

Union Calendar No. 271

112TH CONGRESS
2^D SESSION

H. R. 2484

[Report No. 112-333, Part I]

To reauthorize the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to include a comprehensive and integrated strategy to address harmful algal blooms and hypoxia, to provide for the development and implementation of a comprehensive research plan and action strategy to reduce harmful algal blooms and hypoxia, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 11, 2011

Mr. HARRIS (for himself, Mrs. CHRISTENSEN, Mr. MICHAUD, Mr. GRIJALVA, Ms. PINGREE of Maine, and Mr. MACK) introduced the following bill; which was 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

DECEMBER 16, 2011

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*]

DECEMBER 16, 2011

Referral to the Committee on Natural Resources extended for a period ending not later than February 9, 2012

FEBRUARY 9, 2012

Additional sponsors: Mr. BARTLETT, Ms. CASTOR of Florida, Mr. DEFAZIO,
and Mr. YOUNG of Florida

FEBRUARY 9, 2012

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 introduced bill, see copy of bill as introduced on July 11, 2011]

A BILL

To reauthorize the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to include a comprehensive and integrated strategy to address harmful algal blooms and hypoxia, to provide for the development and implementation of a comprehensive research plan and action strategy to reduce harmful algal blooms and hypoxia, 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 *2011”.*

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

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

15 **SEC. 3. DEFINITIONS.**

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

17 **“SEC. 602. DEFINITIONS.**

18 *“In this title:*

19 *“(1) ADMINISTRATOR.—The term ‘Adminis-*
20 *trator’ means the Administrator of the Environ-*
21 *mental Protection Agency.*

22 *“(2) NOAA.—The term ‘NOAA’ means the Na-*
23 *tional Oceanic and Atmospheric Administration.*

1 “(3) *PLAN*.—The term ‘Plan’ means the com-
2 prehensive research plan and action strategy under
3 section 605.

4 “(4) *PROGRAM*.—The term ‘Program’ means the
5 National Harmful Algal Bloom and Hypoxia Pro-
6 gram under section 604(a).

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

14 “(6) *TASK FORCE*.—The term ‘Task Force’
15 means the Inter-Agency Task Force on Harmful Algal
16 Blooms and Hypoxia under section 603(a)(1).

17 “(7) *UNDER SECRETARY*.—The term ‘Under Sec-
18 retary’ means the Under Secretary of Commerce for
19 Oceans and Atmosphere.”.

20 **SEC. 4. INTER-AGENCY TASK FORCE.**

21 Section 603(a) is amended to read as follows:

22 “(a) *INTER-AGENCY TASK FORCE*.—

23 “(1) *ESTABLISHMENT*.—The President, through
24 the Committee on Environment and Natural Re-
25 sources of the National Science and Technology Coun-

1 *cil, shall establish an Inter-Agency Task Force on*
2 *Harmful Algal Blooms and Hypoxia.*

3 “(2) *REPRESENTATION.*—*The Task Force shall*
4 *consist of representatives from the following:*

5 “(A) *The Department of Commerce.*

6 “(B) *The Environmental Protection Agency.*

7 “(C) *The Department of Agriculture.*

8 “(D) *The Department of the Interior.*

9 “(E) *The Department of the Navy.*

10 “(F) *The Department of Health and*
11 *Human Services.*

12 “(G) *The National Science Foundation.*

13 “(H) *The National Aeronautics and Space*
14 *Administration.*

15 “(I) *The Food and Drug Administration.*

16 “(J) *The Office of Science and Technology*
17 *Policy.*

18 “(K) *The Council on Environmental Qual-*
19 *ity.*

20 “(L) *Such other Federal agencies as the*
21 *President considers appropriate.*

22 “(3) *CHAIRPERSON.*—*The Under Secretary from*
23 *the Department of Commerce shall serve as the Chair-*
24 *person of the Task Force.*

25 “(4) *REQUIRED MEETINGS.*—

1 “(A) *IN GENERAL.*—*The Task Force shall*
2 *meet, or otherwise communicate, to coordinate*
3 *activities within each agency represented on the*
4 *Task Force in order to fulfill the program re-*
5 *quirements in section 604(b).*

