

**Calendar No. 542**112<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION**S. 1701****[Report No. 112-237]**

To amend the Harmful Algal Blooms and Hypoxia Research and Control Act of 1998, and for other purposes.

---

## IN THE SENATE OF THE UNITED STATES

OCTOBER 13, 2011

Ms. SNOWE (for herself, Mr. NELSON of Florida, Mr. BEGICH, Mr. ROCKEFELLER, Mr. WHITEHOUSE, Mrs. GILLIBRAND, Mr. CARDIN, Ms. COLLINS, Ms. CANTWELL, Mrs. BOXER, Mr. WYDEN, Mr. MERKLEY, and Mr. BLUMENTHAL) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

NOVEMBER 13, 2012

Reported by Mr. ROCKEFELLER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]**A BILL**

To amend the Harmful Algal Blooms and Hypoxia Research and Control Act of 1998, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Harmful Algal Blooms  
3 and Hypoxia Research and Control Amendments Act of  
4 2011”.

5 **SEC. 2. AMENDMENT OF HARMFUL ALGAL BLOOM AND HY-**  
6 **POXIA RESEARCH AND CONTROL ACT OF**  
7 **1998.**

8 Except as otherwise expressly provided, whenever in  
9 this Act an amendment or repeal is expressed in terms  
10 of an amendment to, or repeal of, a section or other provi-  
11 sion, the reference shall be considered to be made to a  
12 section or other provision of the Harmful Algal Bloom and  
13 Hypoxia Research and Control Act of 1998 (16 U.S.C.  
14 1451 note).

15 **SEC. 3. FINDINGS.**

16 Section 602 is amended to read as follows:

17 **“§ 602. Findings**

18 “Congress finds the following:

19 “(1) Harmful algal blooms and hypoxia—

20 “(A) are increasing in frequency and inten-  
21 sity in the Nation’s coastal waters and Great  
22 Lakes;

23 “(B) pose a threat to the health of coastal  
24 and Great Lakes ecosystems;

25 “(C) are costly to coastal economies; and

1           “(D) threaten the safety of seafood and  
2           human health.

3           “(2) Excessive nutrients in coastal waters have  
4           been linked to the increased intensity and frequency  
5           of hypoxia and some harmful algal blooms. There is  
6           a need to identify more workable and effective ac-  
7           tions to reduce the negative impacts of harmful algal  
8           blooms and hypoxia on coastal waters.

9           “(3) The National Oceanic and Atmospheric  
10          Administration, through its ongoing research, moni-  
11          toring, observing, education, grant, and coastal re-  
12          source management programs and in collaboration  
13          with the other Federal agencies on the Inter-Agency  
14          Task Force on Harmful Algal Blooms and Hypoxia,  
15          along with States, Indian tribes, and local govern-  
16          ments, possesses the capabilities necessary to sup-  
17          port a near and long-term comprehensive effort to  
18          prevent, reduce, and control the human and environ-  
19          mental costs of harmful algal blooms and hypoxia.

20          “(4) Increases in nutrient loading from point  
21          and nonpoint sources can trigger and exacerbate  
22          harmful algal blooms and hypoxia. Since much of  
23          the increases originate in upland areas and are deliv-  
24          ered to marine and freshwater bodies via river dis-

1 charge, integrated and landscape-level research and  
2 control strategies are required.

3 “(5) Harmful algal blooms and hypoxia affect  
4 many sectors of the coastal economy, including tour-  
5 ism, public health, and recreational and commercial  
6 fisheries. According to a recent report produced by  
7 the National Oceanic and Atmospheric Administra-  
8 tion, the United States seafood, restaurant, and  
9 tourism industries suffer estimated annual losses of  
10 at least \$82,000,000 due to the economic impacts of  
11 harmful algal blooms.

12 “(6) The proliferation of harmful and nuisance  
13 algae can occur in all United States waters, includ-  
14 ing coastal areas (such as estuaries), the Great  
15 Lakes, and inland waterways, crossing political  
16 boundaries and necessitating regional coordination  
17 for research, monitoring, mitigation, response, and  
18 prevention efforts.

19 “(7) Federally funded and other research has  
20 led to several technological advances, including re-  
21 mote sensing, molecular and optical tools, satellite  
22 imagery, and coastal and ocean observing systems,  
23 that—

24 “(A) provide data for forecast models;

1           “(B) improve the monitoring and pre-  
2           diction of these events; and

3           “(C) provide essential decision making  
4           tools for managers and stakeholders.”.

5 **SEC. 4. PURPOSES.**

6       The Act is amended by inserting after section 602  
7 the following:

8 **“§ 602A. Purposes**

9       “The purposes of this title are—

10           “(1) to provide for the development and coordi-  
11           nation of a comprehensive and integrated national  
12           program to address harmful algal blooms and hy-  
13           poxia through baseline research, monitoring, preven-  
14           tion, mitigation, and control;

15           “(2) to provide for the assessment of environ-  
16           mental, socioeconomic, and human health impacts of  
17           harmful algal blooms and hypoxia on a regional and  
18           national scale, and to integrate this assessment into  
19           marine and freshwater resource decisions; and

20           “(3) to facilitate regional, State, tribal, and  
21           local efforts to develop and implement appropriate  
22           harmful algal bloom and hypoxia response plans,  
23           strategies, and tools, including outreach programs  
24           and information dissemination mechanisms.”.

1 **SEC. 5. INTER-AGENCY TASK FORCE ON HARMFUL ALGAL**  
 2 **BLOOMS AND HYPOXIA.**

3 Section 603(a) is amended—

4 (1) by striking “the following representatives  
 5 from” and inserting “a representative from”;

6 (2) in paragraph (11), by striking “and”;

7 (3) by redesignating paragraph (12) as para-  
 8 graph (13);

9 (4) by inserting after paragraph (11) the fol-  
 10 lowing:

11 “(12) The Centers for Disease Control; and”;  
 12 and

13 (5) in paragraph (13), as redesignated, by  
 14 striking “such”.

15 **SEC. 6. NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA**  
 16 **PROGRAM.**

17 The Act is amended by inserting after section 603  
 18 the following:

19 **“§ 603A. National harmful algal bloom and hypoxia**  
 20 **program**

21 “(a) ESTABLISHMENT.—Except as provided in sub-  
 22 section (d), the Under Secretary, acting through the Task  
 23 Force established under section 603, shall establish and  
 24 maintain a national harmful algal bloom and hypoxia pro-  
 25 gram.

26 “(b) ACTION STRATEGY.—

1           “(1) IN GENERAL.—Not later than 1 year after  
2 the date of enactment of the Harmful Algal Blooms  
3 and Hypoxia Research and Control Amendments Act  
4 of 2011, the Task Force shall develop a national  
5 harmful algal blooms and hypoxia action strategy  
6 that—

7           “(A) is consistent with the purposes under  
8 section 602A;

9           “(B) includes a statement of goals and ob-  
10 jectives; and

11           “(C) includes an implementation plan.

12           “(2) PUBLICATION.—Not later than 30 days  
13 after the date that the action strategy is developed,  
14 the Task Force shall—

15           “(A) submit the action strategy to Con-  
16 gress; and

17           “(B) publish the action strategy in the  
18 Federal Register.

19           “(3) PERIODIC REVISION.—The Task Force  
20 shall periodically review and revise the action strat-  
21 egy, as necessary.

22           “(c) TASK FORCE FUNCTIONS.—The Task Force  
23 shall—

24           “(1) coordinate interagency review of plans and  
25 policies of the Program;

1           “(2) assess interagency work and spending  
2 plans for implementing the activities of the Pro-  
3 gram;

4           “(3) review the Program’s distribution of Fed-  
5 eral grants and funding to address research prior-  
6 ities;

7           “(4) support the implementation of the actions  
8 and strategies identified in the regional research and  
9 action plans under section 603B;

10          “(5) support the development of institutional  
11 mechanisms and financial instruments to further the  
12 goals of the Program;

13          “(6) coordinate and integrate the research of all  
14 Federal programs, including ocean and Great Lakes  
15 science and management programs and centers, that  
16 address the chemical, biological, and physical compo-  
17 nents of marine and freshwater harmful algal  
18 blooms and hypoxia;

19          “(7) expedite the interagency review process by  
20 ensuring timely review and dispersal of required re-  
21 ports and assessments under this title;

22          “(8) promote the development of new tech-  
23 nologies for predicting, monitoring, and mitigating  
24 harmful algal blooms and hypoxia conditions; and



1           “(9) establish such interagency working groups  
2 as it considers necessary.

