Maine Healthy Beaches Program: Norking Together to Improve Coastal Water Quality

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Maine Healthy Beaches Program



Program Elements:

- 28 towns/state parks, 60
 beach management areas
- Monitoring, Assessment and Notification
- Special Studies & Sanitary Surveys
- Partners local, state and federal level



Winslow Park, Freeport, ME





K. Lindberg



Number of Exceedances per Year

(monitoring 2x per month)

Winslow Park, Freeport, ME





K. Lindberg

Potential Bacteria Sources:

- ✓ Stormwater runoff
- ✓Boats/moorings
- ✓Bathers
- ✓Wildlife
- ✓Pet waste

Willard Beach, South Portland, ME



WIL-01

WIL-02

WIL-03



Willard Beach, South Portland, ME





S. Mosley

Potential Bacteria Sources:

- ✓ Storm drain outfalls
- ✓ Impervious surfaces/runoff
- ✓Boats/moorings
- ✓ Bathers
- ✓Wildlife
- ✓Pet waste

Willard Beach, South Portland, ME





East End Beach, Portland, ME





S. Mosley



Number of Exceedances per Year

(monitoring 3x per week)

East End Beach, Portland, ME





S. Mosley

Potential Bacteria Sources:

- ✓Combined sewer overflows
- ✓ Storm drains
- ✓ Impervious surfaces/runoff
- ✓STP outfall
- ✓Marinas/moorings
- ✓ Presumpscot River mouth
- ✓ Bathers
- ✓ Wildlife
- ✓Pet waste

Beyond the Shoreline: areas identified as needing special studies/sanitary surveys

- Biddeford
- Camden
- Kennebunk
- Kennebunkport
- Lincolnville

- MDI
- Ogunquit
- OOB/Saco
- Popham
- Portland

- Rockport
- Scarborough
- South Portland
- York

Watershed Health = Beach Health



Fecal Contamination= Guts of warm-blooded animals



Sanitary Survey

Explore ALL Bacterial Pathways

- Malfunctioning septic systems
- Leaky sewers/cross connections
- Stormwater runoff
- Domestic and wild animals
- OBD's, POTW outfalls
- Boats dumping sewage
- Beach activities/characteristics





Ogunquit Circulation Study and Data Analysis





Maine Geological Survey, 2008

- Ogunquit River = primary source of contamination
- Rainfall > 1 in. within 5 days of monitoring increases bacteria levels
- Night time ebb tide = entrainment outside surf zone
- Day time flood + wind + waves can bring bacteria back to beach

Pinpointing Sources

MAINE



Fluorometry



	High Bacteria	Low Bacteria
High Optical Brightener	Black water (e.g. human sources- malfunctioning septic system, sanitary sewer cross connection)	Grey or Gray water (e.g. laundry, wash water)
Low Optical Brightener	Human or non- human sources	Potentially low or no fecal contamination

Potential sources based on bacteria and optical brightener levels

Watershed Risk Analysis





Septic System Risk Analysis





Surveying Properties



Healthy Beaches

J. Glowa ME DEP





Lincolnville Beach, Maine (K. Lindberg)

Promoting Best Practices



What you can do as a CITIZEN:

Maintain and routinely pump out your septic system.

Report any illicit or questionable discharges to your local CEO/LPI.

Properly dispose of pet waste and/or livestock manure.

 Maintain appropriate vegetative buffers along waterways.



Find, Fix & Prevent Sources

Municipal Guide To Clean Water: Conducting Sanitary Surveys to Improve Coastal Water Quality





Questions?

