

The Honorable Barbara Boxer
Chairwoman
Senate Environment & Public Works Committee
112 Hart Senate Office Building
Washington, D.C. 20510

The Honorable James M. Inhofe
Ranking Minority Member
Senate Environment & Public Works Committee
453 Russell Senate Office Building
Washington, DC 20510

Dear Chairwoman and Ranking Minority Member:

I urge you to introduce and advance a bill in the 2009 U.S. Senate to enact the proposed Freshwater Harmful Algal Bloom Research and Control Act (FHAB Act). The Act is needed to mandate that the U.S. Environmental Protection Agency establish a National Freshwater Harmful Algal Blooms Research Plan so that Federal policy can be developed. The Agency has not made regulatory determinations or established guidelines for freshwater harmful algal blooms (FHABs) due to the lack of sufficient scientific information on occurrence, dose-response health effects and control methodology. The World Health Organization and a number of other countries have established regulations or guidelines. The Act is needed if we are to protect human health, aquatic ecosystems and the U.S. economy from the looming crisis posed by FHABs.

Cyanobacteria (a.k.a. blue-green algae) are the predominant FHAB organisms. Their populations rapidly expand during appropriate conditions of nutrients, warmth, sunlight and quiescent or stagnant water. Dozens of cyanobacteria species produce some of the most potent toxins known. These toxins, cyanotoxins, cause lethal, sub-lethal and chronic effects in humans and other organisms. Cyanotoxins occur in finished drinking water, as well as in recreational waters. Bloom biomasses adversely impact aquatic biota, including massive fish kills caused by hypoxia and/or toxin secretions when the cells die and decay. There is widespread agreement among scientists and water quality managers that the incidence of blooms in freshwater bodies is increasing in the U.S. and worldwide. Every year FHABs occur where they were not observed previously, and FHAB durations increase. Global climate change, rising freshwater usage demand, excessive nutrient inputs to freshwater and poor water management practices are driving much of the increase. The economic costs of FHABs and eutrophication in U.S. freshwaters are conservatively estimated to be \$2.2-4.6 billion annually. Federal leadership, Agency

compliance and innovative research are needed to reverse this trend and protect U.S. interests.

The U.S. Congress provided leadership for harmful algal blooms in our Nation's coastal water in 1998 by enacting the Harmful Algal Bloom and Hypoxia Research Act (HABHRCA). The Act directed the National Oceanographic and Atmospheric Administration to establish a National Harmful Algal Bloom Research Plan for the waters within their purview, the coastal waters of our Nation, and authorized funds for research. Subsequently allocated funds enabled NOAA to establish the research plan. Great strides have been made in monitoring and predicting HABs, and understanding the complex factors that cause coastal HABs. These advances primarily occurred due to NOAA's establishment of the competitive research grant programs of *Monitoring and Event Response for Harmful Algal Blooms* (MERHAB) and *Ecology and Oceanography of Harmful Algal Blooms* (ECOHAB). The scientific information gained through the research funded by these programs encouraged NOAA to establish a third scientific research program this month, the *Prevention, Control, and Mitigation of Harmful Algal Blooms* (PCM HAB) program. The new PCM HAB program is the first step in reversing the increasing trend of coastal HABs. The FHAB Act is needed to provide comparable progress in meeting the challenge of HABs in all our Nation's freshwater bodies.

The EPA has not established a National Freshwater Harmful Algal Blooms Research Plan primarily due to the lack of clear Congressional directive, and the authorization and allocation of research funds. Enactment of the FHAB Act will enable the Agency to develop the plan and fund research on FHABs through the existing MERHAB, ECOHAB and PCM HAB programs. I urge you to provide the Congressional mandate needed by the Agency by introducing and successfully advancing the FHAB Act. I further urge you to subsequently allocate the research funds.

Sincerely yours,