3           “(d) ~~LEAD FEDERAL AGENCY.~~—The National Oceanic and Atmospheric Administration shall have primary  
4 responsibility for administering the Program.  
5

6           “(e) ~~PROGRAM DUTIES.~~—In administering the Program, the Under Secretary shall—  
7

8           “(1) develop and promote a national strategy to  
9 understand, detect, predict, control, mitigate, and  
10 respond to marine and freshwater harmful algal  
11 bloom and hypoxia events;

12           “(2) prepare work and spending plans for implementing the activities of the Program and developing and implementing the regional research and  
13 action plans;  
14  
15

16           “(3) administer merit-based, competitive grant  
17 funding—

18           “(A) to support the projects maintained  
19 and established by the Program; and

20           “(B) to address the research and management needs and priorities identified in the regional research and action plans;  
21  
22

23           “(4) coordinate and work cooperatively with regional, State, tribal, and local government agencies  
24

1 and programs that address marine and freshwater  
2 harmful algal blooms and hypoxia;

3 “(5) coordinate with the Secretary of State to  
4 support international efforts on marine and fresh-  
5 water harmful algal bloom and hypoxia information  
6 sharing, research, mitigation, control, and response  
7 activities;

8 “(6) identify additional research, development,  
9 and demonstration needs and priorities relating to  
10 monitoring, prevention, control, mitigation, and re-  
11 sponse to marine and freshwater harmful algal  
12 blooms and hypoxia, including methods and tech-  
13 nologies to protect the ecosystems affected by ma-  
14 rine and freshwater harmful algal blooms and hy-  
15 poxia;

16 “(7) integrate, coordinate, and augment exist-  
17 ing education programs to improve public under-  
18 standing and awareness of the causes, impacts, and  
19 mitigation efforts for marine and freshwater harmful  
20 algal blooms and hypoxia;

21 “(8) facilitate and provide resources to train  
22 State and local coastal and water resource managers  
23 in the methods and technologies for monitoring, con-  
24 trolling, and mitigating marine and freshwater  
25 harmful algal blooms and hypoxia;

1           “(9) support regional efforts to control and  
2 mitigate outbreaks through—

3           “(A) communication of the contents of the  
4 regional research and action plans and mainte-  
5 nance of online data portals for other informa-  
6 tion about harmful algal blooms and hypoxia to  
7 State and local stakeholders within the region  
8 for which each plan is developed; and

9           “(B) overseeing the development, review,  
10 and periodic updating of regional research and  
11 action plans;

12           “(10) convene at least 1 meeting of the Task  
13 Force each year; and

14           “(11) perform such other tasks as may be dele-  
15 gated by the Task Force.

16           “(f) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-  
17 ISTRATION ACTIVITIES.—The Under Secretary shall—

18           “(1) maintain and enhance the existing com-  
19 petitive programs at the National Oceanic and At-  
20 mospheric Administration relating to marine and  
21 freshwater algal blooms and hypoxia;

22           “(2) carry out marine and Great Lakes harmful  
23 algal bloom and hypoxia events response activities;

24           “(3) establish new programs and infrastructure,  
25 as necessary, to develop and enhance the critical ob-

1       servations, monitoring, modeling, data management,  
2       information dissemination, and operational forecasts  
3       required to meet the purposes under section 602A;

4             “(4) enhance communication and coordination  
5       among Federal agencies carrying out marine and  
6       freshwater harmful algal bloom and hypoxia activi-  
7       ties; and

8             “(5) increase the availability to appropriate  
9       public and private entities of—

10               “(A) analytical facilities and technologies;

11               “(B) operational forecasts; and

12               “(C) reference and research materials.

13       “(g) COOPERATIVE EFFORTS.—The Under Secretary  
14 shall work cooperatively and avoid duplication of effort  
15 with other offices, centers, and programs within the Na-  
16 tional Oceanic and Atmospheric Administration, other  
17 agencies on the Task Force, and States, tribes, and non-  
18 governmental organizations concerned with marine and  
19 freshwater issues to coordinate harmful algal blooms and  
20 hypoxia (and related) activities and research.

21       “(h) FRESHWATER PROGRAM.—With respect to the  
22 freshwater aspects of the Program, except for those as-  
23 pects occurring in the Great Lakes, the Administrator of  
24 the Environmental Protection Agency, in consultation

1 with the Under Secretary, through the Task Force,  
2 shall—

3           “(1) carry out the duties assigned to the Under  
4 Secretary under this section and section 603B, in-  
5 cluding the activities under subsection (g);

6           “(2) research the ecology of freshwater harmful  
7 algal blooms;

8           “(3) monitor and respond to freshwater harm-  
9 ful algal blooms events in lakes (except for the Great  
10 Lakes); rivers; and reservoirs;

11           “(4) mitigate and control freshwater harmful  
12 algal blooms; and

13           “(5) recommend the amount of funding re-  
14 quired to carry out subsection (g) for inclusion in  
15 the President’s annual budget request to Congress.

16           “(i) INTEGRATED COASTAL AND OCEAN OBSERVA-  
17 TION SYSTEM.—The collection of monitoring and observa-  
18 tion data under this title shall comply with all data stand-  
19 ards and protocols developed pursuant to the Integrated  
20 Coastal and Ocean Observation System Act of 2009 (33  
21 U.S.C. 3601 et seq.). Such data shall be made available  
22 through the system established under that Act.”.

1 **SEC. 7. REGIONAL RESEARCH AND ACTION PLANS.**

2 The Act, as amended by section 6 of this Act, is fur-  
 3 ther amended by inserting after section 603A the fol-  
 4 lowing:

5 **“§ 603B. Regional research and action plans**

6 “(a) IN GENERAL.—In administering the Program,  
 7 the Under Secretary shall—

8 “(1) identify appropriate regions and sub-  
 9 regions to be addressed by each regional research  
 10 and action plan; and

11 “(2) oversee the development and implementa-  
 12 tion of the regional research and action plans.

13 “(b) PLAN DEVELOPMENT.—The Under Secretary  
 14 shall—

15 “(1) develop and submit to the Task Force for  
 16 approval a regional research and action plan for  
 17 each region, that builds upon any existing State or  
 18 regional plans the Under Secretary considers appro-  
 19 priate; and

20 “(2) identify appropriate elements for each re-  
 21 gion, including—

22 “(A) baseline ecological, social, and eco-  
 23 nomic research needed to understand the bio-  
 24 logical, physical, and chemical conditions that  
 25 cause, exacerbate, and result from harmful  
 26 algal blooms and hypoxia;

1           “(B) regional priorities for ecological and  
2           socio-economic research on issues related to and  
3           impacts of harmful algal blooms and hypoxia;

4           “(C) research, development, and dem-  
5           onstration activities needed to develop and ad-  
6           vance technologies and techniques—

7           “(i) for minimizing the occurrence of  
8           harmful algal blooms and hypoxia; and

9           “(ii) for improving capabilities to pre-  
10          dict, monitor, prevent, control, and miti-  
11          gate harmful algal blooms and hypoxia;

12          “(D) State, tribal, and local government  
13          actions that may be implemented—

14          “(i) to support long-term monitoring  
15          efforts and emergency monitoring as need-  
16          ed;

17          “(ii) to minimize the occurrence of  
18          harmful algal blooms and hypoxia;

19          “(iii) to reduce the duration and in-  
20          tensity of harmful algal blooms and hy-  
21          poxia in times of emergency;

22          “(iv) to address human health dimen-  
23          sions of harmful algal blooms and hypoxia;  
24          and

1           “(v) to identify and protect vulnerable  
2           ecosystems that could be, or have been, af-  
3           fected by harmful algal blooms and hy-  
4           poxia;

5           “(E) mechanisms by which data, informa-  
6           tion, and products are transferred between the  
7           Program and State, tribal, and local govern-  
8           ments and research entities;

9           “(F) communication, outreach and infor-  
10          mation dissemination efforts that State, tribal,  
11          and local governments and stakeholder organi-  
12          zations can take to educate and inform the pub-  
13          lic about harmful algal blooms and hypoxia and  
14          alternative coastal resource-utilization opportu-  
15          nities that are available; and

16          “(G) the roles that Federal agencies can  
17          play to facilitate implementation of the regional  
18          research and action plan for that region.

