To develop and maintain an integrated system of coastal and ocean observations for the Nation’s coasts, oceans, and Great Lakes, to improve warnings of tsunami, hurricanes, El Niño events, and other natural hazards, to enhance homeland security, to support maritime operations, to improve management of coastal and marine resources, and for other purposes.

IN THE SENATE OF THE UNITED STATES

March 21, 2007

Ms. Snowe (for herself, Ms. Cantwell, Mr. Inouye, Mr. Stevens, Mrs. Boxer, Mr. Cardin, Mr. Kerry, Mr. Menendez, Ms. Collins, Mr. Lautenberg, Mr. Lott, Mrs. Feinstein, Mr. Nelson of Florida, and Ms. Murkowski) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To develop and maintain an integrated system of coastal and ocean observations for the Nation’s coasts, oceans, and Great Lakes, to improve warnings of tsunami, hurricanes, El Niño events, and other natural hazards, to enhance homeland security, to support maritime operations, to improve management of coastal and marine resources, and for other purposes.

Be it enacted by the Senate and House of Representa-

atives of the United States of America in Congress assembled,
SECTION 1. SHORT TITLE.

This Act may be cited as the “Coastal and Ocean Observation System Act of 2007”.

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress finds the following:

   (1) The United States Commission on Ocean Policy recommends a national commitment to a sustained and integrated coastal and ocean observing system and to coordinated research programs which would provide vital information to assist the Nation and the world in understanding, monitoring, and predicting changes to the ocean and coastal resources and the global climate system, enhancing homeland security, improving weather and climate forecasts, strengthening management and sustainable use of coastal and ocean resources, improving the safety and efficiency of maritime operations, and mitigating the impacts of marine hazards.

   (2) The continuing and potentially devastating threat posed by tsunami, hurricanes, storm surges, and other marine hazards requires immediate implementation of strengthened observation and communications, and data management systems to provide timely detection, assessment, and warnings and to support response strategies for the millions of people
living in coastal regions of the United States and throughout the world.

(3) Safeguarding homeland security, conducting search and rescue operations, responding to natural and manmade coastal hazards (such as oil spills and harmful algal blooms), and managing fisheries and other coastal activities each require improved understanding and monitoring of the Nation’s waters, coastlines, ecosystems, and resources, including the ability to provide rapid response teams with real-time environmental conditions necessary for their work.

(4) The 95,000-mile coastline of the United States, including the Great Lakes, is vital to the Nation’s prosperity, contributing over $117 billion to the national economy in 2000, supporting jobs for more than 200 million Americans, handling $700 billion in waterborne commerce, and supporting commercial and sport fisheries valued at more than $50 billion annually.

(5) Ensuring the effective implementation of National and State programs to protect unique coastal and ocean habitats, such as wetlands and coral reefs, and living marine resources requires a sustained program of research and monitoring to
understand these natural systems and detect changes that could jeopardize their long term viability.

(6) Many elements of a coastal and ocean observing system are in place, but require national investment, consolidation, completion, and integration among international, Federal, regional, State, and local elements.

(7) In 2003, the United States led more than 50 nations in affirming the vital importance of timely, reliable, long-term global observations as a basis for sound decision-making, recognizing the contribution of observation systems to meet national, regional, and global needs, and calling for strengthened cooperation and coordination in establishing a Global Earth Observation System of Systems, of which an integrated coastal and ocean observing system is an essential part.

(8) Protocols and reporting for observations, measurements, and other data collection for a coastal and ocean observing system should be standardized to facilitate data use and dissemination.

(9) Key variables, including temperature, salinity, sea level, surface currents, and ocean color,
should be collected to address a variety of informational needs.

(b) PURPOSES.—The purposes of this Act are to establish an integrated national system of ocean, coastal, and Great Lakes observing systems to address regional and national needs for ocean information and to provide for—

(1) the planning, development, implementation, and maintenance of an integrated coastal and ocean observing system that provides data and information to sustain and restore healthy marine, coastal, and Great Lakes ecosystems and manage the resources they support, aid marine navigation safety and national security, support economic development, enable advances in scientific understanding of the oceans and the Great Lakes, and strengthen science education and communication;

(2) implementation of research, development, education, and outreach programs to improve understanding of the marine environment and achieve the full national benefits of an integrated coastal and ocean observing system;

(3) implementation of a data, information management, and modeling system required by all components of an integrated coastal and ocean observing
system and related research to develop early warning systems to more effectively predict and mitigate im-
pacts of natural hazards, improve weather and cli-
mate forecasts, conserve healthy and restore de-
graded coastal ecosystems, and ensure usefulness of data and information for users; and

(4) establishment of a network of regional asso-
ciations to operate and maintain regional coastal and ocean observing systems to ensure fulfillment of national objectives at regional scales and to address state and local needs for ocean information and data products.

