

**(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 4001(e) of this title.

**(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 non-coastal 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.

(Pub. L. 105-383, title VI, § 603B, as added Pub. L. 113-124, § 5, June 30, 2014, 128 Stat. 1382.)

**§ 4004. Northern Gulf of Mexico hypoxia****(a) Initial progress reports**

Beginning not later than 12 months after June 30, 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.

(Pub. L. 105-383, title VI, § 604, Nov. 13, 1998, 112 Stat. 3449; Pub. L. 113-124, § 7, June 30, 2014, 128 Stat. 1384.)

**Editorial Notes****CODIFICATION**

Section was formerly set out in a note under section 1451 of Title 16, Conservation.

**AMENDMENTS**

2014—Pub. L. 113-124 amended section generally. Prior to amendment, section required the Task Force to submit an integrated assessment of hypoxia in the northern Gulf of Mexico and develop a plan for reducing, mitigating, and controlling such hypoxia.

**§ 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 June 16, 2022, the Task Force, in accordance with the authority under section 4001 of this title, shall complete and submit to Congress and the President an interim integrated assessment.

**(2) Finalized integrated assessment**

Not later than 3 years after June 16, 2022, 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 5304 of title 25).

**(c) Action plan**

**(1) In general**

Not later than 3 years and 180 days after June 16, 2022, 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.

(Pub. L. 105–383, title VI, §605, as added Pub. L. 117–144, §2(a)(2), June 16, 2022, 136 Stat. 1266.)

**Editorial Notes**

**PRIOR PROVISIONS**

A prior section 605 of Pub. L. 105–383 was renumbered section 606 and is classified to section 4005 of this title.

**§ 4005. Great Lakes hypoxia and harmful algal blooms**

**(a) Integrated assessment**

Not later than 18 months after June 30, 2014, the Task Force, in accordance with the authority under section 4001 of this title, 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 June 30, 2014, the Task Force shall develop 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);