Beach Advisories (SOOE Extended)

Methods and Data Sources

Beach advisories at New Hampshire and Maine tidal bathing beaches within the Piscataqua Region Watershed were compiled for each year from 2003 to 2021 (Figure 19.2, found in State of Our Estuaries Report. The list of beaches currently includes 16 public tidal beaches monitored by NHDES, and one public tidal beach, Fort Foster, monitored by Maine Healthy Beaches. Beach advisories per year from 2003 to 2021 were compiled by each tidal beach within the Piscataqua Region Watershed (Figure 19.3). Only advisories due to water quality contamination were included.

For each advisory, the number of days that the advisory was in effect was calculated. The total number of beach advisory days for the year was then calculated. Beach advisories per year was compared to the number of beach days between Memorial Day and Labor Day (number of days multiplied by the number of beaches monitored) (Figure 19.4).

Additional information regarding monitoring can be found on NHDES and Maine DEP websites.

NHDES Public Beach Inspection Program and Maine DEP Healthy Beaches Program provided records of beach advisories data for this indicator.

Additional Discussion

Beaches in New Hampshire and Maine are routinely monitored during the swim season, between Memorial Day and Labor Day, for fecal bacteria called enterococci. In New Hampshire, NHDES Public Beach Inspection Program will issue a beach advisory to the public when any one bacterial water quality sample exceeds the state standard of 104 counts/100ml. In Maine, when a bacterial sample goes over 104 counts/100ml, Maine DEP Healthy Beaches Program will provide this data to local beach managers, who will typically issue an advisory based on the exceedance. Resampling will occur at the affected beach/beaches, and once bacteria levels have lowered, the advisory will be lifted.

When an advisory is put into effect, it does not necessarily mean that the beach is closed. A beach advisory cautions against swimming, but ultimately lets the public decide whether they'd like to risk going in the water. A beach closure will come into effect if the state or local government decides that water conditions are unsafe for the public.

A number of factors can contribute to the elevated fecal bacteria levels at North Hampton State Beach and New Castle Town Beach. However, it is difficult to pinpoint one specific source of pollution. Heavy rainfall events prior to the bacterial sampling may have caused runoff from nearby saltmarshes or neighboring towns that could have led to the higher levels of fecal bacteria.

