

**AMENDMENT IN THE NATURE OF A SUBSTITUTE**

**TO H.R. 2484**

**OFFERED BY MR. HARRIS**

Strike all after the enacting clause and insert the following:

**1 SECTION 1. SHORT TITLE.**

2 This Act may be cited as the "Harmful Algal Bloom  
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. DEFINITIONS.**

16 Section 602 is amended to read as follows:

**17 "SEC. 602. DEFINITIONS.**

18 "In this title:

1           “(1) ADMINISTRATOR.—The term ‘Adminis-  
2           trator’ means the Administrator of the Environ-  
3           mental Protection Agency.

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

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

9           “(4) PROGRAM.—The term ‘Program’ means  
10          the National Harmful Algal Bloom and Hypoxia  
11          Program under section 604(a).

12          “(5) STATE.—The term ‘State’ means each of  
13          the several States of the United States, the District  
14          of Columbia, the Commonwealth of Puerto Rico, the  
15          United States Virgin Islands, Guam, American  
16          Samoa, the Commonwealth of the Northern Mariana  
17          Islands, any other territory or possession of the  
18          United States, and any Indian tribe.

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

22          “(7) UNDER SECRETARY.—The term ‘Under  
23          Secretary’ means the Under Secretary of Commerce  
24          for Oceans and Atmosphere.”.

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

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

3 “(a) INTER-AGENCY TASK FORCE.—

4 “(1) ESTABLISHMENT.—The President,  
5 through the Committee on Environment and Natural  
6 Resources of the National Science and Technology  
7 Council, shall establish an Inter-Agency Task Force  
8 on Harmful Algal Blooms and Hypoxia.

9 “(2) REPRESENTATION.—The Task Force shall  
10 consist of representatives from the following:

11 “(A) The Department of Commerce.

12 “(B) The Environmental Protection Agen-  
13 cy.

14 “(C) The Department of Agriculture.

15 “(D) The Department of the Interior.

16 “(E) The Department of the Navy.

17 “(F) The Department of Health and  
18 Human Services.

19 “(G) The National Science Foundation.

20 “(H) The National Aeronautics and Space  
21 Administration.

22 “(I) The Food and Drug Administration.

23 “(J) The Office of Science and Technology  
24 Policy.

25 “(K) The Council on Environmental Qual-  
26 ity.

1           “(L) Such other Federal agencies as the  
2           President considers appropriate.

3           “(3) CHAIRPERSON.—The Under Secretary  
4           from the Department of Commerce shall serve as the  
5           Chairperson of the Task Force.

6           “(4) REQUIRED MEETINGS.—

7           “(A) IN GENERAL.—The Task Force shall  
8           meet, or otherwise communicate, to coordinate  
9           activities within each agency represented on the  
10          Task Force in order to fulfill the program re-  
11          quirements in section 604(b).

12          “(B) FREQUENCY.—The Task Force shall  
13          meet at least once per year.

14          “(5) BUDGET COORDINATION.—The Task  
15          Force shall—

16          “(A) coordinate in the development of indi-  
17          vidual agency budgets for the activities de-  
18          scribed in section 604 that will ensure an ap-  
19          propriate balance among the research and ac-  
20          tion priorities; and

21          “(B) submit such budgets to the Director  
22          of the Office of Management and Budget at the  
23          time designated by the Director for agencies to  
24          submit annual budgets.”.

1 **SEC. 5. NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA**  
2 **PROGRAM.**

3 The Act is amended—

4 (1) by redesignating sections 605 and 606 as  
5 sections 608 and 609, respectively;

6 (2) by redesignating section 604 as section 606;

7 and

8 (3) by inserting after section 603 the following:

9 **“SEC. 604. NATIONAL HARMFUL ALGAL BLOOM AND HY-**  
10 **POXIA PROGRAM.**

11 “(a) IN GENERAL.—Except as provided in subsection  
12 (d), the Under Secretary, through the Task Force, shall  
13 maintain a National Harmful Algal Bloom and Hypoxia  
14 Program in accordance with authorities under section 603  
15 pursuant to this section.

