

115TH CONGRESS  
2D SESSION

# H. R. 6645

To amend the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to reauthorize the national harmful algal blooms and hypoxia program and require an assessment and action plan for reducing harmful algal blooms and hypoxia in the Greater Everglades region, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 31, 2018

Mr. MAST (for himself, Mr. POSEY, Ms. BONAMICI, and Ms. KAPTUR) 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

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## A BILL

To amend the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to reauthorize the national harmful algal blooms and hypoxia program and require an assessment and action plan for reducing harmful algal blooms and hypoxia in the Greater Everglades region, 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 Bloom  
3 and Hypoxia Research and Control Act of 2018”.

4 **SEC. 2. HARMFUL ALGAL BLOOMS AND HYPOXIA RE-**  
5 **SEARCH AND CONTROL.**

6 (a) REAUTHORIZATION OF NATIONAL HARMFUL  
7 ALGAL BLOOMS AND HYPOXIA PROGRAM.—Section  
8 609(a) of the Harmful Algal Bloom and Hypoxia Research  
9 and Control Act of 1998 (33 U.S.C. 4003(a)) is amend-  
10 ed—

11 (1) by striking “and 603B” and inserting “,  
12 603B, and 603C”;

13 (2) by striking “\$20,500,000” and inserting  
14 “\$22,000,000”; and

15 (3) by striking “2018” and inserting “2023”.

16 (b) GREATER EVERGLADES ASSESSMENT AND AC-  
17 TION PLAN.—The Harmful Algal Bloom and Hypoxia Re-  
18 search and Control Act of 1998 (33 U.S.C. 4003) is  
19 amended by inserting after section 603B the following new  
20 section:

21 **“SEC. 603C. GREATER EVERGLADES HARMFUL ALGAL**  
22 **BLOOMS AND HYPOXIA.**

23 “(a) INTEGRATED ASSESSMENT.—Not later than 18  
24 months after the date of enactment of the Harmful Algal  
25 Bloom and Hypoxia Research and Control Act of 2018,  
26 the Task Force, in accordance with the authority under

1 section 603, shall complete and submit to the Congress  
2 and the President an integrated assessment that examines  
3 the causes, consequences, and potential approaches to re-  
4 duce harmful algal blooms and hypoxia in the Greater Ev-  
5 erglades region, including—

6           “(1) a comprehensive analysis of how restora-  
7           tion efforts undertaken pursuant to such section  
8           with respect to the South Florida Ecosystem (as de-  
9           fined in section 528 of the Water Resources Devel-  
10          opment Act of 1996 (33 U.S.C. 2201 note; Public  
11          Law 104–303)) may impact the distribution, mag-  
12          nitude, duration, and frequency of harmful algal  
13          blooms and hypoxia events within the region; and

14          “(2) the status of, and gaps within, current  
15          harmful algal bloom and hypoxia research, moni-  
16          toring, management, prevention, response, and con-  
17          trol activities that directly benefit the region and  
18          that are carried out by any of the following entities:

19                 “(A) Federal agencies, including the  
20                 United States Army Corps of Engineers.

21                 “(B) State agencies.

22                 “(C) Regional research consortia.

23                 “(D) Institutions of higher education (as  
24                 defined in section 101 of the Higher Education  
25                 Act of 1965 (20 U.S.C. 1001)).

1                   “(E) Private industry.

2                   “(F) Nongovernmental organizations.

3           “(b) ACTION PLAN.—

4                   “(1) IN GENERAL.—Not later than 2 years  
5 after the date of enactment of the Harmful Algal  
6 Bloom and Hypoxia Research and Control Act of  
7 2018, the Task Force shall develop and submit to  
8 the Congress a plan, based on the integrated assess-  
9 ment under subsection (a), for reducing, mitigating,  
10 and controlling harmful algal blooms and hypoxia in  
11 the Greater Everglades region.

