



A Season of Growth and Resilience

As spring breathes new life into the Kawartha watershed, it's a perfect time to celebrate renewal, resilience, and the power of community. In this edition of Watershed Watch, we're highlighting the ways in which knowledge, action, and nature come together to support a healthier, more vibrant environment for all.

You'll discover how floodplain mapping is helping to build safer, smarter communities across our region, using cutting-edge technology to guide development and emergency preparedness. We'll also introduce you to the Kawartha Conservation Foundation - a passionate network of volunteers, donors, and changemakers working together to protect and enhance our natural spaces. And, just in time for planting season, we're excited to announce the return of our annual Native Plant Sale, featuring exciting new kits and your returning favourites, making it easier than ever to grow local and support biodiversity.

Spring is a time for taking action - whether you're planting a pollinator-friendly garden, supporting conservation projects, or learning how to adapt to changing weather patterns, there's something for everyone in this issue.

Let's grow together.

The Kawartha Conservation Team



Spring has arrived, and it's the perfect time to explore all the exciting events and professional development opportunities we have planned! Don't forget to check out our Events Calendar and make the most of the season with nature, community, and fun.

[EVENTS CALENDAR](#)

SMART PLANNING STARTS WITH SMART MAPPING: UNDERSTANDING FLOOD RISKS

Water has a way of reminding us who's really in charge. Whether it's a slow, steady rise after heavy spring rains or a sudden surge from an intense storm, flooding can reshape landscapes, disrupt lives, and leave lasting impacts. That's why floodplain mapping is so important, it helps us understand where water goes during extreme weather events and ensures that planning, permitting, and development happen in the right places.

Kawartha Conservation has completed floodplain mapping studies across the watershed, including Bobcaygeon, Burnt River, Fenelon Falls North and South, Dunsford Creek, Mariposa Brook, and several other key areas. These maps aren't just lines on paper, they are essential tools that support informed decision-making at every level, from municipal planning to individual property owners.

"Floodplain mapping provides a science-based approach to managing development," says Galen Yerex, Floodplain GIS/Mapping Technician at Kawartha Conservation. "It helps ensure that new construction happens in safe locations, reducing risks to people and property. It's about making sure we're building in the right places, with the right information."



Galen Yerex, Floodplain GIS/Mapping Technician and GIS/Survey Technician Rylee Goerlitz.

How Floodplains Are Mapped

Mapping floodplains is a highly technical process that combines cutting-edge technology with detailed hydrological data. One of the most significant advancements in recent years has been the use of LiDAR (Light Detection and Ranging) technology. LiDAR uses laser pulses from aircraft to create incredibly accurate, high-resolution 3D maps of the landscape. This data helps scientists and engineers model how water flows during storm events and determine which areas are most at risk of flooding.

"In the past, floodplain mapping relied on older survey methods that didn't always capture the full picture," Yerex explains. "With LiDAR, we can map the terrain with precision down to centimeters, giving us a much clearer understanding of how water moves through the landscape."

Beyond topography, floodplain mapping incorporates a range of data sources, including:

- Historical weather patterns and rainfall data to estimate how much water can be expected in major storm events.
- Flow data, water level data and precipitation data.
- Hydrological models that simulate how rivers, streams, and lakes respond to heavy precipitation.
- Land use data to assess how urban development, deforestation, soils and other human activities impact water flow.

All of these elements come together in sophisticated computer models that generate a floodline, or a line delineating the extent of flooding. Flood maps are created and display the floodline along with their associated flood elevations. These maps illustrate not only where water will go in an extreme storm but also how deep and how fast it will move, critical information for emergency responders, urban planners, and property owners.

Why This Matters More Than Ever

With climate change increasing the frequency and severity of storms, floodplain mapping has never been more critical. The idea of the “100-year storm” is changing; what was once considered a rare event is now happening more often. Heavy rainfall, rapid snowmelt, and extreme weather patterns all contribute to shifting water dynamics, making it essential to have accurate, up-to-date flood maps.

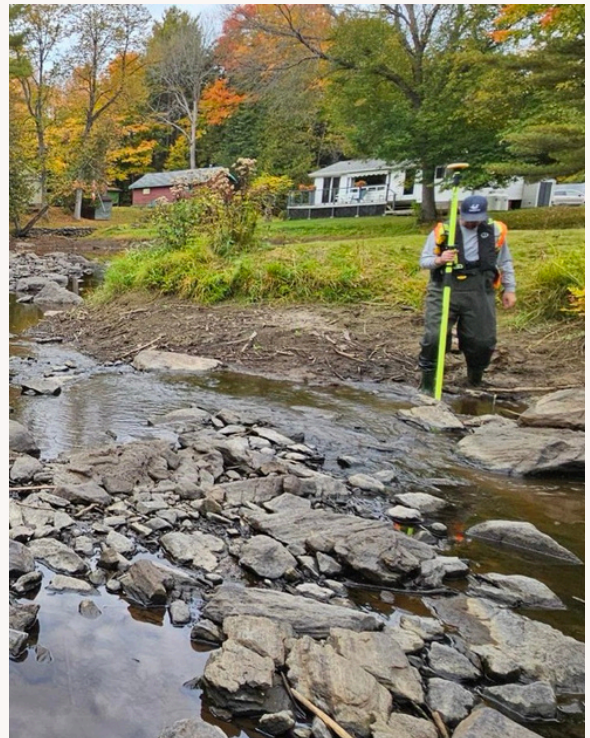
“Flooding doesn’t just impact the people living in flood-prone areas,” Yerex explains. “It affects emergency response, municipal services, infrastructure, and even insurance rates. By having detailed floodplain maps, we can plan better, prepare better, and ultimately protect our communities.”