6 “(B) *FREQUENCY.*—*The Task Force shall*
7 *meet at least once per year.*

8 “(5) *BUDGET COORDINATION.*—*The Task Force*
9 *shall—*

10 “(A) *coordinate in the development of indi-*
11 *vidual agency budgets for the activities described*
12 *in section 604 that will ensure an appropriate*
13 *balance among the research and action prior-*
14 *ities; and*

15 “(B) *submit such budgets to the Director of*
16 *the Office of Management and Budget at the*
17 *time designated by the Director for agencies to*
18 *submit annual budgets.”.*

19 **SEC. 5. NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA**
20 **PROGRAM.**

21 *The Act is amended—*

22 (1) *by redesignating sections 605 and 606 as sec-*
23 *tions 608 and 609, respectively;*

24 (2) *by redesignating section 604 as section 606;*
25 *and*

1 (3) *by inserting after section 603 the following:*

2 **“SEC. 604. NATIONAL HARMFUL ALGAL BLOOM AND HY-**
3 **POXIA PROGRAM.**

4 “(a) *IN GENERAL.—Except as provided in subsection*
5 *(d), the Under Secretary, through the Task Force, shall*
6 *maintain a National Harmful Algal Bloom and Hypoxia*
7 *Program in accordance with authorities under section 603*
8 *pursuant to this section.*

9 “(b) *DUTIES.—The Under Secretary, through the Pro-*
10 *gram, shall coordinate the efforts of the Task Force to—*

11 “(1) *develop and promote a national strategy to*
12 *understand, detect, monitor, predict, control, mitigate,*
13 *and respond to marine and freshwater harmful algal*
14 *bloom and hypoxia events;*

15 “(2) *integrate the research of all Federal pro-*
16 *grams, including ocean and Great Lakes science and*
17 *management programs and centers, that address the*
18 *chemical, biological, and physical components of ma-*
19 *rine and freshwater harmful algal blooms and hy-*
20 *poxia;*

21 “(3) *assist and coordinate, where appropriate,*
22 *with State, tribal, and local government agencies,*
23 *programs, and regional efforts that address marine*
24 *and freshwater harmful algal blooms and hypoxia, in-*

1 *cluding the development and implementation of ap-*
2 *propriate response plans, strategies, and tools;*

3 *“(4) identify additional research, development,*
4 *and demonstration needs and priorities relating to*
5 *understanding, detection, monitoring, prediction, pre-*
6 *vention, control, mitigation, and response to marine*
7 *and freshwater harmful algal blooms and hypoxia;*

8 *“(5) ensure the development and use of methods*
9 *and technologies to protect the ecosystems affected by*
10 *marine and freshwater harmful algal blooms and hy-*
11 *poxia;*

12 *“(6) encourage the appropriate exchange of re-*
13 *search information with other countries in order to*
14 *better mitigate, control, and respond to marine and*
15 *freshwater harmful algal blooms;*

16 *“(7) coordinate existing education programs to*
17 *improve public understanding and awareness of the*
18 *causes, impacts, and mitigation efforts for marine*
19 *and freshwater harmful algal blooms and hypoxia;*

20 *“(8) provide resources to assist in the training of*
21 *State, tribal, and local water and coastal resource*
22 *managers in the methods and technologies for detect-*
23 *ing, monitoring, controlling, mitigating, and respond-*
24 *ing to the effects of marine and freshwater harmful*
25 *algal bloom and hypoxia events;*

1 “(9) oversee the development, review, and peri-
2 odic updating of the Plan;

3 “(10) administer peer-reviewed, merit-based,
4 competitive grant funding to support—

5 “(A) the projects maintained and estab-
6 lished by the Program; and

7 “(B) the research and management needs
8 and priorities identified in the Plan; and

9 “(11) encourage the development of innovative
10 concepts for the beneficial utilization of—

11 “(A) biomass from harmful algal blooms
12 that have been removed from the natural system;
13 and

14 “(B) the growth of certain biofuel crops that
15 reduce runoff that causes harmful algal blooms.

