

**TOWN OF WINDHAM
PARKS & RECREATION**

WATER TESTING POLICIES & PROCEDURES

Overview

Bodies of water (lakes and rivers) usually contain a variety of microorganisms, including bacteria, viruses, protozoa, fungi, and algae. Most of these occur naturally and have little impact on human health. Some microorganisms, however, can cause disease in humans. Disease most commonly results from certain bacteria, viruses, and protozoa that live in the gastrointestinal tract and are shed in the feces of warm-blooded animals, such as humans, dogs, cattle and animals including wildlife.

Maine’s Water Quality Standards is the basis for determining whether or not a certain level of a contaminant such as E. coli is acceptable. The water quality standard for full body contact recreation (swimming) in Maine is based on E. coli, as recommended by the EPS. Monitoring results for E coli are given in terms of the number of E. coli colony forming units (or CFU) in 100 mL of water (about half a cup). For water to meet the recreation standards, the geometric mean of 5 samples over a 30-day period is required to be less than 125 CFU/100 mL.

Fecal waste from humans is the greatest health concern since they carry the most human pathogens. Several other diseases, however, can be transmitted from animal to humans when higher than 235 CFU/100 mL. Other factors of E coli could be waterflow concentrations, septic run-off, algae blooms, storm water pollution and human factors (dirty diapers, vomit or over-population of swimmers).

Policies & Procedures

E. coli Water Testing

1. Windham Parks and Recreation and Dundee Park Employees monitor the water quality at Dundee Park on Presumpscot River throughout the season.
2. Begin taking samples the beginning of June to the beginning of September until Dundee Park closes for the season.
 - a. Water samples are taken at the beginning of each week to receive results back before the weekend. Results usually returned to us within 48 hours.
 - b. Water samples are taken from the swimming area of the beach in approximately 3 feet of water. Fill bottle to the marked line.
3. Samples are taken to A & L Laboratory in Auburn, (155 Center St) to test for E. coli.
4. Test results will be posted on the Gatehouse and on the Windham Parks and Recreation website.
5. If test results come back with an E. coli level of 235 or above, testing will increase to 2-3 times per week and samples will be taken from 3 different areas until levels decrease under 235.
 - a. Left of the beach past the dock.
 - b. Middle of the beach in the swimming area.
 - c. To the right of the buoy line.
6. When the beach is closed to the public due to high E. coli levels, a sign will be posted on the front gate, an alert will be on the Windham Parks and Recreation website, and a closed notice will be posted on the Town of Windham’s website and on Facebook.

E-Coli Levels

Action Plan

E-Coli Levels	Action Plan
0-149	Continue taking water samples and monitoring
150-234	Continue to monitor, consider more frequent testing
235+	Close the beach until water samples demonstrate healthy levels (2-3 water samples a week) and take samples in 3 different areas

Contaminations

1. Dirty Diapers - Child must be wearing waterproof diapers in the water. If a child is not wearing a waterproof diaper and has not soiled the diaper, staff will ask parent to not allow child back in the water until waterproof diaper can be acquired. If a child has been in the water with a soiled diaper the water has a good chance of being contaminated.
2. Vomit - If someone has vomited in or near the water the water could be contaminated.
3. Procedure when water could be contaminated.
 - a. Clear everyone from the water using a megaphone if necessary and close the beach down.
 - b. Post "Beach Closed Due to Contamination" sign.
 - c. Contact the Parks and Recreation office.
 - d. Document the information on an incident report form.

Returning to the Water

1. Swimmers may return to the water when water samples have been tested and results show a level of 234 or below.
2. Remove Beach Closed signs.
3. Update information on Windham Parks and Recreation website, Facebook page and the Town of Windham's website.

For any questions of concerns, contact the Windham Parks and Recreation Director at 892-1905.