

STATE OF NEW YORK

5150--A

2025-2026 Regular Sessions

IN ASSEMBLY

February 12, 2025

Introduced by M. of A. KELLES, GONZALEZ-ROJAS, McMAHON, BURDICK, SHIMSKY, OTIS, SHRESTHA, ROSENTHAL, SLATER -- read once and referred to the Committee on Environmental Conservation -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law and the state finance law, in relation to enacting the "harmful algal bloom monitoring and prevention act"

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

1 Section 1. Short title. This act shall be known and may be cited as
2 the "harmful algal bloom monitoring and prevention act".
3 § 2. Legislative findings and declarations. The legislature finds that
4 the state of New York has a responsibility to maintain the health and
5 safety of its abundant clean water resources, upon which the residents
6 of New York state, as well as its many visitors, rely on for drinking,
7 agriculture, tourism, recreation, and their livelihoods. Because the
8 waters of the state are under threat by harmful algal blooms (HABS),
9 which are known to be toxic and even fatal to humans, pets, and wild-
10 life, the state has a responsibility to participate in coordinated,
11 statewide monitoring, evaluation, prevention and mitigation, going
12 beyond water body-specific data collection and isolated mitigation
13 efforts. While the causes of HABS are complex and varied, with a coordi-
14 nated and standardized approach to monitoring and evaluation, patterns
15 can more readily be identified to isolate the combination of relevant
16 causes specific to different bodies of water across the state and deter-
17 mine the most effective targeted interventions. To address this threat,
18 the state must develop and maintain a comprehensive state clearinghouse
19 to bring together existing and new available statewide cross-sectional
20 and longitudinal data and information on harmful algal blooms, potential
21 and known causes, best practice interventions, expertise, and funding

EXPLANATION--Matter in italics (underscored) is new; matter in brackets
[-] is old law to be omitted.

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1 resources. This data and subsequent report will enable the state to
2 effectively and efficiently administer a central grant program support-
3 ing data-driven best practices in prevention and mitigation of harmful
4 algal blooms.

5 § 3. The environmental conservation law is amended by adding a new
6 section 15-0519 to read as follows:

7 § 15-0519. Harmful algal bloom monitoring and prevention program.

8 1. Definitions. For the purposes of this section, the following terms
9 shall have the following meanings:

10 a. "Harmful algal blooms" shall mean growths of blooms of algal
11 species present in fresh or salt water that can produce toxins that are
12 harmful to public health, the economy, or recreational enjoyment, or
13 that can impair water quality and the natural ecology therein.

14 b. "Municipality" shall mean a county, city, town, or village.

15 c. "Waters of the state" means all waterways, or bodies of water
16 located within New York state or that part of any body of water which is
17 adjacent to New York state over which the state has territorial juris-
18 isdiction.

19 2. Comprehensive statewide data collection consolidation and report.

20 a. The commissioner shall develop a comprehensive database of all exist-
21 ing data collected to date by the department regarding harmful algal
22 bloom monitoring, evaluation, mitigation, and prevention.

23 b. The commissioner shall provide guidelines and protocols for the
24 submission of data on harmful algal bloom monitoring, evaluation, miti-
25 gation and prevention strategies from relevant institutions, organiza-
26 tions, and individuals with experience in peer-reviewed research, grant-
27 making, or other like activities in the area of water quality relating
28 to the monitoring, evaluation, prevention, and mitigation of harmful
29 algal bloom outbreaks, including but not limited to research programs,
30 clinics, labs, and project management. Such protocols shall include
31 tiers of quality standards by which data can be stratified to minimize
32 data loss.

33 c. The data collected, consolidated, and made publicly available shall
34 consist of elements including but not limited to longitudinal data on
35 the prevalence and incidence of harmful algal blooms, contextual factors
36 thought to be associated with the incidence of harmful algal blooms such
37 as water temperature, turbidity, flow rate, salinity, nutrient levels
38 for phosphorus and nitrogen, acidity (pH), dissolved oxygen levels,
39 monitoring and evaluation of waters of the state that do not contain
40 harmful algal blooms, and results of harmful algal bloom interventions
41 in New York state.

