Subtitle C--Integrated Coastal and Ocean Observation System Act of 2009

SEC. 12301. SHORT TITLE.

This subtitle may be cited as the `Integrated Coastal and Ocean Observation System Act of 2009'.

SEC. 12302. PURPOSES.

The purposes of this subtitle are to--

- (1) establish a national integrated System of ocean, coastal, and Great Lakes observing systems, comprised of Federal and non-Federal components coordinated at the national level by the National Ocean Research Leadership Council and at the regional level by a network of regional information coordination entities, and that includes in situ, remote, and other coastal and ocean observation, technologies, and data management and communication systems, and is designed to address regional and national needs for ocean information, to gather specific data on key coastal, ocean, and Great Lakes variables, and to ensure timely and sustained dissemination and availability of these data to--
 - (A) support national defense, marine commerce, navigation safety, weather, climate, and marine forecasting, energy siting and production, economic development, ecosystembased marine, coastal, and Great Lakes resource management, public safety, and public outreach training and education;
 - (B) promote greater public awareness and stewardship of the Nation's ocean, coastal, and Great Lakes resources and the general public welfare; and
 - (C) enable advances in scientific understanding to support the sustainable use, conservation, management, and understanding of healthy ocean, coastal, and Great Lakes resources;
- (2) improve the Nation's capability to measure, track, explain, and predict events related directly and indirectly to weather and climate change, natural climate variability, and interactions between the oceanic and atmospheric environments, including the Great Lakes; and
- (3) authorize activities to promote basic and applied research to develop, test, and deploy innovations and improvements in coastal and ocean observation technologies, modeling systems, and other scientific and technological capabilities to improve our conceptual understanding of weather and climate, ocean-atmosphere dynamics, global climate change, physical, chemical, and biological dynamics of

the ocean, coastal and Great Lakes environments, and to conserve healthy and restore degraded coastal ecosystems.

SEC. 12303. DEFINITIONS.

In this subtitle:

- (1) ADMINISTRATOR- The term `Administrator' means the Under Secretary of Commerce for Oceans and Atmosphere in the Under Secretary's capacity as Administrator of the National Oceanic and Atmospheric Administration.
- (2) COUNCIL- The term `Council' means the National Ocean Research Leadership Council established by section 7902 of title 10, United States Code.
- (3) FEDERAL ASSETS- The term `Federal assets' means all relevant non-classified civilian coastal and ocean observations, technologies, and related modeling, research, data management, basic and applied technology research and development, and public education and outreach programs, that are managed by member agencies of the Council.
- (4) INTERAGENCY OCEAN OBSERVATION COMMITTEE- The term `Interagency Ocean Observation Committee' means the committee established under section 12304(c)(2).
- (5) NON-FEDERAL ASSETS- The term `non-Federal assets' means all relevant coastal and ocean observation technologies, related basic and applied technology research and development, and public education and outreach programs that are integrated into the System and are managed through States, regional organizations, universities, nongovernmental organizations, or the private sector.
- (6) REGIONAL INFORMATION COORDINATION ENTITIES-
 - (A) IN GENERAL- The term `regional information coordination entity' means an organizational body that is certified or established by contract or memorandum by the lead Federal agency designated in section 12304(c)(3) of this subtitle and coordinates State, Federal, local, and private interests at a regional level with the responsibility of engaging the private and public sectors in designing, operating, and improving regional coastal and ocean observing systems in order to ensure the provision of data and information that meet the needs of user groups from the respective regions.
 - (B) CERTAIN INCLUDED ASSOCIATIONS- The term `regional information coordination entity' includes regional associations described in the System Plan.
- (7) SECRETARY- The term `Secretary' means the Secretary of Commerce, acting through the National Oceanic and Atmospheric Administration.
- (8) SYSTEM- The term `System' means the National Integrated Coastal and Ocean Observation System established under section 12304.