19          “(e) CONSULTATION.—In developing a regional re-  
20          search and action plan under this section, the Under Sec-  
21          retary shall—

22                 “(1) coordinate with State coastal management  
23                 and planning officials;

24                 “(2) coordinate with tribal resource manage-  
25                 ment officials;



1           “(3) coordinate with water management and  
2 watershed officials from coastal States and non-  
3 coastal States with water sources that drain into  
4 water bodies affected by harmful algal blooms and  
5 hypoxia;

6           “(4) coordinate with the Administrator and  
7 other Federal agencies as the Under Secretary con-  
8 siders appropriate; and

9           “(5) consult with—

10                   “(A) public health officials;

11                   “(B) emergency management officials;

12                   “(C) science and technology development  
13 institutions;

14                   “(D) economists;

15                   “(E) industries and businesses affected by  
16 marine and freshwater harmful algal blooms  
17 and hypoxia;

18                   “(F) scientists, with expertise concerning  
19 harmful algal blooms or hypoxia, from academic  
20 or research institutions; and

21                   “(G) other stakeholders.

22           “(d) BUILDING ON AVAILABLE STUDIES AND INFOR-  
23 MATION.—In developing a regional research and action  
24 plan under this section, the Under Secretary shall—

1           “(1) utilize and build on existing research, as-  
2           sessments, reports, including those carried out under  
3           existing law, and other relevant sources; and

4           “(2) consider the impacts, research, and exist-  
5           ing program activities of all United States coastlines  
6           and fresh and inland waters, including the Great  
7           Lakes, the Chesapeake Bay, estuaries, and tribu-  
8           taries.

9           “(e) SCHEDULE.—The Under Secretary shall—

10           “(1) begin developing the regional research and  
11           action plans for at least a third of the regions not  
12           later than 9 months after the date of the enactment  
13           of the Harmful Algal Blooms and Hypoxia Research  
14           and Control Amendments Act of 2011;

15           “(2) begin developing the regional research and  
16           action plans for at least another third of the regions  
17           not later than 21 months after the date of the enact-  
18           ment of the Harmful Algal Blooms and Hypoxia Re-  
19           search and Control Amendments Act of 2011;

20           “(3) begin developing the regional research and  
21           action plans for the remaining regions not later than  
22           33 months after the date of the enactment of the  
23           Harmful Algal Blooms and Hypoxia Research and  
24           Control Amendments Act of 2011; and

1           “(4) ensure that each regional research and ac-  
2           tion plan developed under this section is—

3                   “(A) completed and approved by the Task  
4                   Force not later than 12 months after the date  
5                   that development of the regional research and  
6                   action plan begins; and

7                   “(B) updated not less than once every 5  
8                   years after the completion of the regional re-  
9                   search and action plan.

10          “(f) FUNDING.—

11                   “(1) IN GENERAL.—Subject to available appro-  
12                   priations, the Under Secretary shall make funding  
13                   available to eligible organizations to implement the  
14                   research, monitoring, forecasting, modeling, and re-  
15                   sponse actions included under each approved re-  
16                   gional research and action plan. The Program shall  
17                   select recipients through a merit-based, competitive  
18                   process and seek to fund research proposals that  
19                   most effectively align with the research priorities  
20                   identified in the relevant regional research and ac-  
21                   tion plan.

22                   “(2) APPLICATION; ASSURANCES.—An organi-  
23                   zation seeking funding under this subsection shall  
24                   submit an application to the Program at such time,  
25                   in such form and manner, and containing such in-

1 formation and assurances as the Program may re-  
 2 quire. The Program shall require each eligible orga-  
 3 nization receiving funds under this subsection to uti-  
 4 lize the mechanisms under subsection (b)(2)(E) to  
 5 ensure the transfer of data and products developed  
 6 under the regional research and action plan.

7 “(3) ELIGIBLE ORGANIZATION.—In this sub-  
 8 section, the term ‘eligible organization’ means—

9 “(A) an institution of higher education,  
 10 other non-profit organization, State, tribal, or  
 11 local government, commercial organization, or  
 12 Federal agency that meets the requirements of  
 13 this section and such other requirements as  
 14 may be established by the Under Secretary; and

15 “(B) with respect to nongovernmental or-  
 16 ganizations, an organization that is subject to  
 17 regulations promulgated or guidelines issued to  
 18 carry out this section, including United States  
 19 audit requirements that are applicable to non-  
 20 governmental organizations.”.

21 **SEC. 8. REPORTING.**

22 Section 603 is amended by adding at the end the fol-  
 23 lowing:

24 “(j) REPORT.—Not later than 2 years after the sub-  
 25 mission of the action strategy under section 603A, the

1 Under Secretary shall submit a report to the appropriate  
2 congressional committees that describes—

3           “(1) the proceedings of the annual Task Force  
4 meetings;

5           “(2) the activities carried out under the Pro-  
6 gram and the regional research and action plans,  
7 and the budget related to the activities;

8           “(3) the progress made on implementing the ac-  
9 tion strategy; and

10           “(4) any need to revise or terminate activities  
11 or projects under the Program.

12           “(k) PROGRAM REPORT.—Not later than 5 years  
13 after the date of enactment of the Harmful Algal Blooms  
14 and Hypoxia Research and Control Amendments Act of  
15 2011, the Task Force shall submit a report on harmful  
16 algal blooms and hypoxia in marine and freshwater sys-  
17 tems to Congress that—

18           “(1) evaluates the state of scientific knowledge  
19 of harmful algal blooms and hypoxia in marine and  
20 freshwater systems, including their causes and eco-  
21 logical consequences;

22           “(2) evaluates the social and economic impacts  
23 of harmful algal blooms and hypoxia, including their  
24 impacts on coastal communities, and reviews those  
25 communities’ efforts and associated economic costs

1 related to event forecasting, planning, mitigation, re-  
2 sponse, public outreach, and education;

3 “(3) examines and evaluates the human health  
4 impacts of harmful algal blooms and hypoxia, includ-  
5 ing any gaps in existing research;

6 “(4) describes advances in capabilities for moni-  
7 toring, forecasting, modeling, control, mitigation,  
8 and prevention of harmful algal blooms and hypoxia,  
9 including techniques for integrating landscape- and  
10 watershed-level water quality information into ma-  
11 rine and freshwater harmful algal bloom and hy-  
12 poxia prevention and mitigation strategies at Fed-  
13 eral and regional levels;

14 “(5) evaluates progress made by, and the needs  
15 of, Federal, regional, State, tribal, and local policies  
16 and strategies for forecasting, planning, mitigating,  
17 preventing, and responding to harmful algal blooms  
18 and hypoxia, including the economic costs and bene-  
19 fits of the policies and strategies;

20 “(6) includes recommendations for integrating,  
21 improving, and funding future Federal, regional,  
22 State, tribal, and local policies and strategies for  
23 preventing and mitigating the occurrence and im-  
24 pacts of harmful algal blooms and hypoxia;

1           “(7) describes communication, outreach, and  
2           education efforts to raise public awareness of harm-  
3           ful algal blooms and hypoxia, their impacts, and the  
4           methods for mitigation and prevention;

5           “(8) describes extramural research activities  
6           carried out under section 605(b); and

7           “(9) specifies how resources were allocated be-  
8           tween intramural and extramural research and man-  
9           agement activities, including a justification for each  
10          allocation.”.

