

112TH CONGRESS
1ST SESSION

H. R. 2484

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

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,*

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. 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.

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

1 “(4) PROGRAM.—The term ‘Program’ means
2 the National Harmful Algal Bloom and Hypoxia
3 Program established under section 604(a).

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

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

15 “(7) UNDER SECRETARY.—The term ‘Under
16 Secretary’ means the Under Secretary of Commerce
17 for Oceans and Atmosphere.”.

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

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

20 “(a) INTER-AGENCY TASK FORCE.—

21 “(1) ESTABLISHMENT.—The President,
22 through the Committee on Environment and Natural
23 Resources of the National Science and Technology
24 Council, shall establish an Inter-Agency Task Force
25 on Harmful Algal Blooms and Hypoxia.

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

3 “(A) The Department of Commerce.

4 “(B) The Environmental Protection Agen-
5 cy.

6 “(C) The Department of Agriculture.

7 “(D) The Department of the Interior.

8 “(E) The Department of the Navy.

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

11 “(G) The National Science Foundation.

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

14 “(I) The Food and Drug Administration.

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

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

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

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

24 “(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
9 Force shall—

10 “(A) coordinate in the development of indi-
11 vidual agency budgets for the activities de-
12 scribed in section 604 that will ensure an ap-
13 propriate balance among the research and ac-
14 tion priorities; and

15 “(B) submit such budgets to the Director
16 of 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
23 sections 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
10 Program, shall coordinate the efforts of the Task Force
11 to—

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

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

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

1 including 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,
6 prevention, control, mitigation, and response to ma-
7 rine and freshwater harmful algal blooms and hy-
8 poxia;

9 “(5) ensure the development and use of meth-
10 ods and technologies to protect the ecosystems af-
11 fected by marine and freshwater harmful algal
12 blooms and hypoxia;

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

17 “(7) provide resources to assist in the training
18 of State, tribal, and local water and coastal resource
19 managers in the methods and technologies for de-
20 tecting, monitoring, controlling, mitigating, and re-
21 sponding to the effects of marine and freshwater
22 harmful algal blooms and hypoxia events;

23 “(8) oversee the development, review, and peri-
24 odic updating of the Plan; and

1 “(9) administer peer-reviewed, merit-based com-
2 petitive grant funding to support—

3 “(A) the projects maintained and estab-
4 lished by the Program; and

5 “(B) the research and management needs
6 and priorities identified in the Plan.

7 “(c) COOPERATIVE EFFORTS.—The Under Secretary
8 shall work cooperatively and avoid duplication of efforts
9 with other offices, centers, and programs within NOAA
10 and other agencies represented on the Task Force, States,
11 tribes, and nongovernmental organizations concerned with
12 marine and freshwater aquatic issues related to harmful
13 algal blooms and hypoxia.

14 “(d) FRESHWATER PROGRAM.—With respect to the
15 freshwater aspects of the Program, the Administrator and
16 the Under Secretary, through the Task Force, shall carry
17 out the duties otherwise assigned to the Under Secretary
18 under this section, excluding the activities described in
19 subsection (e). The Administrator’s participation under
20 this subsection shall include—

21 “(1) research on the ecology of freshwater
22 harmful algal blooms;

23 “(2) monitoring of and event response to fresh-
24 water harmful algal blooms in lakes, rivers, estu-
25 aries, and reservoirs; and

1 “(3) mitigation and control of freshwater harm-
2 ful algal blooms.

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

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

8 “(2) conduct marine and freshwater harmful
9 algal bloom and hypoxia event response activities;
10 and

11 “(3) ensure communication and coordination
12 among Federal agencies carrying out marine and
13 freshwater harmful algal bloom and hypoxia activi-
14 ties and increase the availability to appropriate pub-
15 lic and private entities of—

16 “(A) analytical facilities and technologies;

17 “(B) operational forecasts; and

18 “(C) reference and research materials.

19 “(f) INTEGRATED COASTAL AND OCEAN OBSERVA-
20 TION SYSTEM.—All monitoring and observation data col-
21 lected under this Act shall be collected in compliance with
22 all data standards and protocols developed pursuant to the
23 National Integrated Coastal and Ocean Observation Sys-
24 tem Act of 2009 (33 U.S.C. 3601 et seq.), and such data

1 shall be made available through the system established
2 under that Act.