(9) SYSTEM PLAN- The term `System Plan' means the plan contained in the document entitled `Ocean. US Publication No. 9, The First Integrated Ocean Observing System (IOOS) Development Plan', as updated by the Council under this subtitle.

SEC. 12304. INTEGRATED COASTAL AND OCEAN OBSERVING SYSTEM.

- (a) Establishment- The President, acting through the Council, shall establish a National Integrated Coastal and Ocean Observation System to fulfill the purposes set forth in section 12302 of this subtitle and the System Plan and to fulfill the Nation's international obligations to contribute to the Global Earth Observation System of Systems and the Global Ocean Observing System.
- (b) System Elements-
 - (1) IN GENERAL- In order to fulfill the purposes of this subtitle, the System shall be national in scope and consist of--
 - (A) Federal assets to fulfill national and international observation missions and priorities;
 - (B) non-Federal assets, including a network of regional information coordination entities identified under subsection (c)(4), to fulfill regional observation missions and priorities;
 - (C) (4), to fulfill regional observation missions and priorities; (C) data management, communication, and modeling systems
 - (C) data management, communication, and modeling systems for the timely integration and dissemination of data and information products from the System;
 - (D) a research and development program conducted under the guidance of the Council, consisting of--
 - (i) basic and applied research and technology development to improve understanding of coastal and ocean systems and their relationships to human activities and to ensure improvement of operational assets and products, including related infrastructure, observing technologies, and information and data processing and management technologies; and (ii) large scale computing resources and research to
 - (ii) large scale computing resources and research to advance modeling of coastal and ocean processes.
 - (2) ENHANCING ADMINISTRATION AND MANAGEMENT- The head of each Federal agency that has administrative jurisdiction over a Federal asset shall support the purposes of this subtitle and may take appropriate actions to enhance internal agency administration and management to better support, integrate, finance, and utilize observation data, products, and services developed under this section to further its own agency mission and responsibilities.
 - (3) AVAILABILITY OF DATA- The head of each Federal agency that has administrative jurisdiction over a Federal asset shall make available data that are produced by that asset and that are not

- otherwise restricted for integration, management, and dissemination by the System.
- (4) NON-FEDERAL ASSETS- Non-Federal assets shall be coordinated, as appropriate, by the Interagency Ocean Observing Committee or by regional information coordination entities.
- (c) Policy Oversight, Administration, and Regional Coordination-
 - (1) COUNCIL FUNCTIONS- The Council shall serve as the policy and coordination oversight body for all aspects of the System. In carrying out its responsibilities under this subtitle, the Council shall--
 - (A) approve and adopt comprehensive System budgets developed and maintained by the Interagency Ocean Observation Committee to support System operations, including operations of both Federal and non-Federal assets; (B) ensure coordination of the System with other domestic and international earth observing activities including the Global Ocean Observing System and the Global Earth Observing System of Systems, and provide, as appropriate, support for and representation on United States delegations to international meetings on coastal and ocean observing programs; and
 - (C) encourage coordinated intramural and extramural research and technology development, and a process to transition developing technology and methods into operations of the System.
 - (2) INTERAGENCY OCEAN OBSERVATION COMMITTEE- The Council shall establish or designate an Interagency Ocean Observation Committee which shall--
 - (A) prepare annual and long-term plans for consideration and approval by the Council for the integrated design, operation, maintenance, enhancement and expansion of the System to meet the objectives of this subtitle and the System Plan; (B) develop and transmit to Congress at the time of submission of the President's annual budget request an annual coordinated, comprehensive budget to operate all elements of the System identified in subsection (b), and to ensure continuity of data streams from Federal and non-Federal assets;
 - (C) establish required observation data variables to be gathered by both Federal and non-Federal assets and identify, in consultation with regional information coordination entities, priorities for System observations;
 - (D) establish protocols and standards for System data processing, management, and communication;
 - (E) develop contract certification standards and compliance procedures for all non-Federal assets, including regional information coordination entities, to establish eligibility for integration into the System and to ensure compliance with all applicable standards and protocols established by the Council,

and ensure that regional observations are integrated into the System on a sustained basis;

