



# ECS Lunch and Learn

*Supporting internal knowledge transfer within TRCA*

June 23, 2021



# Watershed and Ecosystems Reporting Hub

## Introduction and Demo of TRCA's New Reporting Hub

Presented by: Shari Dahmer  
Project Manager, Watershed Planning & Reporting

June 23, 2021

# Background

- TRCA issues The Living City Report Card (LCRC) and Conservation Ontario Watershed Report Cards every 5 years.
- Desire from TRCA's BOD and partners for more frequent and less technical reporting.
- TRCA recently launched the Watershed and Ecosystems Reporting Hub, which will be the modern version of the LCRC.





# Acknowledgements

The development of the Reporting Hub required contributions from 30+ staff across the organization, including:

- Watershed Planning and Ecosystem Science
- Information Technology and Records Management
- Engineering Services
- Erosion Risk Management
- Sustainable Technologies Evaluation Program (STEP)
- Communications, Marketing and Events





# Highlights

- Enables regular updates to watershed and waterfront condition reporting.
- Provides users with plain language orientation to the results of a broad array of TRCA monitoring data.
- Allows users to interactively explore data at various scales, including municipal.
- Reporting data is linked to TRCA's Open Data platform.

# Environmental Indicators



## **Flooding**

*Riverine Flooding • Lake Ontario Shoreline Flooding*

## **Erosion**

*Riverine Erosion • Lake Ontario Shoreline Erosion*



## **Future Precipitation**

*Annual Average Precipitation • Annual Extreme Precipitation • Seasonal Extreme Precipitation*

## **Future Temperature**

*Annual Average Temperature • Extreme Heat*



## **Low Impact Development (LID)**

*LID Supportive Policies and Programs*



# Environmental Indicators (cont'd)



## **Natural Cover**

*Natural Cover Quantity • Natural Cover Quality*

## **Terrestrial Biodiversity**

*Forest Vegetation • Forest Birds • Wetland Vegetation • Wetland Birds • Frogs and Toads • Meadow Birds*



## **Aquatic Communities and Habitats**

*Fish Communities in Streams • Benthic Communities in Streams • Stream Temperature*

## **Groundwater Quantity**

*Groundwater Levels*

# Environmental Indicators (cont'd)



## **Stream Water Quality**

*Water Quality Index*

## **Groundwater Quality**

*Chlorides in Groundwater • Nitrates in Groundwater*



## **Area of Concern Status**

*Beneficial Use Impairments (BUIs) • BUI: Degradation of Aesthetics •*

*BUI: Beach Closures*

## **Nearshore Fisheries**

*Nearshore Fish Communities*

## **Western Durham Nearshore Water Quality**

*Nearshore Total Phosphorus • Nearshore E.coli*




# Each Section Contains:

- Contextual Information
- Reporting on Indicators
  - **Targets:** Where do we want to be?
  - **Current Conditions:** Where are we now?
    - Below Target**
    - Achieved Target**
  - **Trends:** How are conditions changing?
    - Improving:** Conditions are getting better over time.
    - Stable:** Conditions are generally not changing over time.
    - Declining:** Conditions are getting worse over time.
  - **Dashboards:** Dynamic visualization of the data



# Reporting Hub Demonstration




Toronto and Region  
**Conservation**  
Authority

COLLECTION

## Environmental Conditions of the Toronto Region

Explore the Watershed and Ecosystems Reporting Hub

[Get started](#)



**Introduction**  
Explore the Watershed and Ecosystems Reporting Hub.





# Next Steps

- Annual updates to data (where available)
- New indicators
- Incorporation of watershed planning
  - ✓ Enable tracking of progress against watershed plan implementation.





# Request to TRCA Staff

- Help promote the Reporting Hub through your network.
- Let us know how you are referencing the Reporting Hub in your daily work.
- Help us improve the platform by providing feedback.



# Feedback

- Have you explored the Reporting Hub? Did you find it was easy to navigate?
- Are there specific pages and/or indicators that you find most useful?
- Are there additional indicators that you would like to see incorporated into the Reporting Hub?
- Do you have any additional feedback you would like to provide?

