

108TH CONGRESS  
1ST SESSION

# S. 937

To reauthorize the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

APRIL 29, 2003

Mr. VOINOVICH (for himself, Mr. DEWINE, and Mr. LEVIN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To reauthorize the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998, 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 Amendments Act of 2003”.

### 6 **SEC. 2. RETENTION OF TASK FORCE.**

7 Section 603 of the Harmful Algal Bloom and Hy-  
8 poxia Research and Control Act of 1998 (16 U.S.C. 1451  
9 note) is amended by striking subsection (e).

1 **SEC. 3. SCIENTIFIC ASSESSMENTS AND RESEARCH PLANS.**

2 Such section 603 is further amended—

3 (1) in subsection (a) by adding at the end the  
4 following:

5 “In developing the assessments and research plans de-  
6 scribed in subsections (b), (c), (d), (e), and (f), the Task  
7 Force shall work with appropriate State, Indian tribe, and  
8 local governments to ensure that the assessments and re-  
9 search plans fulfill the requirements of subsections (b)(2),  
10 (c)(2), (d)(2), (e)(2), and (f)(2). Additionally, the Task  
11 Force shall consult with appropriate industry, academic  
12 institutions, and non-governmental organizations through-  
13 out the development of the assessments and research  
14 plans.”; and

15 (2) by striking subsections (b) and (c) and in-  
16 serting the following:

17 “(b) SCIENTIFIC ASSESSMENTS OF HARMFUL ALGAL  
18 BLOOMS.—(1) Not less than once every 5 years the Task  
19 Force shall complete and submit to the Committee on  
20 Science of the House of Representatives and the Com-  
21 mittee on Commerce, Science, and Transportation of the  
22 Senate a scientific assessment of harmful algal blooms in  
23 United States coastal waters. The first such assessment  
24 shall be completed not later than 24 months after the date  
25 of enactment of the Harmful Algal Bloom and Hypoxia  
26 Research Amendments Act of 2003 and should consider

1 only marine harmful algal blooms. All subsequent assess-  
 2 ments shall examine both marine and freshwater harmful  
 3 algal blooms, including those in the Great Lakes and  
 4 upper reaches of estuaries.

5 “(2) The assessments under this subsection shall—

6 “(A) examine the causes and ecological con-  
 7 sequences, and economic costs, of harmful algal  
 8 blooms;

9 “(B) describe the potential ecological and eco-  
 10 nomic costs and benefits of possible policy and man-  
 11 agement actions for preventing, controlling, and  
 12 mitigating harmful algal blooms;

13 “(C) evaluate progress made by, and the needs  
 14 of, Federal research programs on the causes, charac-  
 15 teristics, and impacts of harmful algal blooms; and

16 “(D) identify ways to improve coordination and  
 17 to prevent unnecessary duplication of effort among  
 18 Federal agencies and departments with respect to  
 19 research on harmful algal blooms.

20 “(c) SCIENTIFIC ASSESSMENT OF FRESHWATER  
 21 HARMFUL ALGAL BLOOMS.—(1) Not later than 24  
 22 months after the date of enactment of the Harmful Algal  
 23 Bloom and Hypoxia Research Amendments Act of 2003  
 24 the Task Force shall complete and submit to the Com-  
 25 mittee on Science of the House of Representatives and the

1 Committee on Commerce, Science, and Transportation of  
2 the Senate a scientific assessment of current knowledge  
3 about harmful algal blooms in freshwater locations such  
4 as the Great Lakes and upper reaches of estuaries, includ-  
5 ing a research plan for coordinating Federal efforts to bet-  
6 ter understand freshwater harmful algal blooms.

7 “(2) The freshwater harmful algal bloom scientific  
8 assessment shall—

9 “(A) examine the causes and ecological con-  
10 sequences, and the economic costs, of harmful algal  
11 blooms with significant effects on freshwater loca-  
12 tions, including estimations of the frequency and oc-  
13 currence of significant events;

14 “(B) establish priorities and guidelines for a  
15 competitive, peer-reviewed, merit-based interagency  
16 research program, as part of the Ecology and  
17 Oceanography of Harmful Algal Blooms (ECOHAB)  
18 project, to better understand the causes, characteris-  
19 tics, and impacts of harmful algal blooms in fresh-  
20 water locations; and

21 “(C) identify ways to improve coordination and  
22 to prevent unnecessary duplication of effort among  
23 Federal agencies and departments with respect to  
24 research on harmful algal blooms in freshwater loca-  
25 tions.

1       “(d) NATIONAL SCIENTIFIC RESEARCH PLAN INTO  
2       REDUCING IMPACTS FROM HARMFUL ALGAL BLOOMS.—

3       (1) Not later than 12 months after the date of enactment  
4       of the Harmful Algal Bloom and Hypoxia Research  
5       Amendments Act of 2003, the Task Force shall develop  
6       and submit to the Committee on Science of the House of  
7       Representatives and the Committee on Commerce,  
8       Science, and Transportation of the Senate a research plan  
9       providing for a comprehensive and coordinated national  
10      research program to develop prevention, control, and miti-  
11      gation methods to reduce the impacts of harmful algal  
12      blooms on coastal ecosystems (including the Great Lakes),  
13      public health, and the economy.