16 “(c) *COOPERATIVE EFFORTS.*—The Under Secretary
17 shall work cooperatively and avoid duplication of efforts
18 with other offices, centers, and programs within NOAA and
19 other agencies represented on the Task Force, States, tribes,
20 and nongovernmental organizations concerned with marine
21 and freshwater aquatic issues related to harmful algal
22 blooms and hypoxia.

23 “(d) *FRESHWATER PROGRAM.*—

24 “(1) *IN GENERAL.*—With respect to the fresh-
25 water aspects of the Program, the Administrator and

1 *the Under Secretary, through the Task Force, shall*
2 *carry out the duties otherwise assigned to the Under*
3 *Secretary under this section, excluding the activities*
4 *described in subsection (e).*

5 “(2) *PARTICIPATION.*—*The Administrator’s par-*
6 *ticipation under this subsection shall include—*

7 “(A) *research on the ecology of freshwater*
8 *harmful algal blooms;*

9 “(B) *monitoring of and event response to*
10 *freshwater harmful algal blooms in lakes, rivers,*
11 *estuaries (including their tributaries), and res-*
12 *ervoirs; and*

13 “(C) *mitigation and control of freshwater*
14 *harmful algal blooms.*

15 “(3) *NONDUPLICATION.*—*The Administrator*
16 *shall ensure that activities carried out under this Act*
17 *shall focus on new approaches to addressing fresh-*
18 *water harmful algal blooms and are not duplicative*
19 *of existing research and development programs au-*
20 *thorized by this or any other Act.*

21 “(4) *REPORT.*—*Not later than 1 year after the*
22 *date of enactment of the Harmful Algal Bloom and*
23 *Hypoxia Research and Control Amendments Act of*
24 *2011, the Administrator shall prepare and transmit*

1 to the Committee on Science, Space, and Technology
2 of the House of Representatives a report containing—

3 “(A) a detailed budget explanation for all of
4 the activities conducted by the Administrator
5 under this Act; and

6 “(B) a description of how such activities re-
7 duce the effects of freshwater harmful algal
8 blooms and improve water quality.

9 “(e) NOAA ACTIVITIES.—As part of the program
10 under this section, the Under Secretary shall—

11 “(1) maintain existing peer-reviewed competitive
12 grant programs at NOAA relating to marine and
13 freshwater harmful algal blooms and hypoxia;

14 “(2) conduct marine and freshwater harmful
15 algal bloom and hypoxia event response activities;
16 and

17 “(3) ensure communication and coordination
18 among Federal agencies carrying out marine and
19 freshwater harmful algal bloom and hypoxia activities
20 and increase the availability to appropriate public
21 and private entities of—

22 “(A) analytical facilities and technologies;

23 “(B) operational forecasts; and

24 “(C) reference and research materials.

1 “(f) *INTEGRATED COASTAL AND OCEAN OBSERVATION*
2 *SYSTEM.*—*All monitoring and observation data collected*
3 *under this Act shall be collected in compliance with all data*
4 *standards and protocols developed pursuant to the National*
5 *Integrated Coastal and Ocean Observation System Act of*
6 *2009 (33 U.S.C. 3601 et seq.), and such data shall be made*
7 *available through the system established under that Act.*

8 “(g) *TECHNOLOGY RESEARCH, DEVELOPMENT, AND*
9 *DEMONSTRATION.*—

10 “(1) *IN GENERAL.*—*As part of the duties de-*
11 *scribed in subsection (b), the Under Secretary and the*
12 *Administrator, through the Task Force, shall main-*
13 *tain a focus on technology research and development*
14 *for each of the categories of marine harmful algal*
15 *blooms, freshwater harmful algal blooms, and hypoxia*
16 *in the following areas:*

17 “(A) *Monitoring.*

18 “(B) *Prediction.*

19 “(C) *Prevention.*

20 “(D) *Control.*

21 “(E) *Mitigation.*

22 “(F) *Response to events, including remedi-*
23 *ation.*

24 “(2) *ENUMERATION.*—*As part of the report re-*
25 *quired under subsection (i), the Under Secretary, in*

