



EPA's BEACH Report:

North Carolina 2007 Swimming Season

July 2008

Introduction

The BEACH Act of 2000 requires that coastal and Great Lakes states and territories report to EPA on beach monitoring and notification data for their coastal recreation waters. The BEACH Act defines coastal recreation waters as the Great Lakes and coastal waters (including coastal estuaries) that states, territories, and authorized tribes officially recognize or designate for swimming, bathing, surfing, or similar activities in the water.

This fact sheet summarizes beach monitoring and notification data submitted to EPA by the State of North Carolina for the 2007.

The North Carolina Department of Environment and Natural Resources' Division of Environmental Health administers the Recreational Water Quality Program, which monitors the coastal waters along North Carolina. The 320 miles of ocean coastline and 2.2 million acres of estuarine waters consisting of coastal rivers, bays and sounds give residents and visitors many recreational areas for swimming and water play.

North Carolina's coastal recreational waters are known for its pristine water quality; however, frequent monitoring is important to keep the public informed about any localized problems that may occur. The Recreational Water Quality Program monitors 243 sites along the coast and in 2007 collected 5,885 water samples for recreational waters, most of them on a weekly basis during the swimming season, April through October. North Carolina's ocean beaches rarely have swimming advisories and in 2007 only 1 out of the 13 beaches under advisory was an ocean beach. The other 12 swimming areas were located on sounds and rivers where the lack of tidal action and circulation often contribute to poor water quality.

Figure 1. North Carolina coastal counties.

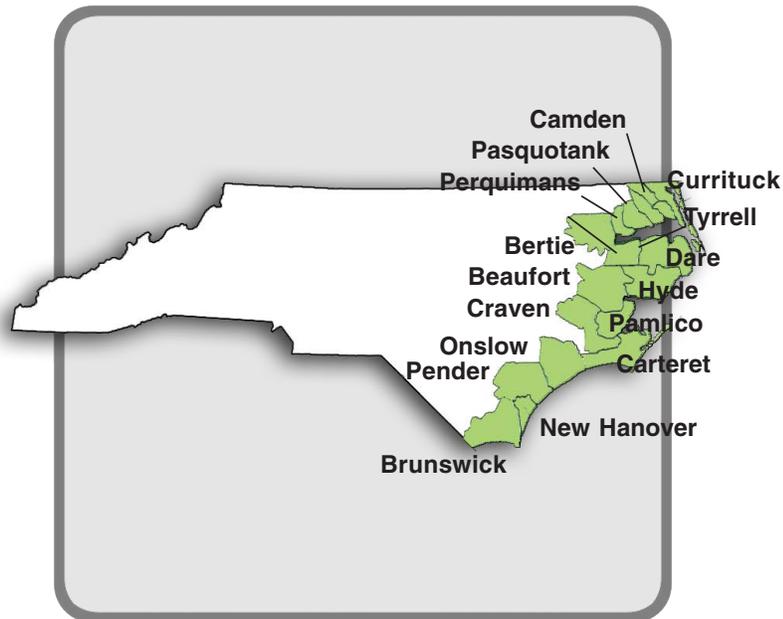


Table 1. Breakdown of monitored and unmonitored coastal beaches by county by 2007.

County	Total Beaches	Monitored	Not Monitored
BEUFORT	12	12	0
BERTIE	1	1	0
BRUNSWICK	30	30	0
CAMDEN	2	2	0
CARTERET	53	53	0
CHOWAN	1	1	0
CRAVEN	8	8	0
CURRITUCK	9	9	0
DARE	57	57	0
HYDE	5	5	0
NEW HANOVER	22	22	0
ONSLow	21	21	0
PAMLICO	10	10	0
PASQUOTANK	1	1	0
PENDER	9	9	0
PERQUIMANS	1	1	0
TYRRELL	1	1	0
TOTALS	243	243	0

2007 Summary Results

How many notification actions were reported and how long were they?

North Carolina's approach is to issue a beach advisory when water quality standards are exceeded at a particular beach that warns people to avoid contact with the ocean water. A total of 13 monitored beaches had at least one advisory issued during the 2007 swimming season. About 68 percent of North Carolina's 22 notification actions lasted two days or less. Figure 2 presents a full breakdown of notification action durations.

What percentage of days were beaches under a notification action?

For North Carolina's 2007 swimming season, actions were reported less than 1 percent of the time (Figure 3).

How do 2007 results compare to previous years?

Table 2 compares 2007 notification action data with monitored beach data from previous years.

What pollution sources impact monitored beaches?

Figure 4 displays the percentage of North Carolina's monitored beaches potentially impacted by various pollution sources. In 2007, 73 percent of the beaches identified storm related runoff as a known potential source of pollution.

For More Information

For general information about beaches:

www.epa.gov/beaches/

For more information concerning North Carolina's beaches, please visit:

www.deh.enr.state.nc.us/shellfish/

Water_Monitoring/RWQweb/home.htm.

Figure 2: Beach notification actions by duration.

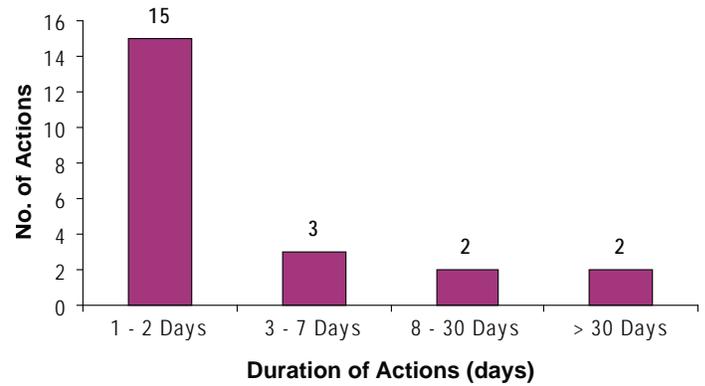


Figure 3: Beach days with and without notification actions.

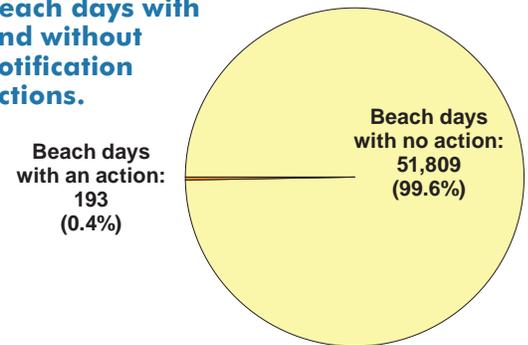


Table 2. Beach notification actions, 2005–2007.

	2005	2006	2007
Number of monitored beaches	247	243	243
Number of beaches affected by notification actions	11	20	13
Percentage of beaches affected by notification actions	4%	8%	5%
Percentage of beach days affected by notification actions	0.4%	0.9%	0.4%

Figure 4: Percent of monitored beaches potentially impacted by pollution sources (243 beaches).

