

111TH CONGRESS
2^D SESSION

H. R. 3650

AN ACT

To establish a National Harmful Algal Bloom and Hypoxia Program, to develop and coordinate a comprehensive and integrated strategy to address harmful algal blooms and hypoxia, and to provide for the development and implementation of comprehensive regional action plans to reduce harmful algal blooms and hypoxia.

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 Blooms
5 and Hypoxia Research and Control Amendments Act of
6 2010”.

7 **SEC. 2. AMENDMENT OF HARMFUL ALGAL BLOOM AND HY-**
8 **POXIA 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
12 of an amendment to, or repeal of, a section or other provi-
13 sion, the reference shall be considered to be made to a
14 section or other provision of the Harmful Algal Bloom and
15 Hypoxia Research and Control Act of 1998 (16 U.S.C.
16 1451 note).

17 **SEC. 3. DEFINITIONS.**

18 (a) AMENDMENT.—The Act is amended by inserting
19 after section 602 the following:

20 **“SEC. 602A. DEFINITIONS.**

21 “In this title:

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

1 “(2) PROGRAM.—The term ‘Program’ means
2 the National Harmful Algal Bloom and Hypoxia
3 Program established under section 603A.

4 “(3) 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 “(4) UNDER SECRETARY.—The term ‘Under
12 Secretary’ means the Under Secretary of Commerce
13 for Oceans and Atmosphere.”.

14 (b) TABLE OF CONTENTS AMENDMENT.—The table
15 of contents in section 2 of the Coast Guard Authorization
16 Act of 1998 is amended by adding after the item relating
17 to section 602 the following new item:

“Sec. 602A. Definitions.”.

18 **SEC. 4. NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA**
19 **PROGRAM.**

20 (a) AMENDMENT.—The Act is amended by inserting
21 after section 603 the following:

22 **“SEC. 603A. NATIONAL HARMFUL ALGAL BLOOM AND HY-**
23 **POXIA PROGRAM.**

24 “(a) IN GENERAL.—Except as provided in subsection
25 (d), the Under Secretary, through the Task Force estab-

1 lished under section 603(a), shall establish and maintain
2 a National Harmful Algal Bloom and Hypoxia Program
3 pursuant to this section.

4 “(b) DUTIES.—The Under Secretary, through the
5 Program, shall coordinate the efforts of the Task Force
6 to—

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

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

17 “(3) coordinate and work cooperatively with
18 State, tribal, and local government agencies and pro-
19 grams that address marine and freshwater harmful
20 algal blooms and hypoxia;

21 “(4) identify additional research, development,
22 and demonstration needs and priorities relating to
23 monitoring, prediction, prevention, control, mitiga-
24 tion, and response to marine and freshwater harmful
25 algal blooms and hypoxia;

1 “(5) encourage international information shar-
2 ing and research efforts on marine and freshwater
3 harmful algal blooms and hypoxia, and encourage
4 international mitigation, control, and response activi-
5 ties;

6 “(6) ensure the development and implementa-
7 tion of methods and technologies to protect the eco-
8 systems affected by marine and freshwater harmful
9 algal blooms;

10 “(7) integrate, coordinate, and augment exist-
11 ing education programs to improve public under-
12 standing and awareness of the causes, impacts, and
13 mitigation efforts for marine and freshwater harmful
14 algal blooms and hypoxia;

15 “(8) assist in regional, State, tribal, and local
16 efforts to develop and implement appropriate marine
17 and freshwater harmful algal bloom and hypoxia re-
18 sponse plans, strategies, and tools;

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

1 “(10) oversee the development, implementation,
2 review, and periodic updating of the Regional Re-
3 search and Action Plans under section 603B; and

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

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

8 “(B) the research and management needs
9 and priorities identified in the Regional Re-
10 search and Action Plans.

11 “(c) COOPERATIVE EFFORTS.—The Under Secretary
12 shall work cooperatively and avoid duplication of efforts
13 with other offices, centers, and programs within the Na-
14 tional Oceanic and Atmospheric Administration and other
15 agencies represented on the Task Force established under
16 section 603(a), States, tribes, and nongovernmental orga-
17 nizations concerned with marine and freshwater aquatic
18 issues related to harmful algal blooms and hypoxia.

