UPPER THAMES RIVER
CONSERVATION AUTHORITY

fyi

March 2021


Horned Lark

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What's happening in the Medway Creek watershed

The UTRCA is partnering with the Friends of Medway Creek to offer their first ever webinar, on Tuesday, March 16 at 7 pm.

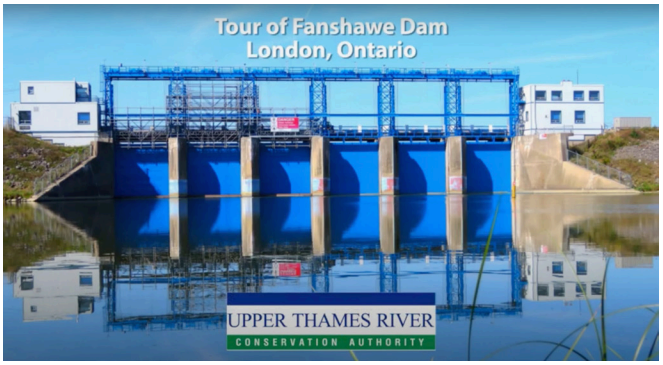
Tatianna Lozier, UTRCA Agricultural Soil and Water Quality Technician, will be discussing stewardship practices to help reduce erosion from the farm. With the days getting longer and the snow melting, this topic is very timely!

While the webinar will focus on residents of the Medway Creek watershed, everyone is welcome! Click here to register.

Contact: Julie Welker, Community Partnership Specialist

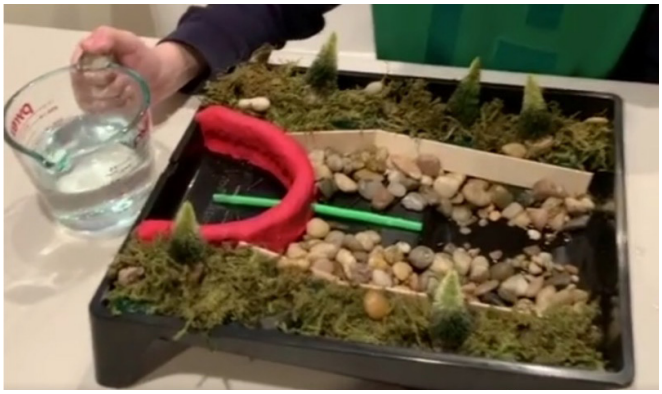
Virtual Field Trip to Fanshawe Dam for Remote Learners in TVDSB

Fanshawe Community Education staff launched their first virtual field trips for the Thames Valley District School Board (TVDSB) this month. Nearly 300 grade 5 students participated in the new "Fanshawe Dam - Form, Function and Forces" virtual field trips designed specifically for remote learners.



Teachers were provided with a Teacher's Guide, lesson plan, and additional resources to lead their students through an engaging, curriculum-based program focused on the Fanshawe Dam and flood management in our watershed. The lesson included a video tour of the dam featuring Kim Gilbert, who highlighted the history of flooding in our watershed and the role the Fanshawe Dam plays in protecting residents from the forces of floods. Kim also identified and described the forces that act on the Fanshawe Dam. In other videos, Alexis Stupich conducted experiments with our flood plain model to help students visualize the role that groundcover, such as wetlands, and dams and dykes play in flood management and prevention.

After participating in the teacher-led lesson and watching the videos, students were given instructions on how to complete a STEM Challenge design at home. Students were tasked with using natural and/or household materials to create a strong, stable structure to manage flooding while withstanding various outdoor, environmental forces. Students were very creative in their choice of materials and in their designs, and many students chose to incorporate wetlands and other natural, permeable groundcover in their final design. Once students built their design, they conducted three experiments on their model - a wind test, a rain test, and a flood test - and made adaptations to their design as necessary, to ensure it worked well in managing flooding and was able to withstand forces.



An example of a grade 5 student's STEM Challenge design for the virtual field trip

As the culminating activity for this field trip, classes participated in a one hour synchronous learning video session with Julie Read via Microsoft Teams. Julie continued the conversation about flood management and mitigation in our watershed, introducing innovative engineering solutions and Low Impact Development (LID) designed to help "slow the flow." Julie then led a "Sharing Slideshow" which featured photos and videos of the students' STEM Challenge designs. Students had an opportunity to explain the design of their structure, share how it held up to the various tests, and give feedback on other students' designs. The synchronous video session ended with Julie answering students' questions and students sharing their reflections.