16 “(b) DUTIES.—The Under Secretary, through the  
17 Program, shall coordinate the efforts of the Task Force  
18 to—

19 “(1) develop and promote a national strategy to  
20 understand, detect, monitor, predict, control, miti-  
21 gate, and respond to marine and freshwater harmful  
22 algal bloom and hypoxia events;

23 “(2) integrate the research of all Federal pro-  
24 grams, including ocean and Great Lakes science and  
25 management programs and centers, that address the  
26 chemical, biological, and physical components of ma-

1 rine and freshwater harmful algal blooms and hy-  
2 poxia;

3 “(3) assist and coordinate, where appropriate,  
4 with State, tribal, and local government agencies,  
5 programs, and regional efforts that address marine  
6 and freshwater harmful algal blooms and hypoxia,  
7 including the development and implementation of ap-  
8 propriate response plans, strategies, and tools;

9 “(4) identify additional research, development,  
10 and demonstration needs and priorities relating to  
11 understanding, detection, monitoring, prediction,  
12 prevention, control, mitigation, and response to ma-  
13 rine and freshwater harmful algal blooms and hy-  
14 poxia;

15 “(5) ensure the development and use of meth-  
16 ods and technologies to protect the ecosystems af-  
17 fected by marine and freshwater harmful algal  
18 blooms and hypoxia;

19 “(6) encourage the appropriate exchange of re-  
20 search information with other countries in order to  
21 better mitigate, control, and respond to marine and  
22 freshwater harmful algal blooms;

23 “(7) coordinate existing education programs to  
24 improve public understanding and awareness of the

1 causes, impacts, and mitigation efforts for marine  
2 and freshwater harmful algal blooms and hypoxia;

3 “(8) provide resources to assist in the training  
4 of State, tribal, and local water and coastal resource  
5 managers in the methods and technologies for de-  
6 tecting, monitoring, controlling, mitigating, and re-  
7 sponding to the effects of marine and freshwater  
8 harmful algal bloom and hypoxia events;

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

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

13 “(A) the projects maintained and estab-  
14 lished by the Program; and

15 “(B) the research and management needs  
16 and priorities identified in the Plan.

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

24 “(d) FRESHWATER PROGRAM.—

1           “(1) IN GENERAL.—With respect to the fresh-  
2 water aspects of the Program, the Administrator  
3 and the Under Secretary, through the Task Force,  
4 shall carry out the duties otherwise assigned to the  
5 Under Secretary under this section, excluding the  
6 activities described in subsection (e).

7           “(2) PARTICIPATION.—The Administrator’s  
8 participation under this subsection shall include—

9                   “(A) research on the ecology of freshwater  
10 harmful algal blooms;

11                   “(B) monitoring of and event response to  
12 freshwater harmful algal blooms in lakes, rivers,  
13 estuaries, and reservoirs; and

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

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

22           “(4) REPORT.—Not later than 1 year after the  
23 date of enactment of the Harmful Algal Bloom and  
24 Hypoxia Research and Control Amendments Act of  
25 2011, the Administrator shall prepare and transmit



1 to the Committee on Science, Space, and Technology  
2 of the House of Representatives a report con-  
3 taining—

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

7 “(B) a description of how such activities  
8 reduce the effects of freshwater harmful algal  
9 blooms and improve water quality.

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

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

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

18 “(3) ensure communication and coordination  
19 among Federal agencies carrying out marine and  
20 freshwater harmful algal bloom and hypoxia activi-  
21 ties and increase the availability to appropriate pub-  
22 lic and private entities of—

23 “(A) analytical facilities and technologies;

24 “(B) operational forecasts; and

25 “(C) reference and research materials.

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

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

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

18                   “(A) Monitoring.

19                   “(B) Prediction.

20                   “(C) Prevention.

21                   “(D) Control.

22                   “(E) Mitigation.

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

1           “(2) ENUMERATION.—As part of the report re-  
2           quired under subsection (i), the Under Secretary, in  
3           coordination with the Administrator, shall enu-  
4           merate the technology research and development  
5           conducted for each of the areas identified in para-  
6           graph (1).

7           “(3) PROTOCOL.—The Under Secretary, in co-  
8           ordination with the Administrator, shall develop a  
9           protocol for—

10           “(A) assessing the stage of technology de-  
11           velopment that is ready to move from lab test-  
12           ing to field testing;

13           “(B) coordinating local, State, and Federal  
14           authorities to facilitate measures necessary to  
15           conduct field tests in a timely manner; and

16           “(C) working with local and State entities,  
17           programs, and interested stakeholders to con-  
18           duct outreach and education on technology field  
19           testing projects.