SEC. 3. DEFINITIONS.

In this Act:

(1) ADMINISTRATOR.—The term “Adminis-
trator” means Administrator of the National Oceanic and Atmospheric Administration.

(2) COUNCIL.—The term “Council” means the National Ocean Research Leadership Council estab-
lished by section 7902 of title 10, United States Code.

(3) INTEGRATED OCEAN OBSERVING PROGRAM OFFICE.—The term “Integrated Ocean Observing Program Office” means a program office within the National Oceanic and Atmospheric Administration
to integrate its ocean observing assets and implement the requirements under section 4(d).

(4) **INTERAGENCY PROGRAM OFFICE.**—The term “Interagency Program Office” means the office established under section 4(e).

(5) **NATIONAL OCEANOGRAPHIC PARTNERSHIP PROGRAM.**—The term “National Oceanographic Partnership Program” means the program established under section 7901 of title 10, United States Code.

(6) **OBSERVING SYSTEM.**—The term “observing system” means the integrated coastal, ocean, and Great Lakes observing system to be established by the Council under section 4(a).

(7) **SECRETARY.**—The term “Secretary” means the Secretary of Commerce, acting through the National Oceanic and Atmospheric Administration.

**SEC. 4. INTEGRATED COASTAL AND OCEAN OBSERVING SYSTEM.**

(a) **ESTABLISHMENT.**—The President, acting through the Council, shall establish and maintain an integrated system of coastal and ocean observations, data communication and management, analysis, modeling, research, education, and outreach designed to understand current conditions and provide data and information for
the timely detection and prediction of changes occurring in the ocean, coastal and Great Lakes environment that impact the Nation’s social, economic, and ecological systems. The observing system shall provide for long-term, continuous and quality-controlled observations of the Nation’s coasts, oceans, and Great Lakes in order to—

(1) understand the effects of human activities and natural variability on and improve the health of the Nation’s coasts, oceans, and Great Lakes;

(2) measure, track, explain, and predict climatic and environmental changes and protect human lives and livelihoods from hazards such as tsunami, hurricanes, storm surges, coastal erosion, levy breaches, and fluctuating water levels;

(3) supply critical information to marine-related businesses such as marine transportation, aquaculture, fisheries, and offshore energy production and aid marine navigation and safety;

(4) support national defense and homeland security efforts;

(5) support the sustainable use, conservation, management, and enjoyment of healthy ocean, coastal, and Great Lakes resources, better understand the interactions of ocean processes within the coastal
zone, and support implementation and refinement of ecosystem-based management and restoration;

(6) support the protection of critical coastal habitats, such as coral reefs and wetlands, and unique ecosystems and resources;

(7) educate the public about the role and importance of the oceans, coasts, and Great Lakes in daily life; and

(8) support research and development to ensure improvement to ocean, coastal, and Great Lakes observation measurements and to enhance understanding of the Nation’s ocean, coastal, and Great Lakes resources.

(b) SYSTEM ELEMENTS.—In order to fulfill the purposes of this Act, the observing system shall consist of the following program elements:

(1) A national program to fulfill national and international observation priorities.

(2) A network of regional associations to manage the regional coastal and ocean observing and information programs that collect, measure, and disseminate data and information products.

(3) Data management, communication, and modeling systems for the timely integration and dis-
• 950 IS

• 

• 10

• 11

• 12

• 13

• 14

• 15

• 16

• 17

• 18

• 19

• 20

• 21

• 22

• 23

• 24

• 25

1. dissemination of data and information products from the national and regional systems.

2. A research and development program conducted under the guidance of the Council; including projects under the National Oceanographic Partnership Program, consisting of the following:

3. (A) Basic research to advance knowledge of coastal and ocean systems and ensure improvement of operational products, including related infrastructure, observing technology, and information technology.

4. (B) Focused research and technology development projects to improve understanding of the relationship between the coasts and oceans and human activities.

5. (C) Large scale computing resources and research to advance modeling of coastal and ocean processes.