Staff have received very positive feedback from students and teachers alike for this new virtual program. One teacher wrote, "Thank you for the amazing session! My students LOVED it! I appreciate all the time and effort behind the creation of this field trip!" A student wrote, "I'd like to say that learning about the Fanshawe Dam was fun and I really enjoyed the experiments like the wetlands and the water one. I hope to see the Fanshawe Dam in person when I can."

Fanshawe Community Education staff are thankful for the opportunity to continue to engage directly with students during the pandemic. Sincere thanks go to Erin Mutch, TVDSB Learning Coordinator for Environmental Education, Science and Experiential Learning, for her help in coordinating this virtual program.

Contact: Julie Read, Community Education Supervisor (Fanshawe)

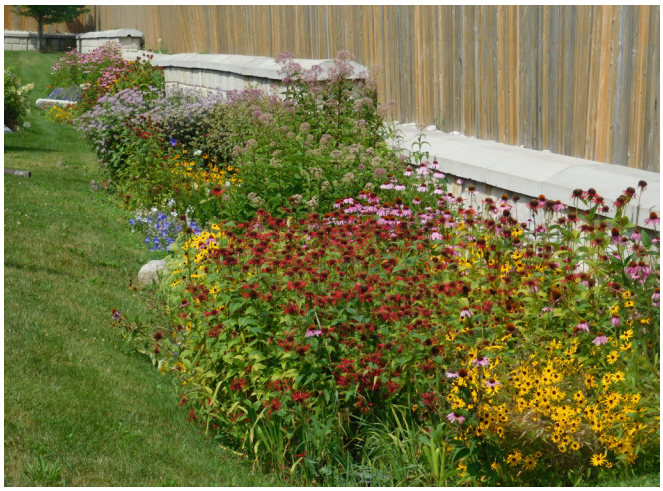
Fusion Landscape Professional (FLP) Program

Stormwater Low Impact Development (LID) uses designs and landscape features to infiltrate, filter, retain, and slow down runoff, in order to reduce the impacts of increased stormwater runoff and pollution. Rain gardens, downspout disconnects, absorbent landscapes, permeable pavement, and green roofs are all examples of LID.

The UTRCA's stormwater LID program facilitates the promotion and implementation of green infrastructure, including LID, to mitigate climate change impacts by improving water quality and delaying runoff into the Thames River. The program, which includes education, outreach, and LID maintenance and monitoring, is targeted at watershed municipalities and residents.

The basis for this LID program is the water quality target in the UTRCA's Environmental Targets: Strategic Plan: "Improve each subwatershed's water quality score by one grade, as measured by UTRCA Watershed

Report Cards, by the year 2037." The actions to achieve this target include creating an Urban Stewardship Program that focuses on reducing stormwater and nutrient runoff by promoting widespread adoption of LID though education, demonstration, and technical support.



Rain gardens and bioswales installed at The Enclave at Victoria Hills, in Ingersoll

In the last few years, UTRCA and City of London staff have received many inquiries from watershed residents asking if we could recommend local landscape contractors with experience installing LID features on residential properties. Seeing a need in the residential market for landscapers with LID experience, staff investigated programs that would meet this need in the landscape industry.

Discussions with Credit Valley Conservation identified the Fusion Landscape Professional (FLP) program as a way to work with watershed municipalities to increase the uptake of residential LID features and reduce residential stormwater runoff. The FLP program also allows the UTRCA to act as a liaison between municipalities, homeowners, and the landscape sector.

Landscape Ontario developed the FLP program in partnership with the Region of Peel and the Regional Municipality of York. The program helps communities address stormwater at the lot level to relieve some of the stress being placed on the existing infrastructure -- stress caused by the increase in impervious surfaces (more urban areas), water demand (growing population), and stormwater runoff (more frequent intense storms due to climate change).

The long-term goal of the program is for healthy and water efficient landscapes that utilize stormwater to become a standard practice in the landscape industry, and to promote FLP certified companies as leaders in the industry.