3 “(g) TECHNOLOGY RESEARCH, DEVELOPMENT, AND
4 DEMONSTRATION.—

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

12 “(A) Monitoring.

13 “(B) Prediction.

14 “(C) Prevention.

15 “(D) Control.

16 “(E) Mitigation.

17 “(F) Response to events, including remedi-
18 ation.

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

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

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

7 “(B) coordinating local, State, and Federal
8 authorities to facilitate measures necessary to
9 conduct field tests in a timely manner; and

10 “(C) working with local and State entities,
11 programs, and interested stakeholders to con-
12 duct outreach and education on technology field
13 testing projects.

14 “(h) INFORMATION CLEARINGHOUSE.—

15 “(1) ELECTRONIC INFORMATION.—Using the
16 authority under section 603(i)(2)(B), the Under Sec-
17 retary, in coordination with the Administrator, shall
18 expand the existing electronic clearinghouse to pro-
19 vide information about marine and freshwater harm-
20 ful algal blooms and hypoxia, including—

21 “(A) the Federal agencies involved in re-
22 search and development on understanding, de-
23 tection, monitoring, prediction, prevention, con-
24 trol, mitigation, and response activities;

1 “(B) tools available to predict and model
2 events; and

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

7 “(2) TOXIN STANDARDS.—The Under Sec-
8 retary, in coordination with the Administrator,
9 shall—

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

13 “(B) notify the Congress of such mecha-
14 nism as part of the report required under sub-
15 section (i).

16 “(i) REPORT.—Not later than 1 year after the sub-
17 mission of the Plan, the Under Secretary, in coordination
18 with the Administrator, shall prepare and transmit to the
19 Congress a report that describes—

20 “(1) the activities carried out under the Pro-
21 gram and the Plan and the budget related to such
22 activities;

23 “(2) the progress made on implementing the ac-
24 tion strategy; and

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

3 **SEC. 6. COMPREHENSIVE RESEARCH PLAN AND ACTION**
4 **STRATEGY.**

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

7 **“SEC. 605. COMPREHENSIVE RESEARCH PLAN AND ACTION**
8 **STRATEGY.**

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

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

19 “(2) the roles and responsibilities of each Fed-
20 eral agency in the Task Force in carrying out Pro-
21 gram activities; and

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

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

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

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

13 “(3) ways to reduce the duration and intensity
14 of harmful algal blooms and hypoxia, including de-
15 ployment of response technologies in a timely man-
16 ner;

17 “(4) research and methods to address human
18 health dimensions of harmful algal blooms and hy-
19 poxia;

20 “(5) mechanisms, including the potential costs
21 and benefits of those mechanisms, to protect eco-
22 systems that may be or have been affected by harm-
23 ful algal blooms and hypoxia events;

24 “(6) mechanisms by which data, information,
25 and products may be transferred between the Pro-

1 gram and State, tribal, and local governments and
2 relevant research entities;

3 “(7) communication and information dissemina-
4 tion methods that State, tribal, and local govern-
5 ments may undertake to educate and inform the
6 public concerning harmful algal blooms and hypoxia;
7 and

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

10 “(c) UTILIZING AVAILABLE STUDIES AND INFORMA-
11 TION.—In developing the Plan, the Under Secretary shall
12 utilize existing research, assessments, reports, and pro-
13 gram activities, including—

14 “(1) those carried out pursuant to existing law;
15 and

16 “(2) other relevant peer-reviewed and published
17 sources.

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

20 “(1) coordinate with—

21 “(A) State coastal management and plan-
22 ning officials;

23 “(B) tribal resource management officials;

24 and

1 “(C) water management and watershed of-
2 ficials from both coastal States and noncoastal
3 States with water sources that drain into water
4 bodies affected by harmful algal blooms and hy-
5 poxia; and

6 “(2) consult with—

7 “(A) public health officials;

8 “(B) emergency management officials;

9 “(C) science and technology development
10 institutions;

11 “(D) economists;

12 “(E) industries and businesses affected by
13 marine and freshwater harmful algal blooms
14 and hypoxia;

15 “(F) scientists with expertise concerning
16 harmful algal blooms or hypoxia from academic
17 or research institutions; and

18 “(G) other stakeholders.