20           “(h) INFORMATION CLEARINGHOUSE.—

21           “(1) ELECTRONIC INFORMATION.—Using the  
22           authority under section 603(i)(2)(B), the Under Sec-  
23           retary, in coordination with the Administrator, shall  
24           expand the existing electronic clearinghouse to pro-

1       vide information about marine and freshwater harm-  
2       ful algal blooms and hypoxia, including—

3               “(A) the Federal agencies involved in re-  
4       search and development on understanding, de-  
5       tection, monitoring, prediction, prevention, con-  
6       trol, mitigation, and response activities;

7               “(B) tools available to predict and model  
8       events; and

9               “(C) current or developing technologies for  
10      detection, monitoring, prediction, prevention,  
11      control, mitigation, and response, including re-  
12      mediation.

13      “(2) TOXIN STANDARDS.—The Under Sec-  
14      retary, in consultation with the Administrator,  
15      shall—

16              “(A) develop a mechanism to provide a re-  
17      liable and cost-effective supply of toxin stand-  
18      ards for comparative research; and

19              “(B) notify the Congress of such mecha-  
20      nism as part of the report required under sub-  
21      section (i).

22      “(i) REPORT.—Not later than 1 year after the sub-  
23      mission of the Plan, the Under Secretary, through the  
24      Task Force, shall prepare and transmit to the Congress  
25      a report that describes—

1 “(1) the activities carried out under the Pro-  
2 gram and the Plan and the budget related to such  
3 activities; and

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

6 **SEC. 6. COMPREHENSIVE RESEARCH PLAN AND ACTION**  
7 **STRATEGY.**

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

10 **“SEC. 605. COMPREHENSIVE RESEARCH PLAN AND ACTION**  
11 **STRATEGY.**

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

19 “(1) the specific activities to be carried out by  
20 the Program and the timeline for carrying out such  
21 activities;

22 “(2) the roles and responsibilities of each Fed-  
23 eral agency in the Task Force in carrying out Pro-  
24 gram activities; and

1           “(3) appropriate regions and subregions requir-  
2           ing specific research and activities to address local,  
3           State, and regional harmful algal blooms and hy-  
4           poxia.

5           “(b) REGIONAL FOCUS.—The regional and sub-  
6 regional parts of the Plan shall identify—

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

10           “(2) research, development, and demonstration  
11           activities needed to develop and advance technologies  
12           and techniques for minimizing the occurrence of  
13           harmful algal blooms and hypoxia and improving ca-  
14           pabilities to detect, predict, monitor, control, miti-  
15           gate, respond to, and remediate harmful algal  
16           blooms and hypoxia;

17           “(3) ways to reduce the duration and intensity  
18           of harmful algal blooms and hypoxia, including de-  
19           ployment of response technologies in a timely man-  
20           ner;

21           “(4) research and methods to address human  
22           health dimensions of harmful algal blooms and hy-  
23           poxia;

24           “(5) mechanisms, including the potential costs  
25           and benefits of those mechanisms, to protect eco-

1 systems that may be or have been affected by harm-  
2 ful algal bloom and hypoxia events;

3 “(6) mechanisms by which data, information,  
4 and products may be transferred between the Pro-  
5 gram and State, tribal, and local governments and  
6 relevant research entities;

7 “(7) communication and information dissemina-  
8 tion methods that State, tribal, and local govern-  
9 ments may undertake to educate and inform the  
10 public concerning harmful algal blooms and hypoxia;  
11 and

12 “(8) the roles that Federal agencies may have  
13 to assist in the implementation of the Plan.

14 “(c) UTILIZING AVAILABLE STUDIES AND INFORMA-  
15 TION.—In developing the Plan, the Under Secretary shall  
16 utilize existing research, assessments, reports, and pro-  
17 gram activities, including—

18 “(1) those carried out pursuant to existing law;  
19 and

20 “(2) other relevant peer-reviewed and published  
21 sources.