42 d. The data collected, consolidated, and made publicly available shall
43 meet a standard that is consistent with the practices and expertise of
44 institutions, organizations, or individuals with experience in peer-re-
45 viewed research, grantmaking, or other like activities in the area of
46 water quality relating to the monitoring, evaluation, prevention, and
47 mitigation of harmful algal bloom outbreaks, including but not limited
48 to research programs, clinics, labs, and project management.

49 e. No later than three years after the effective date of this section,
50 the commissioner, in consultation with the commissioner of agriculture
51 and markets, shall prepare a report that includes a list of vetted, best
52 practice strategies for harmful algal bloom monitoring, evaluation,
53 mitigation and prevention as identified from such comprehensive, state-
54 wide database, which shall be differentiated by region or water body
55 with unique confirmed causal pathways for the related harmful algal
56 bloom outbreak trends as well as external evaluation, including but not

1 limited to strategies approved by the federal environmental protection
2 agency, certification that such strategies meet or exceed the American
3 National Standards for health effects of drinking water treatment chemi-
4 cals (NSF/ANSI/CAN-60), or testing for efficacy by a center of excel-
5 lence in healthy water solutions. The department shall publish such
6 list and findings supporting the strategies on such list on the depart-
7 ment's website.

8 3. Harmful algal bloom database. a. Within twelve months of the effec-
9 tive date of this section, the commissioner shall establish and main-
10 tain a website providing public access to a harmful algal bloom database
11 which shall contain all relevant data, research, and reporting required
12 pursuant to subdivision two of this section.

13 b. Such database shall support the coordination of efforts across the
14 state to monitor, evaluate, prevent, and mitigate harmful algal blooms,
15 and shall include, but not be limited to:

16 i. the geolocation of harmful algal bloom outbreaks, and all data
17 associated with efforts to monitor, evaluate, prevent, and mitigate such
18 outbreaks;

19 ii. existing research including all findings relating to outbreaks of
20 harmful algal blooms in the waters of the state and the causes of such
21 outbreaks; and

22 iii. known or developing strategies and best practices of state,
23 municipal, and non-governmental organizations that monitor, evaluate,
24 prevent, or mitigate harmful algal bloom outbreaks, the respective
25 waters of the state in which such strategies and best practices have
26 been conducted, and the geolocations of such waters.

27 4. Publicly accessible website and portal. Within twelve months of the
28 effective date of this section, the department shall establish and main-
29 tain a website with an easily accessible portal for use by local poli-
30 tical subdivisions, and nonprofit organizations working on their behalf,
31 which provides access to harmful algal blooms expertise and providers of
32 harmful algal blooms monitoring, evaluation and prevention services,
33 including but not limited to the following:

34 a. information on institutions with expertise in peer-reviewed grant-
35 making and research in the area of water quality and/or harmful algal
36 blooms, including but not limited to the New York sea grant at Stony
37 Brook University, the New York water resource institute at Cornell
38 University, the center of excellence in healthy water solutions, the
39 bureau of water supply protection, the New York city department of envi-
40 ronmental protection, the department of agriculture and markets, commu-
41 nity-based nonprofit organizations with missions that specifically
42 involve monitoring, evaluating, mitigating, or preventing harmful algal
43 blooms, and any other institution or organization providing data
44 compiled pursuant to this section, and the contact information, relevant
45 research programs, clinics, labs, staff, and published research of such
46 institutions; and

47 b. available sources of funding for algal bloom monitoring, evalu-
48 ation, prevention, and mitigation, including federal, state, municipal,
49 and/or private funding, grants, or other monies.

50 5. Harmful algal bloom grant program. The commissioner, in consulta-
51 tion with the commissioner of agriculture and markets, the commissioner
52 of health, and the president of the empire state development corpo-
53 ration, shall establish a harmful algal bloom grant program which shall
54 provide funding to municipalities, intermunicipal organizations, commu-
55 nity-based nonprofits, or academic institutions for the deployment of

1 harmful algal bloom monitoring, evaluation, prevention, and mitigation
2 strategies and best practices.

3 a. The intent of this grant program shall be to build on the existing
4 knowledge base about harmful algal blooms for a given water body or
5 geolocation with respect to monitoring, prevention and/or mitigation.
6 Data collected should meet standards outlined by the department so data
7 can be incorporated into the comprehensive database required by this
8 section and contribute to collective, coordinated efforts to mitigate
9 and prevent further harmful algal bloom outbreaks.