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

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

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

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

4 “(c) **REQUIRED UPDATE.**—

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

13 “(2) **REQUIREMENTS.**—The updated assess-
14 ment shall take into account the following:

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

19 “(B) The contribution of the topography of
20 the Gulf of Mexico in the effects of the charac-
21 teristics described in subparagraph (A) on the
22 hypoxic zone.

23 “(C) The frequency and availability of
24 monitoring to measure the size of the hypoxic
25 zone.

1 “(D) The potential of hypoxia hot-spot for-
2 mation within the Gulf of Mexico and possible
3 causes of such hot-spots.

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

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

9 “(G) A scientifically generated, peer-re-
10 viewed goal for the size of the hypoxic zone in
11 the Gulf of Mexico.

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

14 “(A) to enhance understanding of the con-
15 tribution of topography, water column strati-
16 fication, seasonal flows and conditions, and
17 wind and current dynamics on the size of the
18 hypoxic zone;

19 “(B) to develop models able to—

20 “(i) simulate different shelf regions
21 and the fundamental processes that act in
22 each shelf region;

23 “(ii) differentiate between the sepa-
24 rate effects of stratification and nutrient
25 loading in the formation of hypoxia; and

1 “(iii) be informed by realistic three-di-
2 mensional hydrodynamic and biogeo-
3 chemical models;

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

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

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

12 (a) IN GENERAL.—The Act is amended by inserting
13 after section 606, as redesignated by section 5(2) of this
14 Act, the following:

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

16 “(a) ASSESSMENT PLAN.—Not later than 12 months
17 after the date of enactment of the Harmful Algal Blooms
18 and Hypoxia Research and Control Amendments Act of
19 2011, the Task Force, in accordance with the authority
20 under section 603, shall complete and submit to the Con-
21 gress and the President an integrated assessment of hy-
22 poxia in the Chesapeake Bay that examines the status of
23 and gaps within current research, monitoring, prevention,
24 response, and control activities by—

25 “(1) Federal agencies;

- 1 “(2) state agencies;
2 “(3) regional research consortia;
3 “(4) academia;
4 “(5) private industry; and
5 “(6) nongovernmental organizations.

6 “(b) RESEARCH PLAN.—

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

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

17 “(A) consult with State and local govern-
18 ments and representatives from academic, agri-
19 cultural, industry, and other stakeholder
20 groups;

21 “(B) include incentive-based partnership
22 approaches;

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

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

3 “(E) publish a summary of the proposed
4 plan in the Federal Register 90 days prior to
5 the submission to the Congress of the com-
6 pleted plan; and

7 “(F) provide progress reports every 2
8 years after the submission to the Congress of
9 the completed plan on the activities leading to-
10 ward attainment of the goals set forth in the
11 plan.

12 “(3) CONTENTS.—The plan shall—

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

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

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

24 “(ii) data quality methods used to en-
25 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
7 economic effects, at the population and
8 community level.”.

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

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

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

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

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

21 “(2) \$4,000,000 may be used for the research
22 and assessment activities related to marine and
23 freshwater harmful algal blooms at research labora-
24 tories of 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
9 Mexico ecosystem and hypoxia activities;

10 “(6) \$1,500,000 may be used to carry out
11 coastal 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
15 response activities; and

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

18 “(b) USE OF FUNDS.—From funds made available
19 under section 2(a)(2) of the Environmental Research, De-
20 velopment, and Demonstration Authorization Act of 1981
21 (Public Law 96–569; 94 Stat. 3335), the Administrator
22 may utilize up to \$3,000,000 for each of the fiscal years
23 2012 through 2015 to carry out the authorized activities
24 under this Act.”.

1 (b) EXTRAMURAL RESEARCH ACTIVITIES.—The
2 Under Secretary shall ensure that a substantial portion
3 of funds appropriated pursuant to section 608 of the
4 Harmful Algal Bloom and Hypoxia Research and Control
5 Act of 1998 that are used for research purposes are allo-
6 cated to extramural research activities.

7 **SEC. 10. CLERICAL AMENDMENTS.**

8 (a) TABLE OF CONTENTS AMENDMENT.—The table
9 of contents in section 2 of the Coast Guard Authorization
10 Act of 1998 is amended by striking the items relating to
11 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.”.

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

○