11 **SEC. 9. NORTHERN GULF OF MEXICO HYPOXIA.**

12          Section 604 is amended to read as follows:

13 **“SEC. 604. NORTHERN GULF OF MEXICO HYPOXIA.**

14          “(a) **TASK FORCE INITIAL PROGRESS REPORTS.—**  
15          Beginning not later than 12 months after the date of en-  
16          actment of the Harmful Algal Blooms and Hypoxia Re-  
17          search and Control Amendments Act of 2011, and every  
18          2 years thereafter, the Administrator, through the Mis-  
19          sissippi River/Gulf of Mexico Watershed Nutrient Task  
20          Force, shall submit a progress report to the appropriate  
21          congressional committees and the President that describes  
22          the progress made by Task Force-directed activities ear-  
23          ried out or funded by the Environmental Protection Agen-  
24          cy and other State and Federal partners toward attain-  
25          ment of the goals of the Gulf Hypoxia Action Plan 2008.

1       “(b) CONTENTS.—Each report required under this  
2 section shall—

3           “(1) assess the progress made toward nutrient  
4 load reductions, the response of the hypoxic zone  
5 and water quality throughout the Mississippi/  
6 Atchafalaya River Basin, and the economic and so-  
7 cial effects;

8           “(2) evaluate lessons learned; and

9           “(3) recommend appropriate actions to continue  
10 to implement or, if necessary, revise the strategy set  
11 forth in the Gulf Hypoxia Action Plan 2008.”.

12 **SEC. 10. INTERAGENCY FINANCING.**

13       The Act, as amended by section 9 of this Act, is fur-  
14 ther amended by inserting after section 604 the following:

15 **“SEC. 604A. INTERAGENCY FINANCING.**

16       “The departments and agencies represented on the  
17 Task Force may participate in interagency financing and  
18 share, transfer, receive, obligate, and expend funds appro-  
19 priated to any member of the Task Force for the purposes  
20 of carrying out any administrative or programmatic  
21 project or activity under this title, including support for  
22 the Program, a common infrastructure, information shar-  
23 ing, and system integration for harmful algal bloom and  
24 hypoxia research, monitoring, forecasting, prevention, and  
25 control. Funds may be transferred among such depart-



1 ments and agencies through an appropriate instrument  
 2 that specifies the goods, services, or space being acquired  
 3 from another Task Force member and the costs of the  
 4 goods, services, and space. The amount of funds  
 5 transferrable under this section for any fiscal year may  
 6 not exceed 5 percent of the account from which such  
 7 transfer was made.”.

8 **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

9 Section 605 is amended to read as follows:

10 **“§ 605. Authorization of appropriations**

11 “(a) IN GENERAL.—There are authorized to be ap-  
 12 propriated, for each of the fiscal years 2011 through 2015  
 13 to the Under Secretary to carry out sections 603A and  
 14 603B, \$30,000,000, of which—

15 “(1) \$2,000,000 may be used for the develop-  
 16 ment of regional research and action plans and the  
 17 reports required under section 603B;

18 “(2) \$3,000,000 may be used for the research  
 19 and assessment activities related to marine and  
 20 freshwater harmful algal blooms at the National  
 21 Oceanic and Atmospheric Administration research  
 22 laboratories;

23 “(3) \$7,000,000 may be used to carry out the  
 24 Ecology and Oceanography of Harmful Algal  
 25 Blooms Program (ECOHAB);

1           “(4) \$4,500,000 may be used to carry out the  
2           Monitoring and Event Response for Harmful Algal  
3           Blooms Program (MERHAB);

4           “(5) \$1,500,000 may be used to carry out the  
5           Northern Gulf of Mexico Ecosystems and Hypoxia  
6           Assessment Program (NGOMEX);

7           “(6) \$4,000,000 may be used to carry out the  
8           Coastal Hypoxia Research Program (CHRP);

9           “(7) \$4,000,000 may be used to carry out the  
10          Prevention, Control, and Mitigation of Harmful  
11          Algal Blooms Program (PCM);

12          “(8) \$1,000,000 may be used to carry out the  
13          Event Response Program; and

14          “(9) \$3,000,000 may be used to carry out the  
15          Infrastructure Program.

16          “(b) **EXTRAMURAL RESEARCH ACTIVITIES.**—The  
17          Under Secretary shall ensure that a substantial portion  
18          of funds appropriated pursuant to subsection (a) that are  
19          used for research purposes are allocated to extramural re-  
20          search activities.”.

21          **SEC. 12. DEFINITIONS; CONFORMING AMENDMENT.**

22          (a) **IN GENERAL.**—The Act is amended by inserting  
23          after section 605 the following:

24          **“§ 605A. Definitions**

25          “In this title:

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

4           “(2) HARMFUL ALGAL BLOOM.—The term  
5           ‘harmful algal bloom’ means marine and freshwater  
6           phytoplankton that proliferate to high concentra-  
7           tions, resulting in nuisance conditions or harmful  
8           impacts on marine and aquatic ecosystems, coastal  
9           communities, and human health through the produc-  
10          tion of toxic compounds or other biological, chemical,  
11          and physical impacts of the algae outbreak.

12          “(3) HYPOXIA.—The term ‘hypoxia’ means a  
13          condition where low dissolved oxygen in aquatic sys-  
14          tems causes stress or death to resident organisms.

15          “(4) PROGRAM.—The term ‘Program’ means  
16          the National Harmful Algal Bloom and Hypoxia  
17          Program established under section 603A.

18          “(5) REGIONAL RESEARCH AND ACTION  
19          PLAN.—The term ‘regional research and action plan’  
20          means a plan established under section 603B.

21          “(6) STATE.—The term ‘State’ means each of  
22          the several States of the United States, the District  
23          of Columbia, the Commonwealth of Puerto Rico, the  
24          Virgin Islands, Guam, American Samoa, the Com-  
25          monwealth of the Northern Mariana Islands, any

1 other territory or possession of the United States,  
2 and any Indian tribe.

3 “(7) **TASK FORCE.**—The term ‘Task Force’  
4 means the Inter-Agency Task Force established by  
5 section 603(a).

6 “(8) **UNDER SECRETARY.**—The term ‘Under  
7 Secretary’ means the Under Secretary of Commerce  
8 for Oceans and Atmosphere.

9 “(9) **UNITED STATES COASTAL WATERS.**—The  
10 term ‘United States coastal waters’ includes the  
11 Great Lakes.”.

12 (b) **CONFORMING AMENDMENT.**—Section 603(a) is  
13 amended by striking “(hereinafter referred to as the ‘Task  
14 Force’)”.

15 **SEC. 13. APPLICATION WITH OTHER LAWS.**

16 The Act is amended by adding after section 606 the  
17 following:

18 **“SEC. 607. EFFECT ON OTHER FEDERAL AUTHORITY.**

19 “Nothing in this title supersedes or limits the author-  
20 ity of any agency to carry out its responsibilities and mis-  
21 sions under other laws.”.

22 **SECTION 1. SHORT TITLE.**

23 *This Act may be cited as the “Harmful Algal Blooms*  
24 *and Hypoxia Research and Control Amendments Act of*  
25 *2011”.*

1 **SEC. 2. AMENDMENT OF HARMFUL ALGAL BLOOM AND HY-**  
2 **POXIA RESEARCH AND CONTROL ACT OF 1998.**

3 *Except as otherwise expressly provided, whenever in*  
4 *this Act an amendment or repeal is expressed in terms of*  
5 *an amendment to, or repeal of, a section or other provision,*  
6 *the reference shall be considered to be made to a section or*  
7 *other provision of the Harmful Algal Bloom and Hypoxia*  
8 *Research and Control Act of 1998 (16 U.S.C. 1451 note).*

9 **SEC. 3. FINDINGS.**

10 *Section 602 is amended to read as follows:*

11 **“§ 602. Findings**

12 *“Congress finds the following:*

13 *“(1) Harmful algal blooms and hypoxia—*

14 *“(A) are increasing in frequency and inten-*  
15 *sity in the Nation’s coastal waters and Great*  
16 *Lakes;*

17 *“(B) pose a threat to the health of coastal*  
18 *and Great Lakes ecosystems;*

