## 108TH CONGRESS 2D SESSION

# S. 2489

To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.

# IN THE SENATE OF THE UNITED STATES

June 2, 2004

Mr. Inouye (for himself, Mr. Stevens, Mr. Hollings, Mr. Gregg, Ms. Snowe, and Mr. Lott) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

# A BILL

- To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,
  - 3 SECTION 1. SHORT TITLE.
  - 4 This Act may be cited as the "Coastal and Ocean
  - 5 Mapping Integration Act".
  - 6 SEC. 2. INTEGRATED COASTAL AND OCEAN MAPPING PRO-
  - 7 GRAM.
  - 8 (a) In General.—The Administrator of the Na-
  - 9 tional Oceanic and Atmospheric Administration shall es-

- 1 tablish a program to develop, in coordination with the
- 2 Interagency Committee on Coastal and Ocean Mapping,
- 3 a coordinated and comprehensive Federal ocean and coast-
- 4 al mapping program for the Great Lakes and Coastal
- 5 State waters, the territorial sea, the exclusive economic
- 6 zone, and the continental shelf of the United States that
- 7 enhances conservation and management of marine re-
- 8 sources, improves decision-making regarding research pri-
- 9 orities and the siting of research and other platforms, and
- 10 advances coastal and ocean science.
- 11 (b) Program Parameters.—In developing such a
- 12 program, the Administrator shall work with the Com-
- 13 mittee to—
- 14 (1) identify all Federal programs conducting
- shoreline delineation and coastal or ocean mapping,
- noting geographic coverage, frequency, spatial cov-
- erage, resolution, and subject matter focus of the
- data and location of data archives;
- 19 (2) promote cost-effective, cooperative mapping
- 20 efforts among all Federal coastal and ocean mapping
- agencies by increasing data sharing, developing data
- acquisition and metadata standards, and facilitating
- 23 the interoperability of in situ data collection systems,
- data processing, archiving, and distribution of data
- 25 products;

- 1 (3) facilitate the adaptation of existing tech2 nologies as well as foster expertise in new coastal
  3 and ocean mapping technologies by engaging in co4 operative training programs and leveraging agency
  5 expertise, non-governmental organizations, and pri6 vate sector resources to efficiently meet Federal
  7 mapping mandates;
  - (4) develop standards and protocols for testing innovative experimental mapping technologies and transferring new technologies to the private sector;
  - (5) centrally archive, manage, and distribute data sets as well as provide mapping products and services to the general public in service of statutory requirements; and
  - (6) develop specific data presentation methods for use by Federal, State, and other entities that document locations of federally permitted activities, submerged cultural resources, undersea cables, off-shore aquaculture projects, and any areas designated for the purposes of environmental protection or conservation and management of living marine resources.

# 1 SEC. 3. INTERAGENCY COMMITTEE ON COASTAL AND

- 2 OCEAN MAPPING.
- 3 (a) Establishment.—There is hereby established
- 4 an Interagency Committee on Coastal and Ocean Map-
- 5 ping.
- 6 (b) Membership.—The Committee shall be com-
- 7 prised of senior representatives from Federal agencies
- 8 with ocean and coastal mapping and surveying responsibil-
- 9 ities. The representatives shall be high-ranking officials of
- 10 their respective agencies or departments and, whenever
- 11 possible, the head of the portion of the agency or depart-
- 12 ment that is most relevant to the purposes of this Act.
- 13 Membership shall include senior representatives from the
- 14 National Oceanic and Atmospheric Administration, the
- 15 Chief of Naval Operations, the United States Geological
- 16 Survey, Minerals Management Service, National Science
- 17 Foundation, National Geospatial-Intelligence Agency,
- 18 United States Army Corps of Engineers, United States
- 19 Coast Guard, Environmental Protection Agency, Federal
- 20 Emergency Management Agency and National Aero-
- 21 nautics and Space Administration, and other appropriate
- 22 Federal agencies involved in ocean and coastal mapping.
- (c) Chairman.—The Committee shall be chaired by
- 24 the representative from the National Oceanic and Atmos-
- 25 pheric Administration. The chairman may create sub-
- 26 committees chaired by any member agency of the com-

- 1 mittee. Working groups may be formed by the full Com-
- 2 mittee to address issues of short duration.
- 3 (d) Meetings.—The Committee shall meet on a
- 4 quarterly basis, but subcommittee or working group meet-
- 5 ings shall meet on an as-needed basis.
- 6 (e) Coordination.—The committee should coordi-
- 7 nate activities, when appropriate, with other Federal ef-
- 8 forts, including the Digital Coast, Geospatial One-Stop,
- 9 and the Federal Geographic Data Committee.