10 b. The program shall require that applicants for the harmful algal
11 bloom grant program, informed by the harmful algal bloom database
12 created by subdivision three of this section, outline a proposal to
13 either:

14 i. contribute to monitoring efforts for a given water body or geoloca-
15 tion where further data collection is necessary to identify the most
16 appropriate mitigation and prevention strategies; or

17 ii. propose implementation of new or existing technologies for a given
18 water body or geolocation for harmful algal bloom mitigation and/or
19 prevention.

20 c. Any data collected with these funds shall be collected following
21 standards outlined by the department so it can be incorporated into the
22 database and further collective knowledge regarding harmful algal bloom
23 mitigation and/or prevention.

24 d. As a condition of funding, grantees shall agree to make their data
25 and findings publicly available in the harmful algal bloom database
26 created by subdivision three of this section.

27 e. In determining which applicants shall be awarded grants pursuant to
28 this subdivision, first preference shall be given to applicants who
29 propose strategies that incorporate principles of least harm and great-
30 est safety to applicators, the public, and the environment, and utilize
31 passive or non-chemical physical controls, including but not limited to:

32 i. aeration;

33 ii. hydrological manipulations;

34 iii. mechanical mixing;

35 iv. reservoir drawdown or desiccation;

36 v. surface skimming;

37 vi. ultrasound; or

38 vii. other emerging technologies, as approved by the department.

39 f. In determining which applicants shall be awarded grants pursuant to
40 this subdivision, second preference shall be given to applicants who
41 demonstrate expertise with previous experience treating water bodies in
42 the United States larger than one thousand acres, with proven success
43 using accepted strategies, including but not limited to strategies that:

44 i. are aimed at reducing cyanotoxins in the water to less than harmful
45 levels;

46 ii. employ ready-to-use technology that is means tested, reproducible,
47 and generalizable, without limitation of size or shape of the water
48 body;

49 iii. employ technology which allows for application under emergency
50 situations and within less than ninety-six hours from approval;

51 iv. utilize products that are modular and can be used as a preventa-
52 tive measure;

53 v. utilize products that are quick and easy to apply and are generally
54 recognized as safe to the applicator, public, and environment;

55 vi. utilize products that float on the surface of the water and do not
56 sink immediately to the bottom of the water column;

1 vii. utilize products that are distributed autonomously across the
2 water body after a localized application;

3 viii. utilize products with a time-release mechanism that applies
4 constant and prolonged oxidative stress of the cyanobacteria triggered
5 by the programmed cell death signaling cascade, resulting in their
6 collapse; and

7 ix. utilize products manufactured in the United States.

8 g. The commissioner shall make monies available from the harmful algal
9 bloom monitoring and prevention fund, as established pursuant to section
10 ninety-nine-ss of the state finance law, within amounts appropriated
11 therefor, pursuant to this section.

12 § 4. The state finance law is amended by adding a new section 99-ss to
13 read as follows:

14 § 99-ss. Harmful algal bloom monitoring and prevention fund. 1. There
15 is hereby established in the joint custody of the state comptroller and
16 commissioner of taxation and finance a special fund to be known as the
17 "harmful algal bloom monitoring and prevention fund".

18 2. Such fund shall consist of all revenues received by the comptroller
19 and all other moneys appropriated, credited, or transferred thereto from
20 the general fund or any other fund or source pursuant to law. Nothing
21 contained in this section shall prevent the state from receiving grants,
22 gifts, or bequests for the purposes of such fund and depositing them
23 into such fund according to law.

24 3. Moneys shall be paid out of the fund on the audit and warrant of
25 the comptroller on vouchers certified or approved by the commissioner of
26 environmental conservation or the commissioner of environmental conser-
27 vation's designee.

28 4. Moneys of the fund shall be available to the commissioner of envi-
29 ronmental conservation for the harmful algal bloom monitoring and
30 prevention program established pursuant to section 15-0519 of the envi-
31 ronmental conservation law.

32 § 5. This act shall take effect one year after it shall have become a
33 law. Effective immediately, the addition, amendment and/or repeal of any
34 rule or regulation necessary for the implementation of this act on its
35 effective date are authorized to be made and completed on or before such
36 effective date.