- (F) identify gaps in observation coverage or needs for capital improvements of both Federal assets and non-Federal assets; (G) subject to the availability of appropriations, establish through one or more participating Federal agencies, in consultation with the System advisory committee established under subsection (d), a competitive matching grant or other programs--
 - (i) to promote intramural and extramural research and development of new, innovative, and emerging observation technologies including testing and field trials; and
 - (ii) to facilitate the migration of new, innovative, and emerging scientific and technological advances from research and development to operational deployment;
- (H) periodically review and recommend to the Council, in consultation with the Administrator, revisions to the System Plan;
- (I) ensure collaboration among Federal agencies participating in the activities of the Committee; and
- (J) perform such additional duties as the Council may delegate.
- (3) LEAD FEDERAL AGENCY- The National Oceanic and Atmospheric Administration shall function as the lead Federal agency for the implementation and administration of the System, in consultation with the Council, the Interagency Ocean Observation Committee, other Federal agencies that maintain portions of the System, and the regional information coordination entities, and shall--
 - (A) establish an Integrated Ocean Observing Program Office within the National Oceanic and Atmospheric Administration utilizing to the extent necessary, personnel from member agencies participating on the Interagency Ocean Observation Committee, to oversee daily operations and coordination of the System;
 - (B) implement policies, protocols, and standards approved by the Council and delegated by the Interagency Ocean Observing Committee;
 - (C) promulgate program guidelines to certify and integrate non-Federal assets, including regional information coordination entities, into the System to provide regional coastal and ocean observation data that meet the needs of user groups from the respective regions;
 - (D) have the authority to enter into and oversee contracts, leases, grants or cooperative agreements with non-Federal assets, including regional information coordination entities, to support the purposes of this subtitle on such terms as the Administrator deems appropriate;

- (E) implement a merit-based, competitive funding process to support non-Federal assets, including the development and maintenance of a network of regional information coordination entities, and develop and implement a process for the periodic review and evaluation of all non-Federal assets, including regional information coordination entities;
- (F) provide opportunities for competitive contracts and grants for demonstration projects to design, develop, integrate, deploy, and support components of the System;
- (G) establish efficient and effective administrative procedures for allocation of funds among contractors, grantees, and non-Federal assets, including regional information coordination entities in a timely manner, and contingent on appropriations according to the budget adopted by the Council;
- (H) develop and implement a process for the periodic review and evaluation of regional information coordination entities;
- (I) formulate an annual process by which gaps in observation coverage or needs for capital improvements of Federal assets and non-Federal assets of the System are identified by the regional information coordination entities, the Administrator, or other members of the System and transmitted to the Interagency Ocean Observing Committee;
- (J) develop and be responsible for a data management and communication system, in accordance with standards and protocols established by the Council, by which all data collected by the System regarding ocean and coastal waters of the United States including the Great Lakes, are processed, stored, integrated, and made available to all end-user communities;
- (K) implement a program of public education and outreach to improve public awareness of global climate change and effects on the ocean, coastal, and Great Lakes environment;
- (L) report annually to the Interagency Ocean Observing Committee on the accomplishments, operational needs, and performance of the System to contribute to the annual and long-term plans developed pursuant to subsection (c)(2)(A)(i); and
- (M) develop a plan to efficiently integrate into the System new, innovative, or emerging technologies that have been demonstrated to be useful to the System and which will fulfill the purposes of this subtitle and the System Plan.
- (4) REGIONAL INFORMATION COORDINATION ENTITIES-
 - (A) IN GENERAL- To be certified or established under this subtitle, a regional information coordination entity shall be certified or established by contract or agreement by the Administrator, and shall agree to meet the certification standards and compliance procedure guidelines issued by the

Administrator and information needs of user groups in the region while adhering to national standards and shall--

