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**SENATE COMMITTEE ON ENVIRONMENTAL QUALITY**

**Senator Allen, Chair**

**2021 - 2022 Regular**

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**Bill No:** AB 1066  
**Author:** Bloom  
**Version:** 6/24/2021  
**Urgency:** No  
**Consultant:** Gabrielle Meindl

**Hearing Date:** 7/7/2021  
**Fiscal:** Yes

**SUBJECT:** High-use freshwater recreation sites: water quality monitoring

**DIGEST:** Requires the California Water Quality Monitoring Council (Council), on or before December 31, 2023, to propose to the State Water Resources Control Board (State Water Board), for consideration a definition of a priority inland water-contact recreation site, as specified; and, recommendations and requirements for the establishment of a priority inland water-contact recreation site monitoring program, as specified.

**ANALYSIS:**

Existing law:

- 1) Establishes as state policy that all public waters should be used for multiple purposes, to the extent that the uses are consistent with public health and public safety. (Health and Safety Code (HSC) § 115825 (a))
- 2) Requires the State Department of Public Health (CDPH) to, by regulation and in consultation with the State Water Board, local health officers, and the public, establish, maintain, and amend as necessary, minimum standards for the sanitation of public beaches as it determines are reasonably necessary for the protection of the public health and safety (this jurisdiction was later transferred to the State Water Board, see HSC § 115881). (HSC § 115880 (a))
- 3) Requires the beach regulations to include the testing of the waters adjacent to all public beaches for microbiological contaminants, including, but not limited to, total coliform, fecal coliform, and enterococci bacteria. (HSC § 115880 (c)(1))
- 4) Requires the beach regulations to include establishing protective minimum standards for total coliform, fecal coliform, and enterococci bacteria, or for other microbiological indicators that CDPH determines are appropriate for testing. (HSC § 115880 (c)(2))

- 5) Requires the local health officer to be responsible for testing the waters adjacent to, and coordinating the testing of, all public beaches within the officer's jurisdiction. (HSC § 115880 (f))
- 6) Requires, whenever any public beach fails to meet the bacteriological standards, the health officer to, at a minimum, post the public beach with conspicuous warning signs to inform the public of the nature of the problem and the possibility of risk to public health. (HSC § 115915)
- 7) Establishes the California Water Quality Monitoring Council (Council), which is administered by the State Water Board, and requires the Council to undertake various actions relating to water quality data collection and to review existing water quality monitoring assessment and reporting efforts, and recommend specific actions and funding necessary to coordinate and enhance those efforts. (WC § 13181)

This bill:

- 1) Requires the Council, on or before July 1, 2022, to direct a new or existing working group to study water recreation hazards at priority water-contact recreation sites.
- 2) Specifies that the working group be co-chaired by representatives from the State Water Board and CDPH and include representation from other state agencies as deemed appropriate by the Council.
- 3) Requires, on or before July 1, 2023, the working group to submit a report to the Council that the Council would be required to post on its internet website, that contains specified information, including:
  - a) A summary of existing, readily-available data that identifies water contact recreation sites;
  - b) A summary of existing, readily-available data for specific water-contact recreation sites that indicates the timing and types of uses that involve limited body or full body contact with the water and any demographic information about the users;
  - c) Potential criteria for identifying priority water-contact recreation sites, with an emphasis on establishing equity-based criteria including but not limited to the use by one or more overburdened communities;
  - d) A discussion of potential water quality hazards at priority water-contact recreation sites; and

- e) General recommendations for reducing water quality risks at priority water-contact recreation sites. Those recommendations may include, but are not limited to:
  - i) A risk-based water quality monitoring program;
  - ii) A public water quality safety education campaign;
  - iii) Posting at and notification of water quality hazards at identified water bodies; and
  - iv) Standards and/or criteria needed to better protect the public from water quality hazards.
  
- 4) Requires the Council, on or before December 31, 2023, in consultation with the CDPH, local health officers, and the public, to propose to the State Water Board for consideration both of the following based on the working group report:
  - a) A definition of a priority water-contact recreation site; and
  - b) Recommendations and requirements for the establishment of a priority water-contact recreation site monitoring program that shall include, but is not limited to, all of the following components:
    - i) The number of monitoring samples necessary per priority water-contact recreation site;
    - ii) The frequency of monitoring;
    - iii) The annual or seasonal duration of monitoring; and
    - iv) The microbiological standards, methods, and data sharing protocols to be used to support an effective monitoring program.
  
- 5) Requires the Council, in developing a proposed definition of a priority water contact recreation site, to consider various characteristics of a water-body including whether the body is used for the following:
  - a) Fresh or estuarine surface waters, including waterbodies with seasonal or tidal fluctuations;
  - b) Organized recreational events with water contact;
  - c) Commercial purposes with water contact;
  - d) Accessed through a required fee area and used for water contact;
  - e) Used by a high number of persons for water-contact recreation;
  - f) Designated by the state board or a regional board for water-contact recreation (REC-1) beneficial use;
  - g) Used by overburdened communities; and
  - h) Identified as having the potential for significant water quality hazards.
  
- 6) Defines “Inland water” as all fresh and estuarine surface waters of the state.

- 7) Defines “Overburdened community” as a minority, low-income, tribal, or indigenous population or geographic location that potentially experiences disproportionate environmental harms and risks. This disproportionality can be as a result of greater vulnerability to environmental hazards, lack of opportunity for public participation, or other factors. Increased vulnerability may be attributable to an accumulation of negative or lack of positive environmental, health, economic, or social conditions within these populations or places. The term describes situations where multiple factors, including both environmental and socio-economic stressors, may act cumulatively to affect health and the environment and contribute to persistent environmental health disparities.
- 8) Defines “Water-contact recreation site” as any inland water that is used, or is suitable for being used, recreationally in a manner that involves limited body or full body contact with the water.

## Background

- 1) *Recreation in California's waters.* In addition to its iconic coastal beaches and 1,400 miles of coastline, California has nearly 190,000 miles of rivers and more than 3,000 named freshwater lakes and reservoirs that support recreational use. As a booming state population increasingly seeks the outdoors to recreate, California's water-based recreational activities have grown more popular and diverse. Water recreation in California, which includes swimming, wading, boating, fishing, surfing, diving, and water skiing, among other activities, occurs in a multitude of venues: swimming pools and spas, and ocean waters, beaches, reservoirs, natural lakes, streams, and rivers. Public water supply projects, such as the State Water Project, provide additional recreational opportunities for Californians.
- 2) *Potential contamination of recreational waters.* Untreated recreational water-associated outbreaks can be caused by pathogens or chemicals, including toxins, in freshwater or marine water. Enteric pathogens can be transmitted when people ingest untreated recreational water contaminated with feces or vomit. Swimmers can contaminate water in untreated recreational water venues if they have a fecal or vomit incident in or near the water. Enteric pathogens can also be introduced into untreated recreational water venues by stormwater runoff; sewage system overflows and discharges; leaks from septic or municipal wastewater systems; dumped boating waste; and, animal waste in or near swim areas. According to Heal the Bay, annually there are more than 90 million illnesses related to untreated recreational waters, both fresh and

marine, in the United States resulting in \$3 billion in healthcare costs.

- 3) *California's beach water quality efforts.* The State Water Board notes that California has the most extensive and comprehensive monitoring and regulatory program for beaches in the nation. Monitoring is performed by county health agencies in seventeen different coastal and San Francisco Bay Area counties; publicly owned sewage treatment plants and other dischargers along the coastal zone; environmental groups; and, numerous citizen-monitoring groups.

California's statewide beach program includes several components aimed at ocean water quality, including those listed below.

- a) *California Clean Beaches Program.* Established by AB 411 (Chapter 765, Statutes of 1997), the California Clean Beaches Program requires beaches with storm drains that discharge during dry weather and are visited by more than 50,000 people per year to be monitored at least weekly during the dry season (historically April through October). This program is implemented by the local health officer or environmental health agency of California's coastal counties and cities, and is strictly limited by statute to ocean beaches. As of 2018, coastal cities and counties spent around \$10 million annually on AB 411 required monitoring; the state allocates around \$1.5 million a year to counties based on program size, including \$500,000 annually from US EPA's beach grant program.
  - b) *Safe to Swim.* "Safe to Swim" is a term used to describe a collection of various efforts, including those led by the Council, as well as by the Surface Water Ambient Monitoring Program (SWAMP) in the State Water Board's Office of Information Management and Analysis (OIMA). These efforts communicate information from existing data, and overall has no dedicated funding. For example, the Council has a "Can I Swim at My Coastal Beach" site that connects the public to county health agency sites. This is more of a directory than a single source of information for recreational water quality in the state and currently contains dated data that make its utility to the public questionable.
- 4) *Other state water quality efforts.* The Council states in its 2019 Draft Safe to Swim Network Charter, "There are currently no requirements to monitor freshwater areas nor is there statewide guidance for posting water quality advisories or closures at these inland waters." However, California does have several other statewide water quality programs that could be utilized, or contribute to, the goals of this bill, including those below.

