

Sewage Blues

in the

LaHave River Estuary

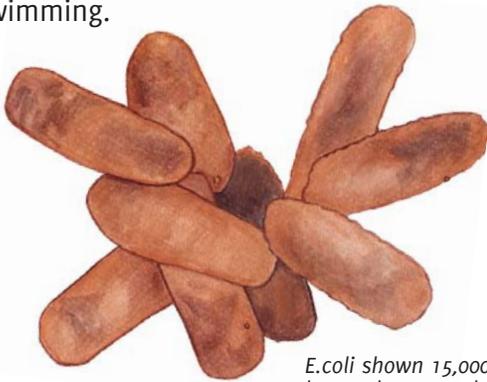
Concerns for Homeowners

Why focus on this section of the river?

The LaHave River Estuary is the tidal part of the river from Bridgewater to the coast and there's more sewage in it than there should be. The estuary is concentrated with homes along the riverbanks where local residents enjoy river life. People, cormorants, kingfishers, osprey, and loons live here and eat the fish. Salmon have to swim through the estuary to the upper river to spawn and young salmon have to swim to sea. Other fish and shellfish live here too. Then there's the view, boating, skating, and swimming.



Living along side the LaHave Estuary



E.coli shown 15,000 times larger than actual size.

How do we know there's too much sewage here?

Bluenose Coastal Action Foundation (BCAF) is responsible for a bi-weekly water quality monitoring program which has been collecting and analyzing data since autumn 2007 from the LaHave watershed. Testing results suggest too many fecal coliform bacteria (such as *E. coli*), too much nitrogen, and too much phosphorus - too much of the time. These high levels of fecal coliforms and nutrients are signs of untreated sewage (visit www.coastalaction.org for details).

What's the problem with fecal coliforms and nutrients?

Fecal coliforms cause disease. Their presence indicates the potential for other waterborne illnesses such as viruses to be present in the water. Often fecal coliform levels have exceeded guidelines for recreational water use (see Canadian Council of Environment Ministers Water Quality Guidelines at www.ccme.ca). Nitrogen and phosphorus allow plants and algae to grow excessively in the LaHave in the summer. When these life forms die, oxygen in the water is consumed and there is nothing left for fish to breathe.

Where are they coming from?

Farming and wildlife contribute fecal coliforms and nutrients to the river; however, most come from human waste. Much of the sewage from Bridgewater and further up the river is treated in government-run treatment plants for Bridgewater, Cookville, and New Germany. Good farming practices also help reduce contaminants. Outside of these communities - where houses and businesses are spread out along the river and its branches and brooks - homeowners are responsible for their own sewage treatment systems. Some of these systems work; some don't. Some homes have a 'straight pipe' system; that is, toilets flush straight in to the LaHave. The 1993 study of the estuary shows that 830 households along the estuary had systems which weren't working or had straight pipes (*LaHave River Regional Sewage Treatment Strategy: Final Report*. Porter Dillon, 1993. Appendix D).



BCAF technician recording raw data for bi-weekly water quality monitoring project



Want to learn more?

This issue was discussed on CBC radio on September 22 and 23, 2011. Go to www.cbc.ca/informationmornings/archives/ to find the broadcast.



What can a homeowner do?

If you have a septic tank or a holding tank, have it pumped regularly. If you don't know a certified person locally, look in the yellow pages of the phone book under Septic Tanks - Cleaning. The pumper truck operator can advise you on how often you should have your tank pumped and will take the contents to the recently opened, state-of-the-art sewage lagoon at the municipal waste management facility. You can rest easy.

If your **system isn't working** or if you have a **straight pipe** things get more complicated. Here are some options:

- Installing a privy (outhouse) approved by NS Dept. of Environment is legal if you don't have running water. Most of us have running water.
- An approval from NS Dept. of Environment is not required for installing a composting toilet because it has no watery output. But you still have to treat water running from sinks and showers.
- Install a septic tank with a drainage field that can handle at least 1000L/day (This is for new construction; however, there are cases where smaller volume systems can be designed to replace a malfunction if the 1000L/day can't be met). This is going to cost money.

How much money?

You must hire a qualified person from a list on the NS Dept. of Environment's website to come and assess conditions on your property to determine the appropriate options. There are various kinds of drainage fields for septic tanks with 2012 prices ranging from about \$10,000 to \$30,000.

Is your property with an existing house large enough to accommodate a standard septic tank and drainage field (for information on horizontal clearances see On Site Sewage Disposal Systems Technical Guidelines at [www.gov.ns.ca/nse/pages 32-33](http://www.gov.ns.ca/nse/pages32-33))? If not, the person you hire can modify requirements or put forward other options to fit the situation such as a peat system, a sloping sand filter, or a holding tank. Look into long term maintenance costs for these options.

But wait!

Bluenose Coastal Action Foundation can offer you free and confidential advice from a qualified person (902-634-9977 or toll free at 1-888-551-5586).

Through the NS Dept. of Environment's *Environmental Home Assessment Program* a technician can come to your property and advise you on what you may be required to do; furthermore, the technician can suggest any government assistance available. This advice is offered as part of a government-supported program; however, no contact is made with government officials during this period and your information remains confidential. This allows time to get some money together before going ahead. Once you apply for a grant or phone a qualified person on the NS Dept. of Environment list, you become open to the regulatory system. Please visit <http://www.gov.ns.ca/nse/hap/> and <http://www.gov.ns.ca/nse/wastewater/> for related links and more information.



Humans and wildlife rely on LaHave Estuary waters being clean and healthy

There is another option.

Another option is now operating in Conquerall Bank. Locations where homes (and wells) are close together, as in this area and others like Dayspring, LaHave, and Riverport, groups of homeowners can approach the Municipality of the District of Lunenburg requesting systems serving multiple homes (using paid installments through the tax system).

Together we can make a difference.

**Lunenburg Queens
Federation of Agriculture**

LaHave River Watershed Committee