- (i) demonstrate an organizational structure capable of gathering required System observation data, supporting and integrating all aspects of coastal and ocean observing and information programs within a region and that reflects the needs of State and local governments, commercial interests, and other users and beneficiaries of the System and other requirements specified under this subtitle and the System Plan; (ii) identify gaps in observation coverage needs for capital improvements of Federal assets and non-Federal assets of the System, or other recommendations to assist in the development of the annual and long-term plans created pursuant to subsection (c)(2)(A)(i) and transmit such information to the Interagency Ocean Observing Committee via the Program Office; (iii) develop and operate under a strategic operational plan that will ensure the efficient and effective administration of programs and assets to support daily data observations for integration into the System, pursuant to the standards approved by the Council; (iv) work cooperatively with governmental and nongovernmental entities at all levels to identify and provide information products of the System for multiple users within the service area of the regional information coordination entities; and (v) comply with all financial oversight requirements
- (v) comply with all financial oversight requirements established by the Administrator, including requirements relating to audits.
- (B) PARTICIPATION- For the purposes of this subtitle, employees of Federal agencies may participate in the functions of the regional information coordination entities.
- (d) System Advisory Committee-
 - (1) IN GENERAL- The Administrator shall establish or designate a System advisory committee, which shall provide advice as may be requested by the Administrator or the Interagency Ocean Observing Committee.
 - (2) PURPOSE- The purpose of the System advisory committee is to advise the Administrator and the Interagency Ocean Observing Committee on--
 - (A) administration, operation, management, and maintenance of the System, including integration of Federal and non-Federal assets and data management and communication aspects of the System, and fulfillment of the purposes set forth in section 12302;
 - (B) expansion and periodic modernization and upgrade of technology components of the System;

- (C) identification of end-user communities, their needs for information provided by the System, and the System's effectiveness in disseminating information to end-user communities and the general public; and
- (D) any other purpose identified by the Administrator or the Interagency Ocean Observing Committee.

(3) MEMBERS-

- (A) IN GENERAL- The System advisory committee shall be composed of members appointed by the Administrator. Members shall be qualified by education, training, and experience to evaluate scientific and technical information related to the design, operation, maintenance, or use of the System, or use of data products provided through the System.
- (B) TERMS OF SERVICE- Members shall be appointed for 3-year terms, renewable once. A vacancy appointment shall be for the remainder of the unexpired term of the vacancy, and an individual so appointed may subsequently be appointed for 2 full 3-year terms if the remainder of the unexpired term is less than 1 year.
- (C) CHAIRPERSON- The Administrator shall designate a chairperson from among the members of the System advisory committee.
- (D) APPOINTMENT- Members of the System advisory committee shall be appointed as special Government employees for purposes of section 202(a) of title 18, United States Code.

(4) ADMINISTRATIVE PROVISIONS-

- (A) REPORTING- The System advisory committee shall report to the Administrator and the Interagency Ocean Observing Committee, as appropriate.
- (B) ADMINISTRATIVE SUPPORT- The Administrator shall provide administrative support to the System advisory committee.
- (C) MEETINGS- The System advisory committee shall meet at least once each year, and at other times at the call of the Administrator, the Interagency Ocean Observing Committee, or the chairperson.
- (D) COMPENSATION AND EXPENSES- Members of the System advisory committee shall not be compensated for service on that Committee, but may be allowed travel expenses, including per diem in lieu of subsistence, in accordance with subchapter I of chapter 57 of title 5, United States Code.
- (E) EXPIRATION- Section 14 of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the System advisory committee.
- (e) Civil Liability- For purposes of determining liability arising from the dissemination and use of observation data gathered pursuant to this

section, any non-Federal asset or regional information coordination entity incorporated into the System by contract, lease, grant, or cooperative agreement under subsection (c)(3)(D) that is participating in the System shall be considered to be part of the National Oceanic and Atmospheric Administration. Any employee of such a non-Federal asset or regional information coordination entity, while operating within the scope of his or her employment in carrying out the purposes of this subtitle, with respect to tort liability, is deemed to be an employee of the Federal Government. (f) Limitation- Nothing in this subtitle shall be construed to invalidate existing certifications, contracts, or agreements between regional information coordination entities and other elements of the System.

