

Water quality good at most Massachusetts beaches; Issues remain at some urban spots



With temperatures hitting over 90 degrees, people flock to Wollaston in Quincy to cool off on Monday, June 12, 2017

THE ISSUE: Although water quality is generally good at Massachusetts beaches, issues remain in some areas.

THE IMPACT: An average of 4.9 percent of samples from marine beaches and 3.8 percent of samples from freshwater beaches test positive for elevated bacteria levels.

Rain can put a damper on summer fun in a variety of ways.

Not only does heavy rain keep people indoors, but it also can overflow sewer systems and carry garbage to the coast, sometimes causing a temporary spike in unsafe bacteria levels at beaches.

“There’s filthy, bacteria-laden storm water, which typically gets to the beach after running into storm drains in the road,” said Bruce Berman, a spokesman for Save the Harbor/Save the Bay. “When you think about rain, it washes everything in the streets into storm drains.”

Water quality in Massachusetts beaches is generally good, Berman said, but some issues remain, particularly around urban beaches.

The vast majority of the time, issues are minimal.

Last summer, state and local agencies collected a total of 15,604 water samples from 586 marine

beach sites and 594 freshwater beach sites. About 3.5 percent of samples from ocean beaches and 3 percent of freshwater samples tested positive for elevated bacteria levels, compared to historic averages of 4.9 percent and 3.8 percent respectively. Last year’s drought, according to the public health officials, was likely a factor in lower bacteria levels.

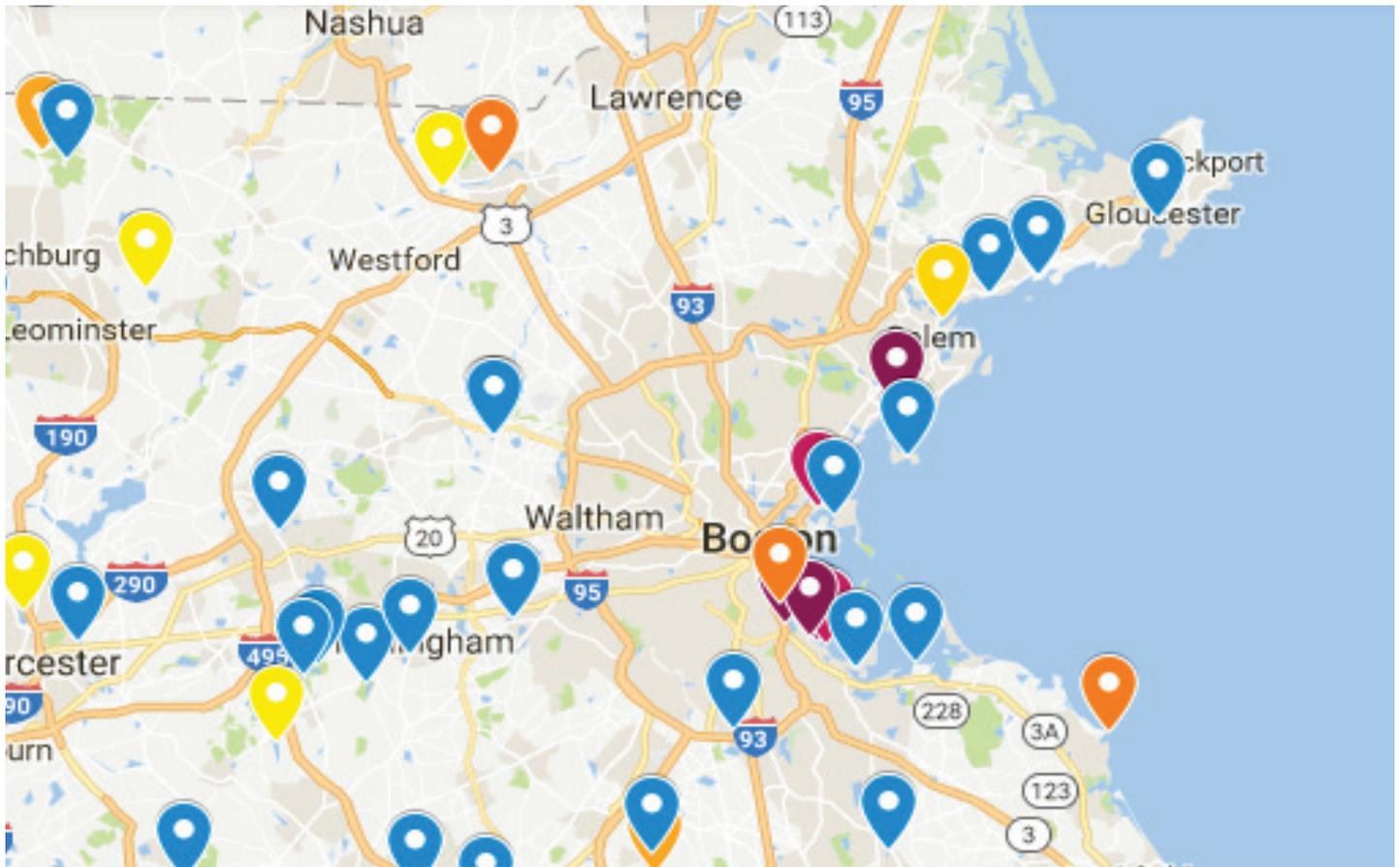
“Overall, Massachusetts beaches have excellent water quality,” said Dr. Marc A. Nascarella, chief toxicologist and director of the Department of Public Health’s Environmental Toxicology Program.

A challenge for beaches, particularly those in urban areas, is old sewer infrastructure, which can cause underground sewer pipes to leak into stormwater pipes when there’s heavy rain.

“Rainfall is the most significant driver of bacteria exceedances in Massachusetts,” Nascarella said.

Last summer, there were 160 “no swimming” postings at marine beaches, with beaches in Boston, Lynn and Quincy being closed the most often. Most closures were due to high bacteria levels, but rip currents, shark sightings and other factors also caused some postings.

At inland, freshwater beaches there were 114 postings in 2016, with beaches in Brimfield, Templeton



Blue markers are at beaches that were closed for one day, yellow markers are at beaches that were closed for two days, orange markers are at beaches closed for three days, pink markers are at beaches closed for four or five days, and red markers are at beaches that were closed for 10 or more days during the 2016 summer season.

and West Tisbury reporting the highest number of high-bacteria samples. In addition to bacteria, algae blooms – often caused by fertilizer runoff – caused closures at freshwater beaches.

Overall, Massachusetts has 529 public marine and 549 freshwater public beaches.

“Human fecal matter can enter beach water in a variety of ways, including sewage treatment system failures, combined sewer overflows, discharge of sewage by boats, re-suspension of sediments, and rainfall and resulting surface runoff,” Nascarella said.

Exposure to high concentrations of fecal bacteria can cause symptoms including gastrointestinal sickness, cold symptoms and skin rashes.

Berman said neglecting infrastructure decades ago caused water quality problems, and investing in repairs is a main part of the solution.

“Thirty years ago, Boston Harbor was a national disgrace,” he said. “Our waste washed up on shore from

Cape Cod to Cape Ann. Today, we’re talking about elevated bacteria on handful of beaches that we need to address. We have a lot of progress to be proud of. We just have to finish the job.”