

HARMFUL ALGAL BLOOM AND HYPOXIA RESEARCH AND CONTROL ACT OF 1998

[Public Law 105–383, enacted November 13, 1998]

[As Amended Through P.L. 117–144, Enacted June 16, 2022]

【Currency: This publication is a compilation of the text of Public Law 105–383. It was last amended by the public law listed in the As Amended Through note above and below at the bottom of each page of the pdf version and reflects current law through the date of the enactment of the public law listed at <https://www.govinfo.gov/app/collection/comps/>】

【Note: While this publication does not represent an official version of any Federal statute, substantial efforts have been made to ensure the accuracy of its contents. The official version of Federal law is found in the United States Statutes at Large and in the United States Code. The legal effect to be given to the Statutes at Large and the United States Code is established by statute (1 U.S.C. 112, 204).】

AN ACT to authorize appropriations for fiscal years 1998 and 1999 for the Coast Guard, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Coast Guard Authorization Act of 1998”.

SEC. 2. TABLE OF CONTENTS.

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TITLE IV—MISCELLANEOUS

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SEC. 409. COAST GUARD CITY, USA.

The Commandant of the Coast Guard may recognize the community of Grand Haven, Michigan, as “Coast Guard City, USA”. If the Commandant desires to recognize any other community in the same manner or any other community requests such recognition from the Coast Guard, the Commandant shall notify the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives 30 days prior to approving such recognition.

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TITLE VI—HARMFUL ALGAL BLOOMS AND HYPOXIA

SEC. 601. [33 U.S.C. 4001 note] SHORT TITLE.

This title may be cited as the “Harmful Algal Bloom and Hypoxia Research and Control Act of 1998”.

SEC. 602. [33 U.S.C. 4001 note] FINDINGS.

The Congress finds that—

(1) the recent outbreak of the harmful microbe *Pfiesteria piscicida* in the coastal waters of the United States is one example of potentially harmful algal blooms composed of naturally occurring species that reproduce explosively and that are increasing in frequency and intensity in the Nation’s coastal waters;

(2) other recent occurrences of harmful algal blooms include red tides in the Gulf of Mexico and the Southeast; brown tides in New York and Texas; ciguatera fish poisoning in Hawaii, Florida, Puerto Rico, and the United States Virgin Islands; and shellfish poisonings in the Gulf of Maine, the Pacific Northwest, and the Gulf of Alaska;

(3) in certain cases, harmful algal blooms have resulted in fish kills, the deaths of numerous endangered West Indian manatees, beach and shellfish bed closures, threats to public health and safety, and concern among the public about the safety of seafood;

(4) according to some scientists, the factors causing or contributing to harmful algal blooms may include excessive nutrients in coastal waters, other forms of pollution, the transfer of harmful species through ship ballast water, and ocean currents;

(5) harmful algal blooms may have been responsible for an estimated \$1,000,000,000 in economic losses during the past decade;

(6) harmful algal blooms and blooms of non-toxic algal species may lead to other damaging marine conditions such as hypoxia (reduced oxygen concentrations), which are harmful or fatal to fish, shellfish, and benthic organisms;

(7) according to the National Oceanic and Atmospheric Administration in the Department of Commerce, 53 percent of United States estuaries experience hypoxia for at least part of

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the year and a 7,000 square mile area in the Gulf of Mexico off Louisiana and Texas suffers from hypoxia;

(8) according to some scientists, a factor believed to cause hypoxia is excessive nutrient loading into coastal waters;

(9) there is a need to identify more workable and effective actions to reduce nutrient loadings to coastal waters;

(10) the National Oceanic and Atmospheric Administration, through its ongoing research, education, grant, and coastal resource management programs, possesses a full range of capabilities necessary to support a near and long-term comprehensive effort to prevent, reduce, and control harmful algal blooms and hypoxia;

(11) funding for the research and related programs of the National Oceanic and Atmospheric Administration will aid in improving the Nation's understanding and capabilities for addressing the human and environmental costs associated with harmful algal blooms and hypoxia; and

(12) other Federal agencies such as the Environmental Protection Agency, the Department of Agriculture, and the National Science Foundation, along with the States, Indian tribes, and local governments, conduct important work related to the prevention, reduction, and control of harmful algal blooms and hypoxia.