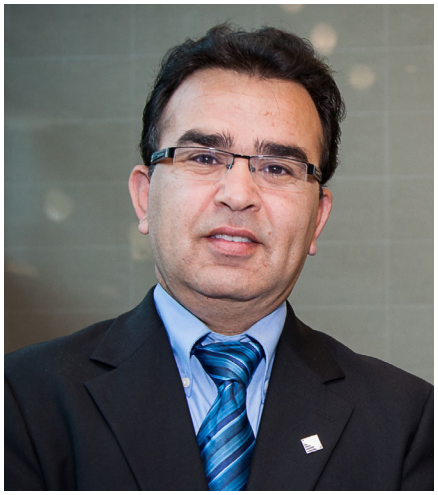
Fusion landscaping combines the art and science of horticulture with the science of hydrology to design, build/install, and maintain aesthetically pleasing, water efficient landscapes. These landscapes optimize lot level stormwater management by using established design principles including form, function, and the environment. LID technologies, such as rain gardens, bioswales, infiltration trenches, and permeable pavers, are installed to capture and use rain water on site, instead of it being directed away from the property.

The UTRCA recently offered the FLP Certification Program at a subsidized rate to members of Landscape Ontario who are located in the UTRCA watershed, in partnership with the City of London and with funding from the Ministry of Environment, Conservation and Parks. Ten landscape professionals, three UTRCA staff, and one City of London staff participated in the virtual training. This was the first time that the FLP program has been offered to the landscape industry outside of the GTA. Positive reviews were received from all participants! After successfully completing the exam, UTRCA staff Vanni Azzano, Julie Welker, and Brandon Williamson are now certified Fusion Landscape Professionals.

FLP CERTIFIED

The UTRCA will maintain a list of local certified Fusion Landscape Professionals which can be used by watershed residents. Staff will continue to partner with the City of London and Landscape Ontario to deliver the FLP program in the UTRCA watershed on an annual basis.
Contact: Vanni Azzano, Community Education Supervisor (Wildwood)

Ontario Volunteer Service Award



Imtiaz Shah, UTRCA Senior Environmental Engineer, was recognized with an Ontario Volunteer Service Award at a virtual ceremony on February 17th. This award recognizes volunteers for providing committed and dedicated service to an organization.

The Ministry of Heritage, Sport, Tourism and Culture Industries presented Imtiaz with a 10 years award for his continued services with Professional Engineers Ontario - London Chapter. Imtiaz chaired the London Chapter for two years, and was vice chair for another two years.

Congratulations, Imtiaz!

Bloodroot – A Sign of Spring

Just when you doubt spring will ever arrive, you spot a small cluster of Bloodroot emerging from the brown leaf litter on the forest floor. Bloodroot (*Sanguinaria canadensis*) flowers in mid to late April and is one of our earliest blooming native flowers. It blooms, is pollinated, sets seed, and dies back by the time the trees leaf out and shade the forest floor.

Bloodroot is found in fertile deciduous woods from the Great Lakes east to Nova Scotia and south to Florida. It is named for the orange-red juice that comes from the rhizome (underground stem) if it is broken. The Latin name also refers to the juice - *Sanguinarius* means "bloody". The juice is used as a dye by Indigenous peoples. The rhizomes and leaves are bitter and toxic and so are not often eaten by wildlife. The rhizomes grow longer each year and branch out to form colonies of plants.

The plant produces a single white flower with 8-10 petals. The flower is short-lived, blooming for only a day or two before dying. It is pollinated by small bees and flies. The flower emerges directly out of the ground on a short stem, wrapped in a large basal leaf which gradually opens up, reaching full size when the flower wilts. The leaves have a distinctive wavy, lobed margin. They go dormant in mid to late summer, which is later than some other spring ephemerals.

The beautiful white flower and distinctive leaf of a Bloodroot plant.

A colony of Bloodroot plants.

Bloodfruit fruit is a spindle-shaped capsule, about 1 inch long, containing 10-15 seeds. The seeds have a fleshy organ called an elaiosome that attracts ants. The ants take the seeds to their nest, where they eat the elaiosomes and put the seeds in their nest debris, where they are protected until they germinate.

Enjoy the Bloodroot flowers while they last, knowing the blooming of other spring forest flowers is not far behind.

Contact: Cathy Quinlan, Terrestrial Biologist

On the Agenda

The next UTRCA Board of Directors meeting will be held virtually on March 23, 2021.

- Review and Approval of the Factual Certificate
- Section 28 Status Report
- 2020 Health and Safety Summary
- COVID-19 Programs & Services Response 2021
- Perth County Official Plan Amendment
- Natural Cover Presentation

Please visit the "Board Agendas & Minutes" page at www.thamesriver.on.ca for draft agendas, audio/video recordings, and approved minutes.

Contact: Michelle Viglianti, Administrative Assistant