#### 10 SEC. 4. NOAA INTEGRATED MAPPING INITIATIVE.

- 11 (a) IN GENERAL.—Not later than 6 months after the
- 12 date of enactment of this Act, the Administrator, in con-
- 13 sultation with the Committee, shall develop and submit to
- 14 the Congress a plan for an integrated coastal and ocean
- 15 mapping initiative within the National Oceanic and At-
- 16 mospheric Administration.
- 17 (b) Plan Requirements.—The plan shall—
- 18 (1) identify and describe all coastal and ocean
- mapping programs within the agency, including
- those that conduct mapping or related activities in
- 21 the course of existing missions, such as hydrographic
- surveys, ocean exploration projects, living marine re-
- source conservation and management programs,
- coastal zone management projects, and coastal and
- ocean science projects;

- 1 (2) establish geographic priorities and minimum 2 data acquisition and metadata standards for those 3 programs;
  - (3) encourage the development of innovative coastal and ocean mapping technologies and applications through research and development cooperative agreements at joint institutes;
  - (4) document available and developing technologies, best practices in data processing and distribution, and leveraging opportunities with other Federal agencies, non-governmental organizations, and the private sector;
  - (5) identify training, technology, and other resource requirements for enabling the National Oceanic and Atmospheric Administration's programs, ships, and aircraft to support a coordinated coastal and ocean mapping program;
  - (6) identify a centralized mechanism for coordinating data collection, processing, archiving, and dissemination activities of all such mapping programs within the National Oceanic and Atmospheric Administration, including—
    - (A) designating primary data processing centers to maximize efficiency in information technology investment, develop consistency in

1	data processing, and meet Federal mandates
2	for data accessibility; and
3	(B) designating a repository that is re-
4	sponsible for archiving and managing the dis-
5	tribution of all coastal and ocean mapping data
6	to simplify the provision of services to benefit
7	Federal and State programs; and
8	(7) set forth a timetable for implementation
9	and completion of the plan, including a schedule for
10	periodic Congressional progress reports, and rec-
11	ommendations for integrating approaches developed
12	under the initiative into the interagency program.
13	(c) NOAA JOINT HYDROGRAPHIC CENTERS.—The
14	Secretary is authorized to maintain and operate up to 3
15	joint hydrographic centers, which shall be co-located with
16	an institution of higher education. The centers shall serve
17	as hydrographic centers of excellence and are authorized
18	to conduct activities necessary to carry out the purposes
19	of this Act, including—
20	(1) research and development of innovative
21	coastal and ocean mapping technologies, equipment
22	and data products;
23	(2) mapping of the United States outer conti-
24	nental shelf;

- 1 (3) data processing for non-traditional data and 2 uses;
- 3 (4) advancing the use of remote sensing tech-4 nologies, for related issues, including mapping and 5 assessment of essential fish habitat and of coral re-6 sources, ocean observations and ocean exploration; 7 and
- 8 (5) providing graduate education in hydro-9 graphic sciences for National Oceanic and Atmos-10 pheric Administration Commissioned Officer Corps 11 and civilian personnel.

