UPPER THAMES RIVER
CONSERVATION AUTHORITY

fyi

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Photo: Red-breasted Nuthatch, B. Gallagher

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## New Funding announced for Medway Creek Project

In December 2019, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) announced new funding for the Medway Creek subwatershed project. The new On-Farm Applied Research and Monitoring (ONFARM) project will continue work that began in 2015 in the Upper Medway Creek subwatershed through the Great Lakes Agricultural Stewardship Initiative. The ONFARM project is being administered by the Ontario Soil and Crop Improvement Association.

The new funding will continue monitoring of the watercourse until spring of 2023 and will add a data collection component for land management practices, to better understand how farm management impacts water quality. Farmers in this area are currently working to improve water quality by planting a high percentage of the farmland to cover crops, which protect the soil from erosion and nutrient loss over the non-growing season. The new funding will help strengthen the water quality dataset collected.

ONFARM partners will also work with participating farmers to undertake soil sampling to benchmark and track changes in soil health over the years to come.

**See the news release from OMAFRA**.

*Contact: Michael Funk, Agricultural Soil & Water Quality Technician*

Planning is underway for new edge-of-field monitoring components under the new ONFARM project.

## UTRCA Hosts CISEC Training

The UTRCA's Watershed Conservation Centre hosted the Canadian I Certified Inspector of Sediment and Erosion Control (CAN-CISEC) training course from November 13-14, 2019. CISEC is the leading certification program for erosion and sediment control inspectors in Canada and the US. In Ontario, the CAN-CISEC program is currently run through a partnership between the Toronto and Region Conservation Authority and CISEC, Inc., which is based in Parker, Colorado.

Construction sites are a potential source of sediment and other substances that can get into waterways and have a significant impact on water quality. Due to the economic and environmental impacts associated with sediment spills from large infrastructure and development projects, more and more construction sites in the GTA and beyond are requiring site supervisors and inspectors to have CISEC certification.

A wide range of industry professionals attended the course including conservation authority regulations staff and municipal partner staff working in development review, public works, and water/wastewater and

stormwater management. Municipal staff in attendance included representatives from the City of London, County of Oxford, Municipality of Thames Centre, Municipality of Middlesex Centre, Town of Ingersoll, and the Town of St. Marys. For those applicants who met strict qualification and experience requirements, the course was followed by optional exams including the four hour (Level III) Full Certification exam.

This stormdrain inlet has been overwhelmed with sediment from a construction site.

Proper sediment and erosion control measures are in place for this municipal bridge project.

Participants successfully completing the certification program and exams have demonstrated comprehensive knowledge of the principles and best management practices of controlling sediment, erosion, and other stormwater pollutants from leaving active construction sites and entering protected watercourses and wetlands.

The opportunity for education and professional development (for our staff as well as our municipal partner staff) in the areas of sediment and erosion control best management practices was part of UTRCA's commitment and work plan to meet our Water Quality Target. We are pleased to announce that all UTRCA Regulations staff passed the exam with flying colours and Cari Ramsey, Jessica Schnaithmann, Brent Verscheure, and Karen Winfield are all now fully certified as CAN-CISEC inspectors.

*Contact: Vanni Azzano, Community Education Supervisor, or Karen Winfield, Land Use Regulations Officer*

UTRCA Community Education and Partnerships staff received the Innovation Award for developing the Focus on Flooding Escape Room.

## Rekindle the Spark Conference – Presentations & Innovation Award

UTRCA Community Education staff recently attended the Rekindle the Spark Education Conference in Orangeville. Environmental educators from across Ontario attended, including staff from 18 conservation authorities and two school boards. UTRCA staff gave two presentations at the conference; Maranda MacKean and Erin Dolmage highlighted Wildwood's Outdoor School program and Karlee Flear presented on the UTRCA's Focus on Flooding education programs.

Our Education and Partnerships staff were also honoured to receive this year's Conservation Ontario "Innovation Award" at the conference. The award is given to a Conservation Authority that demonstrates leadership in innovation within a conservation education framework. Submissions for the award are made prior to the conference and voted on by conference attendees. The UTRCA received the award for the **Focus on Flooding Escape Room**. Funding to develop the Escape Room was provided by the National Disaster Mitigation Program.

*Contact: Karlee Flear, Community Education Supervisor*

## Slag Filter Phosphorus Reduction Project

The UTRCA, in collaboration with Bluewater Pipe Inc. and McCutcheon Farm Drainage, is testing the feasibility and practicality of using slag, which is leftover material from metal refining, to filter water from agricultural field tiles. The project goal is to reduce phosphorus loadings into local streams and rivers. The design being tested was manufactured locally at a cost that is reasonable for farmers to consider installing.