6. (5) A coordinated outreach, education, and training program that integrates and augments existing programs (such as the National Sea Grant College Program, the Centers for Ocean Sciences Education Excellence program, and the National Estuarine Research Reserve System), to ensure the use of data and information for improving public edu-
cation and awareness of the Nation’s coastal and ocean environment and building the technical expertise required to operate and improve the observing system.

(c) COUNCIL FUNCTIONS.—The Council shall serve as the oversight body for the design and implementation of all aspects of the observing system. In carrying out its responsibilities under this section, the Council shall—

(1) adopt plans, budgets, and standards that are developed and maintained by the Interagency Program Office in consultation with the regional associations;

(2) coordinate the observing system with other earth observing activities including the Global Ocean Observing System and the Global Earth Observing System of Systems;

(3) coordinate and approve programs of intramural and extramural research, technology development, education, and outreach to support improvements to and the operation of an integrated coastal and ocean observing system and to advance the understanding of the oceans;

(4) promote development of technology and methods for improving the observing system;
(5) support the development of institutional mechanisms and financial instruments to further the goals of the program and provide for the capitalization of the required infrastructure;

(6) provide, as appropriate, support for and representation on United States delegations to international meetings on coastal and ocean observing programs, including those under the jurisdiction of the International Joint Commission involving Canadian waters; and

(7) in consultation with the Secretary of State, support coordination of relevant Federal activities with those of other nations.

(d) LEAD FEDERAL AGENCY.—The National Oceanic and Atmospheric Administration shall be the lead Federal agency for implementation and administration of the observing system and to carry out the responsibilities of this Act, in consultation with the Council, the Interagency Program Office, other Federal Agencies that maintain portions of the observing system and the Regional Associations, shall—

(1) establish an Integrated Ocean Observing Program Office;

(2) integrate, improve, and extend existing programs and research projects, and ensure that re-
regional associations are integrated into the operational observation system on a sustained basis;

(3) integrate the appropriate capabilities of the National Oceanic and Atmospheric Administration, and other appropriate centers, into the observing system for the purpose of assimilating, managing, disseminating, and archiving data from regional observation systems and other observation systems;

(4) provide for the migration of scientific and technological advances from research and development to operational deployment;

(5) provide for opportunities to contract with private sector companies in designing, developing, integrating, and deploying ocean observation system elements;

(6) establish efficient and effective administrative procedures for allocation of funds among Federal agencies, contractors, grantees, and regional associations in a timely manner, and contingent on appropriations according to the budget adopted by the Council;

(7) develop and implement a process for the certification and assimilation into the national ocean observations network of the regional associations and their periodic review and recertification and cer-
tify regional associations that meet the requirements of subsection (f); and

(8) develop a data management and communication system, in accordance with the established standards and protocols, by which all data collected by the observing system regarding coastal waters of the United States are integrated and available.

(c) INTERAGENCY PROGRAM OFFICE.—

(1) ESTABLISHMENT.—The Council shall establish an Interagency Program Office housed within the National Oceanic and Atmospheric Administration.

(2) RESPONSIBILITIES.—The Interagency Program Office shall be responsible for program planning and coordination of the implementation of the observing system.

(3) DUTIES.—The Interagency Program Office shall report to the Council via the Secretary and shall—

(A) prepare annual and long-term plans for consideration and approval by the Council for the design and implementation of the observing system that promote collaboration among Federal agencies and regional associations in developing global, national, and re-
regional observing systems, including identification and refinement of a core set of variables to be measured by all systems;

(B) coordinate the development of agency and regional associations priorities and budgets to implement, operate, and maintain the observing systems;

(C) establish and refine standards and protocols for data collection, management and communications, including quality control standards, in consultation with participating Federal agencies and regional associations; and

(D) establish a process for assuring compliance for all participating entities with the standards and protocols for data management and communications, including quality control standards.