Beyond emergency management, floodplain mapping plays a crucial role in long-term community planning. It helps municipalities design infrastructure that can withstand extreme weather, guides responsible land use decisions, and ensures that development aligns with environmental realities.

For homeowners, these maps provide valuable insights. Knowing whether a property is in a floodplain can influence everything from home renovations to insurance decisions. “If you understand your flood risk, you can take proactive steps to protect your home, whether that’s flood-proofing, purchasing the right insurance, or even choosing a different location to build,” says Yerex.

As weather patterns continue to change, our approach to water management must evolve with it. Floodplain mapping is one of the most effective tools we have to adapt to this reality, ensuring that we are building, planning, and preparing with the future in mind. By using the best available science and technology, we can make sure that our communities remain resilient, even when the water rises.

To learn more about floodplain mapping or to check out the mapping already completed, visit us online at kawarthaconservation.com/floodplain.



Galen Yerex, Floodplain GIS/Mapping Technician out completing surveys in the Kawartha Watershed.

JOIN THE KAWARTHA CONSERVATION FOUNDATION AND MAKE A DIFFERENCE

Spring is a time of renewal, growth, and fresh beginnings, making it the perfect season to get involved with the Kawartha Conservation Foundation. As the charitable arm of Kawartha Conservation, the Foundation plays a vital role in funding and supporting programs that enhance and protect the region's lakes, rivers, and natural spaces.

By becoming a volunteer or donor, you'll join a passionate group of people committed to environmental stewardship. Whether it's supporting tree planting initiatives, funding environmental education for youth, or helping to improve conservation areas, every contribution makes a meaningful impact.

"The Kawartha Conservation Foundation is more than just an organization; it's a community of individuals who care deeply about our natural environment," said Alison Porter, President of the Kawartha Conservation Foundation. "By working together, we can create lasting change and ensure that future generations can enjoy the beauty and benefits of nature."

Supporting Conservation Through Action

The Foundation actively funds projects that promote sustainability and conservation across the Kawartha watershed. Recent initiatives have included enhancements to Ken Reid Conservation Area, trail improvements, and expanding outdoor education programs.

"Our goal is to inspire people to take action," Porter said. "When you support the Foundation, you're directly investing in the health of our local environment, which benefits everyone in the community."

One of the best ways to get involved is by attending and supporting events, making a donation, or becoming a Foundation member. Whether you're an avid nature lover or someone looking to give back in a meaningful way, the Foundation provides opportunities for all levels of involvement.

A Shared Commitment to the Future

With the support of dedicated individuals and businesses, the Foundation continues to expand its impact. As more people recognize the importance of conservation, there's an opportunity to do even more.

"When people come together for a common cause, incredible things happen," Porter added. "We invite everyone to be part of this movement and help protect the places that make the Kawarthas so special."

If you're interested in learning more or becoming involved, visit [Kawartha Conservation Foundation](#) and take the first step in making a difference today.



Kawartha Conservation Foundation attending an outdoor market during Fall Fest at Ken Reid Conservation Area.

GROW LOCAL, THRIVE LOCAL: 2025 NATIVE PLANT SALE

Spring is in the air, and with it comes the highly anticipated return of Kawartha Conservation's Native Plant Sale! Starting April 7, landowners and gardeners will have a limited-time opportunity to purchase a variety of native plant species that help enhance landscapes, support local wildlife, and promote a healthier watershed.

“Our Native Plant Sale has become a staple event for homeowners looking to create more sustainable and vibrant outdoor spaces,” says Danielle Marcoux-Hunter, Landowner and Community Specialist at Kawartha Conservation. “Native plants are adapted to our region’s climate and soil, requiring less maintenance while providing essential habitat and food sources for pollinators and other wildlife.”

New in 2025 is the Shoreline Tiny Forest Kit, a specially curated selection of native shrubs designed to boost biodiversity and improve shoreline resilience. The kit includes Canada serviceberry, buttonbush, sweet gale, nannyberry, and more, all carefully chosen to provide beauty, stability, and ecological benefits to waterfront properties. “These shoreline plants help prevent erosion, filter runoff, and create essential habitats for birds, bees, and butterflies,” Marcoux-Hunter explains. “It’s a great way for landowners to make a big impact, even in a small space.”

In addition to exciting new offerings, we’re bringing back some of our most popular native plant kits, perfect for a variety of landscapes and gardening goals. The Pollinator Friendly Kit will help attract and support bees, butterflies, and other pollinators with a beautiful selection of nectar-rich flowers. The Shady Oasis Kit is ideal for transforming shaded areas into lush, thriving garden spaces with native plants that flourish in lower light conditions. The Rain garden Kit provides a natural way to manage stormwater while creating a stunning garden that supports local biodiversity. The Waterfront Wonders Kit remains a great choice for shoreline properties, featuring plants that stabilize banks, prevent erosion, and enhance water quality.

“These kits continue to be top sellers because they make it easy for people to incorporate native plants into their landscapes,” says Marcoux-Hunter. “Whether you have a backyard garden, a shady retreat, or a waterfront property, there’s a kit designed just for you.”

With demand growing each year, native plants and kits will only be available while supplies last. Orders can be placed online, with plant pickups scheduled for May 23rd at Ken Reid Conservation Area.

Don't miss out on this opportunity to bring nature home. To learn more about available species, planting advice, and ordering details, visit KawarthaConservation.com or contact Danielle Marcoux-Hunter at dmarcouxhunter@kawarthaconservation.com.



Verbena hastata, Blue Vervain



Geum triflorum, Prairie Smoke

For more information on how Kawartha Conservation can help.
Conservation Lands: conservationareas@kawarthaconservation.com
General info: geninfo@kawarthaconservation.com
Permitting: permits@kawarthaconservation.com
Planning: planning@kawarthaconservation.com