1 *coordination with the Administrator, shall enumerate*
2 *the technology research and development conducted for*
3 *each of the areas identified in paragraph (1).*

4 “(3) *PROTOCOL.—The Under Secretary, in co-*
5 *ordination with the Administrator, shall develop a*
6 *protocol for—*

7 “(A) *assessing the stage of technology devel-*
8 *opment that is ready to move from lab testing to*
9 *field testing;*

10 “(B) *coordinating local, State, and Federal*
11 *authorities to facilitate measures necessary to*
12 *conduct field tests in a timely manner; and*

13 “(C) *working with local and State entities,*
14 *programs, and interested stakeholders to conduct*
15 *outreach and education on technology field test-*
16 *ing projects.*

17 “(h) *INFORMATION CLEARINGHOUSE.—*

18 “(1) *ELECTRONIC INFORMATION.—Using the au-*
19 *thority under section 603(i)(2)(B), the Under Sec-*
20 *retary, in coordination with the Administrator, shall*
21 *expand the existing electronic clearinghouse to provide*
22 *information about marine and freshwater harmful*
23 *algal blooms and hypoxia, including—*

24 “(A) *the Federal agencies involved in re-*
25 *search and development on understanding, detec-*

1 tion, monitoring, prediction, prevention, control,
2 mitigation, and response activities;

3 “(B) tools available to predict and model
4 events; and

5 “(C) current or developing technologies for
6 detection, monitoring, prediction, prevention,
7 control, mitigation, and response, including re-
8 mediation.

9 “(2) *TOXIN STANDARDS*.—The Under Secretary,
10 in consultation with the Administrator, shall—

11 “(A) develop a mechanism to provide a reli-
12 able and cost-effective supply of toxin standards
13 for comparative research; and

14 “(B) notify the Congress of such mechanism
15 as part of the report required under subsection
16 (i).

17 “(i) *REPORT*.—Not later than 1 year after the submis-
18 sion of the Plan, the Under Secretary, through the Task
19 Force, shall prepare and transmit to the Congress a report
20 that describes—

21 “(1) the activities carried out under the Program
22 and the Plan and the budget related to such activities;
23 and

24 “(2) the need to revise or terminate activities or
25 projects under the Program.”.

1 **SEC. 6. COMPREHENSIVE RESEARCH PLAN AND ACTION**
2 **STRATEGY.**

3 *The Act is amended by inserting after section 604, as*
4 *added by section 5(3) of this Act, the following:*

5 **“SEC. 605. COMPREHENSIVE RESEARCH PLAN AND ACTION**
6 **STRATEGY.**

7 *“(a) IN GENERAL.—Not later than 2 years after the*
8 *date of enactment of the Harmful Algal Bloom and Hy-*
9 *poxia Research and Control Amendments Act of 2011, the*
10 *Under Secretary, through the Task Force, shall transmit to*
11 *the Congress a comprehensive research plan and action*
12 *strategy to address marine and freshwater harmful algal*
13 *blooms and hypoxia that identifies—*

14 *“(1) the specific activities to be carried out by*
15 *the Program and the timeline for carrying out such*
16 *activities;*

17 *“(2) the roles and responsibilities of each Federal*
18 *agency in the Task Force in carrying out Program*
19 *activities; and*

20 *“(3) appropriate regions and subregions requir-*
21 *ing specific research and activities to address local,*
22 *State, and regional harmful algal blooms and hy-*
23 *poxia.*

24 *“(b) REGIONAL FOCUS.—The regional and subregional*
25 *parts of the Plan shall identify—*

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

4 “(2) research, development, and demonstration
5 activities needed to develop and advance technologies
6 and techniques for minimizing the occurrence of
7 harmful algal blooms and hypoxia and improving ca-
8 pabilities to detect, predict, monitor, control, miti-
9 gate, respond to, and remediate harmful algal blooms
10 and hypoxia;

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

14 “(4) research and methods to address human
15 health dimensions of harmful algal blooms and hy-
16 poxia;

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

21 “(6) mechanisms by which data, information,
22 and products may be transferred between the Program
23 and State, tribal, and local governments and relevant
24 research entities;