(f) **Regional Associations of Coastal and Ocean Observing Systems.**—

(1) The Secretary shall initiate a rulemaking proceeding to establish a process for the certification of regional associations to be responsible for the development and operation of regional coastal and ocean observing systems to meet the information needs of user groups in the region while adhering to
national standards. To be certified a regional association shall meet the certification standards developed by the Interagency Program Office in conjunction with the regional associations and approved by the Council and shall—

(A) demonstrate an organizational structure capable of supporting and integrating all aspects of coastal and ocean observing and information programs within a region and that reflects broad representation from state and local government, commercial interests, and other users and beneficiaries of marine information;

(B) operate under a strategic operations and business plan that details the operation and support of regional coastal and ocean observing systems pursuant to the standards approved by the Council; and

(C) work with governmental entities and programs at all levels to identify and provide information products of the observing system for multiple users in the region to advance outreach and education, to improve coastal and fishery management, safe and efficient marine navigation, weather and climate prediction, to enhance
preparation for hurricanes, tsunami, and other
natural hazards, and other appropriate activi-
ties.

(2) For the purposes of this Act, employees of
Federal agencies may participate in the functions of
the Regional Associations.

(g) CIVIL LIABILITY.—For purposes of section
1346(b)(1) and chapter 171 of title 28, United States
Code, and chapters 309 and 311 of title 46, United States
Code, any regional coastal and ocean observing system
that is a designated part of a regional association certified
under this section shall, with respect to tort liability aris-
ing from the dissemination and use of the data, in car-
ying out the purposes of this Act, be deemed to be part
of the National Oceanic and Atmospheric Administration,
and any employee of such system, while operating within
the scope of his or her employment in carrying out such
purposes, shall be deemed to be an employee of the Gov-
ernment.

SEC. 5. PROCESS FOR TRANSITION FROM RESEARCH TO
OPERATION.

The National Oceanic and Atmospheric Administra-
tion, in consultation with the Council, shall formulate a
process by which—
(1) funding is made available for intramural and extramural research on new technologies for collecting data regarding coastal and ocean waters of the United States;

(2) such technologies are tested including—

(A) accelerated research into biological and chemical sensing techniques and satellite sensors for collecting such data; and

(B) developing technologies to improve all aspects of the observing system, especially the timeliness and accuracy of its predictive models and the usefulness of its information products;

and

(3) funding is made available and a plan is developed and executed to transition technology that has been demonstrated to be useful for the observing system is incorporated into use by the observing system.

SEC. 6. INTERAGENCY FINANCING.

The departments and agencies represented on the Council are authorized to participate in interagency financing and share, transfer, receive, obligate, and expend funds appropriated to any member of the Council for the purposes of carrying out any administrative or programmatic project or activity under this Act or under the
National Oceanographic Partnership Program, including
support for the Interagency Program Office, a common
infrastructure, and system integration for a coastal and
ocean observing system. Funds may be transferred among
such departments and agencies through an appropriate in-
strument that specifies the goods, services, or space being
acquired from another Council member and the costs of
the same.

SEC. 7. APPLICATION WITH OUTER CONTINENTAL SHELF
LANDS ACT.

Nothing in this Act supersedes, or limits the author-
ity of the Secretary of the Interior under, the Outer Conti-
nental Shelf Lands Act (43 U.S.C. 1331 et seq.).

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Na-
tional Oceanic and Atmospheric Administration for the
implementation of this Act, $150,000,000 for each of the
fiscal years 2008 through 2012 and such additional sums
as may be necessary for each of the fiscal years 2008
through 2012. The Administrator shall provide such sums
as are necessary to the regional associations certified
under section 4(f) for implementation of regional coastal
and ocean observing systems. Sums appropriated pursuant
to this section shall remain available until expended.
SEC. 9. IMPLEMENTATION PLAN.

Not later than 12 months after the date of the enactment of this Act, the Secretary shall submit to the Congress and the Council a plan for implementation of this Act, including for—

(1) coordinating activities of the Secretary under this Act with other Federal agencies; and

(2) distributing, to regional associations, funds available to carry out this Act.

SEC. 10. REPORT TO CONGRESS.

(a) REQUIREMENT.—Not later than 2 years after the date of the enactment of this Act and every 2 years thereafter, the Administrator shall prepare and the President acting through the Council shall approve and transmit to the Congress a report on progress made in implementing this Act.

(b) CONTENTS.—The report shall include the following:

(1) A description of activities carried out under the implementation plan and this Act.

(2) An evaluation of the effectiveness of the observing system.

(3) Benefits of the program to users of data products resulting from the observing system (including the general public, industry, scientists, re-
source managers, emergency responders, policy makers, and educators).

(4) Recommendations concerning—

(A) modifications to the observing system;

and

(B) funding levels for the observing system in subsequent fiscal years.

(5) The results of a periodic external independent programmatic audit of the observing system.

○