SEC. 12305. INTERAGENCY FINANCING AND AGREEMENTS.

- (a) In General- To carry out interagency activities under this subtitle, the Secretary of Commerce may execute cooperative agreements, or any other agreements, with, and receive and expend funds made available by, any State or subdivision thereof, any Federal agency, or any public or private organization, or individual.
- (b) Reciprocity- Member Departments and agencies of the Council shall have the authority to create, support, and maintain joint centers, and to enter into and perform such contracts, leases, grants, and cooperative agreements as may be necessary to carry out the purposes of this subtitle and fulfillment of the System Plan.

SEC. 12306. APPLICATION WITH OTHER LAWS.

Nothing in this subtitle supersedes or limits the authority of any agency to carry out its responsibilities and missions under other laws.

SEC. 12307. 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 subtitle.
- (b) Contents- The report shall include--
 - (1) a description of activities carried out under this subtitle and the System Plan;
 - (2) an evaluation of the effectiveness of the System, including an evaluation of progress made by the Council to achieve the goals identified under the System Plan;
 - (3) identification of Federal and non-Federal assets as determined by the Council that have been integrated into the System, including assets essential to the gathering of required observation data variables necessary to meet the respective missions of Council agencies;

- (4) a review of procurements, planned or initiated, by each Council agency to enhance, expand, or modernize the observation capabilities and data products provided by the System, including data management and communication subsystems;
- (5) an assessment regarding activities to integrate Federal and non-Federal assets, nationally and on the regional level, and discussion of the performance and effectiveness of regional information coordination entities to coordinate regional observation operations;
- (6) a description of benefits of the program to users of data products resulting from the System (including the general public, industries, scientists, resource managers, emergency responders, policy makers, and educators);
- (7) recommendations concerning--
 - (A) modifications to the System; and
 - (B) funding levels for the System in subsequent fiscal years; and
- (8) the results of a periodic external independent programmatic audit of the System.

SEC. 12308. PUBLIC-PRIVATE USE POLICY.

The Council shall develop a policy within 6 months after the date of the enactment of this Act that defines processes for making decisions about the roles of the Federal Government, the States, regional information coordination entities, the academic community, and the private sector in providing to end-user communities environmental information, products, technologies, and services related to the System. The Council shall publish the policy in the Federal Register for public comment for a period not less than 60 days. Nothing in this section shall be construed to require changes in policy in effect on the date of enactment of this Act.

SEC. 12309. INDEPENDENT COST ESTIMATE.

Within 1 year after the date of enactment of this Act, the Interagency Ocean Observation Committee, through the Administrator and the Director of the National Science Foundation, shall obtain an independent cost estimate for operations and maintenance of existing Federal assets of the System, and planned or anticipated acquisition, operation, and maintenance of new Federal assets for the System, including operation facilities, observation equipment, modeling and software, data management and communication, and other essential components. The independent cost estimate shall be transmitted unabridged and without revision by the Administrator to Congress.

SEC. 12310. INTENT OF CONGRESS.

It is the intent of Congress that funding provided to agencies of the Council to implement this subtitle shall supplement, and not replace, existing sources of funding for other programs. It is the further intent of Congress that agencies of the Council shall not enter into contracts or agreements for the development or procurement of new Federal assets for the System that are estimated to be in excess of \$250,000,000 in life-cycle costs without first providing adequate notice to Congress and opportunity for review and comment.

SEC. 12311. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary of Commerce for fiscal years 2009 through 2013 such sums as are necessary to fulfill the purposes of this subtitle and support activities identified in the annual coordinated System budget developed by the Interagency Ocean Observation Committee and submitted to the Congress.