SEC. 603. [33 U.S.C. 4001] ASSESSMENTS.

(a) ESTABLISHMENT OF INTER-AGENCY TASK FORCE.—The President, through the Committee on Environment and Natural Resources of the National Science and Technology Council, shall establish an Inter-Agency Task Force on Harmful Algal Blooms and Hypoxia. The Task Force shall consist of a representative from—

(1) the Department of Commerce (who shall serve as Chairman of the Task Force);

(2) the Environmental Protection Agency;

(3) the Department of Agriculture;

(4) the Department of the Interior;

(5) the Department of the Navy;

(6) the Department of Health and Human Services;

(7) the National Science Foundation;

(8) the National Aeronautics and Space Administration;

(9) the Food and Drug Administration;

(10) the Office of Science and Technology Policy;

(11) the Council on Environmental Quality;

(12) the Centers for Disease Control and Prevention;

(13) the Army Corps of Engineers; and

(14) other Federal agencies as the President considers appropriate.

(b) ASSESSMENT OF HARMFUL ALGAL BLOOMS.—

(1) Not later than 12 months after the date of the enactment of this title, the Task Force, in cooperation with the coastal States, Indian tribes, and local governments, industry (including agricultural organizations), academic institutions, and non-governmental organizations with expertise in coastal zone management, shall complete and submit to the Congress an assessment which examines the ecological and economic

consequences of harmful algal blooms, alternatives for reducing, mitigating, and controlling harmful algal blooms, and the social and economic costs and benefits of such alternatives.

(2) The assessment shall—

(A) identify alternatives for preventing unnecessary duplication of effort among Federal agencies and departments with respect to harmful algal blooms; and

(B) provide for Federal cooperation and coordination with and assistance to the coastal States, Indian tribes, and local governments in the prevention, reduction, management, mitigation, and control of harmful algal blooms and their environmental and public health impacts.

(c) ASSESSMENT OF HYPOXIA.—

(1) Not later than 12 months after the date of the enactment of this title, the Task Force, in cooperation with the States, Indian tribes, local governments, industry, agricultural, academic institutions, and non-governmental organizations with expertise in watershed and coastal zone management, shall complete and submit to the Congress an assessment which examines the ecological and economic consequences of hypoxia in United States coastal waters, alternatives for reducing, mitigating, and controlling hypoxia, and the social and economic costs and benefits of such alternatives.

(2) The assessment shall—

(A) establish needs, priorities, and guidelines for a peer-reviewed, inter-agency research program on the causes, characteristics, and impacts of hypoxia;

(B) identify alternatives for preventing unnecessary duplication of effort among Federal agencies and departments with respect to hypoxia; and

(C) provide for Federal cooperation and coordination with and assistance to the States, Indian tribes, and local governments in the prevention, reduction, management, mitigation, and control of hypoxia and its environmental impacts.

(d) REPORT TO CONGRESS ON HARMFUL ALGAL BLOOM IMPACTS.—

(1) DEVELOPMENT.—Not later than 12 months after the date of enactment of the Harmful Algal Bloom and Hypoxia Amendments Act of 2004, the President, in consultation with the chief executive officers of the States, shall develop and submit to the Congress a report that describes and evaluates the effectiveness of measures described in paragraph (2) that may be utilized to protect environmental and public health from impacts of harmful algal blooms. In developing the report, the President shall consult with the Task Force, the coastal States, Indian tribes, local governments, appropriate industries (including fisheries, agriculture, and fertilizer), academic institutions, and nongovernmental organizations with expertise in coastal zone science and management, and also consider the scientific assessments developed under this Act.

(2) REQUIREMENTS.—The report shall—

(A) review techniques for prediction of the onset, course, and impacts of harmful algal blooms including

evaluation of their accuracy and utility in protecting environmental and public health and provisions for their development;

(B) identify innovative research and development methods for the prevention, control, and mitigation of harmful algal blooms and provisions for their development; and

(C) include incentive-based partnership approaches regarding subparagraphs (A) and (B) where practicable.

