#### 111TH CONGRESS 1ST SESSION

# S. 172

To establish a coordinated national ocean exploration program within the National Oceanic and Atmospheric Administration, and for other purposes.

#### IN THE SENATE OF THE UNITED STATES

January 8, 2009

Ms. Snowe (for herself, Mr. Inouye, and Mr. Rockefeller) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

## A BILL

To establish a coordinated national ocean exploration program within the National Oceanic and Atmospheric Administration, and for other purposes.

- 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 "NOAA Ocean Explo-
- 5 ration and Undersea Research Program Act of 2009".

## 6 TITLE I—OCEAN EXPLORATION

- 7 **SEC. 101. PURPOSE.**
- 8 The purpose of this title is to establish the national
- 9 ocean exploration program and the national undersea re-

- 1 search program within the National Oceanic and Atmos-
- 2 pheric Administration.

#### 3 SEC. 102. PROGRAM ESTABLISHED.

- 4 The Administrator of the National Oceanic and At-
- 5 mospheric Administration shall, in consultation with the
- 6 National Science Foundation and other appropriate Fed-
- 7 eral agencies, establish a coordinated national ocean explo-
- 8 ration program within the National Oceanic and Atmos-
- 9 pheric Administration that promotes collaboration with
- 10 other Federal ocean and undersea research and explo-
- 11 ration programs. To the extent appropriate, the Adminis-
- 12 trator shall seek to facilitate coordination of data and in-
- 13 formation management systems, outreach and education
- 14 programs to improve public understanding of ocean and
- 15 coastal resources, and development and transfer of tech-
- 16 nologies to facilitate ocean and undersea research and ex-
- 17 ploration.

#### 18 SEC. 103. POWERS AND DUTIES OF THE ADMINISTRATOR.

- 19 (a) IN GENERAL.—In carrying out the program au-
- 20 thorized by section 102, the Administrator of the National
- 21 Oceanic and Atmospheric Administration shall—
- 22 (1) conduct interdisciplinary voyages or other
- 23 scientific activities in conjunction with other Federal
- agencies or academic or educational institutions, to
- 25 explore and survey little known areas of the marine

- environment, inventory, observe, and assess living and nonliving marine resources, and report such findings;
  - (2) give priority attention to deep ocean regions, with a focus on deep water marine systems that hold potential for important scientific discoveries, such as hydrothermal vent communities and seamounts;
    - (3) conduct scientific voyages to locate, define, and document historic shipwrecks, submerged sites, and other ocean exploration activities that combine archaeology and oceanographic sciences;
    - (4) develop and implement, in consultation with the National Science Foundation, a transparent, competitive process for merit-based peer-review and approval of proposals for activities to be conducted under this program, taking into consideration advice of the Board established under section 105;
    - (5) enhance the technical capability of the United States marine science community by promoting the development of improved oceanographic research, communication, navigation, and data collection systems, as well as underwater platforms and sensor and autonomous vehicles; and

