

# Union Calendar No. 350

113TH CONGRESS  
2D SESSION

# S. 1254

[Report No. 113-471, Part I]

---

## IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 18, 2014

Referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

JUNE 5, 2014

Reported from the Committee on Science, Space, and Technology with an amendment

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

JUNE 5, 2014

The Committee on Natural Resources discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of Senate passed bill, see copy of bill as printed in the House on February 18, 2014]

# 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,*

3   **SECTION 1. SHORT TITLE.**

4       *This Act may be cited as the “Harmful Algal Bloom*  
5   *and Hypoxia Research and Control Amendments Act of*  
6   *2014”.*

7   **SEC. 2. REFERENCES TO THE HARMFUL ALGAL BLOOM AND**  
8                   **HYPOXIA RESEARCH AND CONTROL ACT OF**  
9                   **1998.**

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

16   **SEC. 3. 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 Pre-  
2 vention; and”; and

3           (5) in paragraph (13), as redesignated, by strik-  
4 ing “such”.

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

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

9 **“SEC. 603A. NATIONAL HARMFUL ALGAL BLOOM AND HY-  
10 POXIA PROGRAM.**

11           “(a) ESTABLISHMENT.—Not later than 1 year after the  
12 date of enactment of the Harmful Algal Bloom and Hy-  
13 poxia Research and Control Amendments Act of 2014, the  
14 Under Secretary, acting through the Task Force, shall  
15 maintain and enhance a national harmful algal bloom and  
16 hypoxia program, including—

17           “(1) a statement of objectives, including under-  
18 standing, detecting, predicting, controlling, miti-  
19 gating, and responding to marine and freshwater  
20 harmful algal bloom and hypoxia events; and

21           “(2) the comprehensive research plan and action  
22 strategy under section 603B.

23           “(b) PERIODIC REVISION.—The Task Force shall peri-  
24 odically review and revise the Program, as necessary.

1       “(c) *TASK FORCE FUNCTIONS.*—*The Task Force*  
2 *shall*—

3           “(1) *coordinate interagency review of the objec-*  
4 *tives and activities of the Program;*

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

8           “(3) *support the implementation of the Action*  
9 *Strategy, including the coordination and integration*  
10 *of the research of all Federal programs, including*  
11 *ocean and Great Lakes science and management pro-*  
12 *grams and centers, that address the chemical, biologi-*  
13 *cal, and physical components of marine and fresh-*  
14 *water harmful algal blooms and hypoxia;*

15           “(4) *support the development of institutional*  
16 *mechanisms and financial instruments to further the*  
17 *objectives and activities of the Program;*

18           “(5) *review the Program’s distribution of Federal*  
19 *funding to address the objectives and activities of the*  
20 *Program;*

21           “(6) *promote the development of new technologies*  
22 *for predicting, monitoring, and mitigating harmful*  
23 *algal bloom and hypoxia conditions; and*

24           “(7) *establish such interagency working groups*  
25 *as it considers necessary.*

1       “(d) LEAD FEDERAL AGENCY.—Except as provided in  
2 subsection (h), the National Oceanic and Atmospheric Ad-  
3 ministration shall have primary responsibility for admin-  
4 istering the Program.

5       “(e) PROGRAM DUTIES.—In administering the Pro-  
6 gram, the Under Secretary shall—

7           “(1) promote the Program;

8           “(2) prepare work and spending plans for imple-  
9 menting the research and activities identified under  
10 the Action Strategy;

11           “(3) administer peer-reviewed, merit-based, com-  
12 petitive grant funding—

13           “(A) to maintain and enhance baseline  
14 monitoring programs established by the Pro-  
15 gram;

16           “(B) to support the projects maintained  
17 and established by the Program; and

18           “(C) to address the research and manage-  
19 ment needs and priorities identified in the Ac-  
20 tion Strategy;

21           “(4) coordinate with and work cooperatively  
22 with regional, State, tribal, and local government  
23 agencies and programs that address marine and  
24 freshwater harmful algal blooms and hypoxia;