## 12 SEC. 5. INTERAGENCY PROGRAM REPORTING.

- No later than 18 months after the date of enactment
- 14 of this Act, and bi-annually thereafter, the Chairman of
- 15 the Committee shall transmit to the Senate Committee on
- 16 Commerce, Science, and Transportation and the House of
- 17 Representatives Committee on Resources a report detail-
- 18 ing progress made in implementing the provisions of this
- 19 Act, including—
- 20 (1) an inventory of data within the territorial
- seas and the exclusive economic zone and throughout
- the continental shelf of the United States, noting the
- age and source of the survey and the spatial resolu-
- 24 tion (metadata) of the data;

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1	(2) identification of priority areas in need of
2	survey coverage using present technologies;
3	(3) a resource plan that identifies when priority
4	areas in need of modern coastal and ocean mapping
5	surveys can be accomplished;
6	(4) the status of efforts to produce integrated
7	digital maps of coastal and ocean areas;
8	(5) a description of any products resulting from
9	coordinated mapping efforts under this Act that im-
10	prove public understanding of the coasts, oceans, or
11	regulatory decision-making;
12	(6) documentation of minimum and desired
13	standards for data acquisition and integrated
14	metadata;
15	(7) a statement of the status of Federal efforts
16	to leverage mapping technologies, coordinate map-
17	ping activities, share expertise, and exchange data;
18	(8) a statement of resource requirements for or-
19	ganizations to meet the goals of the program, includ-
20	ing technology needs for data acquisition, processing
21	and distribution systems;
22	(9) a statement of the status of efforts to de-
23	classify data gathered by the Navy, the National
24	Geospatial-Intelligence Agency and other agencies to

the extent possible without jeopardizing national se-

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1	curity, and make it available to partner agencies and
2	the public; and
3	(10) a resource plan for a digital coast inte-
4	grated mapping pilot project for the northern Gulf
5	of Mexico that will—
6	(A) cover the area from the authorized
7	coastal counties through the territorial sea; and
8	(B) identify how such a pilot project will
9	leverage public and private mapping data and
10	resources, such as the United States Geological
11	Survey National Map, to result in an oper-
12	ational coastal change assessment program for
13	the subregion.
14	SEC. 6. AUTHORIZATION OF APPROPRIATIONS.
15	(a) In General.—In addition to the amounts au-
16	thorized by section 306 of the Hydrographic Services Im-
17	provement Act of 1998 (33 U.S.C. 892d), there are au-
18	thorized to be appropriated to the Administrator to carry
19	out this Act—
20	(1) \$20,000,000 for fiscal year 2005;
21	(2) \$26,000,000 for fiscal year 2006;
22	(3) \$32,000,000 for fiscal year 2007;
23	(4) \$38,000,000 for fiscal year 2008; and
24	(5) \$45,000,000 for each of fiscal years 2009
25	through 2012

1	(b) Joint Hydrographic Centers.—Of the
2	amounts appropriated pursuant to subsection (a), the fol-
3	lowing amounts shall be used to carry out section 4(c) of
4	this Act:
5	(1) \$10,000,000 for fiscal year 2005.
6	(2) \$11,000,000 for fiscal year 2006.
7	(3) \$12,000,000 for fiscal year 2006.
8	(4) \$13,000,000 for fiscal year 2006.
9	(5) \$15,000,000 for each of fiscal years 2009
10	through 2012.
11	SEC. 7. DEFINITIONS.
12	In this Act:
13	(1) Administrator.—The term "Adminis-
14	trator" means the Administrator of the National
15	Oceanic and Atmospheric Administration.
16	(2) COMMITTEE.—The term "Committee"
17	means the Interagency Ocean Mapping Committee
18	established by section 3.
19	(3) Exclusive economic zone.—The term
20	"exclusive economic zone" means the exclusive eco-
21	nomic zone of the United States established by Pres-
22	idential Proclamation No. 5030, of March 10, 1983.
23	(4) OCEAN AND COASTAL MAPPING.—The term
24	"ocean and coastal mapping" means the collection of
25	physical, biological, geological, chemical, and archae-

ological characteristics of ocean and coastal sea beds through the use of acoustics, satellites, aerial photogrammetry, light and imaging, and direct sampling.

(5) TERRITORIAL SEA.—The term "territorial sea" means the belt of sea measured from the baseline of the United States determined in accordance with international law, as set forth in Presidential Proclamation Number 5928, dated December 27, 1988.

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