

## Fecal Bacteria Monitoring in the LaHave River Estuary

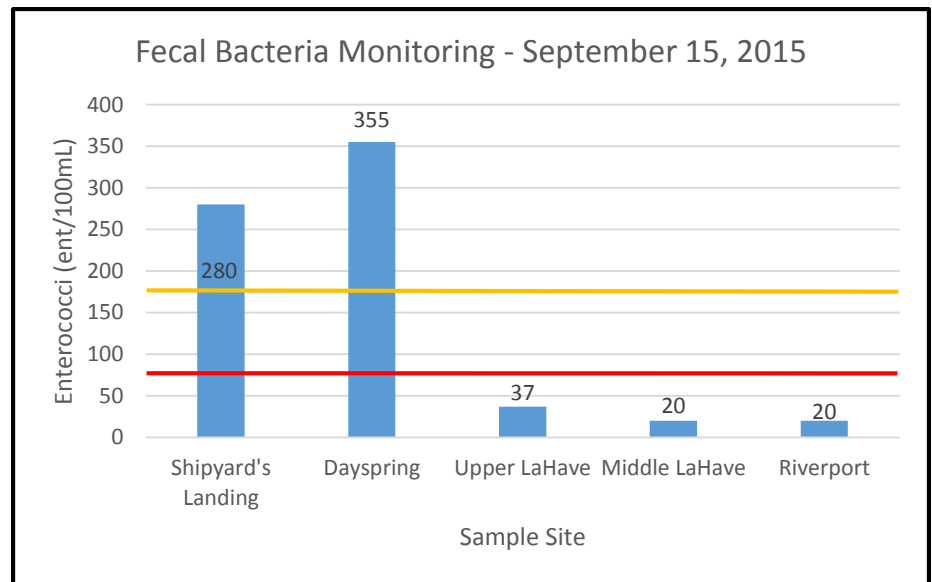
One of the greatest water quality concerns in the LaHave River Watershed is the ongoing fecal contamination of the estuary, which has been observed over the last 8 years as part of Coastal Action's water quality monitoring program. While fecal bacteria can come from a number of sources such as agriculture or wildlife, the largest contributor to this contamination is suspected to be straight pipes. Straight pipes are illegal sewage systems that discharge raw human sewage, from homes and businesses, directly into a watercourse and pose a significant risk to human health. A 1993 survey identified over 800 straight pipes from Bridgewater to the mouth of the estuary. While many of those pipes have since been replaced by legal septic systems, there are likely still hundreds of them being used today.

Coastal Action works with a group of concerned residents called the Straight Pipe Citizens Group to monitor bacteria levels of the LaHave River Estuary and to educate the public about straight pipes. This summer, the Group will be collecting water samples from 5 shoreline locations in the LaHave River Estuary every week from June to September. These samples are being tested for enterococci. While E.coli is used as an "indicator organism" in freshwater, enterococci are the most appropriate indicator of fecal contamination in marine recreational waters. Health Canada has established guidelines for recreational contact with water contaminated by fecal bacteria to protect human health.

**Primary Contact:** Recreational activity in which the whole body or the face and trunk are frequently wetted by spray, and where it is likely that some water will be swallowed. Inadvertent immersion, through being swept into the water by a wave or slipping, would also result in whole body contact. Examples include swimming, surfing, waterskiing, whitewater canoeing/rafting/kayaking, windsurfing, or subsurface diving.

**Secondary Contact:** Recreational activity in which only the limbs are regularly wetted and in which greater contact (including swallowing water) is unusual. Examples include rowing, sailing, canoe touring, or fishing.

(Health Canada, 2012)



— Primary Contact Guideline:  $\leq 70$  enterococci / 100 mL  
 — Secondary Contact Guideline: 175 enterococci / 100 mL

Health Canada (2012). Guidelines for Canadian Recreational Water Quality, Third Edition. Water, Air and Climate Change Bureau, Healthy Environments and Consumer Safety Branch, Health Canada, Ottawa, Ontario. (Catalogue No H129-15/2012E).

For more information on fecal bacteria monitoring in the LaHave River Estuary, please contact Project Coordinator Shanna Fredericks at (902) 634-9977 or [shanna@coastalaction.org](mailto:shanna@coastalaction.org).