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

6           “(6) identify additional research, development,  
7 and demonstration needs and priorities relating to  
8 monitoring, prevention, control, mitigation, and re-  
9 sponse to marine and freshwater harmful algal blooms  
10 and hypoxia, including methods and technologies to  
11 protect the ecosystems affected by marine and fresh-  
12 water harmful algal blooms and hypoxia;

13           “(7) integrate, coordinate, and augment existing  
14 education programs to improve public understanding  
15 and awareness of the causes, impacts, and mitigation  
16 efforts for marine and freshwater harmful algal  
17 blooms and hypoxia;

18           “(8) facilitate and provide resources to train  
19 State and local coastal and water resource managers  
20 in the methods and technologies for monitoring, pre-  
21 venting, controlling, and mitigating marine and  
22 freshwater harmful algal blooms and hypoxia;

23           “(9) support regional efforts to control and miti-  
24 gate outbreaks through—

1               “(A) communication of the contents of the  
2               Action Strategy and maintenance of online data  
3               portals for other information about harmful  
4               algal blooms and hypoxia to State, tribal, and  
5               local stakeholders; and

6               “(B) overseeing the development, review,  
7               and periodic updating of the Action Strategy;

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

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

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

14              “(1) maintain and enhance the existing competi-  
15              tive programs at the National Oceanic and Atmos-  
16              pheric Administration relating to harmful algal  
17              blooms and hypoxia;

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

20              “(3) develop and enhance, including with respect  
21              to infrastructure as necessary, critical observations,  
22              monitoring, modeling, data management, information  
23              dissemination, and operational forecasts relevant to  
24              harmful algal blooms and hypoxia events;

1           “(4) enhance communication and coordination  
2        among Federal agencies carrying out marine and  
3        freshwater harmful algal bloom and hypoxia activities  
4        and research;

5           “(5) to the greatest extent practicable, leverage  
6        existing resources and expertise available from local  
7        research universities and institutions; and

8           “(6) 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 bloom and hy-  
20        poxia (and related) activities and research.

21           “(h) FRESHWATER.—With respect to the freshwater as-  
22        pects of the Program, the Administrator, through the Task  
23        Force, shall carry out the duties otherwise assigned to the  
24        Under Secretary under this section, except the activities de-  
25        scribed in subsection (f).

1           “(1) *PARTICIPATION.*—The Administrator’s par-  
2        ticipation under this section shall include—

3           “(A) research on the ecology and impacts of  
4        freshwater harmful algal blooms; and  
5           “(B) forecasting and monitoring of and  
6        event response to freshwater harmful algal  
7        blooms in lakes, rivers, estuaries (including their  
8        tributaries), and reservoirs.

9           “(2) *NONDUPLICATION.*—The Administrator  
10      shall ensure that activities carried out under this title  
11      focus on new approaches to addressing freshwater  
12      harmful algal blooms and are not duplicative of exist-  
13      ing research and development programs authorized by  
14      this title or any other law.

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

22      **SEC. 5. COMPREHENSIVE RESEARCH PLAN AND ACTION**  
23           **STRATEGY.**

24      The Act, as amended by section 4 of this Act, is further  
25      amended by inserting after section 603A the following:

1   **“SEC. 603B. COMPREHENSIVE RESEARCH PLAN AND ACTION**2                   **STRATEGY.**

3         “(a) *IN GENERAL.*—Not later than 1 year after the  
4   date of enactment of the Harmful Algal Bloom and Hy-  
5   poxia Research and Control Amendments Act of 2014, the  
6   Under Secretary, through the Task Force, shall develop and  
7   submit to Congress a comprehensive research plan and ac-  
8   tion strategy to address marine and freshwater harmful  
9   algal blooms and hypoxia. The Action Strategy shall iden-  
10 tify—

11                 “(1) the specific activities to be carried out by  
12   the Program and the timeline for carrying out those  
13   activities;

14                 “(2) the roles and responsibilities of each Federal  
15   agency in the Task Force in carrying out the activi-  
16   ties under paragraph (1); and

17                 “(3) the appropriate regions and subregions re-  
18   quiring specific research and activities to address  
19   harmful algal blooms and hypoxia.