1 “(7) *communication and information dissemina-*
2 *tion methods that State, tribal, and local governments*
3 *may undertake to educate and inform the public con-*
4 *cerning harmful algal blooms and hypoxia; and*

5 “(8) *the roles that Federal agencies may have to*
6 *assist in the implementation of the Plan.*

7 “(c) *UTILIZING AVAILABLE STUDIES AND INFORMA-*
8 *TION.—In developing the Plan, the Under Secretary shall*
9 *utilize existing research, assessments, reports, and program*
10 *activities, including—*

11 “(1) *those carried out pursuant to existing law;*
12 *and*

13 “(2) *other relevant peer-reviewed and published*
14 *sources.*

15 “(d) *DEVELOPMENT OF THE PLAN.—In developing the*
16 *Plan, the Under Secretary shall, as appropriate—*

17 “(1) *coordinate with—*

18 “(A) *State coastal management and plan-*
19 *ning officials;*

20 “(B) *tribal resource management officials;*
21 *and*

22 “(C) *water management and watershed offi-*
23 *cial from both coastal States and noncoastal*
24 *States with water sources that drain into water*

1 *bodies affected by harmful algal blooms and hy-*
2 *poxia; and*

3 “(2) *consult with—*

4 “(A) *public health officials;*

5 “(B) *emergency management officials;*

6 “(C) *science and technology development in-*
7 *stitutions;*

8 “(D) *economists;*

9 “(E) *industries and businesses affected by*
10 *marine and freshwater harmful algal blooms and*
11 *hypoxia;*

12 “(F) *scientists with expertise concerning*
13 *harmful algal blooms or hypoxia from academic*
14 *or research institutions; and*

15 “(G) *other stakeholders.*

16 “(e) *FEDERAL REGISTER.—The Under Secretary shall*
17 *publish the Plan in the Federal Register.*

18 “(f) *PERIODIC REVISION.—The Under Secretary, in*
19 *coordination and consultation with the individuals and en-*
20 *tities identified in subsection (d), shall periodically review*
21 *and revise the Plan prepared under this section, as nec-*
22 *essary.”.*

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

24 *Section 606, as redesignated by section 5(2) of this Act,*
25 *is amended by adding at the end the following:*

1 “(c) *REQUIRED UPDATE.*—

2 “(1) *IN GENERAL.*—*Within 2 years after the date*
3 *of enactment of the Harmful Algal Bloom and Hy-*
4 *poxia Research and Control Amendments Act of 2011,*
5 *the Administrator, through the Mississippi River/Gulf*
6 *of Mexico Watershed Nutrient Task Force, shall com-*
7 *plete and submit to the Congress and the President an*
8 *updated assessment and a revised action plan based*
9 *on the updated assessment.*

10 “(2) *REQUIREMENTS.*—*The updated assessment*
11 *shall take into account the following:*

12 “(A) *The role of nutrient influx in the con-*
13 *text of water column stratification, seasonal*
14 *flows and conditions, and wind and current dy-*
15 *namics in the Gulf of Mexico.*

16 “(B) *The contribution of the topography of*
17 *the Gulf of Mexico in the effects of the character-*
18 *istics described in subparagraph (A) on the*
19 *hypoxic zone.*

20 “(C) *The frequency and availability of mon-*
21 *itoring to measure the size of the hypoxic zone.*

22 “(D) *The potential of hypoxia hot-spot for-*
23 *mation within the Gulf of Mexico and possible*
24 *causes of such hot-spots.*

1 “(E) *The contribution of wetland loss to hypoxia events in the Gulf of Mexico.*

2
3 “(F) *The actual effect of hypoxia on the ecosystem of the Gulf of Mexico and the benefits resulting from a reduced hypoxic zone size.*

4
5
6 “(G) *A scientifically generated, peer-reviewed goal for the size of the hypoxic zone in the Gulf of Mexico.*

7
8
9 “(3) *RESEARCH STRATEGY.—The updated plan shall include a research strategy—*