12                   “(2) CONTENTS.—The plan shall—

13                   “(A) address the monitoring needs identi-  
14 fied in the integrated assessment under sub-  
15 section (a);

16                   “(B) develop a timeline and budgetary re-  
17 quirements for deployment of future assets;

18                   “(C) identify requirements for the develop-  
19 ment and verification of Greater Everglades  
20 harmful algal bloom and hypoxia models, in-  
21 cluding—

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

1           “(ii) data quality methods used to en-  
2           sure the best available data are utilized;  
3           and

4           “(D) propose the development of an early  
5           warning system for alerting local communities  
6           in the region to harmful algal bloom risks that  
7           may impact human health.

8           “(3) REQUIREMENTS.—In developing the plan,  
9           the Task Force shall—

10           “(A) coordinate with the State of Florida  
11           and affected local and Tribal governments;

12           “(B) consult with representatives from  
13           academic, agricultural, industry, and other  
14           stakeholder groups;

15           “(C) ensure that the plan complements  
16           and does not duplicate activities conducted by  
17           other Federal or State agencies, including the  
18           South Florida Ecosystem Restoration Task  
19           Force established under subsection (f) of sec-  
20           tion 528 of the Water Resources Development  
21           Act of 1996 (33 U.S.C. 2201 note; Public Law  
22           104–303);

23           “(D) identify critical research for reducing,  
24           mitigating, and controlling harmful algal bloom  
25           events and their effects;

1           “(E) evaluate cost-effective, incentive-  
2 based partnership approaches;

3           “(F) ensure that the plan is technically  
4 sound and cost-effective;

5           “(G) utilize existing research, assessments,  
6 reports, and program activities;

7           “(H) publish a summary of the proposed  
8 plan in the Federal Register at least 180 days  
9 prior to submitting the completed plan to Con-  
10 gress;

11           “(I) after submitting the completed plan to  
12 Congress, provide biennial progress reports on  
13 the activities toward achieving the objectives of  
14 the plan;

15           “(J) conduct the assessment under sub-  
16 section (a) and submit the plan under sub-  
17 section (b) through the agencies that are mem-  
18 bers of the Task Force using funds authorized  
19 and available for such agencies in support of  
20 restoration of the Greater Everglades; and

21           “(K) include the funding for the assess-  
22 ment in the plan and carry out the plan in the  
23 annual cross-cut budget for the South Florida  
24 Ecosystem Restoration Program under section  
25 528 of the Water Resources Development Act

1 of 1996 (33 U.S.C. 2201 note; Public Law  
2 104–303).

3 “(c) GREATER EVERGLADES.—In this section, the  
4 term ‘Greater Everglades’ means—

5 “(1) all lands and waters within the administra-  
6 tive boundaries of the South Florida Water Manage-  
7 ment District;

8 “(2) regional coastal waters, including Biscayne  
9 Bay, the Caloosahatchee Estuary, Florida Bay, and  
10 Indian River Lagoon; and

11 “(3) the Florida Reef Tract.”.

12 (c) INTER-AGENCY TASK FORCE.—Section 603(a) of  
13 the Harmful Algal Bloom and Hypoxia Research and Con-  
14 trol Act of 1998 (33 U.S.C. 4001(a)) is amended—

15 (1) in paragraph (12), by striking “and” at the  
16 end;

17 (2) by redesignating paragraph (13) as para-  
18 graph (14); and

19 (3) by inserting after paragraph (12) the fol-  
20 lowing:

21 “(13) the Army Corps of Engineers; and”.

22 (d) SCIENTIFIC ASSESSMENTS OF FRESHWATER  
23 HARMFUL ALGAL BLOOMS.—Section 603(f)(1) Harmful  
24 Algal Bloom and Hypoxia Research and Control Act of  
25 1998 (33 U.S.C. 4001(f)(1)) is amended by striking “later

1 than 24 months” and all that follows and inserting “less  
2 than once every 5 years, the Task Force shall complete  
3 and submit to Congress a scientific assessment of harmful  
4 algal blooms in United States coastal waters and fresh-  
5 water systems. Each assessment shall examine both ma-  
6 rine and freshwater harmful algal blooms, including those  
7 in the Great Lakes, Greater Everglades, and upper  
8 reaches of estuaries, those in freshwater lakes and rivers,  
9 and those that originate in freshwater lakes or rivers and  
10 migrate to coastal waters.”.