- a) *Surface Water Ambient Monitoring Program*. According to the State Water Board, SWAMP was created in response to the need for a comprehensive surface water monitoring and assessment program in California. Prior to the creation of SWAMP, the State and regional water boards for decades conducted mostly discharge-focused, compliance-based water quality monitoring. This left most of California's water resources unmonitored. In 1999, the Legislature directed, by passage of AB 982 (Ducheny, Chapter 495, Statutes of 1999), the State Water Board to prepare a proposal for a comprehensive monitoring program for all of California's surface waters, and it provided funding for such a program beginning in 2000. At this direction, SWAMP was established.

SWAMP is an ambient monitoring program. Ambient monitoring considers all waters of the State, while compliance-based monitoring is limited to determining compliance with permit limits or other specific regulatory requirements. Compliance-based monitoring, by itself, produces fragmented and inconsistent monitoring data, making broad synthesis and analysis difficult or impossible. In contrast, SWAMP's more comprehensive monitoring programs evaluate the overall condition of surface waters throughout the State, the goal of which is to provide information needed by state and regional water board staff, water managers, the Legislature, and the public to help understand and better manage California's water resources.

- b) *The California Environmental Data Exchange Network (CEDEN)*. CEDEN was created by the State Water Board with support from the SWAMP Program, and is a collaborative effort among federal, state, and local agencies meant to provide a central location for sharing information about California's water bodies, including streams, lakes, rivers, and the coastal ocean. Many groups in California monitor water quality, aquatic habitat, and wildlife health to ensure good stewardship of our ecological resources. CEDEN aggregates these data and makes them accessible to environmental managers and the public. OIMA manages the CEDEN database, the structure of which appears to be oriented towards use by individuals fluent with water quality science and technology.
- 5) *California Water Quality Monitoring Council*. Senate Bill (SB) 1070 (Kehoe, Chapter 750, Statutes of 2006) required the CalEPA and the California Natural Resources Agency to, on or before December 1, 2007, enter into a memorandum of understanding (MOU) to establish the Council, which the State Water Board is required to administer. Statute and the MOU require that

the Council develop specific recommendations to improve the coordination and cost-effectiveness of water quality and ecosystem monitoring and assessment, enhance the integration of monitoring data across departments and agencies, and increase public accessibility to monitoring data and assessment information.

On July 1, 2020, the Council approved a Strategic Plan to help visualize and describe the overall vision and mission of the Council and its workgroups, and on December 22, 2020, the Secretaries of CalEPA and the California Natural Resources Agency signed a new MOU supporting the formation and work of the Council. This new MOU recognizes the continued need for collaboration and coordination across the two agencies and the sectors contributing to collection and use of water quality and ecosystem health data.

According to the Council's Draft Safe to Swim Network Charter 2019, the Council convened a Safe to Swim Work Group in 2010, which was tasked with coordinating the monitoring and assessment of swimming safety statewide. The Safe to Swim Work Group was also tasked to manage and enhance the My Water Quality web portal. Originally focused primarily on coastal beaches, the Work Group expanded in 2018 to more formally address inland beaches and effectively address all waters in California that support water recreation.

- 6) *This bill.* AB 1066 aims to take the first step at addressing the gap in public protection at freshwater/inland sites by requiring the Council to propose to the State Water Board for consideration, a definition of a priority water-contact recreation site and recommendations and requirements for the establishment of a priority water contact recreation site monitoring program. The bill specifies that in developing the proposed definition, the Council must consider various characteristics of a water-body including whether the body has been identified as having the potential for significant water quality hazards and is used by overburdened communities.

The bill also requires that the recommendations and requirements for the establishment of a priority inland water contact recreation site monitoring program include a suggested number of monitoring samples, the frequency of monitoring, and the microbiological standards and protocols to be used for monitoring. These requirements will lay the groundwork for a establishing a comprehensive and coordinated priority inland water-contact recreation site program similar to California's beach water quality programs.

## Comments

- 1) *Purpose of Bill.* According to the author, "AB 1066 will address a key public health challenge that many Californians face in outdoor recreation – ensuring there are science and health based bacterial standards, ongoing water quality monitoring, and public notification for freshwater recreation where needed... California is a magnificent state and one that affords all our communities with opportunities to recreate outdoors. Our lakes, rivers and streams should be enjoyed by residents throughout the state, but we need to ensure that their public health is protected while doing so."

**SOURCE:** Heal the Bay

**SUPPORT:**

California Association of Environmental Health Administrators (CAEHA)  
California Coastkeeper Alliance  
Coachella Valley Waterkeeper  
Heal the Bay  
Inland Empire Waterkeeper  
Los Angeles Waterkeeper  
Monterey Coastkeeper  
Russian Riverkeeper  
San Diego Coastkeeper  
Santa Barbara Channelkeeper  
Yuba River Waterkeeper

**OPPOSITION:**

None received

**-- END --**