Advanced Septic Systems

The ideal solution for your **home** and **cottage**

Environmentally Friendly and Sustainable



For more information: www.waterloo-biofilter.com 1-866-366-4329 info@waterloo-biofilter.com





The Waterloo Advantage

Waterloo Biofilter Systems Inc. is a

Canadian-owned and operated company that has for over 20 years developed, designed, manufactured, and maintained advanced onsite wastewater treatment systems.

We are committed to helping protect the environment with technology focused on high quality treatment, low energy usage, and system robustness.



UNIVERSITY OF WATERLOO

The patented Waterloo Biofilter system was developed at the University of Waterloo's Centre for Groundwater Research.



Permanent Filter Medium

The key to the Waterloo Biofilter system is the absorbent foam filter medium that has been optimized to physically filter and biologically treat sewage. This filter medium is warrantied for 20 years and will likely last generations.

A Waterloo is designed to perform on difficult sites



Small or **Remote Lots**



Bedrock or **Clay Soils**





High Watertable

Environmentally Sensitive Areas

The environmentally friendly choice



Step 1

Wastewater is collected and distributed over the Waterloo foam filter medium.



Step 2

Wastewater slowly trickles down through the foam pieces where natural occurring bacteria remove contaminants.



Step 3

After passing through the foam, the treated water is put back into the environment.





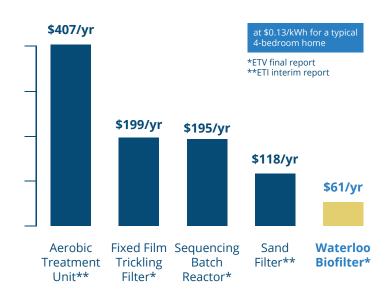
Low Energy, Low Operating Cost

Waterloo Biofilters use very little energy; up to **85% less** power than aeration technologies using air compressors. In the long-term we have the lowest operating costs.

Few moving parts

Less energy use

No noisy air compressor





Nitrogen Removal

Standard Waterloo systems remove up to **50-65% total nitrogen**, helping to reduce nitrate levels in groundwater and protect surface waters. With the **WaterNOx-LS™** system add-on, up to **95% TN removal** can be achieved passively and cost-effectively.



Phosphorous Removal

With the **Waterloo EC-P™** system add-on, greater than **95% total phosphorus** can be removed – helping protect surface waters from blue-green algae and lake eutrophication. Compact and low energy, the Waterloo EC-P™ permanently removes phosphorus without chemicals or additional sludge production.



A Waterloo is discrete and minimizes raised mounding and tree removal. A variety of product configurations are available to suit your unique site conditions and personal tastes.



Seasonal Performance

Whether for seasonal or year-round use, the Waterloo is designed to withstand extreme cold temperatures and can easily handle variable flow rates.



Made in Canada Tough Enough for Canada

Residential Products



Waterloo Shed Biofilters are spray foam insulated for winter operation, clad in attractive composite siding, and roofed with 50-year shingles. Shed Biofilters are compact and require only a single pump to operate.



Waterloo Flat Bed Biofilters are constructed of strong yet lightweight fibreglass shells. Flat Bed Biofilters easily blend in with landscaping and require only a single pump to operate.



Waterloo Basket Biofilters are constructed of a rigid steel mesh coated for corrosion protection. Basket Biofilters are placed in a below-ground concrete tank and are ideal for larger homes or increased nitrogen removal.



Waterloo HDPE Tank Biofilters are constructed using very durable below-ground high-density polyethylene tanks. HDPE Tank Biofilters are ideal for difficult access sites and increased nitrogen removal.

Proved and Approved

The Waterloo Biofilter has been thoroughly tested and proven effective by numerous 3rd party verification programs. We pride ourselves on the high treatment levels our technology consistently demonstrates.

Is yours a Waterloo?

CAN/BNQ Certification

	Median Concentration	Percent Removal
cBOD ₅	4 mg/L	98%
TSS	4 mg/L	> 98%
Fecal Coliforms	17,900 cfu/100mL	> 99%

ETV Verification

	Median Concentration	Percent Removal
cBOD ₅	7 mg/L	96%
TSS	5 mg/L	97%
Total Nitrogen	13 mg/L	65%