14      “(2) The research plan shall—

15           “(A) establish priorities and guidelines for a  
16           competitive, peer-reviewed, merit-based interagency  
17           research program on methods for the prevention,  
18           control, and mitigation of harmful algal blooms;

19           “(B) identify ways to improve coordination and  
20           to prevent unnecessary duplication of effort among  
21           Federal agencies and departments with respect to  
22           the actions described in paragraph (1); and

23           “(C) ensure, through consultation with Sea  
24           Grant Programs, that the results and findings of the  
25           research program are communicated to State, Indian

1       tribe, and local governments, and to the general pub-  
2       lic.

3       “(e) SCIENTIFIC ASSESSMENTS OF HYPOXIA.—(1)  
4       Not less than once every 5 years the Task Force shall  
5       complete and submit to the Committee on Science of the  
6       House of Representatives and the Committee on Com-  
7       merce, Science, and Transportation of the Senate a sci-  
8       entific assessment of hypoxia in United States coastal wa-  
9       ters including the Great Lakes. The first such assessment  
10      shall be completed not less than 24 months after the date  
11      of enactment of the Harmful Algal Bloom and Hypoxia  
12      Research Amendments Act of 2003.

13      “(2) The assessments under this subsection shall—

14              “(A) examine the causes and ecological con-  
15              sequences, and the economic costs, of hypoxia;

16              “(B) describe the potential ecological and eco-  
17              nomic costs and benefits of possible policy and man-  
18              agement actions for preventing, controlling, and  
19              mitigating hypoxia;

20              “(C) evaluate progress made by, and the needs  
21              of, Federal research programs on the causes, charac-  
22              teristics, and impacts of hypoxia, including rec-  
23              ommendations of how to eliminate significant gaps  
24              in hypoxia modeling and monitoring data; and

1           “(D) identify ways to improve coordination and  
2           to prevent unnecessary duplication of effort among  
3           Federal agencies and departments with respect to  
4           research on hypoxia.

5           “(f) LOCAL AND REGIONAL SCIENTIFIC ASSESS-  
6           MENTS.—(1) The Secretary of Commerce, in coordination  
7           with the Task Force and appropriate State, Indian tribe,  
8           and local governments, shall provide for local and regional  
9           scientific assessments of hypoxia or harmful algal blooms,  
10          as requested by State, Indian tribe, or local governments,  
11          or for affected areas as identified by the Secretary. If the  
12          Secretary receives multiple requests, the Secretary shall  
13          ensure, to the extent practicable, that assessments under  
14          this subsection cover geographically and ecologically di-  
15          verse locations with significant ecological and economic  
16          impacts from hypoxia or harmful algal blooms. The Sec-  
17          retary shall establish a procedure for reviewing requests  
18          for local and regional assessments. The Secretary shall en-  
19          sure, through consultation with Sea Grant Programs, that  
20          the findings of the assessments are communicated to the  
21          appropriate State, Indian tribe, and local governments,  
22          and to the general public.

23          “(2) The scientific assessments under this subsection  
24          shall examine—

1           “(A) the causes and ecological consequences,  
2           and the economic costs, of hypoxia or harmful algal  
3           blooms in that area;

4           “(B) methods to prevent, control, and mitigate  
5           hypoxia or harmful algal blooms in that area and  
6           the potential ecological and economic costs and bene-  
7           fits of such methods; and

8           “(C) other topics the Task Force consider ap-  
9           propriate.”.

10 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

11       Section 605 of such Act is amended—

12           (1) by striking “and \$19,000,000 for fiscal year  
13           2001” and inserting “\$19,000,000 for fiscal year  
14           2001, \$27,200,000 for fiscal year 2004,  
15           \$28,700,000 for fiscal year 2005, and \$29,200,000  
16           for fiscal year 2006”;

17           (2) in paragraph (1) by striking “and” after  
18           “2000,” and by inserting “, and \$3,000,000 for  
19           each of fiscal years 2004, 2005, and 2006” after  
20           “2001”;

21           (3) in paragraph (2) by striking “and” after  
22           “2000,” and by inserting “, and \$10,200,000, of  
23           which \$2,000,000 shall be used for the research pro-  
24           gram described in section 603(c)(2)(B), for each of  
25           fiscal years 2004, 2005, and 2006” after “2001”;



1           (4) in paragraph (3) by striking “and” after  
 2           “2000,” and by inserting “, \$2,000,000 for fiscal  
 3           year 2004, \$3,000,000 for fiscal year 2005, and  
 4           \$3,000,000 for fiscal year 2006” after “2001”;

5           (5) in paragraph (4) by striking “2001” and in-  
 6           serting “2001, and \$6,000,000 for each of fiscal  
 7           years 2004, 2005, and 2006,”;

8           (6) in paragraph (4) by inserting “the Moni-  
 9           toring and Event Response for Harmful Algal  
 10          Blooms (MERHAB) project under” after “adminis-  
 11          tered by”;

12          (7) by striking “and” after the semicolon at the  
 13          end of paragraph (4);

14          (8) in paragraph (5) by striking “and” after  
 15          “2000,” and by inserting “, \$5,000,000 for fiscal  
 16          year 2004, \$5,500,000 for fiscal year 2005, and  
 17          \$6,000,000 for fiscal year 2006” after “2001”;

18          (9) in paragraph (5) by striking “Administra-  
 19          tion.” and inserting “Administration; and”; and

20          (10) by adding at the end the following:

21               “(6) \$3,000,000 for each of fiscal years 2004,  
 22               2005, and 2006 to carry out the activities described  
 23               in section 603(f).”.

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