The slag filter is being tested on a 25 acre field, which is cropped with a rotation of corn, soybeans and alfalfa. The field has been systematically tiled, with perforated horizontal pipes installed underground throughout the field to collect excess water and move it to a nearby stream. The farmer follows a nutrient management plan when spreading manure and commercial fertilizer on the land. However, heavy rain and melting snow can carry these nutrients into the underground drainage tile and then into the watercourse.

A control box (in the centre) diverts water from the underground field tile into two filter units of different sizes, to test their ability to remove phosphorus. The water is sampled before and after the filter units.

The project is testing two sizes of filter units. Each unit is comprised of a large diameter vertical plastic pipe with a removable slag cartridge. Water from the field tile enters from the bottom, seeps up through the slag cartridge, and then returns to the tile line. The cartridge contains clean pea gravel and slag, which has been approved by government as a low-risk substance.

The project is funded by the Thames River Phosphorus Reduction Collaborative.

*Contact: Craig Merkley, Conservation Services Specialist*

## Stream of Dreams


The Stream Talk focuses on watersheds, stream health, and stormwater impacts specific to the school community.

Community Education and Partnerships staff had an exciting and busy fall, providing the Stream of Dreams programs to all the students at Byron Somerset, Emily Carr, Little Falls, Holy Name, Shakespeare, Sir Arthur Currie, and W Sherwood Fox elementary schools. We reached more than 3,000 students with environmental messaging around watersheds, stormwater and how we can all have a more positive impact on our water.

In the Fish Painting Workshop, each student paints a recycled plastic fish to create a Dreamfish.

This spring, we will be visiting many more students at AJ Baker, Caradoc, Laurie Hawkins, Northridge, South Perth, and Trafalgar schools. Each class will participate in a Stream Talk and a Fish Painting Workshop, customized to their grade and tied to the curriculum.

*Contact: Linda Smith, Community Partnerships Specialist, or Vanni Azzano, Community Education Supervisor*

The Dreamfish are installed on a fence at the school to create a Stream of Dreams mural representing the school's vision for its watershed, and reminding the local community that all we need to take of care of our water and ecosystem.

The UTRCA's River Safety education program received a donation from Enbridge, which supports safety, community, and the environment through their community investment program.

## New River Safety Program Sponsors

We would like to say a BIG thank you to two new River Safety program sponsors – **Enbridge** and Forest City Fire Protection & Security. River Safety is an educational program delivered to Grade 2 students in our watershed. The program uses fun, hand-on activities to teach students how to stay safe near rivers and streams.

Optimist Clubs across the watershed have supported this program for the past 20 years. We are very grateful for their continued support and excited to have Enbridge and Forest City Fire Protection & Security join us in helping to deliver this important message.
*Contact: Karlee Flear, Community Education Supervisor*

## UTRCA Board of Directors Field Tour

As part of the November 26th Board of Directors meeting, the UTRCA's Conservation Services unit (with help from Aquatic Biologist Michelle Fletcher) showcased our water quality, soil conservation, and forestry in-field activities. The tour kicked off with a visit to view past tree planting projects, specifically a 12-year-old sugar maple plantation and a 26-year-old conifer windbreak and stream buffer, and discuss site preparation for a spring 2020 mixed species tree planting.

The second stop looked at a stream restoration project that demonstrated the improvements that can take place when livestock stop going into a creek and floodplain. Planting trees and shrubs and enhancing the creek with stone riffles and point bars has improved water quality and aquatic habitat, resulting in an increase in fish species and total numbers.


The third stop was the base station for the Upper Medway Creek Subwatershed Project. Staff discussed local projects, including controlled drainage, a slag filter to remove phosphorus, and creek and edge-of-field water quality sampling methods, among others.

The final stop was to a mixed tree species buffer planted along a stream. On the return trip to the WCC, the group visited a stormwater management pond in Thorndale to see aquatic and upland plantings facilitated by the UTRCA's Communities for Nature program.

A tour booklet details the projects highlighted at the various stops, as well as other nearby projects.
*Contact: Brad Glasman, Manager, Conservation Services*

## Board of Directors - On the Agenda

The next UTRCA Board of Directors meeting will be on January 28, 2020, at the Watershed Conservation Centre, located in Fanshawe Conservation Area. Draft agendas, approved minutes, and audio recordings are posted at **www.thamesriver.on.ca**, on the "Board Agendas & Minutes" page.

- Delegation: Motherwell Heritage Group
- Ontario Flood Advisor Report Summary
- Summary of Consultation Meeting with Minister Yurek
- 2020 Draft Budget: Summary of Municipal Input to Date
- Administration and Enforcement - Section 28
- Board of Directors Correspondence: Summary of Municipal and Conservation Authority Policy and Practice
- Alternative Meeting Options
- 2019 Sick Time Usage Summary
- 2020 Board of Directors Elections

*Contact: Michelle Viglianti, Administrative Assistant*