20         “(b) *REGIONAL FOCUS.*—The regional and subregional  
21   parts of the Action Strategy shall identify—

22                 “(1) regional priorities for ecological, economic,  
23   and social research on issues related to the impacts of  
24   harmful algal blooms and hypoxia;

25                 “(2) research, development, and demonstration  
26   activities needed to develop and advance technologies

1       and techniques for minimizing the occurrence of  
2       harmful algal blooms and hypoxia and improving ca-  
3       pabilities to detect, predict, monitor, control, miti-  
4       gate, respond to, and remediate harmful algal blooms  
5       and hypoxia;

6           “(3) ways to reduce the duration and intensity  
7       of harmful algal blooms and hypoxia, including de-  
8       ployment of response technologies in a timely manner;

9           “(4) research and methods to address human  
10      health dimensions of harmful algal blooms and hy-  
11      poxia;

12          “(5) mechanisms, including the potential costs  
13       and benefits of those mechanisms, to protect eco-  
14       systems that may be or have been affected by harmful  
15       algal bloom and hypoxia events;

16          “(6) mechanisms by which data, information,  
17       and products may be transferred between the Program  
18       and the State, tribal, and local governments and re-  
19       search entities;

20          “(7) communication and information dissemina-  
21       tion methods that State, tribal, and local governments  
22       may undertake to educate and inform the public con-  
23       cerning harmful algal blooms and hypoxia; and

24          “(8) roles that Federal agencies may have to as-  
25       sist in the implementation of the Action Strategy, in-

1       *cluding efforts to support local and regional scientific  
2       assessments under section 603(e).*

3       “(c) UTILIZING AVAILABLE STUDIES AND INFORMA-  
4       TION.—*In developing the Action Strategy, the Under Sec-  
5       retary shall utilize existing research, assessments, reports,  
6       and program activities, including—*

7           “(1) those carried out under existing law; and  
8           “(2) other relevant peer-reviewed and published  
9       sources.

10          “(d) DEVELOPMENT OF THE ACTION STRATEGY.—*In  
11       developing the Action Strategy, the Under Secretary shall,  
12       as appropriate—*

13           “(1) coordinate with—  
14              “(A) State coastal management and plan-  
15       ning officials;

16              “(B) tribal resource management officials;  
17       and

18              “(C) water management and watershed offi-  
19       cials from both coastal States and noncoastal  
20       States with water sources that drain into water  
21       bodies affected by harmful algal blooms and hy-  
22       poxia; and

23           “(2) consult with—  
24              “(A) public health officials;  
25              “(B) emergency management officials;

1               “(C) science and technology development in-  
2               stitutions;  
3               “(D) economists;  
4               “(E) industries and businesses affected by  
5               marine and freshwater harmful algal blooms and  
6               hypoxia;  
7               “(F) scientists with expertise concerning  
8               harmful algal blooms or hypoxia from academic  
9               or research institutions; and  
10              “(G) other stakeholders.

11             “(e) *FEDERAL REGISTER*.—The Under Secretary shall  
12             publish the Action Strategy in the Federal Register.

13             “(f) *PERIODIC REVISION*.—The Under Secretary, in  
14             coordination and consultation with the individuals and en-  
15             ties under subsection (d), shall periodically review and re-  
16             vise the Action Strategy prepared under this section, as nec-  
17             essary.”.

18     **SEC. 6. REPORTING.**

19             Section 603 is amended by adding at the end the fol-  
20             lowing:

21             “(j) *REPORT*.—Not later than 2 years after the date  
22             the Action Strategy is submitted under section 603B, the  
23             Under Secretary shall submit a report to Congress that de-  
24             scribes—

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

3           “(2) the activities carried out under the Pro-  
4       gram, including the regional and subregional parts of  
5       the Action Strategy;

6           “(3) the budget related to the activities under  
7       paragraph (2);

8           “(4) the progress made on implementing the Ac-  
9       tion Strategy; and

10          “(5) any need to revise or terminate research  
11       and activities under the Program.”.

