



December 7, 2018

BACKGROUND

The Thames River Phosphorus Reduction Collaborative (PRC) is led by the Ontario Federation of Agriculture and the Great Lakes and St. Lawrence Cities Initiative. Its purpose is to reduce the amount of phosphorus entering our lakes and rivers, and ultimately Lake Erie. The PRC sent out a request for proposals in July, 2018 and eleven proposals were received by the deadline of September 28, 2018.

Here are the companies, organizations and proposals that have been funded:

Upper Thames River Conservation Authority Collaboration

The [Upper Thames River Conservation Authority](#) (UTRCA) is working with [Bluewater Pipe](#) and McCutcheon Farm Drainage Ltd. on farms in the London area. They'll be testing an on-farm sorptive media phosphorus filter with a removable cartridge connected to field tiles.

The UTRCA is one of 36 Conservation Authorities in Ontario. The jurisdiction covers the upper watershed of the Thames River, which includes 3,421 square kilometres of land and more than 500,000 people in southwestern Ontario.

Bluewater Pipe is a company located in Huron Park, Ontario that makes corrugated plastic tubing for agricultural land drainage – selling to both farmers and drainage contractors in southwestern Ontario.

McCutcheon Farm Drainage provides London area farms with drainage solutions.

ESSRE Consulting Inc.

ESSRE is a Pennsylvania-based technology development and engineering design services firm. The company will be working with the Thames River PRC to test novel nano-enhanced adsorptive media that remove and recover dissolved phosphorus (SRP, or soluble reactive phosphorus), thereby enabling the safe, sustainable reuse of the captured phosphorus. The media are configurable to capture SRP that runs into field drainage tiles, that exits through farm edge-of-field drainage pipe into a specially designed media box, or that, when properly filtered, after it collects in municipal drainage systems.

Silt Sock Environmental

[Silt Sock Environmental](#) manufactures the fabric filter 'Silt Sock' at its Ailsa Craig, Ontario facility. The company makes various products for sediment control and is working with ESSRE Consulting to demonstrate the use of specialized filter sock products to adsorb soluble phosphorus from farm runoff water. Their filter can be fitted around drainage inlets at the field surface or with a basket inside the inlet. Silt Sock Environmental will be working on installations at various PRC sites.

Waterloo Biofilter Systems Inc.

[Waterloo Biofilter Systems Inc.](#) is an Ontario company that develops, designs, manufactures and maintains advanced onsite wastewater treatment systems. The company will install its Waterloo EC-P™ technology at a municipal drain – pump station. The technology uses low-energy electrochemistry to produce iron ions which react with phosphate ions in the water, creating insoluble iron-phosphorus minerals that can be filtered out. This process can also be used to capture and reuse phosphorus as a fertilizing soil amendment.

Muddy River Technologies

[Muddy River Technologies](#) is a Delta, British Columbia based firm that develops water and wastewater treatment systems. The company will use its patent-pending Amprey process to remove dissolved phosphorus at a municipal drainage site. The process involves using electricity to slowly dissolve lava rock with the resulting iron, magnesium, aluminum and calcium ions binding to phosphate ions in the water to form a solid material that can be removed.

For more information, please visit www.thamesriverprc.com