19 *“(C) are costly to coastal economies; and*

20 *“(D) threaten the safety of seafood and*  
21 *human health.*

22 *“(2) Excessive nutrients in coastal waters have*  
23 *been linked to the increased intensity and frequency*  
24 *of hypoxia and some harmful algal blooms. There is*  
25 *a need to identify more workable and effective actions*

1        *to reduce the negative impacts of harmful algal*  
2        *blooms and hypoxia on coastal waters.*

3                *“(3) The National Oceanic and Atmospheric Ad-*  
4        *ministration, through its ongoing research, moni-*  
5        *toring, observing, education, grant, and coastal re-*  
6        *source management programs and in collaboration*  
7        *with the other Federal agencies on the Inter-Agency*  
8        *Task Force on Harmful Algal Blooms and Hypoxia,*  
9        *along with States, Indian tribes, and local govern-*  
10       *ments, possesses the capabilities necessary to support*  
11       *a near and long-term comprehensive effort to prevent,*  
12       *reduce, and control the human and environmental*  
13       *costs of harmful algal blooms and hypoxia.*

14               *“(4) Increases in nutrient loading from point*  
15       *and nonpoint sources can trigger and exacerbate*  
16       *harmful algal blooms and hypoxia. Since much of the*  
17       *increases originate in upland areas and are delivered*  
18       *to marine and freshwater bodies via river discharge,*  
19       *integrated and landscape-level research and control*  
20       *strategies are required.*

21               *“(5) Harmful algal blooms and hypoxia affect*  
22       *many sectors of the coastal economy, including tour-*  
23       *ism, public health, and recreational and commercial*  
24       *fisheries. According to a recent report produced by the*  
25       *National Oceanic and Atmospheric Administration,*

1       *the United States seafood, restaurant, and tourism in-*  
2       *dustries suffer estimated annual losses of at least*  
3       *\$82,000,000 due to the economic impacts of harmful*  
4       *algal blooms.*

5               *“(6) The proliferation of harmful and nuisance*  
6       *algae can occur in all United States waters, including*  
7       *coastal areas (such as estuaries), the Great Lakes, and*  
8       *inland waterways, crossing political boundaries and*  
9       *necessitating regional coordination for research, mon-*  
10       *itoring, mitigation, response, and prevention efforts.*

11               *“(7) Federally funded and other research has led*  
12       *to several technological advances, including remote*  
13       *sensing, molecular and optical tools, satellite imagery,*  
14       *and coastal and ocean observing systems, that—*

15                       *“(A) provide data for forecast models;*

16                       *“(B) improve the monitoring and pre-*  
17                       *diction of these events; and*

18                       *“(C) provide essential decision making tools*  
19                       *for managers and stakeholders.”.*

20       **SEC. 4. PURPOSES.**

21       *The Act is amended by inserting after section 602 the*  
22       *following:*

23       **“§ 602A. Purposes**

24       *“The purposes of this title are—*

1           “(1) to provide for the development and coordi-  
 2           nation of a comprehensive and integrated national  
 3           program to address harmful algal blooms and hy-  
 4           poxia through baseline research, monitoring, preven-  
 5           tion, mitigation, and control;

6           “(2) to provide for the assessment of environ-  
 7           mental, socioeconomic, and human health impacts of  
 8           harmful algal blooms and hypoxia on a regional and  
 9           national scale, and to integrate this assessment into  
 10          marine and freshwater resource decisions; and

11          “(3) to facilitate regional, State, tribal, and local  
 12          efforts to develop and implement appropriate harmful  
 13          algal bloom and hypoxia response plans, strategies,  
 14          and tools, including outreach programs and informa-  
 15          tion dissemination mechanisms.”.

16 **SEC. 5. INTER-AGENCY TASK FORCE ON HARMFUL ALGAL**  
 17 **BLOOMS AND HYPOXIA.**

18          Section 603(a) is amended—

19           (1) by striking “the following representatives  
 20           from” and inserting “a representative from”;

21           (2) in paragraph (11), by striking “and”;

22           (3) by redesignating paragraph (12) as para-  
 23           graph (13);

24           (4) by inserting after paragraph (11) the fol-  
 25           lowing:



1           “(12) the Centers for Disease Control; and”; and  
 2           (5) in paragraph (13), as redesignated, by strik-  
 3           ing “such”.

4 **SEC. 6. NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA**  
 5           **PROGRAM.**

6           *The Act is amended by inserting after section 603 the*  
 7 *following:*

8 **“§ 603A. National harmful algal bloom and hypoxia**  
 9           **program**

10           “(a) *ESTABLISHMENT.*—*Except as provided in sub-*  
 11 *section (d), the Under Secretary, acting through the Task*  
 12 *Force established under section 603, shall establish and*  
 13 *maintain a national harmful algal bloom and hypoxia pro-*  
 14 *gram.*

15           “(b) *ACTION STRATEGY.*—

16           “(1) *IN GENERAL.*—*Not later than 1 year after*  
 17 *the date of enactment of the Harmful Algal Blooms*  
 18 *and Hypoxia Research and Control Amendments Act*  
 19 *of 2011, the Task Force shall develop a national*  
 20 *harmful algal blooms and hypoxia action strategy*  
 21 *that—*

22           “(A) *is consistent with the purposes under*  
 23 *section 602A;*

24           “(B) *includes a statement of goals and ob-*  
 25 *jectives; and*

1                   “(C) includes an implementation plan.

2                   “(2) PUBLICATION.—Not later than 30 days  
3 after the date that the action strategy is developed, the  
4 Task Force shall—

5                   “(A) submit the action strategy to Congress;  
6 and

7                   “(B) publish the action strategy in the Fed-  
8 eral Register.

9                   “(3) PERIODIC REVISION.—The Task Force shall  
10 periodically review and revise the action strategy, as  
11 necessary.

12                  “(c) TASK FORCE FUNCTIONS.—The Task Force  
13 shall—

14                   “(1) coordinate interagency review of plans and  
15 policies of the Program;

16                   “(2) assess interagency work and spending plans  
17 for implementing the activities of the Program;

18                   “(3) review the Program’s distribution of Federal  
19 grants and funding to address research priorities;

20                   “(4) support the implementation of the actions  
21 and strategies identified in the regional research and  
22 action plans under section 603B;

23                   “(5) support the development of institutional  
24 mechanisms and financial instruments to further the  
25 goals of the Program;

1           “(6) coordinate and integrate the research of all  
2       *Federal programs, including ocean and Great Lakes*  
3       *science and management programs and centers, that*  
4       *address the chemical, biological, and physical compo-*  
5       *nents of marine and freshwater harmful algal blooms*  
6       *and hypoxia;*

7           “(7) expedite the interagency review process by  
8       *ensuring timely review and dispersal of required re-*  
9       *ports and assessments under this title;*

10          “(8) promote the development of new technologies  
11       *for predicting, monitoring, and mitigating harmful*  
12       *algal blooms and hypoxia conditions; and*

13          “(9) establish such interagency working groups  
14       *as it considers necessary.*

15          “(d) *LEAD FEDERAL AGENCY.—The National Oceanic*  
16       *and Atmospheric Administration shall have primary re-*  
17       *sponsibility for administering the Program.*

18          “(e) *PROGRAM DUTIES.—In administering the Pro-*  
19       *gram, the Under Secretary shall—*

20               “(1) develop and promote a national strategy to  
21       *understand, detect, predict, control, mitigate, and re-*  
22       *spond to marine and freshwater harmful algal bloom*  
23       *and hypoxia events;*

24               “(2) prepare work and spending plans for imple-  
25       *menting the activities of the Program and developing*

1 *and implementing the regional research and action*  
2 *plans;*

3 *“(3) administer merit-based, competitive grant*  
4 *funding—*

5 *“(A) to support the projects maintained and*  
6 *established by the Program; and*

7 *“(B) to address the research and manage-*  
8 *ment needs and priorities identified in the re-*  
9 *gional research and action plans;*

10 *“(4) coordinate and work cooperatively with re-*  
11 *gional, State, tribal, and local government agencies*  
12 *and programs that address marine and freshwater*  
13 *harmful algal blooms and hypoxia;*