12 **SEC. 7. NORTHERN GULF OF MEXICO HYPOXIA.**

13          Section 604 is amended to read as follows:

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

15          “(a) INITIAL PROGRESS REPORTS.—Beginning not  
16       later than 12 months after the date of enactment of the  
17       Harmful Algal Bloom and Hypoxia Research and Control  
18       Amendments Act of 2014, and biennially thereafter, the Ad-  
19       ministrator, through the Mississippi River/Gulf of Mexico  
20       Watershed Nutrient Task Force, shall submit a progress re-  
21       port to the appropriate congressional committees and the  
22       President that describes the progress made by activities di-  
23       rected by the Mississippi River/Gulf of Mexico Watershed  
24       Nutrient Task Force and carried out or funded by the Envi-  
25       ronmental Protection Agency and other State and Federal

1 partners toward attainment of the goals of the Gulf Hy-  
2 poxia Action Plan 2008.

3 “(b) CONTENTS.—Each report required under this sec-  
4 tion shall—

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

9 “(2) evaluate lessons learned; and

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

13 **SEC. 8. GREAT LAKES HYPOXIA AND HARMFUL ALGAL  
14 BLOOMS.**

15 Section 605 is amended to read as follows:

16 **“SEC. 605. GREAT LAKES HYPOXIA AND HARMFUL ALGAL  
17 BLOOMS.**

18 “(a) INTEGRATED ASSESSMENT.—Not later than 18  
19 months after the date of enactment of the Harmful Algal  
20 Bloom and Hypoxia Research and Control Amendments  
21 Act of 2014, the Task Force, in accordance with the author-  
22 ity under section 603, shall complete and submit to the Con-  
23 gress and the President an integrated assessment that exam-  
24 ines the causes, consequences, and approaches to reduce hy-  
25 poxia and harmful algal blooms in the Great Lakes, includ-

1   *ing the status of and gaps within current research, moni-*  
2   *toring, management, prevention, response, and control ac-*  
3   *tivities by—*

- 4                 “(1) *Federal agencies;*  
5                 “(2) *State agencies;*  
6                 “(3) *regional research consortia;*  
7                 “(4) *academia;*  
8                 “(5) *private industry; and*  
9                 “(6) *nongovernmental organizations.*

10         “(b) *PLAN.—*

11                 “(1) *IN GENERAL.—Not later than 2 years after*  
12   *the date of enactment of the Harmful Algal Bloom*  
13   *and Hypoxia Research and Control Amendments Act*  
14   *of 2014, the Task Force shall develop and submit to*  
15   *the Congress a plan, based on the integrated assess-*  
16   *ment under subsection (a), for reducing, mitigating,*  
17   *and controlling hypoxia and harmful algal blooms in*  
18   *the Great Lakes.*

19                 “(2) *CONTENTS.—The plan shall—*

20                         “(A) *address the monitoring needs identi-*  
21   *fied in the integrated assessment under sub-*  
22   *section (a);*

23                         “(B) *develop a timeline and budgetary re-*  
24   *quirements for deployment of future assets;*

1               “(C) identify requirements for the development  
2               and verification of Great Lakes hypoxia  
3               and harmful algal bloom models, including—

4               “(i) all assumptions built into the  
5               models; and

6               “(ii) data quality methods used to ensure  
7               the best available data are utilized;  
8               and

9               “(D) describe efforts to improve the assessment  
10              of the impacts of hypoxia and harmful  
11              algal blooms by—

12              “(i) characterizing current and past  
13              biological conditions in ecosystems affected  
14              by hypoxia and harmful algal blooms; and

15              “(ii) quantifying effects, including economic  
16              effects, at the population and community levels.