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

24 “(1) coordinate with—

1           “(A) State coastal management and plan-  
2           ning officials;

3           “(B) tribal resource management officials;  
4           and

5           “(C) water management and watershed of-  
6           ficials from both coastal States and noncoastal  
7           States with water sources that drain into water  
8           bodies affected by harmful algal blooms and hy-  
9           poxia; and

10          “(2) consult with—

11           “(A) public health officials;

12           “(B) emergency management officials;

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

15           “(D) economists;

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

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

22           “(G) other stakeholders.

23          “(e) FEDERAL REGISTER.—The Under Secretary  
24          shall publish the Plan in the Federal Register.



1       “(f) PERIODIC REVISION.—The Under Secretary, in  
2 coordination and consultation with the individuals and en-  
3 tities identified in subsection (d), shall periodically review  
4 and revise the Plan prepared under this section, as nec-  
5 essary.”.

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

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

9       “(c) REQUIRED UPDATE.—

10           “(1) IN GENERAL.—Prior to the implementa-  
11 tion of any plan developed under this section, includ-  
12 ing the Gulf Hypoxia Action Plan 2008, the Admin-  
13 istrator, through the Mississippi River/Gulf of Mex-  
14 ico Watershed Nutrient Task Force, shall complete  
15 and submit to the Congress and the President an  
16 updated assessment and a revised action plan based  
17 on the updated assessment.

18           “(2) REQUIREMENTS.—The updated assess-  
19 ment shall take into account the following:

20           “(A) The role of nutrient influx in the con-  
21 text of water column stratification, seasonal  
22 flows and conditions, and wind and current dy-  
23 namics in the Gulf of Mexico.

24           “(B) The contribution of the topography of  
25 the Gulf of Mexico in the effects of the charac-

1 teristics described in subparagraph (A) on the  
2 hypoxic zone.

3 “(C) The frequency and availability of  
4 monitoring to measure the size of the hypoxic  
5 zone.

6 “(D) The potential of hypoxia hot-spot for-  
7 mation within the Gulf of Mexico and possible  
8 causes of such hot-spots.

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

11 “(F) The actual effect of hypoxia on the  
12 ecosystem of the Gulf of Mexico and the bene-  
13 fits resulting from a reduced hypoxic zone size.

14 “(G) A scientifically generated, peer-re-  
15 viewed goal for the size of the hypoxic zone in  
16 the Gulf of Mexico.

17 “(3) RESEARCH STRATEGY.—The updated plan  
18 shall include a research strategy—

19 “(A) to enhance understanding of the con-  
20 tribution of topography, water column strati-  
21 fication, seasonal flows and conditions, and  
22 wind and current dynamics on the size of the  
23 hypoxic zone;

24 “(B) to develop models able to—

1           “(i) simulate different shelf regions  
2           and the fundamental processes that act in  
3           each shelf region;

4           “(ii) differentiate between the sepa-  
5           rate effects of stratification and nutrient  
6           loading in the formation of hypoxia; and

7           “(iii) be informed by realistic three-di-  
8           mensional hydrodynamic and biogeo-  
9           chemical models;

10          “(C) that determines the appropriate  
11          amount of monitoring and measuring necessary  
12          to get a scientifically robust accounting on the  
13          size of the Gulf of Mexico hypoxic zone; and

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

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

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

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

22          “(a) **ASSESSMENT PLAN.**—Not later than 12 months  
23          after the date of enactment of the Harmful Algal Bloom  
24          and Hypoxia Research and Control Amendments Act of  
25          2011, the Task Force, in accordance with the authority

1 under section 603, shall complete and submit to the Con-  
2 gress and the President an integrated assessment of hy-  
3 poxia in the Chesapeake Bay that examines the status of  
4 and gaps within current research, monitoring, prevention,  
5 response, and control activities by—

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

12           “(b) RESEARCH PLAN.—

13           “(1) IN GENERAL.—Not later than 2 years  
14 after the date of enactment of the Harmful Algal  
15 Bloom and Hypoxia Research and Control Amend-  
16 ments Act of 2011, the Task Force shall develop  
17 and submit to the Congress a plan, based on the in-  
18 tegrated assessment submitted under subsection (a),  
19 for reducing, mitigating, and controlling hypoxia in  
20 the Chesapeake Bay.