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

| 1                                | (6) establish an ocean exploration forum to en-   |
|----------------------------------|---|
| 2                                | courage partnerships and promote communication  |
| 3                                | among experts and other stakeholders in order to  |
| 4                                | enhance the scientific and technical expertise and  |
| 5                                | relevance of the national program.  |
| 6                                | (b) Donations.—The Administrator may accept do-   |
| 7                                | nations of property, data, and equipment to be applied for  |
| 8                                | the purpose of exploring the oceans or increasing knowl-  |
| 9                                | edge of the oceans.   |
| 10                               | SEC. 104. OCEAN EXPLORATION AND UNDERSEA RESEARCH   |
| 11                               | TECHNOLOGY AND INFRASTRUCTURE TASK  |
| 12                               | FORCE.  |
| 13                               | (a) In General.— The Administrator of the Na-   |
| 14                               | tional Oceanic and Atmospheric Administration, in coordi-   |
|                                  |   |
| 15                               | nation with the National Science Foundation, the National   |
| 15<br>16                         | nation with the National Science Foundation, the National Aeronautics and Space Administration, the United States   |
|                                  | Aeronautics and Space Administration, the United States   |
| 16<br>17                         | Aeronautics and Space Administration, the United States   |
| 16<br>17                         | Aeronautics and Space Administration, the United States<br>Geological Survey, the Department of the Navy, the Min-  |
| 16<br>17<br>18                   | Aeronautics and Space Administration, the United States<br>Geological Survey, the Department of the Navy, the Min-<br>eral Management Service, and relevant governmental,   |
| 16<br>17<br>18                   | Aeronautics and Space Administration, the United States<br>Geological Survey, the Department of the Navy, the Min-<br>eral Management Service, and relevant governmental,<br>non-governmental, academic, industry, and other experts,   |
| 16<br>17<br>18<br>19<br>20       | Aeronautics and Space Administration, the United States<br>Geological Survey, the Department of the Navy, the Min-<br>eral Management Service, and relevant governmental,<br>non-governmental, academic, industry, and other experts,<br>shall convene an ocean exploration and undersea research   |
| 16<br>17<br>18<br>19<br>20<br>21 | Aeronautics and Space Administration, the United States<br>Geological Survey, the Department of the Navy, the Min-<br>eral Management Service, and relevant governmental,<br>non-governmental, academic, industry, and other experts,<br>shall convene an ocean exploration and undersea research<br>technology and infrastructure task force to develop and      |
| 16<br>17<br>18<br>19<br>20<br>21 | Aeronautics and Space Administration, the United States Geological Survey, the Department of the Navy, the Mineral Management Service, and relevant governmental, non-governmental, academic, industry, and other experts, shall convene an ocean exploration and undersea research technology and infrastructure task force to develop and implement a strategy— |

- 1 (2) to improve availability of communications 2 infrastructure, including satellite capabilities, to 3 such programs;
  - (3) to develop an integrated, workable, and comprehensive data management information processing system that will make information on unique and significant features obtained by such programs available for research and management purposes;
  - (4) to conduct public outreach activities that improve the public understanding of ocean science, resources, and processes, in conjunction with relevant programs of the National Oceanic and Atmospheric Administration, the National Science Foundation, and other agencies; and
  - (5) to encourage cost-sharing partnerships with governmental and nongovernmental entities that will assist in transferring exploration and undersea research technology and technical expertise to the programs.
- 20 (b) BUDGET COORDINATION.—The task force shall 21 coordinate the development of agency budgets and identify 22 the items in their annual budget that support the activities 23 identified in the strategy developed under subsection (a).

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

#### SEC. 105. OCEAN EXPLORATION ADVISORY BOARD.

- 2 (a) Establishment.—The Administrator of the Na-
- 3 tional Oceanic and Atmospheric Administration shall ap-
- 4 point an Ocean Exploration Advisory Board composed of
- 5 experts in relevant fields—
- 6 (1) to advise the Administrator on priority
- 7 areas for survey and discovery;
- 8 (2) to assist the program in the development of
- 9 a 5-year strategic plan for the fields of ocean, ma-
- rine, and Great Lakes science, exploration, and dis-
- 11 covery;
- 12 (3) to annually review the quality and effective-
- 13 ness of the proposal review process established under
- 14 section 103(a)(4); and
- 15 (4) to provide other assistance and advice as re-
- 16 quested by the Administrator.
- 17 (b) Federal Advisory Committee Act.—Section
- 18 14 of the Federal Advisory Committee Act (5 U.S.C.
- 19 App.) shall not apply to the Board appointed under sub-
- 20 section (a).
- 21 (c) Application With Outer Continental
- 22 Shelf Lands Act.—Nothing in this title supersedes, or
- 23 limits the authority of the Secretary of the Interior under
- 24 the Outer Continental Shelf Lands Act (43 U.S.C. 1331
- 25 et seq.).

#### SEC. 106. AUTHORIZATION OF APPROPRIATIONS.

- 2 There are authorized to be appropriated to the Na-
- 3 tional Oceanic and Atmospheric Administration to carry
- 4 out this title—
- 5 (1) \$33,550,000 for fiscal year 2009;
- 6 (2) \$36,905,000 for fiscal year 2010;
- 7 (3) \$40,596,000 for fiscal year 2011;
- 8 (4) \$44,655,000 for fiscal year 2012;
- 9 (5) \$49,121,000 for fiscal year 2013;
- 10 (6) \$54,033,000 for fiscal year 2014; and
- 11 (7) \$59,436,000 for fiscal year 2015.