19 “(d) FRESHWATER PROGRAM.—With respect to the
20 freshwater aspects of the Program, the Administrator and
21 Under Secretary, through the Task Force, shall carry out
22 the duties otherwise assigned to the Under Secretary
23 under this section and section 603B, including the activi-
24 ties described in subsection (e). The Administrator’s par-
25 ticipation under this subsection shall include—

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

3 “(2) monitoring and event response of fresh-
4 water harmful algal blooms in lakes, rivers, estuaries
5 (including their tributaries), and reservoirs;

6 “(3) mitigation and control of freshwater harm-
7 ful algal blooms; and

8 “(4) an identification in the President’s annual
9 budget request to Congress of how much funding is
10 proposed in that request for carrying out the activi-
11 ties described in subsection (e).

12 “(e) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-
13 ISTRATION ACTIVITIES.—As part of the program under
14 this section, the Under Secretary shall—

15 “(1) maintain and enhance existing competitive
16 grant programs at the National Oceanic and Atmos-
17 pheric Administration relating to marine and fresh-
18 water harmful algal blooms and hypoxia;

19 “(2) carry out marine and freshwater harmful
20 algal bloom and hypoxia events response activities;
21 and

22 “(3) enhance communication and coordination
23 among Federal agencies carrying out marine and
24 freshwater harmful algal bloom and hypoxia activi-

1 ties, and increase the availability to appropriate pub-
2 lic and private entities of—

3 “(A) analytical facilities and technologies;

4 “(B) operational forecasts; and

5 “(C) reference and research materials.

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

14 “(g) ACTION STRATEGY.—

15 “(1) IN GENERAL.—Not later than 12 months
16 after the date of enactment of the Harmful Algal
17 Blooms and Hypoxia Research and Control Amend-
18 ments Act of 2010, the Under Secretary, through
19 the Task Force established under section 603(a),
20 shall transmit to the Congress an action strategy
21 that identifies—

22 “(A) the specific activities to be carried out
23 by the Program and the timeline for carrying
24 out such activities; and

1 “(B) the roles and responsibilities of each
2 Federal agency in the Task Force established
3 under section 603(a) in carrying out Program
4 activities.

5 “(2) FEDERAL REGISTER.—The Under Sec-
6 retary shall publish the action strategy in the Fed-
7 eral Register.

8 “(3) PERIODIC REVISION.—The Under Sec-
9 retary shall periodically review and revise the action
10 strategy prepared under this subsection as nec-
11 essary.

12 “(h) REPORT.—Two years after the submission of
13 the action strategy, the Under Secretary shall prepare and
14 transmit to the Congress a report that describes—

15 “(1) the activities carried out under the Pro-
16 gram and the Regional Research and Action Plans
17 and the budget related to these activities;

18 “(2) the progress made on implementing the ac-
19 tion strategy; and

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

22 (b) TABLE OF CONTENTS AMENDMENT.—The table
23 of contents in section 2 of the Coast Guard Authorization
24 Act of 1998 is amended by adding after the item relating
25 to section 603 the following new item:

“Sec. 603A. National Harmful Algal Bloom and Hypoxia Program.”.

1 **SEC. 5. REGIONAL RESEARCH AND ACTION PLANS.**

2 (a) AMENDMENT.—The Act is amended by inserting
3 after section 603A the following:

4 **“SEC. 603B. REGIONAL RESEARCH AND ACTION PLANS.**

5 “(a) IN GENERAL.—The Under Secretary, through
6 the Task Force established under section 603(a), shall—

7 “(1) identify the appropriate regions and sub-
8 regions to be addressed by each Regional Research
9 and Action Plan; and

10 “(2) oversee the development and implementa-
11 tion of the Regional Research and Action Plans.