21           “(2) REQUIREMENTS.—In developing such  
22 plan, the Task Force shall—

23                   “(A) consult with State and local govern-  
24                   ments and representatives from academic, agri-

1 cultural, industry, and other stakeholder  
2 groups;

3 “(B) ensure that the plan does not dupli-  
4 cate activities conducted by other Federal or  
5 State agencies;

6 “(C) include incentive-based partnership  
7 approaches;

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

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

13 “(F) publish a summary of the proposed  
14 plan in the Federal Register 90 days prior to  
15 the submission to the Congress of the com-  
16 pleted plan; and

17 “(G) provide progress reports every 2  
18 years after the submission to the Congress of  
19 the completed plan on the activities leading to-  
20 ward attainment of the goals set forth in the  
21 plan.

22 “(3) CONTENTS.—The plan shall—

23 “(A) address the monitoring needs identi-  
24 fied in the integrated assessment submitted  
25 under subsection (a) and develop a timeline and

1 budgetary requirements for deployment of fu-  
2 ture assets;

3 “(B) detail procedures for the development  
4 and verification of Chesapeake Bay hypoxia  
5 models, including making available to the pub-  
6 lic—

7 “(i) all assumptions built into the  
8 models; and

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

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

13 “(i) characterizing current and past  
14 biological conditions in ecosystems affected  
15 by hypoxia; and

16 “(ii) quantifying effects, including  
17 economic effects, at the population and  
18 community level.”.

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

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

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

23 “(a) UNDER SECRETARY.—There are authorized to  
24 be appropriated to the Under Secretary to carry out this

1 Act \$18,000,000 for each of fiscal years 2012 through  
2 2015, of which, for each fiscal year—

3 “(1) \$1,000,000 may be used for the develop-  
4 ment of the comprehensive research plan and action  
5 strategy under section 605 and the assessment and  
6 reports required by sections 606 and 607;

7 “(2) \$4,000,000 may be used for the research  
8 and assessment activities related to marine and  
9 freshwater harmful algal blooms at research labora-  
10 tories of NOAA;

11 “(3) \$4,000,000 may be used to carry out the  
12 Ecology of Harmful Algal Blooms Program  
13 (ECOHAB);

14 “(4) \$1,500,000 may be used to carry out the  
15 Monitoring and Event Response for Harmful Algal  
16 Blooms Program (MERHAB);

17 “(5) \$2,000,000 may be used to carry out re-  
18 search and assessment for the Northern Gulf of  
19 Mexico ecosystem and hypoxia activities;

20 “(6) \$1,500,000 may be used to carry out  
21 coastal hypoxia research activities;

22 “(7) \$1,500,000 may be used to carry out pre-  
23 vention, control, and mitigation activities;

24 “(8) \$500,000 may be used to carry out event  
25 response activities; and

1           “(9) \$500,000 may be used to carry out infra-  
2           structure activities.

3           “(b) ADMINISTRATOR.—

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

8           “(2) NONDUPLICATION.—The Administrator  
9           shall ensure that activities carried out using the  
10          amounts authorized under paragraph (1) do not du-  
11          plicate research and development activities related to  
12          harmful algal blooms and hypoxia conducted by Fed-  
13          eral agencies represented on the Task Force, States,  
14          tribes, and nongovernmental organizations concerned  
15          with marine and freshwater aquatic issues.”.

16          (b) EXTRAMURAL RESEARCH ACTIVITIES.—The  
17          Under Secretary shall ensure that a substantial portion  
18          of funds appropriated pursuant to section 608 of the  
19          Harmful Algal Bloom and Hypoxia Research and Control  
20          Act of 1998 that are used for research purposes are allo-  
21          cated to extramural research activities.

22          **SEC. 10. CLERICAL AMENDMENTS.**

23          (a) TABLE OF CONTENTS AMENDMENT.—The table  
24          of contents in section 2 of the Coast Guard Authorization



1 Act of 1998 is amended by striking the items relating to  
2 sections 602 through 606 and inserting the following:

“602. Definitions.

“603. Assessments.

“604. National harmful algal bloom and hypoxia program.

“605. Comprehensive research plan and action strategy.

“606. Northern Gulf of Mexico hypoxia.

“607. Chesapeake Bay dead zone.

“608. Authorization of appropriations.

“609. Protection of States’ rights.”

3 (b) REFERENCES.—Section 609, as redesignated by  
4 section 5(1) of this Act, is amended by striking “Clean  
5 Water Act or” each place it appears and inserting “Fed-  
6 eral Water Pollution Control Act or the”.