14 *“(5) coordinate with the Secretary of State to*  
15 *support international efforts on marine and fresh-*  
16 *water harmful algal bloom and hypoxia information*  
17 *sharing, research, mitigation, control, and response*  
18 *activities;*

19 *“(6) identify additional research, development,*  
20 *and demonstration needs and priorities relating to*  
21 *monitoring, prevention, control, mitigation, and re-*  
22 *sponse to marine and freshwater harmful algal blooms*  
23 *and hypoxia, including methods and technologies to*  
24 *protect the ecosystems affected by marine and fresh-*  
25 *water harmful algal blooms and hypoxia;*

1           “(7) *integrate, coordinate, and augment existing*  
2 *education programs to improve public understanding*  
3 *and awareness of the causes, impacts, and mitigation*  
4 *efforts for marine and freshwater harmful algal*  
5 *blooms and hypoxia;*

6           “(8) *facilitate and provide resources to train*  
7 *State and local coastal and water resource managers*  
8 *in the methods and technologies for monitoring, con-*  
9 *trolling, and mitigating marine and freshwater*  
10 *harmful algal blooms and hypoxia;*

11           “(9) *support regional efforts to control and miti-*  
12 *gate outbreaks through—*

13           “(A) *communication of the contents of the*  
14 *regional research and action plans and mainte-*  
15 *nance of online data portals for other informa-*  
16 *tion about harmful algal blooms and hypoxia to*  
17 *State and local stakeholders within the region for*  
18 *which each plan is developed; and*

19           “(B) *overseeing the development, review,*  
20 *and periodic updating of regional research and*  
21 *action plans;*

22           “(10) *convene at least 1 meeting of the Task*  
23 *Force each year; and*

24           “(11) *perform such other tasks as may be dele-*  
25 *gated by the Task Force.*

1           “(f) NATIONAL OCEANIC AND ATMOSPHERIC ADMINIS-  
2   TRATION ACTIVITIES.—The Under Secretary shall—

3           “(1) maintain and enhance the existing competi-  
4   tive programs at the National Oceanic and Atmos-  
5   pheric Administration relating to marine and fresh-  
6   water algal blooms and hypoxia;

7           “(2) carry out marine and Great Lakes harmful  
8   algal bloom and hypoxia events response activities;

9           “(3) establish new programs and infrastructure,  
10   as necessary, to develop and enhance the critical ob-  
11   servations, monitoring, modeling, data management,  
12   information dissemination, and operational forecasts  
13   required to meet the purposes under section 602A;

14           “(4) enhance communication and coordination  
15   among Federal agencies carrying out marine and  
16   freshwater harmful algal bloom and hypoxia activi-  
17   ties;

18           “(5) to the greatest extent practicable, leverage  
19   existing resources and expertise available from local  
20   research universities and institutions to meet the pur-  
21   poses under section 602A; and

22           “(6) increase the availability to appropriate  
23   public and private entities of—

24           “(A) analytical facilities and technologies;

25           “(B) operational forecasts; and

1                   “(C) *reference and research materials.*

2           “(g) *COOPERATIVE EFFORTS.—The Under Secretary*  
3 *shall work cooperatively and avoid duplication of effort*  
4 *with other offices, centers, and programs within the Na-*  
5 *tional Oceanic and Atmospheric Administration, other*  
6 *agencies on the Task Force, and States, tribes, and non-*  
7 *governmental organizations concerned with marine and*  
8 *freshwater issues to coordinate harmful algal blooms and*  
9 *hypoxia (and related) activities and research.*

10           “(h) *FRESHWATER PROGRAM.—With respect to the*  
11 *freshwater aspects of the Program, except for those aspects*  
12 *occurring in the Great Lakes, the Administrator of the En-*  
13 *vironmental Protection Agency, in consultation with the*  
14 *Under Secretary, through the Task Force, shall—*

15                   “(1) *carry out the duties assigned to the Under*  
16 *Secretary under this section and section 603B, in-*  
17 *cluding the activities under subsection (g);*

18                   “(2) *research the ecology of freshwater harmful*  
19 *algal blooms;*

20                   “(3) *monitor and respond to freshwater harmful*  
21 *algal blooms events in lakes (except for the Great*  
22 *Lakes), rivers, and reservoirs;*

23                   “(4) *mitigate and control freshwater harmful*  
24 *algal blooms; and*

1           “(5) recommend the amount of funding required  
2           to carry out subsection (g) for inclusion in the Presi-  
3           dent’s annual budget request to Congress.

4           “(i) *INTEGRATED COASTAL AND OCEAN OBSERVATION*  
5 *SYSTEM.*—*The collection of monitoring and observation*  
6 *data under this title shall comply with all data standards*  
7 *and protocols developed pursuant to the Integrated Coastal*  
8 *and Ocean Observation System Act of 2009 (33 U.S.C. 3601*  
9 *et seq.). Such data shall be made available through the sys-*  
10 *tem established under that Act.”.*

11 **SEC. 7. REGIONAL RESEARCH AND ACTION PLANS.**

12           *The Act, as amended by section 6 of this Act, is further*  
13 *amended by inserting after section 603A the following:*

14 **“§ 603B. Regional research and action plans**

15           “(a) *IN GENERAL.*—*In administering the Program,*  
16 *the Under Secretary shall—*

17                   “(1) *identify appropriate regions and subregions*  
18 *to be addressed by each regional research and action*  
19 *plan; and*

20                   “(2) *oversee the development and implementation*  
21 *of the regional research and action plans.*

22           “(b) *PLAN DEVELOPMENT.*—*The Under Secretary*  
23 *shall—*

24                   “(1) *develop and submit to the Task Force for*  
25 *approval a regional research and action plan for each*



1        *region, that builds upon any existing State or re-*  
2        *gional plans the Under Secretary considers appro-*  
3        *priate; and*

4            *“(2) identify appropriate elements for each re-*  
5        *gion, including—*

6            *“(A) baseline ecological, social, and eco-*  
7        *nomical research needed to understand the biologi-*  
8        *cal, physical, and chemical conditions that*  
9        *cause, exacerbate, and result from harmful algal*  
10       *blooms and hypoxia;*

11           *“(B) regional priorities for ecological and*  
12       *socio-economic research on issues related to and*  
13       *impacts of harmful algal blooms and hypoxia;*

14           *“(C) research, development, and demonstra-*  
15       *tion activities needed to develop and advance*  
16       *technologies and techniques—*

17            *“(i) for minimizing the occurrence of*  
18        *harmful algal blooms and hypoxia; and*

19            *“(ii) for improving capabilities to pre-*  
20        *dict, monitor, prevent, control, and mitigate*  
21        *harmful algal blooms and hypoxia;*

22           *“(D) State, tribal, and local government ac-*  
23       *tions that may be implemented—*

24            *“(i) to support long-term monitoring*  
25        *efforts and emergency monitoring as needed;*

1                   “(ii) to minimize the occurrence of  
2                   harmful algal blooms and hypoxia;

3                   “(iii) to reduce the duration and in-  
4                   tensity of harmful algal blooms and hypoxia  
5                   in times of emergency;

6                   “(iv) to address human health dimen-  
7                   sions of harmful algal blooms and hypoxia;  
8                   and

9                   “(v) to identify and protect vulnerable  
10                  ecosystems that could be, or have been, af-  
11                  fected by harmful algal blooms and hypoxia;

12                  “(E) mechanisms by which data, informa-  
13                  tion, and products are transferred between the  
14                  Program and State, tribal, and local govern-  
15                  ments and research entities;

16                  “(F) communication, outreach and infor-  
17                  mation dissemination efforts that State, tribal,  
18                  and local governments and stakeholder organiza-  
19                  tions can take to educate and inform the public  
20                  about harmful algal blooms and hypoxia and al-  
21                  ternative coastal resource-utilization opportuni-  
22                  ties that are available; and

23                  “(G) the roles that Federal agencies can  
24                  play to facilitate implementation of the regional  
25                  research and action plan for that region.

