



**U.S. House of Representatives
Committee on Transportation and Infrastructure**

Washington, DC 20515

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July 5, 2007

MEMORANDUM

TO: Members of the Subcommittee on Water Resources and Environment

FROM: Subcommittee on Water Resources and Environment Staff

RE: SUMMARY OF SUBJECT MATTER: Hearing on "Reauthorization of the Beaches Environmental Assessment and Coastal Health Act"

Purpose of the Hearing

On July 12, 2007, at 2 p.m., the Subcommittee on Water Resources and the Environment will hold a hearing on beach water quality and the reauthorization of the Beaches Environmental Assessment and Coastal Health Act, more commonly known as the BEACH Act. The Subcommittee will receive testimony from the Environmental Protection Agency ("EPA"), representatives of State environmental protection and public health agencies, local government, and other interested stakeholders.

Background

The nation is fortunate to have nearly 23,000 miles of ocean shoreline along the continental United States, more than 5,500 miles of Great Lakes shoreline, and 3.6 million miles of rivers and streams. Beaches are an important part of the complex and dynamic coastal watershed, providing numerous recreational opportunities for millions of people, including boating, fishing, swimming, beachcombing, bird-watching, and sunbathing.

Each year over 180 million people visit our nation's coastal and Great Lakes waters for recreational purposes. This activity supports over 28 million jobs and leads to investments of over \$50 billion in goods and services. It is important to give the public confidence in the quality of our nation's coastal recreational waters. This confidence is important not only to each citizen who swims or surfs, but also to the tourism and recreation industries that rely on safe and swimmable coastal waters.

According to a recent EPA report, over the past 50 years, epidemiological studies and investigations following widespread waterborne illnesses have linked swimming in polluted water with adverse health effects. Swimming-related diseases can range from less severe gastrointestinal diseases (e.g. sore throats and diarrhea) and non-gastrointestinal diseases (e.g. respiratory, ear, eye, and skin infections) to more serious illnesses, such as meningitis or hepatitis.

On October 10, 2000, the Beaches Environmental Assessment and Coastal Health Act ("BEACH Act") was signed into law. This legislation, which amends the Federal Water Pollution Control Act ("Clean Water Act"), was introduced to limit and prevent human exposure to polluted coastal recreation waters (including those along the Great Lakes) by assisting states and local governments to implement beach monitoring, assessment, and public notification programs. For these purposes, the BEACH Act authorized \$30 million annually for fiscal years 2001 through 2005.

In addition, the BEACH Act required states and tribes with coastal recreation waters to adopt minimum water quality standards for pathogens and pathogen indicators by April 10, 2004, and directed EPA to promulgate standards for states that failed to establish standards as protective of human health as EPA's criteria – the 1986 Ambient Water Quality Criteria for Bacteria.

Finally, the BEACH Act required EPA to conduct additional studies associated with pathogens and human health and to publish new or revised water quality criteria for pathogens and pathogen indicators within five years of enactment of the BEACH Act (October 10, 2005), based on the results of these studies. EPA is also directed to review these revised water quality criteria every five years, and to revise the criteria, as necessary, to protect human health. In addition, States are directed to adopt any revised water quality criteria within three years of publication by EPA.

Implementation of the BEACH Act

Beach Act Funding

From 2001 through 2007, the BEACH Act has authorized nearly \$62 million in grant funding to the 35 states with coastal recreation waters to support the implementation of coastal recreation water monitoring and notification programs. According to EPA, states are using the grant funds to implement beach monitoring and notification programs that are consistent with national guidance. Using BEACH Act grant funding, states collect and analyze water samples to determine whether local recreation waters exceed (or are likely to exceed) water quality standards for public health protection, and to notify the public if water quality standards are exceeded (or likely to be exceeded).

EPA awards grants to the 35 eligible states using an allocation formula developed by the Agency in 2002. According to EPA, this allocation formula was developed in consultation with the states and other stakeholders, and uses three factors – beach season length, beach miles, and beach usage – to determine an equitable allocation of funds. However, because in 2002, data for beach miles and beach usage were not readily available, shoreline length and coastal population were used as surrogates.

State Water Quality Standards

Prior to the enactment of the BEACH Act, only 16 states with coastal recreation waters had adopted EPA's 1986 criteria for pathogens and pathogen indicators in coastal recreation waters, and incorporated these into their water quality standards. Other states were either using water quality criteria older than the 1986 criteria or no water quality criteria at all.

Since enactment of the BEACH Act, all 35 states with coastal recreation waters have adopted criteria for pathogens and pathogen indicators that are at least as protective of human health as EPA's 1986 criteria. According to EPA, thirteen states adopted these criteria voluntarily, and the remaining 21 states and territories were included in a November 16, 2004 EPA rulemaking to adopt water quality standards consistent with EPA's 1986 criteria.

Water Quality Criteria and Standards

Section 304(a) of the Clean Water Act directs EPA to establish water quality criteria for all waters and uses, including human health criteria for recreational uses of coastal waters. Federal water quality criteria serve as guidance to States and Tribes in adopting and revising State and Tribal water quality criteria and water quality standards under section 303 of the Clean Water Act. Under current Clean Water Act regulations, States and Tribes may adopt the Federal criteria as their own, may modify the Federal criteria to reflect site-specific conditions, or may base their water quality criteria on other scientifically defensible methods. 40 C.F.R. 131.11(b)(1).

According to EPA, the Agency's current criteria for pathogen and pathogen indicators are based on a series of studies conducted by EPA in the late 1970s and early 1980s. In 1986, EPA recommended the use of indicator organisms as a good predictor of potential waterborne illness in water – enterococci for fresh and marine waters, and *E. coli* in freshwater.

However, during consideration of the BEACH Act, the Committee on Transportation and Infrastructure was concerned that the 1986 revised bacteria criteria were inadequate indicators for determining the human health risk from all microorganisms, including viruses or other pathogens such as giardia or cryptosporidium. The Committee noted, during a 1998 hearing on this issue, that EPA's 1986 criteria needed to be updated to improve the scientific basis for identifying pathogens in coastal recreation waters that were potentially harmful to human health.

In response, the BEACH Act directed the Administrator of EPA to conduct additional studies on revised criteria for coastal recreation waters, as well as newer, accurate, and expeditious testing methods for detecting the presence of pathogens that are harmful to human health. Section 304(a) of the Clean Water Act was amended to direct the Administrator to develop and publish new or revised water quality criteria for coastal recreation waters for the purpose of protecting human health within five years of enactment

of the BEACH Act (October 10, 2005), and to review, and revise if necessary, these water quality criteria every five years thereafter.

NRDC Lawsuit

On August 3, 2006, the Natural Resources Defense Council ("NRDC") filed a lawsuit against EPA for failure to publish "new or revised water quality criteria for pathogens and pathogen indicators (including a revised list of testing methods, as appropriate) ... for the purpose of protecting human health in coastal recreational waters" by October 10, 2005, as required by section 304(a) of the Clean Water Act, as amended by the BEACH Act.

On March 23, 2007, a United States District Court judge held that EPA had violated its non-discretionary duty to publish new or revised criteria by the October 2005 deadline, in violation of the Clean Water Act. The Court directed NRCS and EPA to discuss the issue of the appropriate amount of time EPA would have to complete publication of new or revised water quality criteria for pathogens and pathogen indicators. These discussions are still underway.

GAO Report

The Government Accountability Office (GAO) released a report in May 2007 titled '*Great Lakes: EPA and States Have Made Progress in Implementing the BEACH Act, but Additional Actions Could Improve Public Health Protection.*' The GAO found that EPA has implemented most provisions of the BEACH Act, including developing a national list of beaches and improving uniformity of state water quality standards. However, GAO reported that EPA had neither completed the pathogen or human health studies that had been required by 2003, nor published the new or revised water quality criteria required by 2005. GAO also found that the formula EPA used to distribute approximately \$51 million in BEACH Act grants from 2001 to 2006 did not accurately reflect the monitoring needs of states. In addition, GAO found that among the Great Lakes states, state monitoring and state and local notification programs showed widespread variance in how often beaches were monitored, the monitoring methods used, and how the public was notified of potential health risks. GAO noted that the water quality monitoring has increased along Great Lakes beaches since passage of the BEACH Act, but that the causes of beach and water contamination often remain unknown and unaddressed. State and local officials told GAO that they do not have the available funding to investigate and address contamination sources.

GAO recommended that EPA distribute its BEACH Act grant funds so that they reflect states' monitoring needs and help to improve consistency of monitoring and notification activities. GAO also recommended that Congress should consider providing EPA with more flexibility to allow states to use BEACH Act grants to investigate and remediate contamination sources.

Pending Legislation

In the 110th Congress, three bills have been introduced to reauthorize appropriations for the BEACH Act.

H.R. 723, introduced by Congressman Bishop (NY), extends the authorization of appropriations for the BEACH Act through 2012, including authorization of \$30 million annually for grants to states with coastal recreation waters for development and implementation of programs for water quality monitoring and notification.

H.R. 909, the Safe Water Improvement and Modernization Act of 2007, was introduced by Congressman Bilbray. This legislation also extends the authorization of \$30 million annually for the BEACH Act through 2012. In addition, H.R. 909 directs EPA to conduct a study on the benefits of using molecular diagnostics to accelerate the time necessary for obtaining test results on coastal water quality monitoring, and to report to Congress within 3 years on the results of this study.

H.R. 2537, the Beach Protection Act of 2007, was introduced by Congressman Pallone. This legislation also extends the authorization of appropriations for the BEACH Act through 2012, but increases the authorization of appropriations for grants for state water quality monitoring and notification from \$30 million annually to \$60 million.