11 **SEC. 3. CONSULTATION REQUIRED.**

12 Section 102 of the Harmful Algal Bloom and Hy-  
13 poxia Amendments Act of 2004 (33 U.S.C. 4001a) is  
14 amended by striking “the amendments made by this title”  
15 and inserting “the Harmful Algal Bloom and Hypoxia Re-  
16 search and Control Act of 1998”.

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

19 (a) PROGRAM DUTIES.—Section 603A(e) of the  
20 Harmful Algal Bloom and Hypoxia Research and Control  
21 Act of 1998 (33 U.S.C. 4002(e)) is amended—

22 (1) in paragraph (1), by inserting “, including  
23 to local and regional stakeholders through the estab-  
24 lishment and maintenance of a publicly accessible  
25 Internet website that provides information on Pro-



1 gram activities completed pursuant to this section”  
2 after “Program”;

3 (2) in paragraph (3)—

4 (A) in subparagraph (B), by striking “;  
5 and” and inserting a semicolon;

6 (B) in subparagraph (C), by inserting  
7 “and” after the semicolon at the end; and

8 (C) by adding at the end the following:

9 “(D) to accelerate the utilization of effec-  
10 tive methods of intervention and mitigation to  
11 reduce the frequency, severity, and impacts of  
12 harmful algal bloom and hypoxia events;”;

13 (3) in paragraph (4), by striking “and work co-  
14 operatively with regional, State, tribal, and local gov-  
15 ernment agencies” and inserting “, and work coop-  
16 eratively to provide technical assistance to, regional,  
17 State, tribal, and local government entities, and re-  
18 gional information coordination entities (as defined  
19 in section 12303(6) of the Integrated Coastal and  
20 Ocean Observation System Act of 2009 (33 U.S.C.  
21 3602))”; and

22 (4) in paragraph (7)—

23 (A) by inserting “and extension” after “ex-  
24 isting education”; and

1 (B) by inserting “intervention,” after  
2 “awareness of the causes, impacts,”.

3 (b) INTEGRATED COASTAL AND OCEAN OBSERVING  
4 SYSTEM.—Section 603A(i) of the Harmful Algal Bloom  
5 and Hypoxia Research and Control Act of 1998 (33  
6 U.S.C. 20 4002(i)) is amended by inserting “coordinate  
7 with the regional information coordination entities re-  
8 ferred to in subsection (e) and” after “this title shall”.

9 (c) NATIONAL OCEANIC AND ATMOSPHERIC ADMIN-  
10 ISTRATION ACTIVITIES.—Section 603A(f) of the Harmful  
11 Algal Bloom and Hypoxia Research and Control Act of  
12 1998 (33 U.S.C. 4002(f)) is amended—

13 (1) in paragraph (3), by inserting “, which shall  
14 include unmanned systems,” after “infrastructure”;

15 (2) in paragraph (5), by striking “and” at the  
16 end;

17 (3) in paragraph (6)(C), by striking the period  
18 at the end and inserting a semicolon; and

19 (4) by adding at the end the following:

20 “(7) use cost effective methods in carrying out  
21 this Act; and

22 “(8) develop contingency plans for the long-  
23 term monitoring of hypoxia.”.

1 **SEC. 5. HYPOXIA OR HARMFUL ALGAL BLOOM EVENTS OF**  
2 **SIGNIFICANCE.**

3 (a) RELIEF.—

4 (1) IN GENERAL.—Upon a determination under  
5 subsection (b) that there is an event of significance,  
6 the appropriate Federal official is authorized to  
7 make sums available to the affected State or local  
8 government for the purposes of assessing and miti-  
9 gating the detrimental environmental, economic, sub-  
10 sistence use, and public health effects of the event  
11 of significance.

