Environmental Dashboard

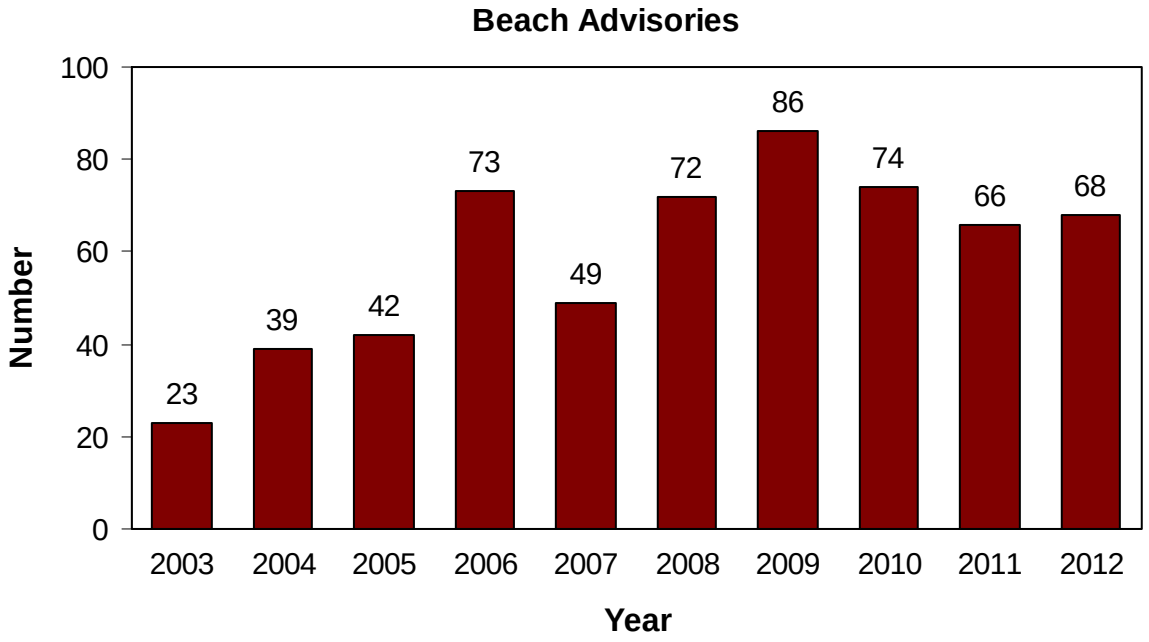
Trends in New Hampshire's Environment

Lakes/Ponds and Rivers/Streams: Beach Advisories

DES collects water samples at public beaches during the swimming season and tests these samples for fecal bacteria to ensure protection of the public's health. In addition, samples of blue-green scums at freshwater beaches and lakes are examined for potentially toxin-producing cyanobacteria, previously called blue-green algae. When test results are above state standards, DES issues an advisory until test results come back clean. Although not required, beach owners may choose to close the beach until an advisory is lifted.

Current Condition

In 2012, DES issued 68 beach advisories; two more advisories than in 2011.



Source: DES Beach Program Data (2003-2012)

Explanation of Indicator and Trend

Water from beaches is analyzed for indicator organisms of bacteria, which show the potential presence of hard-to-detect, disease-causing organisms, also called pathogens. The pathogens present could result in such illnesses as giardiasis, gastroenteritis and cryptosporidiosis. Indicator organisms are generally not present in unpolluted waters and, when present, are correlated with the extent of contamination. *E. coli* is the indicator organism for freshwater beaches and *Enterococci* are the indicator organisms for marine

beaches. Bacteria counts that exceed State standards result in an advisory to notify the public of possible contamination.

The increase in beach advisories since 2003 is partially explained by an expansion of the Beach Program sampling. Between 2003 and 2006, the program was able to visit beaches three times a season instead of just once or twice. However, the percentage of how many summer days beaches are under an advisory has remained fairly constant from 2003 to present. On any day at any beach, the chance of an advisory being in effect was never more than 2.3%.

DES also recognizes the threat of toxic cyanobacteria in New Hampshire's surface waters. Cyanobacteria are capable of producing toxins known to target the liver and central nervous system of animals and people, and can cause irritations to the skin and mucous membranes.

A study conducted in 2002 for the Lakes, Rivers, Streams & Ponds Partnership, a coalition of public and private organizations, found that visitors to New Hampshire's beaches contributed $380 million to the New Hampshire economy. When asked how they would react to perceived declines to water purity, two-thirds of respondents responded they would reduce their visits, resulting in a $51 million reduction in spending from swimming and related activities.

How Does DES Address This?

By monitoring the water at public swimming beaches from late May until early September DES helps to protect public health by informing the public of potential risks. As the use of New Hampshire's inland and coastal waters grows, it is more important than ever that public beaches are inspected on a regular basis. In addition to monitoring beach water quality, DES supports studies to determine the sources of bacteria and provides education and outreach on ways to help keep public beaches clean. This includes picking up pet waste and regular maintenance of septic systems.

DES is proud that The Natural Resources Defense Council (NRDC) named New Hampshire coastal beaches first in beach water quality in both 2010 and 2011 because only one percent of all sampled were above the state standards. Further, both Hampton Beach State Park and Wallis Sands Beach at Wallis Road have been consistently ranked with 5-star ratings, among 359 of the nation's most popular coastal and Great Lakes beaches. Beaches are awarded stars for excellent water quality, frequent testing, and communicating advisories to the public.

For More Information, Including What You Can Do to Help

- DES OneStop Beach data and advisory information [http://www2.des.state.nh.us/DESOnestop/BasicSearch.aspx]
- DES Beach Program [http://des.nh.gov/organization/divisions/water/wmb/beaches/index.htm]
- Current Advisories http://www2.des.state.nh.us/Advisories/Beaches/
- DES Beach Program Brochure [http://des.nh.gov/organization/divisions/water/wmb/beaches/documents/beach_program_brochure.pdf]

04/04/2013