### 12 TITLE II—UNDERSEA RESEARCH

## 13 **PROGRAM**

- 14 SEC. 201. PROGRAM ESTABLISHED.
- 15 (a) In General.—The Administrator of the Na-
- 16 tional Oceanic and Atmospheric Administration shall es-
- 17 tablish and maintain an undersea research program and
- 18 shall designate a Director of that program.
- 19 (b) Purpose.—The purpose of the program is to in-
- 20 crease scientific knowledge essential for the informed man-
- 21 agement, use, and preservation of oceanic, marine, and
- 22 coastal areas and the Great Lakes.
- 23 SEC. 202. POWERS OF PROGRAM DIRECTOR.
- The Director of the program, in carrying out the pro-
- 25 gram, shall—

- 1 (1) cooperate with institutions of higher edu2 cation and other educational marine and ocean
  3 science organizations, and shall make available un4 dersea research facilities, equipment, technologies,
  5 information, and expertise to support undersea re6 search efforts by these organizations;
  - (2) enter into partnerships, as appropriate and using existing authorities, with the private sector to achieve the goals of the program and to promote technological advancement of the marine industry; and
- 12 (3) coordinate the development of agency budg-13 ets and identify the items in their annual budget 14 that support the activities described in paragraphs 15 (1) and (2).

#### 16 SEC. 203. ADMINISTRATIVE STRUCTURE.

- 17 (a) In General.—The program shall be conducted
- 18 through a national headquarters, a network of extramural
- 19 regional undersea research centers that represent all rel-
- 20 evant National Oceanic and Atmospheric Administration
- 21 regions, and the National Institute for Undersea Science
- 22 and Technology.

7

8

9

10

- (b) Direction.—The Director shall develop the over-
- 24 all direction of the program in coordination with a Council
- 25 of Center Directors comprised of the directors of the ex-

| 1  | tramural regional centers and the National Institute for   |
|--|--|
| 2  | Undersea Science and Technology. The Director shall pub-   |
| 3  | lish a draft program direction document not later than   |
| 4  | 1 year after the date of enactment of this Act in the Fed-   |
| 5  | eral Register for a public comment period of not less than   |
| 6  | 120 days. The Director shall publish a final program di-   |
| 7  | rection, including responses to the comments received dur-   |
| 8  | ing the public comment period, in the Federal Register   |
| 9  | within 90 days after the close of the comment period. The  |
| 10   | program director shall update the program direction, with  |
| 11   | opportunity for public comment, at least every 5 years.  |
|  |  |
| 12   | SEC. 204. RESEARCH, EXPLORATION, EDUCATION AND   |
| <ul><li>12</li><li>13</li></ul>              | SEC. 204. RESEARCH, EXPLORATION, EDUCATION AND TECHNOLOGY PROGRAMS.  |
|  |  |
| 13   | TECHNOLOGY PROGRAMS.   |
| 13<br>14                                     | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, explo-   |
| <ul><li>13</li><li>14</li><li>15</li></ul>   | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be con-  |
| 13<br>14<br>15<br>16                         | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be conducted through the network of regional centers and the   |
| 13<br>14<br>15<br>16<br>17                   | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be conducted through the network of regional centers and the National Institute for Undersea Science and Technology:   |
| 13<br>14<br>15<br>16<br>17<br>18             | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be conducted through the network of regional centers and the National Institute for Undersea Science and Technology:  (1) Core research and exploration based on na-   |
| 13<br>14<br>15<br>16<br>17<br>18             | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be conducted through the network of regional centers and the National Institute for Undersea Science and Technology:  (1) Core research and exploration based on national and regional undersea research priorities.   |
| 13<br>14<br>15<br>16<br>17<br>18<br>19<br>20 | TECHNOLOGY PROGRAMS.  (a) IN GENERAL.—The following research, exploration, education, and technology programs shall be conducted through the network of regional centers and the National Institute for Undersea Science and Technology:  (1) Core research and exploration based on national and regional undersea research priorities.  (2) Advanced undersea technology development |

reach programs to enrich ocean science education

- 1 and public awareness of the oceans and Great
- 2 Lakes.
- 3 (4) Development, testing, and transition of ad-
- 4 vanced undersea technology associated with ocean
- 5 observatories, submersibles, advanced diving tech-
- 6 nologies, remotely operated vehicles, autonomous un-
- 7 derwater vehicles, and new sampling and sensing
- 8 technologies.
- 9 (5) Discovery, study, and development of nat-
- ural resources and products from ocean, coastal, and
- aquatic systems.
- 12 (b) Operations.—The Director of the program,
- 13 through operation of the extramural regional centers and
- 14 the National Institute for Undersea Science and Tech-
- 15 nology, shall leverage partnerships and cooperative re-
- 16 search with academia and private industry.