(3) PUBLICATION AND OPPORTUNITY FOR COMMENT.—At least 90 days before submitting the report to the Congress, the President shall cause a summary of the proposed plan to be published in the Federal Register for a public comment period of not less than 60 days.

(4) FEDERAL ASSISTANCE.—The Secretary of Commerce, in coordination with the Task Force and to the extent of funds available, shall provide for Federal cooperation with and assistance to the coastal States, Indian tribes, and local governments regarding the measures described in paragraph (2), as requested.

(e) LOCAL AND REGIONAL SCIENTIFIC ASSESSMENTS.—

(1) IN GENERAL.—The Secretary of Commerce, in coordination with the Task Force and appropriate State, Indian tribe, and local governments, to the extent of funds available, shall provide for local and regional scientific assessments of hypoxia and harmful algal blooms, as requested by States, Indian tribes, and local governments, or for affected areas as identified by the Secretary. If the Secretary receives multiple requests, the Secretary shall ensure, to the extent practicable, that assessments under this subsection cover geographically and ecologically diverse locations with significant ecological and economic impacts from hypoxia or harmful algal blooms. The Secretary shall establish a procedure for reviewing requests for local and regional assessments. The Secretary shall ensure, through consultation with Sea Grant Programs, that the findings of the assessments are communicated to the appropriate State, Indian tribe, and local governments, and to the general public.

(2) PURPOSE.—Local and regional assessments shall examine—

(A) the causes and ecological consequences, and the economic cost, of hypoxia or harmful algal blooms in that area;

(B) potential methods to prevent, control, and mitigate hypoxia or harmful algal blooms in that area and the potential ecological and economic costs and benefits of such methods; and

(C) other topics the Task Force considers appropriate.

(f) SCIENTIFIC ASSESSMENTS OF HYPOXIA.—(1) Not less than once every 5 years the Task Force shall complete and submit to the Congress a scientific assessment of hypoxia in United States coastal waters including the Great Lakes. The first such assessment shall be completed not less than 24 months after the date of enact-

ment of the Harmful Algal Bloom and Hypoxia Amendments Act of 2004.

(2) The assessments under this subsection shall—

(A) examine the causes and ecological consequences, and the economic costs, of hypoxia;

(B) describe the potential ecological and economic costs and benefits of possible policy and management actions for preventing, controlling, and mitigating hypoxia;

(C) evaluate progress made by, and the needs of, Federal research programs on the causes, characteristics, and impacts of hypoxia, including recommendations of how to eliminate significant gaps in hypoxia modeling and monitoring data; and

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

(g) SCIENTIFIC ASSESSMENTS OF MARINE AND FRESHWATER HARMFUL ALGAL BLOOMS.—Not less than once every 5 years the Task Force shall complete and submit to Congress a scientific assessment of harmful algal blooms in United States coastal waters and freshwater systems. Each assessment shall examine both marine and freshwater harmful algal blooms, including those in the Great Lakes and upper reaches of estuaries, those in freshwater lakes and rivers, and those that originate in freshwater lakes or rivers and migrate to coastal waters.

(h) NATIONAL SCIENTIFIC RESEARCH, DEVELOPMENT, DEMONSTRATION, AND TECHNOLOGY TRANSFER PLAN ON REDUCING IMPACTS FROM HARMFUL ALGAL BLOOMS.—(1) Not later than 12 months after the date of enactment of the Harmful Algal Bloom and Hypoxia Amendments Act of 2004, the Task Force shall develop and submit to Congress a plan providing for a comprehensive and coordinated national research program to develop and demonstrate prevention, control, and mitigation methods to reduce the impacts of harmful algal blooms on coastal ecosystems (including the Great Lakes), public health, and the economy.

(2) The plan shall—

(A) establish priorities and guidelines for a competitive, peer reviewed, merit based interagency research, development, demonstration, and technology transfer program on methods for the prevention, control, and mitigation of harmful algal blooms;

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

(C) include to the maximum extent practicable diverse institutions, including Historically Black Colleges and Universities and those serving large proportions of Hispanics, Native Americans, Asian Pacific Americans, and other underrepresented populations.