10
11 “(A) *to enhance understanding of the contribution of topography, water column stratification, seasonal flows and conditions, and wind and current dynamics on the size of the hypoxic zone;*

12
13
14 “(B) *to develop models able to—*

15
16 “(i) *simulate different shelf regions and the fundamental processes that act in each shelf region;*

17
18 “(ii) *differentiate between the separate effects of stratification and nutrient loading in the formation of hypoxia; and*

19
20 “(iii) *be informed by realistic three-dimensional hydrodynamic and biogeochemical models;*

1 “(C) that determines the appropriate
2 amount of monitoring and measuring necessary
3 to get a scientifically robust accounting on the
4 size of the Gulf of Mexico hypoxic zone; and

5 “(D) that examines several potential solu-
6 tions based on information provided by the up-
7 dated assessment in paragraph (1).”.

8 **SEC. 8. CHESAPEAKE BAY DEAD ZONE.**

9 (a) *IN GENERAL.*—The Act is amended by inserting
10 after section 606, as redesignated by section 5(2) of this Act,
11 the following:

12 **“SEC. 607. CHESAPEAKE BAY DEAD ZONE.**

13 “(a) *ASSESSMENT PLAN.*—Not later than 12 months
14 after the date of enactment of the Harmful Algal Bloom and
15 Hypoxia Research and Control Amendments Act of 2011,
16 the Task Force, in accordance with the authority under sec-
17 tion 603, shall complete and submit to the Congress and
18 the President an integrated assessment of hypoxia in the
19 Chesapeake Bay that examines the status of and gaps with-
20 in current research, monitoring, prevention, response, and
21 control activities by—

22 “(1) Federal agencies;

23 “(2) State agencies;

24 “(3) regional research consortia;

25 “(4) academia;

1 “(5) private industry; and

2 “(6) nongovernmental organizations.

3 “(b) *RESEARCH PLAN*.—

4 “(1) *IN GENERAL*.—Not later than 2 years after
5 the date of enactment of the Harmful Algal Bloom
6 and Hypoxia Research and Control Amendments Act
7 of 2011, the Task Force shall develop and submit to
8 the Congress a plan, based on the integrated assess-
9 ment submitted under subsection (a), for reducing,
10 mitigating, and controlling hypoxia in the Ches-
11 apeake Bay.

12 “(2) *REQUIREMENTS*.—In developing such plan,
13 the Task Force shall—

14 “(A) consult with State and local govern-
15 ments and representatives from academic, agri-
16 cultural, industry, and other stakeholder groups;

17 “(B) ensure that the plan does not duplicate
18 activities conducted by other Federal or State
19 agencies;

20 “(C) include incentive-based partnership
21 approaches;

22 “(D) include an economic cost-benefit anal-
23 ysis of the measures for reducing, mitigating,
24 and controlling hypoxia events;

1 “(E) utilize existing research, assessments,
2 reports, and program activities;

3 “(F) publish a summary of the proposed
4 plan in the *Federal Register* 90 days prior to the
5 submission to the Congress of the completed plan;
6 and

7 “(G) provide progress reports every 2 years
8 after the submission to the Congress of the com-
9 pleted plan on the activities leading toward at-
10 tainment of the goals set forth in the plan.

11 “(3) CONTENTS.—The plan shall—

12 “(A) address the monitoring needs identi-
13 fied in the integrated assessment submitted
14 under subsection (a) and develop a timeline and
15 budgetary requirements for deployment of future
16 assets;

17 “(B) detail procedures for the development
18 and verification of Chesapeake Bay hypoxia
19 models, including making available to the pub-
20 lic—

21 “(i) all assumptions built into the
22 models; and

23 “(ii) data quality methods used to en-
24 sure the best available data is utilized; and

1 “(C) describe efforts to improve the assess-
2 ment of the impacts of hypoxia by—

3 “(i) characterizing current and past
4 biological conditions in ecosystems affected
5 by hypoxia; and

6 “(ii) quantifying effects, including eco-
7 nomic effects, at the population and com-
8 munity level.”.

