

Calendar No. 71

109TH CONGRESS }
1st Session

SENATE

{ REPORT
109-57

NATIONAL OCEAN EXPLORATION PROGRAM
ACT

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND
TRANSPORTATION

ON

S. 39



APRIL 13, 2005.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

39-010

WASHINGTON : 2005

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED NINTH CONGRESS

FIRST SESSION

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

R E P O R T

[To accompany S. 39]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 39) to establish a coordinated national ocean exploration program within the National Oceanic and Atmospheric Administration, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

PURPOSE OF THE BILL

The purpose of S. 39, 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 2006 through 2017. The program's main purpose would be to "benefit, inform, and inspire" the American people, while facilitating the discovery of new living and non-living resources, documenting shipwrecks and submerged archeological 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, and advances in deep-sea technologies have made it easier to identify structures at ocean depths, 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 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 narrow focus and limited financial and other support for oceans exploration in the Federal government.

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 in the general public. The final report to Congress by the U.S. Commission on Ocean Policy (the Ocean Commission), released on September 20, 2004, reiterated these needs. The Ocean Commission report highlighted the need for a strong, comprehensive ocean exploration program, citing the persistent call for a national program from various commissions since the 1970s.

For example, the Ocean Commission notes that in the 1980s and 1990s, NOAA and the U.S. Geological Survey (USGS) conducted a long-term exploration of the U.S. 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 Secretary of Commerce with recommending a national strategy for launching a new era of ocean exploration. To develop this strategy, the Secretary, through 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. In response, NOAA established the Office of Ocean Exploration. Funding for this office started at \$4 million in FY2001. In FY2004 it increased to \$12 million, and in FY2005 Congress further increased its funding to \$22 million, based on the Commission's recommendations.

Overall, the Ocean Commission considers the Federal government's past efforts on ocean exploration as 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 U.S. Navy's Office of Naval Research serving supporting roles. The recommendation also states outreach and education should be an integral component of the program. The report recommends an additional \$30 million in the first year of implementation, rising to \$110 million in annual ongoing costs, including infrastructure costs. Chapter 27 of the Commission's report sets forth detailed recommendations for infrastructure needs of the program, including dedicated ocean exploration platforms, including ships and submersibles.

LEGISLATIVE HISTORY

S. 39 was introduced in the Senate on January 25, 2005, by Senator Stevens and referred to the Senate Committee on Commerce, Science, and Transportation. It is cosponsored by Senators Inouye, Snowe, Cantwell, Lautenberg, Kerry, and Dodd. On March 10, 2005, the bill was considered by the Committee in an open Executive Session. The Committee, without objection or amendment, ordered S. 39 be reported.

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:

S. 39—National Oceanic and Atmospheric Administration

Summary: S. 39 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 those activities, the bill would authorize the appropriation of \$45 million annually for fiscal years 2006 through 2011 and \$55 million annually for fiscal years 2012 through 2017.

Assuming appropriation of the authorized amounts, CBO estimates that implementing S. 39 would cost about \$15 million in fiscal year 2006 and \$180 million over the 2006–2010 period. We estimate that \$420 million would be spent after 2010, including \$375 million authorized to be appropriated between 2011 and 2017. Enacting S. 39 would have no impact on revenues or direct spending.

S. 39 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. 39 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—				
	2006	2007	2008	2009	2010
CHANGES IN SPENDING SUBJECT TO APPROPRIATION ¹					
Authorization Level	45	45	45	45	45
Estimated Outlays	15	30	45	45	45

¹ NOAA's National Oceans Office received appropriations of nearly \$830 million for oceanic research and science activities in 2005, including some activities that are similar to the exploration program and ocean research efforts that would be authorized by this bill.

Intergovernmental and private-sector impact: S. 39 contains no intergovernmental or private-sector mandates as defined in UMR A 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: Selena Caldera.

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 2006 through 2017. It does not authorize any new regulations and therefore will not subject any individuals or businesses to new regulations.

ECONOMIC IMPACT

Section 7 would authorize \$45,000,000 for each of fiscal years 2006 through 2011, and \$55,000,000 for each of fiscal years 2012 through 2017 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 will not have any adverse impact on the personal privacy of individuals.

PAPERWORK

The reported bill will 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 and 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, U.S. Geological Survey, U.S. 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 authorizes 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 2006 through 2011, and \$55,000,000 for each of fiscal years 2012 through 2017.

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.