12 (2) FEDERAL SHARE.—The Federal share of  
13 the cost of any activity carried out under this sub-  
14 section for the purposes described in paragraph (1)  
15 may not exceed 50 percent of the cost of that activ-  
16 ity.

17 (3) DONATIONS.—Notwithstanding any other  
18 provision of law, an appropriate Federal official may  
19 accept donations of funds, services, facilities, mate-  
20 rials, or equipment that the appropriate Federal offi-  
21 cial considers necessary for the purposes described  
22 in paragraph (1). Any funds donated to an appro-  
23 priate Federal official under this paragraph may be  
24 expended without further appropriation and without  
25 fiscal year limitation.

26 (b) DETERMINATIONS.—

1           (1) IN GENERAL.—At the discretion of an ap-  
2           propriate Federal official, or at the request of the  
3           Governor of an affected State, an appropriate Fed-  
4           eral official shall determine whether a hypoxia or  
5           harmful algal bloom event is an event of signifi-  
6           cance.

7           (2) CONSIDERATIONS.—In making a determina-  
8           tion under paragraph (1), the appropriate Federal  
9           official shall consider the toxicity of the harmful  
10          algal bloom, the severity of the hypoxia, its potential  
11          to spread, the economic impact, the toxicity to fish  
12          and wildlife, size and nature of the human popu-  
13          lation potentially exposed to the bloom, the relative  
14          size in relation to the past 5 occurrences of harmful  
15          algal blooms or hypoxia events that occur on a re-  
16          current or annual basis, and the geographic scope,  
17          including the potential to affect several municipali-  
18          ties, to affect more than 1 State, or to cross an  
19          international boundary.

20          (c) DEFINITIONS.—In this section:

21               (1) APPROPRIATE FEDERAL OFFICIAL.—The  
22               term “appropriate Federal official” means—

23                       (A) in the case of a marine or coastal hy-  
24                       poxia or harmful algal bloom event, the Under

1 Secretary of Commerce for Oceans and Atmos-  
2 phere; and

3 (B) in the case of a freshwater hypoxia or  
4 harmful algal bloom event, the Administrator of  
5 the Environmental Protection Agency.

6 (2) EVENT OF SIGNIFICANCE.—The term  
7 “event of significance” means a hypoxia or harmful  
8 algal bloom event that has had or will likely have a  
9 significant detrimental environmental, economic,  
10 subsistence use, or public health impact on an af-  
11 fected State.

12 (3) HYPOXIA OR HARMFUL ALGAL BLOOM  
13 EVENT.—The term “hypoxia or harmful algal bloom  
14 event” means the occurrence of hypoxia or a harm-  
15 ful algal bloom as a result of a natural, anthropo-  
16 genic, or undetermined cause.

17 **SEC. 6. HYPOXIA OR HARMFUL ALGAL BLOOM FORE-**  
18 **CASTING.**

19 The Harmful Algal Bloom and Hypoxia Research and  
20 Control Act of 1998 is amended by inserting after section  
21 603B (33 U.S.C. 4003) the following new section:

22 **“SEC. 603C. HYPOXIA OR HARMFUL ALGAL BLOOM FORE-**  
23 **CASTING.**

24 “Not later than one year after the date of the enact-  
25 ment of the Harmful Algal Bloom and Hypoxia Research

1 and Control Act of 2018, the Under Secretary shall com-  
2 plete and submit to Congress a plan for developing the  
3 capacity for sustained operational ecological forecast mod-  
4 els for forecasting harmful algal blooms or hypoxia. The  
5 plan shall include a process for how such forecast models  
6 can be supported and operated with regional information  
7 coordination entities identified under subsection (c)(4) of  
8 section 12304 of the Integrated Coastal and Ocean Obser-  
9 vation System Act of 2009 (33 U.S.C. 3603) for purposes  
10 of the National Integrated Coastal and Ocean Observation  
11 System established under such section.”.

○