1       “(c) *CONSULTATION.*—*In developing a regional re-*  
2 *search and action plan under this section, the Under Sec-*  
3 *retary shall—*

4               “(1) *coordinate with State coastal management*  
5 *and planning officials;*

6               “(2) *coordinate with tribal resource management*  
7 *officials;*

8               “(3) *coordinate with water management and wa-*  
9 *tershed officials from coastal States and noncoastal*  
10 *States with water sources that drain into water bod-*  
11 *ies affected by harmful algal blooms and hypoxia;*

12               “(4) *in matters relating to the Gulf of Mexico,*  
13 *coordinate with the Gulf of Mexico Alliance;*

14               “(5) *coordinate with the Administrator and*  
15 *other Federal agencies as the Under Secretary con-*  
16 *siders appropriate; and*

17               “(6) *consult with—*

18                       “(A) *public health officials;*

19                       “(B) *emergency management officials;*

20                       “(C) *science and technology development in-*  
21 *stitutions;*

22                       “(D) *economists;*

23                       “(E) *industries and businesses affected by*  
24 *marine and freshwater harmful algal blooms and*  
25 *hypoxia;*

1           “(F) scientists, with expertise concerning  
2           harmful algal blooms or hypoxia, from academic  
3           or research institutions; and

4           “(G) other stakeholders.

5           “(d) *BUILDING ON AVAILABLE STUDIES AND INFOR-*  
6 *MATION.—In developing a regional research and action*  
7 *plan under this section, the Under Secretary shall—*

8           “(1) utilize and build on existing research, as-  
9           sessments, reports, including those carried out under  
10          existing law, and other relevant sources; and

11          “(2) consider the impacts, research, and existing  
12          program activities of all United States coastlines and  
13          fresh and inland waters, including the Great Lakes,  
14          the Chesapeake Bay, estuaries, and tributaries.

15          “(e) *SCHEDULE.—The Under Secretary shall—*

16          “(1) begin developing the regional research and  
17          action plans for at least a third of the regions not  
18          later than 9 months after the date of the enactment  
19          of the *Harmful Algal Blooms and Hypoxia Research*  
20          and *Control Amendments Act of 2011*;

21          “(2) begin developing the regional research and  
22          action plans for at least another third of the regions  
23          not later than 21 months after the date of the enact-  
24          ment of the *Harmful Algal Blooms and Hypoxia Re-*  
25          *search and Control Amendments Act of 2011*;

1           “(3) begin developing the regional research and  
2           action plans for the remaining regions not later than  
3           33 months after the date of the enactment of the  
4           *Harmful Algal Blooms and Hypoxia Research and*  
5           *Control Amendments Act of 2011; and*

6           “(4) ensure that each regional research and ac-  
7           tion plan developed under this section is—

8                   “(A) completed and approved by the Task  
9                   Force not later than 12 months after the date  
10                  that development of the regional research and ac-  
11                  tion plan begins; and

12                   “(B) updated not less than once every 5  
13                  years after the completion of the regional re-  
14                  search and action plan.

15           “(f) *PRIORITIZATION.*—In developing the regional re-  
16           search and action plans pursuant to subsection (e), the  
17           Under Secretary shall begin with regions that historically  
18           have the greatest record of harmful algal blooms or the larg-  
19           est perennial hypoxic zones.

20           “(g) *FUNDING.*—

21                   “(1) *IN GENERAL.*—Subject to available appro-  
22                  priations, the Under Secretary shall make funding  
23                  available to eligible organizations to implement the  
24                  research, monitoring, forecasting, modeling, and re-  
25                  sponse actions included under each approved regional

1        *research and action plan. The Program shall select re-*  
2        *ipients through a merit-based, competitive process*  
3        *and seek to fund research proposals that most effec-*  
4        *tively align with the research priorities identified in*  
5        *the relevant regional research and action plan.*

6            *“(2) APPLICATION; ASSURANCES.—An organiza-*  
7        *tion seeking funding under this subsection shall sub-*  
8        *mit an application to the Program at such time, in*  
9        *such form and manner, and containing such informa-*  
10       *tion and assurances as the Program may require. The*  
11       *Program shall require each eligible organization re-*  
12       *ceiving funds under this subsection to utilize the*  
13       *mechanisms under subsection (b)(2)(E) to ensure the*  
14       *transfer of data and products developed under the re-*  
15       *gional research and action plan.*

16           *“(3) ELIGIBLE ORGANIZATION.—In this sub-*  
17       *section, the term ‘eligible organization’ means—*

18            *“(A) an institution of higher education,*  
19        *other non-profit organization, State, tribal, or*  
20        *local government, commercial organization, or*  
21        *Federal agency that meets the requirements of*  
22        *this section and such other requirements as may*  
23        *be established by the Under Secretary; and*

24            *“(B) with respect to nongovernmental orga-*  
25        *nizations, an organization that is subject to reg-*

1            *ulations promulgated or guidelines issued to*  
2            *carry out this section, including United States*  
3            *audit requirements that are applicable to non-*  
4            *governmental organizations.”.*

5    **SEC. 8. REPORTING.**

6            *Section 603 is amended by adding at the end the fol-*  
7            *lowing:*

8            *“(j) REPORT.—Not later than 2 years after the submis-*  
9            *sion of the action strategy under section 603A, the Under*  
10           *Secretary shall submit a report to the appropriate congres-*  
11           *sional committees that describes—*

12                    *“(1) the proceedings of the annual Task Force*  
13                    *meetings;*

14                    *“(2) the activities carried out under the Program*  
15                    *and the regional research and action plans, and the*  
16                    *budget related to the activities;*

17                    *“(3) the progress made on implementing the ac-*  
18                    *tion strategy; and*

19                    *“(4) any need to revise or terminate activities or*  
20                    *projects under the Program.*

21            *“(k) PROGRAM REPORT.—Not later than 5 years after*  
22            *the date of enactment of the Harmful Algal Blooms and*  
23            *Hypoxia Research and Control Amendments Act of 2011,*  
24            *the Task Force shall submit a report on harmful algal*

1 *blooms and hypoxia in marine and freshwater systems to*  
2 *Congress that—*

3           “(1) *evaluates the state of scientific knowledge of*  
4 *harmful algal blooms and hypoxia in marine and*  
5 *freshwater systems, including their causes and eco-*  
6 *logical consequences;*

7           “(2) *evaluates the social and economic impacts*  
8 *of harmful algal blooms and hypoxia, including their*  
9 *impacts on coastal communities, and reviews those*  
10 *communities’ efforts and associated economic costs re-*  
11 *lated to event forecasting, planning, mitigation, re-*  
12 *sponse, public outreach, and education;*

13           “(3) *examines and evaluates the human health*  
14 *impacts of harmful algal blooms and hypoxia, includ-*  
15 *ing any gaps in existing research;*

16           “(4) *describes advances in capabilities for moni-*  
17 *toring, forecasting, modeling, control, mitigation, and*  
18 *prevention of harmful algal blooms and hypoxia, in-*  
19 *cluding techniques for integrating landscape- and wa-*  
20 *tershed-level water quality information into marine*  
21 *and freshwater harmful algal bloom and hypoxia pre-*  
22 *vention and mitigation strategies at Federal and re-*  
23 *gional levels;*

24           “(5) *evaluates progress made by, and the needs*  
25 *of, Federal, regional, State, tribal, and local policies*



1        *and strategies for forecasting, planning, mitigating,*  
 2        *preventing, and responding to harmful algal blooms*  
 3        *and hypoxia, including the economic costs and bene-*  
 4        *fits of the policies and strategies;*

5            *“(6) includes recommendations for integrating,*  
 6        *improving, and funding future Federal, regional,*  
 7        *State, tribal, and local policies and strategies for pre-*  
 8        *venting and mitigating the occurrence and impacts of*  
 9        *harmful algal blooms and hypoxia;*

10           *“(7) describes communication, outreach, and*  
 11        *education efforts to raise public awareness of harmful*  
 12        *algal blooms and hypoxia, their impacts, and the*  
 13        *methods for mitigation and prevention;*

14           *“(8) describes extramural research activities car-*  
 15        *ried out under section 605(b); and*