12 “(b) CONTENTS.—The Plans developed under this
13 section shall identify—

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

17 “(2) research, development, and demonstration
18 activities needed to develop and advance technologies
19 and techniques for minimizing the occurrence of
20 harmful algal blooms and hypoxia and improving ca-
21 pabilities to prevent, predict, monitor, control, and
22 mitigate harmful algal blooms and hypoxia;

23 “(3) ways to reduce the duration and intensity
24 of harmful algal blooms and hypoxia, including in
25 times of emergency;

1 “(4) research and methods to address human
2 health dimensions of harmful algal blooms and hy-
3 poxia;

4 “(5) mechanisms, including the potential costs
5 and benefits of those mechanisms, to protect vulner-
6 able ecosystems that could be or have been affected
7 by harmful algal blooms and hypoxia events;

8 “(6) mechanisms by which data, information,
9 and products are transferred between the Program
10 and State, tribal, and local governments and rel-
11 evant research entities;

12 “(7) communication, outreach, and information
13 dissemination methods that State, tribal, and local
14 governments and stakeholder organizations can un-
15 dertake to educate and inform the public concerning
16 harmful algal blooms and hypoxia; and

17 “(8) the roles that Federal agencies can play to
18 assist in the implementation of the Plan.

19 “(c) BUILDING ON AVAILABLE STUDIES AND INFOR-
20 MATION.—In developing the Plans under this section, the
21 Under Secretary shall—

22 “(1) utilize and build on existing research, as-
23 sessments, and reports, including those carried out
24 pursuant to existing law and other relevant sources;
25 and

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

6 “(d) DEVELOPMENT OF PLANS.—The Under Sec-
7 retary shall develop Plans under this section with assist-
8 ance from the individuals and entities described in sub-
9 section (f).

10 “(e) PLAN TIMELINE AND UPDATES.—The Under
11 Secretary, through the Task Force established under sec-
12 tion 603(a), shall ensure that the Plans developed under
13 this section are completed not later than 24 months after
14 the date of enactment of the Harmful Algal Blooms and
15 Hypoxia Research and Control Amendments Act of 2010,
16 and updated once every 5 years thereafter.

17 “(f) COORDINATION AND CONSULTATION.—In devel-
18 oping the Plans under this section, as appropriate, the
19 Under Secretary—

20 “(1) shall coordinate with State coastal man-
21 agement and planning officials;

22 “(2) shall coordinate with tribal resource man-
23 agement officials;

24 “(3) shall coordinate with water management
25 and watershed officials from both coastal States and

1 noncoastal States with water sources that drain into
2 water bodies affected by harmful algal blooms and
3 hypoxia; and

4 “(4) shall consult with—

5 “(A) public health officials;

6 “(B) emergency management officials;

7 “(C) science and technology development
8 institutions;

9 “(D) economists;

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

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

16 “(G) other stakeholders.”.

17 (b) TABLE OF CONTENTS AMENDMENT.—The table
18 of contents in section 2 of the Coast Guard Authorization
19 Act of 1998 is amended by adding after the item relating
20 to section 603A, as added by section 4(b) of this Act, the
21 following new item:

“Sec. 603B. Regional research and action plans.”.

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

23 Section 604 is amended to read as follows:

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

2 “(a) TASK FORCE INITIAL PROGRESS REPORTS.—
3 Not later than 12 months after the date of enactment of
4 the Harmful Algal Blooms and Hypoxia Research and
5 Control Amendments Act of 2010, the Administrator,
6 through the Mississippi River/Gulf of Mexico Watershed
7 Nutrient Task Force, shall complete and transmit to the
8 Congress and the President a report on the progress made
9 by Task Force-directed activities toward attainment of the
10 goals of the Gulf Hypoxia Action Plan 2008.

11 “(b) TASK FORCE 2-YEAR PROGRESS REPORTS.—
12 After the initial report required under subsection (a), the
13 Administrator, through the Task Force, shall complete
14 and transmit to Congress and the President a report every
15 2 years thereafter on the progress made by Task Force-
16 directed activities toward attainment of the coastal goal
17 of the Gulf Hypoxia Action Plan 2008.

18 “(c) CONTENTS.—The reports required by this sec-
19 tion shall assess progress made toward nutrient load re-
20 ductions, the response of the hypoxic zone and water qual-
21 ity throughout the Mississippi/Atchafalaya River Basin,
22 and the economic and social effects. The reports shall—

23 “(1) include an evaluation of how current poli-
24 cies and programs affect management decisions, in-
25 cluding those made by municipalities and industrial
26 and agricultural producers;

1 “(2) evaluate lessons learned; and

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

5 **SEC. 7. PACIFIC NORTHWEST, ESTUARIES, AND PUGET**
6 **SOUND HYPOXIA.**

7 (a) AMENDMENT.—The Act is amended by inserting
8 after section 604 the following:

9 **“SEC. 604A. PACIFIC NORTHWEST, ESTUARIES, AND PUGET**
10 **SOUND HYPOXIA.**

11 “(a) ASSESSMENT REPORT.—Not later than 12
12 months after the date of enactment of the Harmful Algal
13 Blooms and Hypoxia Research and Control Amendments
14 Act of 2010, the Task Force established under section 603
15 shall complete and submit to Congress and the President
16 an integrated assessment of hypoxia in the coastal and
17 estuarine waters of the Pacific Northwest that examines
18 the status of current research, monitoring, prevention, re-
19 sponse, and control efforts.

20 “(b) PLAN.—The Task Force shall include in the re-
21 gionally appropriate Regional Research and Action Plan
22 developed under section 603B a plan, based on the inte-
23 grated assessment submitted under subsection (a), for re-
24 ducing, mitigating, and controlling hypoxia in the coastal
25 and estuarine waters of the Pacific Northwest. In devel-

1 oping such plan, the Task Force shall consult with State,
 2 Indian tribe, and local governments, and academic, agri-
 3 cultural, industry, and environmental groups and rep-
 4 resentatives. Such plan shall include incentive-based part-
 5 nership approaches. The plan shall also address the social
 6 and economic costs and benefits of the measures for reduc-
 7 ing, mitigating, and controlling hypoxia.”.

8 (b) TABLE OF CONTENTS AMENDMENT.—The table
 9 of contents in section 2 of the Coast Guard Authorization
 10 Act of 1998 is amended by adding after the item relating
 11 to section 604 the following new item:

“Sec. 604A. Pacific Northwest, estuaries, and Puget Sound hypoxia.”.

12 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

13 (a) AUTHORIZATION.—Section 605 is amended to
 14 read as follows:

15 **“SEC. 605. AUTHORIZATION OF APPROPRIATIONS.**

16 “There are authorized to be appropriated—

17 “(1) to the Under Secretary to carry out sec-
 18 tions 603A and 603B, \$34,000,000 for each of fiscal
 19 years 2011 through 2015, of which, for each fiscal
 20 year—

21 “(A) \$2,000,000 may be used for the de-
 22 velopment of the Regional Research and Action
 23 Plans and the reports required by section 604A;

24 “(B) \$3,000,000 may be used for the re-
 25 search and assessment activities related to ma-

1 rine and freshwater harmful algal blooms at re-
2 search laboratories of the National Oceanic and
3 Atmospheric Administration;

4 “(C) \$8,000,000 may be used to carry out
5 the Ecology and Oceanography of Harmful
6 Algal Blooms Program (ECOHAB);

7 “(D) \$5,500,000 may be used to carry out
8 the Monitoring and Event Response for Harm-
9 ful Algal Blooms Program (MERHAB);

10 “(E) \$1,500,000 may be used to carry out
11 the Northern Gulf of Mexico Ecosystems and
12 Hypoxia Assessment Program (NGOMEX);

13 “(F) \$5,000,000 may be used to carry out
14 the Coastal Hypoxia Research Program
15 (CHRP);

16 “(G) \$5,000,000 may be used to carry out
17 the Prevention, Control, and Mitigation of
18 Harmful Algal Blooms Program (PCM);

19 “(H) \$1,000,000 may be used to carry out
20 marine and freshwater harmful algal bloom and
21 hypoxia events response activities; and

22 “(I) \$3,000,000 may be used for increased
23 availability, communication, and coordination
24 activities; and

1 “(2) to the Administrator to carry out sections
2 603A, 603B, and 604, \$7,000,000 for each of fiscal
3 years 2011 through 2015.”.

4 (b) EXTRAMURAL RESEARCH ACTIVITIES.—The
5 Under Secretary shall ensure that a substantial portion
6 of funds appropriated pursuant to subsection (a) that are
7 used for research purposes are allocated to extramural re-
8 search activities.

 Passed the House of Representatives March 12,
2010.

Attest:

Clerk.

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To establish a National Harmful Algal Bloom and Hypoxia Program, to develop and coordinate a comprehensive and integrated strategy to address harmful algal blooms and hypoxia, and to provide for the development and implementation of comprehensive regional action plans to reduce harmful algal blooms and hypoxia.