## EPA's BEACH Report: Minnesota 2006 Swimming Season

June 2007

## 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 2006 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. However, despite their importance to the region's quality of life, beaches are being posted with "Water Contact Not Recommended" advisories because of sewage overflows, pet waste, storm water run-off and other pollutants.

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.

Figure 1. Minnesota coastal counties with 2006 monitored beach data.


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

| County | Total <br> Beaches | Monitored | Not <br> Monitored |
| :--- | :---: | :---: | :---: |
| COOK | 22 | 10 | 12 |
| LAKE | 23 | 11 | 12 |
| ST. LOUIS | 34 | 18 | 16 |
| TOTALS | $\mathbf{7 9}$ | $\mathbf{3 9}$ | $\mathbf{4 0}$ |

## 2006 Summary Results

How many beaches had notification actions?
Whenever the bacteria levels exceed the standard of 235 E . coli colonies per 100 mL of water sampled for a single sample or 126 E. coli colonies per 100 mL of a 5 sample geometric mean, advisory signs are posted to alert bathers to the potential health hazards, email alerts are sent out, the media is notified, beach managers are notified, and the beach hotline is updated. Of the 39 coastal beaches that were monitored in 2006, 9, or 23 percent, had at least one advisory during the 2006 season (Figure 2).

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

A total of 16 beach notification actions were reported in the 2006 swimming season. Some actions were of relatively short duration, however, 4 lasted longer than 30 days. Figure 3 presents breakdowns of action durations.

## What percentage of days were beaches

 under a notification action?For Minnesota's 2006 swimming season, EPA determined there were a total of 5,316 beach days associated with the 39 monitored beaches. Actions were reported on 304 of those days or about 6 percent of the time (Figure 4).

## How do 2006 results compare to previous years?

Beginning in 2003, states are required to submit data to EPA under the BEACH Act for beaches which are in coastal and Great Lakes waters. Table 2 compares 2006 data with data reported in previous years.

## 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: Monitored Beaches with and without notification actions.


Figure 3: Beach notification actions by duration.


Figure 4: Beach days with and without


Table 2. Beach notification actions, 2004-2006.

|  | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ |
| :--- | :---: | :---: | :---: |
| Number of <br> monitored beaches | 38 | 39 | 39 |
| Number of beaches <br> affected by <br> notification actions | 17 | 12 | 9 |
| Percentage of <br> beaches affected by <br> notification actions | $45 \%$ | $31 \%$ | $23 \%$ |