(3) The Secretary of Commerce, in conjunction with other appropriate Federal agencies, shall establish a research, development, demonstration, and technology transfer program that meets the priorities and guidelines established under paragraph (2)(A). The Secretary shall ensure, through consultation with Sea Grant Pro-

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grams, that the results and findings of the program are communicated to State, Indian tribe, and local governments, and to the general public.

(i) **REPORT.**—Not later than 2 years after the date the Action Strategy is submitted under section 603B, the Under Secretary shall submit a report to Congress that describes—

- (1) the proceedings of the annual Task Force meetings;
- (2) the activities carried out under the Program, including the regional and subregional parts of the Action Strategy;
- (3) the budget related to the activities under paragraph (2);
- (4) the progress made on implementing the Action Strategy; and
- (5) any need to revise or terminate research and activities under the Program.

SEC. 603A. [33 U.S.C. 4002] NATIONAL HARMFUL ALGAL BLOOM AND HYPOXIA PROGRAM.

(a) **ESTABLISHMENT.**—Not later than 1 year after the date of enactment of the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, the Under Secretary, acting through the Task Force, shall maintain and enhance a national harmful algal bloom and hypoxia program, including—

- (1) a statement of objectives, including understanding, detecting, predicting, controlling, mitigating, and responding to marine and freshwater harmful algal bloom and hypoxia events; and
- (2) the comprehensive research plan and action strategy under section 603B.

(b) **PERIODIC REVISION.**—The Task Force shall periodically review and revise the Program, as necessary.

(c) **TASK FORCE FUNCTIONS.**—The Task Force shall—

- (1) coordinate interagency review of the objectives and activities of the Program;
- (2) expedite the interagency review process by ensuring timely review and dispersal of required reports and assessments under this title;
- (3) support the implementation of the Action Strategy, including the coordination and integration of the research of all Federal programs, including ocean and Great Lakes science and management programs and centers, that address the chemical, biological, and physical components of marine and freshwater harmful algal blooms and hypoxia;
- (4) support the development of institutional mechanisms and financial instruments to further the objectives and activities of the Program;
- (5) review the Program's distribution of Federal funding to address the objectives and activities of the Program;
- (6) promote the development of new technologies for predicting, monitoring, and mitigating harmful algal bloom and hypoxia conditions; and
- (7) establish such interagency working groups as it considers necessary.

(d) LEAD FEDERAL AGENCY.—Except as provided in subsection (h), the National Oceanic and Atmospheric Administration shall have primary responsibility for administering the Program.

(e) PROGRAM DUTIES.—In administering the Program, the Under Secretary shall—

(1) promote the Program, including to local and regional stakeholders through the establishment and maintenance of a publicly accessible Internet website that provides information as to Program activities completed under this section;

(2) prepare work and spending plans for implementing the research and activities identified under the Action Strategy;

(3) administer peer-reviewed, merit-based, competitive grant funding—

(A) to maintain and enhance baseline monitoring programs established by the Program;

(B) to support the projects maintained and established by the Program;

(C) to address the research and management needs and priorities identified in the Action Strategy; and

(D) to accelerate the utilization of effective methods of intervention and mitigation to reduce the frequency, severity, and impacts of harmful algal bloom and hypoxia events;

(4) coordinate with, and work cooperatively to provide technical assistance to, regional, State, tribal, and local government agencies and programs that address marine and freshwater harmful algal blooms and hypoxia;

(5) coordinate with the Secretary of State to support international efforts on marine and freshwater harmful algal bloom and hypoxia information sharing, research, prediction, mitigation, control, and response activities;

(6) identify additional research, development, and demonstration needs and priorities relating to monitoring, prevention, control, mitigation, and response to marine and freshwater harmful algal blooms and hypoxia, including methods and technologies to protect the ecosystems affected by marine and freshwater harmful algal blooms and hypoxia;

(7) integrate, coordinate, and augment existing education and extension programs to improve public understanding and awareness of the causes, impacts, intervention, and mitigation efforts for marine and freshwater harmful algal blooms and hypoxia;

(8) facilitate and provide resources to train State and local coastal and water resource managers in the methods and technologies for monitoring, preventing, controlling, and mitigating marine and freshwater harmful algal blooms and hypoxia;

(9) support regional efforts to control and mitigate outbreaks through—

(A) communication of the contents of the Action Strategy and maintenance of online data portals for other information about harmful algal blooms and hypoxia to State, tribal, and local stakeholders; and

(B) overseeing the development, review, and periodic updating of the Action Strategy;

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(10) convene at least 1 meeting of the Task Force each year; and

(11) perform such other tasks as may be delegated by the Task Force.

(f) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION ACTIVITIES.—The Under Secretary shall—

(1) maintain and enhance the existing competitive programs at the National Oceanic and Atmospheric Administration relating to harmful algal blooms and hypoxia;

(2) carry out marine and Great Lakes harmful algal bloom and hypoxia events response activities;

(3) develop and enhance, including with respect to infrastructure, which shall include unmanned systems, as necessary, critical observations, monitoring, modeling, data management, information dissemination, and operational forecasts relevant to harmful algal blooms and hypoxia events;

(4) enhance communication and coordination among Federal agencies carrying out marine and freshwater harmful algal bloom and hypoxia activities and research;

(5) to the greatest extent practicable, leverage existing resources and expertise available from local research universities and institutions;

(6) increase the availability to appropriate public and private entities of—

(A) analytical facilities and technologies;

(B) operational forecasts; and

(C) reference and research materials;

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

(8) develop contingency plans for the long-term monitoring of hypoxia.

(g) COOPERATIVE EFFORTS.—The Under Secretary shall work cooperatively and avoid duplication of effort with other offices, centers, and programs within the National Oceanic and Atmospheric Administration, other agencies on the Task Force, and States, tribes, and nongovernmental organizations concerned with marine and freshwater issues to coordinate harmful algal bloom and hypoxia (and related) activities and research.

(h) FRESHWATER.—With respect to the freshwater aspects of the Program, the Administrator, through the Task Force, shall carry out the duties otherwise assigned to the Under Secretary under this section, except the activities described in subsection (f).

(1) PARTICIPATION.—The Administrator's participation under this section shall include—

(A) research on the ecology and impacts of freshwater harmful algal blooms; and

(B) forecasting and monitoring of and event response to freshwater harmful algal blooms in lakes, rivers, estuaries (including their tributaries), and reservoirs.

(2) NONDUPLICATION.—The Administrator shall ensure that activities carried out under this title focus on new approaches to addressing freshwater harmful algal blooms and are not duplicative of existing research and development programs authorized by this title or any other law.

(i) **INTEGRATED COASTAL AND OCEAN OBSERVATION SYSTEM.**—The collection of monitoring and observation data under this title shall comply with all data standards and protocols developed pursuant to the Integrated Coastal and Ocean Observation System Act of 2009 (33 U.S.C. 3601 et seq.). Such data shall be made available through the system established under that Act.

SEC. 603B. [33 U.S.C. 4003] COMPREHENSIVE RESEARCH PLAN AND ACTION STRATEGY.

(a) **IN GENERAL.**—Not later than 1 year after the date of enactment of the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, the Under Secretary, through the Task Force, shall develop and submit to Congress a comprehensive research plan and action strategy to address marine and freshwater harmful algal blooms and hypoxia. The Action Strategy shall identify—

- (1) the specific activities to be carried out by the Program and the timeline for carrying out those activities;
- (2) the roles and responsibilities of each Federal agency in the Task Force in carrying out the activities under paragraph (1); and
- (3) the appropriate regions and subregions requiring specific research and activities to address harmful algal blooms and hypoxia.

(b) **REGIONAL FOCUS.**—The regional and subregional parts of the Action Strategy shall identify—

- (1) regional priorities for ecological, economic, and social research on issues related to the impacts of harmful algal blooms and hypoxia;
- (2) research, development, and demonstration activities needed to develop and advance technologies and techniques for minimizing the occurrence of harmful algal blooms and hypoxia and improving capabilities to detect, predict, monitor, control, mitigate, respond to, and remediate harmful algal blooms and hypoxia;
- (3) ways to reduce the duration and intensity of harmful algal blooms and hypoxia, including deployment of response technologies in a timely manner;
- (4) research and methods to address human health dimensions of harmful algal blooms and hypoxia;
- (5) mechanisms, including the potential costs and benefits of those mechanisms, to protect ecosystems that may be or have been affected by harmful algal bloom and hypoxia events;
- (6) mechanisms by which data, information, and products may be transferred between the Program and the State, tribal, and local governments and research entities;
- (7) communication and information dissemination methods that State, tribal, and local governments may undertake to educate and inform the public concerning harmful algal blooms and hypoxia; and
- (8) roles that Federal agencies may have to assist in the implementation of the Action Strategy, including efforts to support local and regional scientific assessments under section 603(e).

(c) UTILIZING AVAILABLE STUDIES AND INFORMATION.—In developing the Action Strategy, the Under Secretary shall utilize existing research, assessments, reports, and program activities, including—

- (1) those carried out under existing law; and
- (2) other relevant peer-reviewed and published sources.

(d) DEVELOPMENT OF THE ACTION STRATEGY.—In developing the Action Strategy, the Under Secretary shall, as appropriate—

- (1) coordinate with—
 - (A) State coastal management and planning officials;
 - (B) tribal resource management officials; and
 - (C) water management and watershed officials from both coastal States and noncoastal States with water sources that drain into water bodies affected by harmful algal blooms and hypoxia; and
- (2) consult with—
 - (A) public health officials;
 - (B) emergency management officials;
 - (C) science and technology development institutions;
 - (D) economists;
 - (E) industries and businesses affected by marine and freshwater harmful algal blooms and hypoxia;
 - (F) scientists with expertise concerning harmful algal blooms or hypoxia from academic or research institutions; and
 - (G) other stakeholders.

(e) FEDERAL REGISTER.—The Under Secretary shall publish the Action Strategy in the Federal Register.

(f) PERIODIC REVISION.—The Under Secretary, in coordination and consultation with the individuals and entities under subsection (d), shall periodically review and revise the Action Strategy prepared under this section, as necessary.

SEC. 604. [33 U.S.C. 4004] NORTHERN GULF OF MEXICO HYPOXIA.

(a) INITIAL PROGRESS REPORTS.—Beginning not later than 12 months after the date of enactment of the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, and biennially thereafter, the Administrator, through the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force, shall submit a progress report to the appropriate congressional committees and the President that describes the progress made by activities directed by the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force and carried out or funded by the Environmental Protection Agency and other State and Federal partners toward attainment of the goals of the Gulf Hypoxia Action Plan 2008.

(b) CONTENTS.—Each report required under this section shall—

- (1) assess the progress made toward nutrient load reductions, the response of the hypoxic zone and water quality throughout the Mississippi/Atchafalaya River Basin, and the economic and social effects;
- (2) evaluate lessons learned; and
- (3) recommend appropriate actions to continue to implement or, if necessary, revise the strategy set forth in the Gulf Hypoxia Action Plan 2008.

Sec. 605 HARMFUL ALGAL BLOOMS & HYPOXIA RES. & CONTR. ACT... 12**SEC. 605. [33 U.S.C. 4004a] SOUTH FLORIDA HARMFUL ALGAL BLOOMS AND HYPOXIA.**

(a) SOUTH FLORIDA.—In this section, the term “South Florida” means—

(1) all lands and waters within the administrative boundaries of the South Florida Water Management District;

(2) regional coastal waters, including Biscayne Bay, the Caloosahatchee Estuary, Florida Bay, Indian River Lagoon, and St. Lucie River Estuary; and

(3) the Florida Reef Tract.

(b) INTEGRATED ASSESSMENT.—

(1) INTERIM INTEGRATED ASSESSMENT.—Not later than 540 days after the date of enactment of the South Florida Clean Coastal Waters Act of 2021, the Task Force, in accordance with the authority under section 603, shall complete and submit to Congress and the President an interim integrated assessment.

(2) FINALIZED INTEGRATED ASSESSMENT.—Not later than 3 years after the date of enactment of the South Florida Clean Coastal Waters Act of 2021, the Task Force shall finalize, and submit to Congress and the President, the interim integrated assessment required by paragraph (1).

(3) CONTENTS OF INTEGRATED ASSESSMENT.—The integrated assessment required by paragraphs (1) and (2) shall examine the causes, consequences, and potential approaches to reduce harmful algal blooms and hypoxia in South Florida, and the status of, and gaps within, current harmful algal bloom and hypoxia research, monitoring, management, prevention, response, and control activities that directly affect the region by—

(A) Federal agencies;

(B) State agencies;

(C) regional research consortia;

(D) academia;

(E) private industry;

(F) nongovernmental organizations; and

(G) Indian tribes (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304)).

(c) ACTION PLAN.—

(1) IN GENERAL.—Not later than 3 years and 180 days after the date of the enactment of the South Florida Clean Coastal Waters Act of 2021, the Task Force shall develop and submit to Congress a plan, based on the integrated assessment under subsection (b), for reducing, mitigating, and controlling harmful algal blooms and hypoxia in South Florida.

(2) CONTENTS.—The plan submitted under paragraph (1) shall—

(A) address the monitoring needs identified in the integrated assessment under subsection (b);

(B) develop a timeline and budgetary requirements for deployment of future assets;

(C) identify requirements for the development and verification of South Florida harmful algal bloom and hypoxia models, including—

- (i) all assumptions built into the models; and
 - (ii) data quality methods used to ensure the best available data are utilized; and
 - (D) propose a plan to implement a remote monitoring network and early warning system for alerting local communities in the region to harmful algal bloom risks that may impact human health.
- (3) REQUIREMENTS.—In developing the action plan, the Task Force shall—
- (A) consult with the State of Florida, and affected local and tribal governments;
 - (B) consult with representatives from regional academic, agricultural, industry, and other stakeholder groups;
 - (C) ensure that the plan complements and does not duplicate activities conducted by other Federal or State agencies, including the South Florida Ecosystem Restoration Task Force;
 - (D) identify critical research for reducing, mitigating, and controlling harmful algal bloom events and their effects;
 - (E) evaluate cost-effective, incentive-based partnership approaches;
 - (F) ensure that the plan is technically sound and cost-effective;
 - (G) utilize existing research, assessments, reports, and program activities;
 - (H) publish a summary of the proposed plan in the Federal Register at least 180 days prior to submitting the completed plan to Congress; and
 - (I) after submitting the completed plan to Congress, provide biennial progress reports on the activities toward achieving the objectives of the plan.

SEC. 606. [33 U.S.C. 4005] GREAT LAKES HYPOXIA AND HARMFUL ALGAL BLOOMS.

- (a) INTEGRATED ASSESSMENT.—Not later than 18 months after the date of enactment of the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, the Task Force, in accordance with the authority under section 603, shall complete and submit to the Congress and the President an integrated assessment that examines the causes, consequences, and approaches to reduce hypoxia and harmful algal blooms in the Great Lakes, including the status of and gaps within current research, monitoring, management, prevention, response, and control activities by—
- (1) Federal agencies;
 - (2) State agencies;
 - (3) regional research consortia;
 - (4) academia;
 - (5) private industry; and
 - (6) nongovernmental organizations.
- (b) PLAN.—
- (1) IN GENERAL.—Not later than 2 years after the date of enactment of the Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2014, the Task Force shall de-

velop and submit to the Congress a plan, based on the integrated assessment under subsection (a), for reducing, mitigating, and controlling hypoxia and harmful algal blooms in the Great Lakes.

(2) CONTENTS.—The plan shall—

(A) address the monitoring needs identified in the integrated assessment under subsection (a);

(B) develop a timeline and budgetary requirements for deployment of future assets;

(C) identify requirements for the development and verification of Great Lakes hypoxia and harmful algal bloom models, including—

(i) all assumptions built into the models; and

(ii) data quality methods used to ensure the best available data are utilized; and

(D) describe efforts to improve the assessment of the impacts of hypoxia and harmful algal blooms by—

(i) characterizing current and past biological conditions in ecosystems affected by hypoxia and harmful algal blooms; and

(ii) quantifying effects, including economic effects, at the population and community levels.

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

(A) coordinate with State and local governments;

(B) consult with representatives from academic, agricultural, industry, and other stakeholder groups, including relevant Canadian agencies;

(C) ensure that the plan complements and does not duplicate activities conducted by other Federal or State agencies;

(D) identify critical research for reducing, mitigating, and controlling hypoxia events and their effects;

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

(F) ensure that the plan is technically sound and cost effective;

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

(H) publish a summary of the proposed plan in the Federal Register at least 180 days prior to submitting the completed plan to Congress; and

(I) after submitting the completed plan to Congress, provide biennial progress reports on the activities toward achieving the objectives of the plan.

SEC. 607. [33 U.S.C. 4006] PROTECTION OF STATES' RIGHTS.

(a) Nothing in this title shall be interpreted to adversely affect existing State regulatory or enforcement power which has been granted to any State through the Clean Water Act or Coastal Zone Management Act of 1972.

(b) Nothing in this title shall be interpreted to expand the regulatory or enforcement power of the Federal Government which

has been delegated to any State through the Clean Water Act or Coastal Zone Management Act of 1972.

SEC. 608. [33 U.S.C. 4007] EFFECT ON OTHER FEDERAL AUTHORITY.

(a) **AUTHORITY PRESERVED.**—Nothing in this title supersedes or limits the authority of any agency to carry out its responsibilities and missions under other laws.

(b) **REGULATORY AUTHORITY.**—Nothing in this title may be construed as establishing new regulatory authority for any agency.

SEC. 609. [33 U.S.C. 4008] DEFINITIONS.

In this title:

(1) **ACTION STRATEGY.**—The term “Action Strategy” means the comprehensive research plan and action strategy established under section 603B.

(2) **ADMINISTRATOR.**—The term “Administrator” means the Administrator of the Environmental Protection Agency.

(3) **HARMFUL ALGAL BLOOM.**—The term “harmful algal bloom” means marine and freshwater phytoplankton that proliferate to high concentrations, resulting in nuisance conditions or harmful impacts on marine and aquatic ecosystems, coastal communities, and human health through the production of toxic compounds or other biological, chemical, and physical impacts of the algae outbreak.

(4) **HYPOXIA.**—The term “hypoxia” means a condition where low dissolved oxygen in aquatic systems causes stress or death to resident organisms.

(5) **PROGRAM.**—The term “Program” means the national harmful algal bloom and hypoxia program established under section 603A.

(6) **STATE.**—The term “State” means each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, any other territory or possession of the United States, and any Indian tribe.

(7) **TASK FORCE.**—The term “Task Force” means the Inter-Agency Task Force on Harmful Algal Blooms and Hypoxia under section 603(a).

(8) **UNDER SECRETARY.**—The term “Under Secretary” means the Under Secretary of Commerce for Oceans and Atmosphere.

(9) **UNITED STATES COASTAL WATERS.**—The term “United States coastal waters” includes the Great Lakes.

SEC. 610. [33 U.S.C. 4009] AUTHORIZATION OF APPROPRIATIONS.

(a) **IN GENERAL.**—There is authorized to be appropriated to the Under Secretary to carry out sections 603A and 603B \$20,500,000 for each of fiscal years 2014 through 2018, and \$20,500,000 for each of fiscal years 2019 through 2023.

(b) **EXTRAMURAL RESEARCH ACTIVITIES.**—The Under Secretary shall ensure that a substantial portion of funds appropriated pursuant to subsection (a) that are used for research purposes are allocated to extramural research activities. For each fiscal year, the Under Secretary shall publish a list of all grant recipients and the

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amounts for all of the funds allocated for research purposes, specifying those allocated for extramural research activities.