May 16, 2002

Mr. John Bowman, Chairman
Mattapoisett Board of Health
16 Main Street
Mattapoisett, MA 02739
and via fax: 508-758-3030

Re: water testing of Town Beach Brook

Mr. Bowman:

The Buzzards Bay Project conducted a second sampling of the Mattapoisett Town Beach Brook and Town Beach on May 2, 2002. The data sheet from the New Bedford Board of Health is attached, as well as a summary map. Conditions on the day of sampling were rainy, and the tide was high. Total rainfall for that day, as recorded by the Wareham Cranberry Experiment Station, was 0.62 inches. Sampling in the stream and beach was in the morning, and perhaps only half that daily total fell by the time of sampling.

Enterococci bacteria were somewhat to considerably elevated along the stream and at the beach as a result of the rainfall, as compared to the dry weather sampling of April 18 (please refer to my previous correspondence). Similarly, fecal coliform was elevated at all stations because of the rainfall, in contrast to the sampling of April 18.

On the May 2 monitoring, all the samples were tested for *E. coli*. We did this because during the April 18 sampling, the two uppermost stations (M1 at Rt. 6 and M2 at Church St) showed interference because of an abundance of other types of bacteria. We did not observe this interference during the wet weather sampling of May 2. We believe the interference at these two stations on April 18 was caused by bacterial growth in the somewhat stagnant water because there was little stream flow during the dry weather sampling. *E. coli* is one type of fecal coliform bacteria, so the fact that *E. coli* counts were lower than the fecal coliform counts is consistent.

The most important finding of the May 2 sampling is the fact that Enterococci bacteria remain high at the culvert mouth on the town beach, and east of the rocks near the culvert mouth. As noted previously, the new beach testing standard adopted by the state last year is as follows:

For marine water, the indicator organism shall be Enterococci.
(1) No single Enterococci sample shall exceed 104 colonies per 100 ml. and the geometric mean of the most recent five (5) Enterococci levels within the same bathing season shall not exceed 35 colonies per 100 ml.

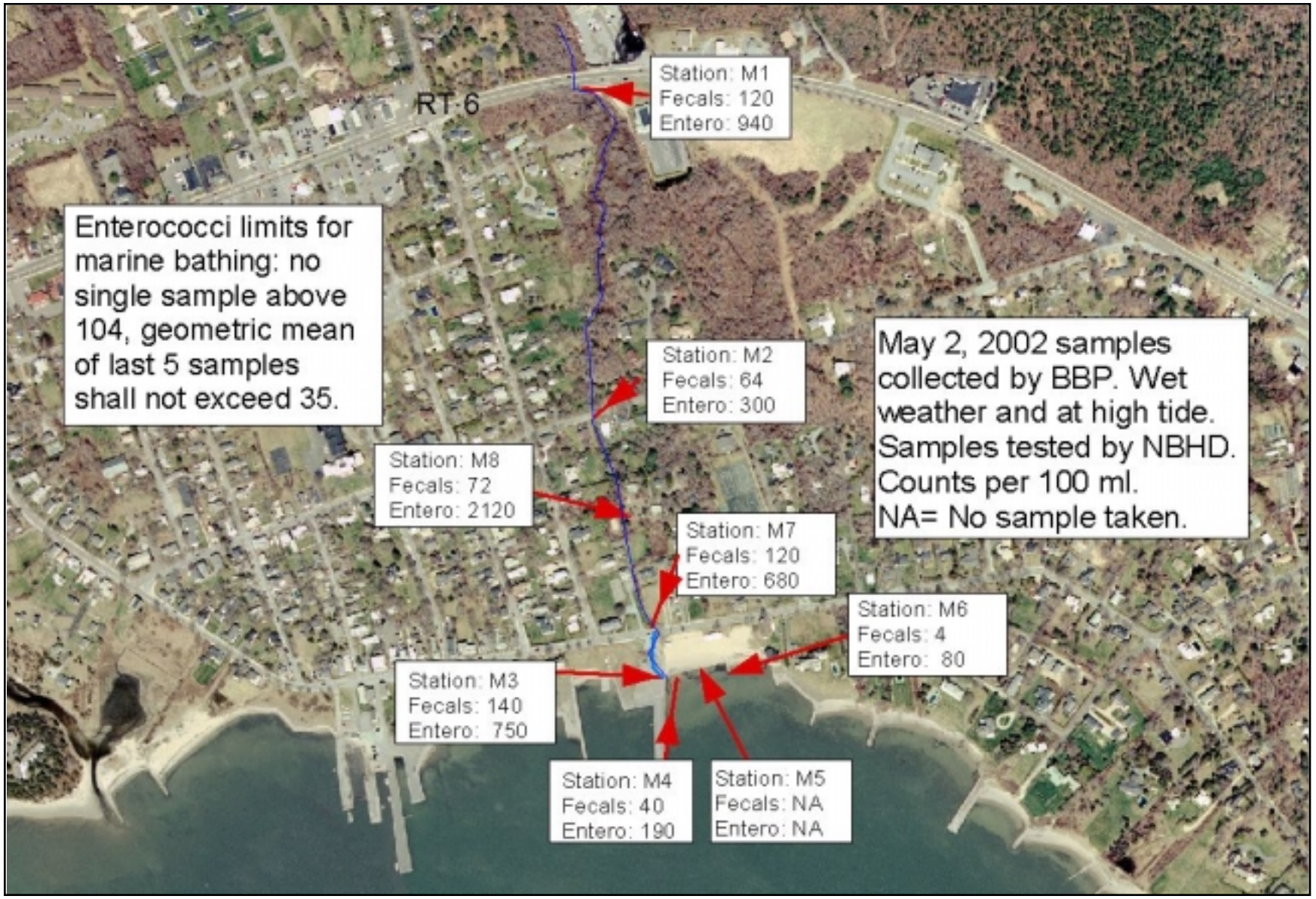
Because children sometimes wade near the discharge, if Enterococci levels remain high in the stream, and immediately adjacent to the stream culvert mouth during both wet and dry periods, it may be prudent to post a sign not to wade in that area. During the next few weeks, we will sample the stream during one additional dry period and during one more rainfall. We will forward the results to you as we receive them.

If you have any questions regarding these results, please do not hesitate to call me.

Sincerely,

Joseph E. Costa, PhD
Executive Director

attachments: map, datasheet


RT 6
Station: M1
Fecals: 120
Entero: 940
Enterococci limits for marine bathing: no single sample above 104, geometric mean of last 5 samples shall not exceed 35.
Station: M2
Fecals: 64
Entero: 300
May 2, 2002 samples collected by BBP. Wet weather and at high tide. Samples tested by NBHD. Counts per 100 ml.
NA= No sample taken.
Station: M8
Fecals: 72
Entero: 2120
Station: M7
Fecals: 120
Entero: 680
Station: M6
Fecals: 4
Entero: 80
Station: M3
Fecals: 140
Entero: 750
Station: M4
Fecals: 40
Entero: 190
Station: M5
Fecals: NA
Entero: NA