18              “(3) REQUIREMENTS.—In developing the plan,  
19              the Task Force shall—

20              “(A) coordinate with State and local governments;

22              “(B) consult with representatives from academic, agricultural, industry, and other stakeholder groups, including relevant Canadian agencies;

1               “(C) ensure that the plan complements and  
2               does not duplicate activities conducted by other  
3               Federal or State agencies;

4               “(D) identify critical research for reducing,  
5               mitigating, and controlling hypoxia events and  
6               their effects;

7               “(E) evaluate cost-effective, incentive-based  
8               partnership approaches;

9               “(F) ensure that the plan is technically  
10              sound and cost effective;

11              “(G) utilize existing research, assessments,  
12              reports, and program activities;

13              “(H) publish a summary of the proposed  
14              plan in the Federal Register at least 180 days  
15              prior to submitting the completed plan to Con-  
16              gress; and

17              “(I) after submitting the completed plan to  
18              Congress, provide biennial progress reports on  
19              the activities toward achieving the objectives of  
20              the plan.”.

21 **SEC. 9. APPLICATION WITH OTHER LAWS.**

22              The Act is amended by adding after section 606 the  
23              following:

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

2         “(a) *AUTHORITY PRESERVED.*—Nothing in this title  
3     *supersedes or limits the authority of any agency to carry*  
4     *out its responsibilities and missions under other laws.*

5         “(b) *REGULATORY AUTHORITY.*—Nothing in this title  
6     *may be construed as establishing new regulatory authority*  
7     *for any agency.”.*

8     **SEC. 10. DEFINITIONS; CONFORMING AMENDMENT.**

9         (a) *IN GENERAL.*—The Act, as amended by section 9  
10   *of this Act, is further amended by adding after section 607*  
11   *the following:*

12   **SEC. 608. DEFINITIONS.**

13         “In this title:

14             “(1) *ACTION STRATEGY.*—The term ‘Action  
15     Strategy’ means the comprehensive research plan and  
16     action strategy established under section 603B.

17             “(2) *ADMINISTRATOR.*—The term ‘Administrator’  
18     means the Administrator of the Environmental Protection Agency.

19             “(3) *HARMFUL ALGAL BLOOM.*—The term ‘harmful  
20     algal bloom’ means marine and freshwater  
21     phytoplankton that proliferate to high concentrations,  
22     resulting in nuisance conditions or harmful impacts  
23     on marine and aquatic ecosystems, coastal communities,  
24     and human health through the production of

1       *toxic compounds or other biological, chemical, and*  
2       *physical impacts of the algae outbreak.*

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

6       “(5) PROGRAM.—The term ‘Program’ means the  
7       national harmful algal bloom and hypoxia program  
8       established under section 603A.

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

16       “(7) TASK FORCE.—The term ‘Task Force’  
17      means the Inter-Agency Task Force on Harmful Algal  
18      Blooms and Hypoxia under section 603(a).

19       “(8) UNDER SECRETARY.—The term ‘Under Sec-  
20      retary’ means the Under Secretary of Commerce for  
21      Oceans and Atmosphere.

22       “(9) UNITED STATES COASTAL WATERS.—The  
23      term ‘United States coastal waters’ includes the Great  
24      Lakes.”.

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

4 **SEC. 11. AUTHORIZATION OF APPROPRIATIONS.**

5       The Act is further amended by adding after section 608  
6 the following:

7 **“SEC. 609. AUTHORIZATION OF APPROPRIATIONS.**

8       “(a) *IN GENERAL.*—There is authorized to be appro-  
9 priated to the Under Secretary to carry out sections 603A  
10 and 603B \$20,500,000 for each of fiscal years 2014 through  
11 2018.

12       “(b) *EXTRAMURAL RESEARCH ACTIVITIES.*—The  
13 Under Secretary shall ensure that a substantial portion of  
14 funds appropriated pursuant to subsection (a) that are used  
15 for research purposes are allocated to extramural research  
16 activities. For each fiscal year, the Under Secretary shall  
17 publish a list of all grant recipients and the amounts for  
18 all of the funds allocated for research purposes, specifying  
19 those allocated for extramural research activities.”.



**Union Calendar No. 350**

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

**S. 1254**

**[Report No. 113-471, Part I]**

---

---

**A BILL**

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

---

---

JUNE 5, 2014

Reported from the Committee on Science, Space, and Technology with an amendment

JUNE 5, 2014

The Committee on Natural Resources discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed