



6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

**[EPA-HQ-OW-2019-0463; FRL 9999-83-OW]**

### **Notice of Intent to Develop a Policy on the Determination of a Harmful Algal Bloom (HAB) and Hypoxia as an Event of National Significance in Freshwater Systems**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Notice of availability; request for comments.

**SUMMARY:** The Environmental Protection Agency (EPA) is requesting public comment to inform the development of an Agency policy for determining if a harmful algal bloom (HAB) or hypoxia event in freshwater is an “event of national significance.” Recent amendments to the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA), provide the EPA with the statutory authority to make such a determination in the case of a freshwater HAB or hypoxia event. Public comments are intended to inform the development of a policy for the EPA to make such determinations, specifically for events in freshwater. A federal determination that such an occurrence is an event of national significance enables mobilization of federal resources to assess and mitigate its detrimental effects, subject to the availability of appropriations. The EPA requests input on what the Agency should specifically consider for determining a “HAB or Hypoxia event of national significance” in freshwater, and related factors in order to inform development of a draft EPA policy. On July 25, 2019, the National Oceanic and Atmospheric Administration (NOAA) issued a separate notice to solicit comments on HAB or hypoxia events of national significance in marine and coastal waters.

**DATES:** Comments must be received on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA–HQ–OW-0463 to the *Federal eRulemaking Portal*: <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commentingepa-dockets>.

**FOR FURTHER INFORMATION CONTACT:** Dr. Lesley V. D’Anglada, Health and Ecological Criteria Division, Office of Water (Mail Code 4304T), Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460; telephone number: (202) 566–1125; email address: [danglada.lesley@epa.gov](mailto:danglada.lesley@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**I. General Information**

*How Can I Get Copies of This Document and Other Related Information?*

1. *Docket.* The EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-0463. Publicly available docket materials are available either electronically through [www.regulations.gov](http://www.regulations.gov) or in hard copy at the Water Docket in the EPA Docket Center, (EPA/DC) EPA West, Room 3334, 1301 Constitution Ave. NW.,

Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Water Docket is (202) 566–2426.

2. *Electronic Access.* You may access this Federal Register document electronically from the Government Printing Office under the “Federal Register” listings FDsys (<http://www.gpo.gov/fdsys/browse/collection.action?collectionCode=FR>).

## **II. What are Harmful Algal Blooms (HABs) and Hypoxia and why is the EPA concerned about them?**

Harmful algal blooms (HABs) are caused by certain types of photosynthetic organisms that under certain conditions form large accumulations of algae that can adversely affect human health and the environment and can cause local economic losses. In freshwater, cyanobacteria are the major HABs-forming taxon. Cyanobacteria are microorganisms that can produce harmful *cyanotoxins* that, if ingested in sufficient amounts, can kill fish, shellfish, livestock, wildlife, and adversely impact human health. Algal blooms, both those that produce cyanotoxins and those that do not, can also harm aquatic environments by depleting oxygen needed to sustain freshwater aquatic life. HABs can negatively impact drinking water systems, recreation, commercial and recreational fishing, property values and public health. Recent notable drinking water cyanotoxin-related events include the 2018 HAB event in Detroit Lake, Oregon, that resulted in do not drink advisories in the City of Salem, and the 2014 HAB event on Lake Erie that resulted in do not drink advisories in the City of Toledo. In 2016, a cyanobacteria bloom in Lake Okeechobee traveled into St. Lucie Estuary, resulting in the largest cyanobacterial bloom

reported in the state of Florida in ten years. The bloom in the St. Lucie River resulted in beach closures and economic losses.

Hypoxia is a condition where the concentration of dissolved oxygen (DO) in a portion of the water column decreases to a level that can no longer support aquatic life, typically less than 2-3 milligrams DO per liter. A variety of factors cause low or zero oxygen conditions in waterbodies, including nitrogen and phosphorus pollution, and waterbody stratification, or layering, due to temperature gradients. Low dissolved oxygen conditions are a serious environmental concern that can impact valuable fisheries and disrupt sensitive ecosystems. In freshwater lakes, hypoxia in deeper waters coupled with warm shallow waters can severely limit the habitat available for fish species, such as trout. Exposure to hypoxia can cause adverse effects to aquatic life, such as reduced growth and reproduction. For more details on HABs, please refer to this site: <https://www.epa.gov/cyanohabs>, and for more information on Hypoxia, please refer to this site: <https://www.epa.gov/ms-htf/hypoxia-101>.

### **III. Information on the Harmful Algal Bloom and Hypoxia Research and Control Act**

In 1998, Congress recognized the severity of these threats and passed the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA 1998, [Pub. L. 105-383](#)). The Harmful Algal Bloom and Hypoxia Research and Control Amendments Act of 2004 (HABHRCA 2004, [Pub. L. 108-456](#)) and 2014 (HABHRCA 2014, [Pub. L. 113-124](#)) reaffirmed and expanded the mandate for NOAA to advance the scientific understanding and ability to detect, monitor, assess, and predict HAB and hypoxia events. Congress most recently reauthorized and amended HABHRCA through the National Integrated Drought Information System Reauthorization Act of 2018 ([Pub. L. 115-423, § 9](#)). This most recent reauthorization and amendment of HABHRCA is referred to as the Harmful Algal Bloom and Hypoxia Research

and Control Amendments Act of 2017 (HABHRCA 2017). HABHRCA 2017 provides NOAA and EPA with authority to make a determination of a “HAB or hypoxia event of national significance,” for marine or coastal events or freshwater events, respectively, either in the discretion of the Agency head or at the request of a Governor of an affected state (33 U.S.C. 4010). Following such a determination, federal officials may “make sums available to the affected State or local government for the purposes of assessing and mitigating the detrimental environmental, economic, subsistence use, and public health effects of the event of national significance.” Funds would be subject to the availability of appropriations, though either of the respective agencies may accept donations of funds, services, facilities, materials, or equipment determined necessary for the purpose of assessing and mitigating the detrimental effects, and donated funds may be expended without further appropriation and without fiscal year limitation. As directed under HABHRCA 2017, EPA, in coordination with NOAA, intends to develop a policy for determining a HAB or Hypoxia occurrence as an “event of national significance” in freshwater systems in the United States. NOAA issued a separate notice to solicit comments on marine and coastal hypoxia or HAB events in 84 FR 35854 on July 25, 2019. After consideration of comments on this notice, the EPA anticipates developing a draft policy for which the Agency would solicit further comment.

HABHRCA 2017 identified the following six factors to be considered in making the determination of a “HAB or hypoxia event of national significance:” the toxicity of the harmful algal bloom; the severity of the hypoxia; its potential to spread; the economic impact; the relative size in relation to the past five occurrences of harmful algal blooms or hypoxia events that occur on a recurrent or annual basis; and the geographic scope, including the potential to affect several municipalities, to affect more than one state, or to cross an international boundary.

#### **IV. Solicitation of Public Comments**

The EPA is soliciting public comments regarding the factors provided by the amendments for the EPA to determine a HAB or Hypoxia Event of National Significance in freshwater systems. The EPA requests separate comment on the application of those factors for HAB and hypoxia events as it is likely that the factors would be considered differently for the different types of events. Specifically, the EPA is soliciting public comments on how to define, quantify, and weigh the following statutory parameters:

- A. *Toxicity of the harmful algal bloom* – What metrics should the EPA use to assess toxicity in determining national significance? For example, should the EPA consider reports of human or animal illnesses or deaths, or adverse effects on aquatic life? Are there other relevant metrics the EPA should consider? Should the toxicity of the event be considered differently based on its frequency and duration?
- B. *Severity of hypoxia* - What metrics should the EPA use to determine whether the severity of a hypoxic event makes it nationally significant? For example, should the severity of the event include consideration of human health, economic, and environmental impacts? Are there other relevant metrics the EPA should consider?
- C. *Potential to spread* - What metrics should the EPA use in determining whether the potential for the spread of a HAB or hypoxia event makes it nationally significant? For example, should historical information be used to inform a decision on the potential for a HAB or hypoxia event to spread? Are there other relevant metrics the EPA should consider?
- D. *Economic impact* - What metrics should the EPA use for economic impact in determining national significance? For example, should economic status (i.e., make-up of the state, local, and tribal government economy and its reliance on the affected waterway for tourism or

drinking water) be considered when determining the national significance of an event? If so, how should economic status be considered? Are there other relevant metrics the EPA should consider?

- E. *Relative size of an event in relation to the past 5 occurrences of HABs or hypoxia events that occur on a recurrent or annual basis* – What metrics should the EPA use for recurrence in determining national significance, and specifically whether the size and scope of an event or occurrence is significant relative to past events? For example, should the EPA assign a specific number of years, seasons, or months between events in considering national significance? Are there other relevant metrics the EPA should consider?
- F. *Geographic scope, including the potential to affect several municipalities, to affect more than one state, or to cross an international boundary* - What metrics should the EPA use in determining whether the geographic scope of a HAB or hypoxia event is nationally significant? For example, for an event that has or might impact more than one state should the EPA make a single determination for that event applicable to all states impacted including those states that may be impacted by expansion, movement, or intensification of the event? Should the EPA limit its consideration of national significance to the area requested by a state based on the then-current location and geographic extent of the event?

The EPA is also requesting comments on whether the Agency should consider developing additional criteria and whether to establish specific procedures for making such determinations. For example:

- A. Should the EPA consider the state's access to critical resources (human, financial, and infrastructure) in determining national significance? For example, does the state have access to technical expertise, necessary supplies/equipment, and alternate sources of water? If the

EPA considers such access, what metrics should the EPA use to measure the capacity of state and local or tribal governments to address the bloom event?

- B. Should the EPA consider certain factors when an event impacts or threatens drinking water sources or finished drinking water? How should duration, magnitude, frequency, extent, and toxicity of HAB impacts on drinking water supplies be considered in determining events of national significance?
- C. Should the EPA consider certain factors when an event has impacts on or threatens recreational waters? How should these impacts be weighed in determining national significance?
- D. Should a determination of national significance be made only if funding has been appropriated to the agencies? If two or more states request determinations, and the determinations of national significance would otherwise qualify each state for funding consistent with the factors considered in making the determination, but only limited funds are available, how should amounts be distributed? Should the funding be equally proportioned or distributed according to some sort of a relative rank or score derived from a weighting of factors considered in the determination of national significance?
- E. What information should an impacted state provide to the EPA when requesting a determination of a freshwater event of national significance or a request to make sums available to the impacted state or local government to assess and mitigate an event of national significance?
- F. Should the EPA consider whether a state or local government that requests a determination that a HAB or hypoxia is an event of national significance concurrently requests other

Federal relief for the same event or occurrence? If so, how should the EPA prioritize funding, for example, based on consideration of a particular factor or multiple factors?

G. Should the EPA require that an affected state or local government request a determination of a freshwater event of national significance within certain timeframes with respect to the start or end of the event or occurrence?

H. Other than funds, what tools and methods should the EPA make available after a determination of a freshwater event of national significance is made?

**Dated:** September 6, 2019.

**David P. Ross,**

*Assistant Administrator, Office of Water.*

[FR Doc. 2019-19985 Filed: 9/13/2019 8:45 am; Publication Date: 9/16/2019]