## EPA's BEACH Report: Minnesota 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 Minnesota for the 2007 swimming season.

Going to "The Lake" is one of the most popular summer activities along Minnesota's Lake Superior coastline. Whether visitors go to the beach to kayak, swim, surf, or look for agates, water quality can have a significant impact on a beach-goers experience.
Between Memorial Day and Labor Day each year, Minnesota conducts a program for monitoring the bacteria content of the recreational waters along the Minnesota Lake Superior shoreline that are publicly owned. A partnership effort between Minnesota's Pollution Control Agency, Department of Natural Resources, county health departments and private/public organizations in the region provides the citizens of Minnesota with specific and timely information regarding water quality conditions. Water is collected from each beach at least once per week during the season. Samples are analyzed for $E$. coli content and the results are made available to the public.
Minnesota has partnered with the Natural Resources Research Institute to develop the www.MNBeaches.org website. The website allows the public access to real time data and advisory information for all of Minnesota's Lake Superior beaches. It also allows the public to sign up to receive e-mail notification of advisories for beaches of their choice.

Figure 1. Minnesota coastal counties.


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

| County | Total <br> Beaches | Monitored | Not <br> Monitored |
| :--- | :---: | :---: | :---: |
| COOK | 22 | 11 | 11 |
| LAKE | 23 | 11 | 12 |
| ST. LOUIS | 34 | 17 | 17 |
| TOTALS | 79 | 39 | 40 |

## 2007 Summary Results

How many notification actions were reported and how long were they?
Minnesota'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 water. A total of 18 monitored beaches had at least one advisory issued during the 2007 swimming season. About 55 percent of Minnesota's 33 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 Minnesota's 2007 swimming season, actions were reported about 4 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 Minnesota's monitored beaches potentially impacted by various pollution sources. In 2007, all of the beaches where sources were investigated included storm- and nonstorm-related runoff, wildlife, and other/ unidentified as potential sources of pollution.

## For More Information

For general information about beaches: www.epa.gov/beaches/
For more information regarding sample results for all monitored beaches in Minnesota go to www. MNBeaches.org or contact the MPCA at (218) 725-7724. You can also call the Agency's toll-free information line, 1-(800) 657-3864.

Figure 2: Beach notification actions by duration.


Figure 3: Beach days with and without notification actions.
Beach days
with an action:
204
$(4.2 \%)$


Table 2. Beach notification actions, 2005-2007.

|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| :--- | :---: | :---: | :---: |
| Number of monitored <br> beaches | 39 | 39 | 39 |
| Number of beaches <br> affected by notification <br> actions | 12 | 9 | 18 |
| Percentage of beaches <br> affected by notification <br> actions | $31 \%$ | $23 \%$ | $46 \%$ |
| Percentage of beach days <br> affected by notification <br> actions | $7 \%$ | $6 \%$ | $4 \%$ |

Figure 4: Percent of monitored beaches potentially impacted by pollution sources ( 39 beaches).