#### 17 SEC. 205. COMPETITIVENESS.

- 18 (a) DISCRETIONARY FUND.—The Program shall allo-
- 19 cate no more than 10 percent of its annual budget to a
- 20 discretionary fund that may be used only for program ad-
- 21 ministration and priority undersea research projects iden-
- 22 tified by the Director but not covered by funding available
- 23 from centers.
- (b) Competitive Selection.—The Administrator
- 25 shall conduct an initial competition to select the regional

| 1  | centers that will participate in the program 90 days after |
|----|--|
| 2  | the publication of the final program direction under sec-  |
| 3  | tion 203 and every 5 years thereafter. Funding for         |
| 4  | projects conducted through the regional centers shall be   |
| 5  | awarded through a competitive, merit-reviewed process or   |
| 6  | the basis of their relevance to the goals of the program   |
| 7  | and their technical feasibility.                           |
| 8  | SEC. 206. AUTHORIZATION OF APPROPRIATIONS.                 |
| 9  | There are authorized to be appropriated to the Na-         |
| 10 | tional Oceanic and Atmospheric Administration to carry     |
| 11 | out this title—  |
| 12 | (1) for fiscal year 2009—                                  |
| 13 | (A) \$13,750,000 for the regional centers                  |
| 14 | of which 50 percent shall be for West Coast re-            |
| 15 | gional centers and 50 percent shall be for East            |
| 16 | Coast regional centers; and                                |
| 17 | (B) \$5,500,000 for the National Tech-                     |
| 18 | nology Institute;  |
| 19 | (2) for fiscal year 2010—                                  |
| 20 | (A) \$15,125,000 for the regional centers                  |
| 21 | of which 50 percent shall be for West Coast re-            |
| 22 | gional centers and 50 percent shall be for East            |
| 23 | Coast regional centers; and                                |
| 24 | (B) \$6,050,000 for the National Tech-                     |
| 25 | nology Institute:  |

| 1  | (3) for fiscal year 2011—                       |
|----|---|
| 2  | (A) \$16,638,000 for the regional centers,      |
| 3  | of which 50 percent shall be for West Coast re- |
| 4  | gional centers and 50 percent shall be for East |
| 5  | Coast regional centers; and                     |
| 6  | (B) \$6,655,000 for the National Tech-          |
| 7  | nology Institute;                               |
| 8  | (4) for fiscal year 2012—                       |
| 9  | (A) \$18,301,000 for the regional centers,      |
| 10 | of which 50 percent shall be for West Coast re- |
| 11 | gional centers and 50 percent shall be for East |
| 12 | Coast regional centers; and                     |
| 13 | (B) \$7,321,000 for the National Tech-          |
| 14 | nology Institute;                               |
| 15 | (5) for fiscal year 2013—                       |
| 16 | (A) \$20,131,000 for the regional centers,      |
| 17 | of which 50 percent shall be for West Coast re- |
| 18 | gional centers and 50 percent shall be for East |
| 19 | Coast regional centers; and                     |
| 20 | (B) \$8,053,000 for the National Tech-          |
| 21 | nology Institute;                               |
| 22 | (6) for fiscal year 2014—                       |
| 23 | (A) $$22,145,000$ for the regional centers,     |
| 24 | of which 50 percent shall be for West Coast re- |

| 1  | gional centers and 50 percent shall be for East |
|----|---|
| 2  | Coast regional centers; and                     |
| 3  | (B) \$8,859,000 for the National Tech-          |
| 4  | nology Institute; and                           |
| 5  | (7) for fiscal year 2015—                       |
| 6  | (A) $$24,359,000$ for the regional centers,     |
| 7  | of which 50 percent shall be for West Coast re- |
| 8  | gional centers and 50 percent shall be for East |
| 9  | Coast regional centers; and                     |
| 10 | (B) \$9,744,000 for the National Tech-          |
| 11 | nology Institute.                               |

 $\bigcirc$