16           *“(9) specifies how resources were allocated be-*  
 17        *tween intramural and extramural research and man-*  
 18        *agement activities, including a justification for each*  
 19        *allocation.”.*

20    **SEC. 9. NORTHERN GULF OF MEXICO HYPOXIA.**

21        *Section 604 is amended to read as follows:*

22    **“SEC. 604. NORTHERN GULF OF MEXICO HYPOXIA.**

23           *“(a) TASK FORCE INITIAL PROGRESS REPORTS.—Be-*  
 24        *ginning not later than 12 months after the date of enact-*  
 25        *ment of the Harmful Algal Blooms and Hypoxia Research*

1 *and Control Amendments Act of 2011, and every 2 years*  
 2 *thereafter, the Administrator, through the Mississippi*  
 3 *River/Gulf of Mexico Watershed Nutrient Task Force, shall*  
 4 *submit a progress report to the appropriate congressional*  
 5 *committees and the President that describes the progress*  
 6 *made by Task Force-directed activities carried out or fund-*  
 7 *ed by the Environmental Protection Agency and other State*  
 8 *and Federal partners toward attainment of the goals of the*  
 9 *Gulf Hypoxia Action Plan 2008.*

10       “(b) *CONTENTS.—Each report required under this sec-*  
 11 *tion shall—*

12               “(1) *assess the progress made toward nutrient*  
 13 *load reductions, the response of the hypoxic zone and*  
 14 *water quality throughout the Mississippi/Atchafalaya*  
 15 *River Basin, and the economic and social effects;*

16               “(2) *evaluate lessons learned; and*

17               “(3) *recommend appropriate actions to continue*  
 18 *to implement or, if necessary, revise the strategy set*  
 19 *forth in the Gulf Hypoxia Action Plan 2008.”.*

20 **SEC. 10. INTERAGENCY FINANCING.**

21       *The Act, as amended by section 9 of this Act, is further*  
 22 *amended by inserting after section 604 the following:*

23 **“SEC. 604A. INTERAGENCY FINANCING.**

24       *“The departments and agencies represented on the*  
 25 *Task Force may participate in interagency financing and*

1 *share, transfer, receive, obligate, and expend funds appro-*  
 2 *priated to any member of the Task Force for the purposes*  
 3 *of carrying out any administrative or programmatic*  
 4 *project or activity under this title, including support for*  
 5 *the Program, a common infrastructure, information shar-*  
 6 *ing, and system integration for harmful algal bloom and*  
 7 *hypoxia research, monitoring, forecasting, prevention, and*  
 8 *control. Funds may be transferred among such departments*  
 9 *and agencies through an appropriate instrument that speci-*  
 10 *fies the goods, services, or space being acquired from another*  
 11 *Task Force member and the costs of the goods, services, and*  
 12 *space. The amount of funds transferrable under this section*  
 13 *for any fiscal year may not exceed 5 percent of the account*  
 14 *from which such transfer was made.”*

15 **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

16 *Section 605 is amended to read as follows:*

17 **“§ 605. Authorization of appropriations**

18 *“(a) IN GENERAL.—There are authorized to be appro-*  
 19 *priated, for each of the fiscal years 2011 through 2015 to*  
 20 *the Under Secretary to carry out sections 603A and 603B,*  
 21 *\$30,000,000, of which—*

22 *“(1) \$2,000,000 may be used for the development*  
 23 *of regional research and action plans and the reports*  
 24 *required under section 603B;*

1           “(2) \$3,000,000 may be used for the research and  
2           assessment activities related to marine and freshwater  
3           harmful algal blooms at the National Oceanic and At-  
4           mospheric Administration research laboratories;

5           “(3) \$7,000,000 may be used to carry out the  
6           Ecology and Oceanography of Harmful Algal Blooms  
7           Program (ECOHAB);

8           “(4) \$4,500,000 may be used to carry out the  
9           Monitoring and Event Response for Harmful Algal  
10          Blooms Program (MERHAB);

11          “(5) \$1,500,000 may be used to carry out the  
12          Northern Gulf of Mexico Ecosystems and Hypoxia As-  
13          sessment Program (NGOMEX);

14          “(6) \$4,000,000 may be used to carry out the  
15          Coastal Hypoxia Research Program (CHRP);

16          “(7) \$4,000,000 may be used to carry out the  
17          Prevention, Control, and Mitigation of Harmful Algal  
18          Blooms Program (PCM);

19          “(8) \$1,000,000 may be used to carry out the  
20          Event Response Program; and

21          “(9) \$3,000,000 may be used to carry out the In-  
22          frastructure Program.

23          “(b) *EXTRAMURAL RESEARCH ACTIVITIES.*—The  
24          Under Secretary shall ensure that a substantial portion of  
25          funds appropriated pursuant to subsection (a) that are used

1 *for research purposes are allocated to extramural research*  
2 *activities.”.*

3 **SEC. 12. DEFINITIONS; CONFORMING AMENDMENT.**

4 *(a) IN GENERAL.—The Act is amended by inserting*  
5 *after section 605 the following:*

6 **“§ 605A. Definitions**

7 *“In this title:*

8 *“(1) ADMINISTRATOR.—The term ‘Adminis-*  
9 *trator’ means the Administrator of the National Oce-*  
10 *anic and Atmospheric Administration.*

11 *“(2) HARMFUL ALGAL BLOOM.—The term ‘harm-*  
12 *ful algal bloom’ means marine and freshwater*  
13 *phytoplankton that proliferate to high concentrations,*  
14 *resulting in nuisance conditions or harmful impacts*  
15 *on marine and aquatic ecosystems, coastal commu-*  
16 *nities, and human health through the production of*  
17 *toxic compounds or other biological, chemical, and*  
18 *physical impacts of the algae outbreak.*

19 *“(3) HYPOXIA.—The term ‘hypoxia’ means a*  
20 *condition where low dissolved oxygen in aquatic sys-*  
21 *tems causes stress or death to resident organisms.*

22 *“(4) PROGRAM.—The term ‘Program’ means the*  
23 *National Harmful Algal Bloom and Hypoxia Pro-*  
24 *gram established under section 603A.*

1           “(5) *REGIONAL RESEARCH AND ACTION PLAN.*—  
2           *The term ‘regional research and action plan’ means*  
3           *a plan established under section 603B.*

4           “(6) *STATE.*—*The term ‘State’ means each of the*  
5           *several States of the United States, the District of Co-*  
6           *lumbia, the Commonwealth of Puerto Rico, the Virgin*  
7           *Islands, Guam, American Samoa, the Commonwealth*  
8           *of the Northern Mariana Islands, any other territory*  
9           *or possession of the United States, and any Indian*  
10          *tribe.*

11          “(7) *TASK FORCE.*—*The term ‘Task Force’*  
12          *means the Inter-Agency Task Force established by sec-*  
13          *tion 603(a).*

14          “(8) *UNDER SECRETARY.*—*The term ‘Under Sec-*  
15          *retary’ means the Under Secretary of Commerce for*  
16          *Oceans and Atmosphere.*

17          “(9) *UNITED STATES COASTAL WATERS.*—*The*  
18          *term ‘United States coastal waters’ includes the Great*  
19          *Lakes.’’.*

20          “(b) *CONFORMING AMENDMENT.*—*Section 603(a) is*  
21          *amended by striking ‘(hereinafter referred to as the ‘Task*  
22          *Force)’’.*

23          **SEC. 13. APPLICATION WITH OTHER LAWS.**

24          *The Act is amended by adding after section 606 the*  
25          *following:*

1 **“SEC. 607. EFFECT ON OTHER FEDERAL AUTHORITY.**

2       *“Nothing in this title supersedes or limits the author-*  
3 *ity of any agency to carry out its responsibilities and mis-*  
4 *sions under other laws.”.*

Calendar No. 542

112<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**S. 1701**

[Report No. 112-237]

---

---

## **A BILL**

To amend the Harmful Algal Blooms and Hypoxia  
Research and Control Act of 1998, and for other  
purposes.

---

---

NOVEMBER 13, 2012

Reported with an amendment