerely,

ELIZABETH M. ROBINSON (For Douglas Holtz-Eakin, Director).

Enclosure.

S. 2280-National Oceanic and Atmospheric Administration

Summary: S. 2280 would direct the National Oceanic and Atmospheric Administration (NOAA) to establish and coordinate a national program for ocean exploration. The purposes of the program would be to explore the physical, biological, geological, archaeological, and other characteristics of the world's oceans. In carrying out this program, NOAA would be authorized to coordinate scientific voyages with other federal agencies or institutions and to conduct public education and outreach programs. The bill also would direct NOAA to convene, with other federal agencies such as the National Aeronautics and Space Administration and the Office of Naval Research, a task force to provide the new program with available exploration technology, communications infrastructure, and data management systems. For these activities, the bill would authorize the appropriation of \$45 million annually for fiscal years 2005 through 2010 and of \$55 million annually for fiscal years 2011 through 2016.

Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 2280 would cost about \$15 million in fiscal year 2005 and \$180 million over the 2005–2009 period. We estimate that \$365 million would be spent after 2009, including \$320 million authorized to be appropriated between 2010 and 2016. Enacting S. 2280 would have no impact on revenues or direct spending. S. 2280 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 2280 is shown in the following table. For this estimate, CBO assumes that the entire amounts authorized by the bill will be appropriated for each fiscal year. Outlays have been estimated on the basis of historical patterns for other NOAA programs. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By fiscal year, in millions of dollars-				
	2005	2006	2007	2008	2009
CHANGES IN SPENDING SUBJECT TO APPROPRIATION ¹					
Authorization Level Estimated Outlays	45 15	45 30	45 45	45 45	45 45

¹NOAA's National Oceans Office received appropriations of \$623 million for oceanic research and science activities in 2004, many of which are similar to the program that would be authorized by this bill.

Intergovernmental and private-sector impact: S. 2280 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments. State and local governments, including academic institutions, that participate in research, development, and education activities created by the bill would incur costs voluntarily.

Estimate prepared by: Federal Costs: Deborah Reis; Impact on State, Local, and Tribal Governments: Gregory Waring; Impact on the Private Sector: Amina Masood.

Estimate approved by: Robert A. Sunshine, Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

The reported bill would establish a national ocean exploration program within NOAA and authorize appropriations for the program for fiscal years 2005 through 2016. It does not authorize any new regulations and therefore would not subject any individuals or businesses to new regulations.

ECONOMIC IMPACT

Section 7 would authorize \$45,000,000 for each of fiscal years 2005 through 2010, and \$55,000,000 for each of fiscal years 2011 through 2016 in appropriations to the Secretary of Commerce for this program. These funding levels are not expected to have an inflationary impact on the Nation's economy.

PRIVACY

The reported bill would not have any adverse impact on the personal privacy of individuals.

PAPERWORK

The reported bill would not increase paperwork requirements for the private sector. Those non-governmental partners that are interested in participating on the Exploration Technology and Infrastructure Task Force established in section 5 would likely increase their communications, data management, and technical expertise capacity related to oceans exploration.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

Section 1 cites this Act as the "National Ocean Exploration Program Act."

Section 2. Establishment

Section 2 would establish a coordinated national ocean exploration program within NOAA, which would work in consultation with the National Science Foundation.

Section 3. Purposes

Section 3 states that the main purpose of the program would be to benefit, inform, and inspire the American people about the oceans. The program would improve the Nation's understanding, appreciation, and stewardship of oceans and submerged archaeology. The program's endeavors would be interdisciplinary and designed to facilitate the discovery of new marine natural products that may have social or health benefits.

Section 4. Authorities

Section 4 would authorize NOAA, with interested parties, to conduct interdisciplinary activities to explore and document little known marine resources, with an emphasis on deep ocean regions (e.g., seamounts) and submerged archaeological sites. The program would engage and educate the public by utilizing a transparent review process for proposed activities, promoting improved technology, and establishing a forum for communication to enhance the scientific/technical expertise of the program. It also authorizes the program to accept donations that could be used for exploration.

Section 5. Exploration Technology and Infrastructure Task Force

Section 5 would establish a task force consisting of the National Aeronautics and Space Administration, United States Geological Survey, the Navy, and other interested agencies and partners. The task force would enhance the program's use of new technology and improve its communications, data management, and technical expertise capacity through partnerships between government and other entities.

Section 6. Interagency Financing

Section 6 would authorize the transfer of funds between Federal agencies, provided those funds are specifically appropriated for this program.

Section 7. Authorization of Appropriations

Section 7 would authorize appropriations to NOAA for this program of \$45,000,000 for each of fiscal years 2005 through 2010, and \$55,000,000 for each of fiscal years 2011 through 2016.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.