9 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

10 (a) *AUTHORIZATION.*—Section 608, as redesignated by
11 section 5(1) of this Act, is amended to read as follows:

12 **“SEC. 608. AUTHORIZATION OF APPROPRIATIONS.**

13 “(a) *UNDER SECRETARY.*—There are authorized to be
14 appropriated to the Under Secretary to carry out this Act
15 \$18,000,000 for each of fiscal years 2012 through 2015, of
16 which, for each fiscal year—

17 “(1) \$1,000,000 may be used for the development
18 of the comprehensive research plan and action strat-
19 egy under section 605 and the assessment and reports
20 required by sections 606 and 607;

21 “(2) \$4,000,000 may be used for the research and
22 assessment activities related to marine and freshwater
23 harmful algal blooms at research laboratories of
24 NOAA;

1 “(3) \$4,000,000 may be used to carry out the
2 *Ecology of Harmful Algal Blooms Program*
3 *(ECOHAB)*;

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

7 “(5) \$2,000,000 may be used to carry out re-
8 *search and assessment for the Northern Gulf of Mexico*
9 *ecosystem and hypoxia activities*;

10 “(6) \$1,500,000 may be used to carry out coastal
11 *hypoxia research activities*;

12 “(7) \$1,500,000 may be used to carry out pre-
13 *vention, control, and mitigation activities*;

14 “(8) \$500,000 may be used to carry out event re-
15 *sponse activities*; and

16 “(9) \$500,000 may be used to carry out infra-
17 *structure activities*.

18 “(b) *ADMINISTRATOR*.—

19 “(1) *IN GENERAL*.—*There are authorized to be*
20 *appropriated to the Administrator \$2,700,000 for*
21 *each of the fiscal years 2012 through 2015 to carry*
22 *out the activities authorized under this Act*.

23 “(2) *NONDUPLICATION*.—*The Administrator*
24 *shall ensure that activities carried out using the*
25 *amounts authorized under paragraph (1) do not du-*

1 *plicate research and development activities related to*
 2 *harmful algal blooms and hypoxia conducted by Fed-*
 3 *eral agencies represented on the Task Force, States,*
 4 *tribes, and nongovernmental organizations concerned*
 5 *with marine and freshwater aquatic issues.”.*

6 (b) *EXTRAMURAL RESEARCH ACTIVITIES.*—*The Under*
 7 *Secretary of Commerce for Oceans and Atmosphere shall en-*
 8 *sure that a substantial portion of funds appropriated pur-*
 9 *suant to section 608 of the Harmful Algal Bloom and Hy-*
 10 *poxia Research and Control Act of 1998 that are used for*
 11 *research purposes are allocated to extramural research ac-*
 12 *tivities.*

13 **SEC. 10. CLERICAL AMENDMENTS.**

14 (a) *TABLE OF CONTENTS AMENDMENT.*—*The table of*
 15 *contents in section 2 of the Coast Guard Authorization Act*
 16 *of 1998 is amended by striking the items relating to sections*
 17 *602 through 606 and inserting the following:*

- “Sec. 602. *Definitions.*
- “Sec. 603. *Assessments.*
- “Sec. 604. *National harmful algal bloom and hypoxia program.*
- “Sec. 605. *Comprehensive research plan and action strategy.*
- “Sec. 606. *Northern Gulf of Mexico hypoxia.*
- “Sec. 607. *Chesapeake Bay dead zone.*
- “Sec. 608. *Authorization of appropriations.*
- “Sec. 609. *Protection of States’ rights.”.*

18 (b) *REFERENCES.*—*Section 609, as redesignated by*
 19 *section 5(1) of this Act, is amended by striking “Clean*
 20 *Water Act or” each place it appears and inserting “Federal*
 21 *Water Pollution Control Act or the”.*

Union Calendar No. 271

112TH CONGRESS
2^D SESSION

H. R. 2484

[Report No. 112-333, Part I]

A BILL

To reauthorize the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to include a comprehensive and integrated strategy to address harmful algal blooms and hypoxia, to provide for the development and implementation of a comprehensive research plan and action strategy to reduce harmful algal blooms and hypoxia, and for other purposes.

FEBRUARY 9, 2012

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