Additional Data Tables and Graphs

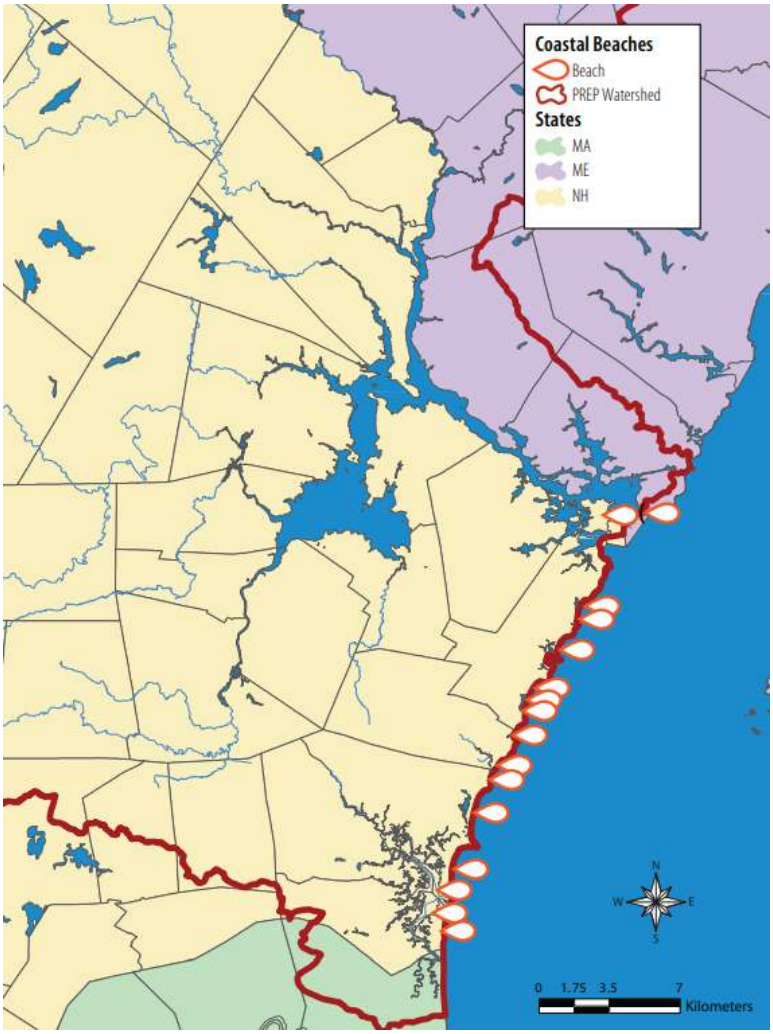

Figure 19.3 Map of Piscataqua Region watershed beaches that are monitored as part of the "Beach Advisories" indicator (State of Our Estuaries 2013).

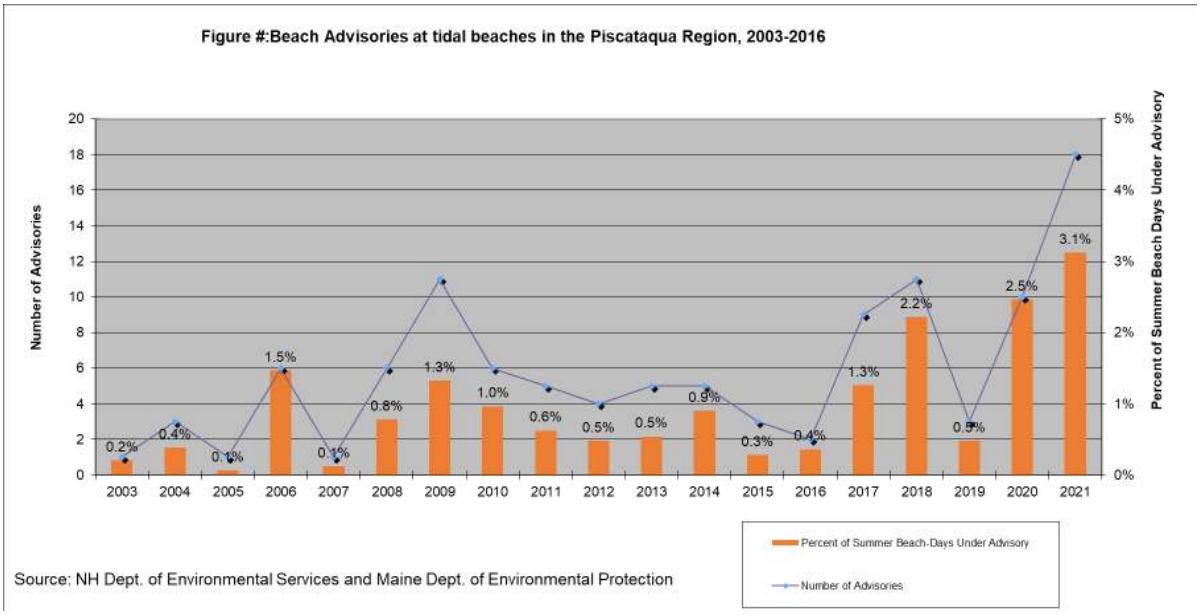

Figure 19.4: Percent of Piscataqua Region Watershed summer beach days under advisory, 2003 - 2021.
Data source: NH Department of Environmental Services and Maine Department of Environmental Protection.

Acknowledgements and Credit

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References

EPA BEACON 2.0 (Beach Advisory and Closing Online Notification). EPA website, 06/02/22.

NOAA. What are beach advisories and beach closures? National Ocean Service website, 12/09/22.