If you have any questions or feedback please contact us at:  
[reportinghub@trca.ca](mailto:reportinghub@trca.ca)



# Upcoming ECS Lunch and Learns!

Wednesday, July 14  
11:00am-12:00pm

## **TRCA's Water Resource System**

By Jonathan Ruppert

Wednesday, August 4  
11:00am-12:00pm

## **Broadview and Eastern EA and Port Lands Flood Protection Implementation**

By Meg St John and Maryam Iler

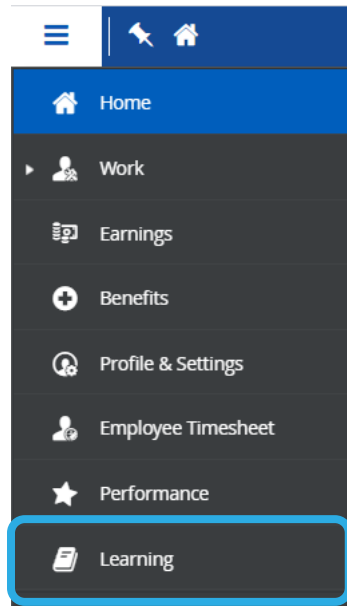
Tuesday, September 14  
11:00am-12:00pm


## **TRCA's Road Ecology Program**

By Lyndsay Cartwright,  
Namrata Shrestha, Andrew  
Chin, David Lawrie



# Learning Management System



 Course Catalog

CATEGORIES


FILTERS

Lunch and Learn

X

Q

4 items




New

Lunch and Learn: Teams, OneDrive and SharePoint

EN

Webinar




New

Lunch and Learn: Hobbies for Mental and Physical Health (Please read...

EN

ILT (Instructor-Led Training)




New

Lunch and Learn: Thermal Imaging for Restoration and Conservation

ENROLLED  
EN

Webinar



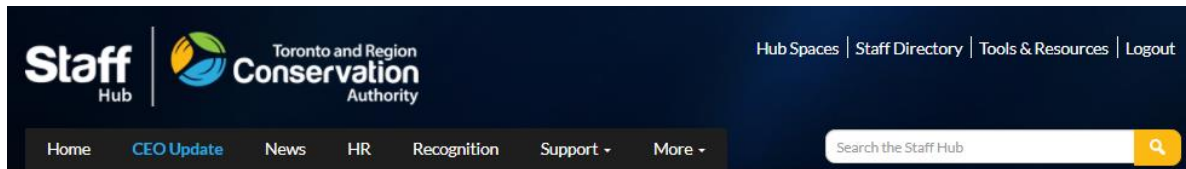
New

Lunch and Learn: Natural Heritage System Update

ENROLLED  
EN

Webinar

# New! Scientific Knowledge Sharing Hub



[Home](#) > [Scientific Knowledge Sharing](#)

## Scientific Knowledge Sharing

Evidence-based decision making is at the core of what TRCA does. Several of our Business Units engage in generating new scientific knowledge to support watershed management actions and decisions.

It is critical that the knowledge generated is effectively shared.

The Scientific Knowledge Sharing platform is dedicated to sharing the latest scientific knowledge generated by TRCA and our partners. It is a place where staff can learn about and engage in the scientific work TRCA is undertaking.

**PLEASE NOTE:** There are several TRCA teams engaged in generating new scientific knowledge. Currently the content on the platform is specific to the Watershed Planning and Ecosystem Science business unit. Additional content from other TRCA teams will be added as the platform develops.



### Knowledge Sharing: Learn More

- [Watershed and Ecosystems Reporting Hub](#)
- [Environmental Monitoring](#)
- [Research and Science Working Group](#)
- [TRCA Research Agenda](#)
- [Development and Engineering Services Hub Space](#)

[SUBMIT A RESOURCE](#)

[GET E-MAIL UPDATES](#)

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### Knowledge Sharing: Latest Updates

[Knowledge Sharing - Climate Change Analysis at the Local Scale](#)

April 19, 2021 by Hub Admin [Featured](#)

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[Scientific Papers](#) +



















[Technical Protocols & Best Practices](#) +

[Videos](#) +

[Webinars and Lunch & Learns](#) +



# Past Recordings

<p><b>Watersheds and Ecosystems Reporting</b> Draft Web Application</p> <p>Laura Del Giudice, Senior Manager, Watershed Planning &amp; Reporting Kristina Dokoska, Project Coordinator, Ontario Climate Consortium</p> <p>September 21, 2020</p> 	<p><b>Introduction to the LID Treatment Train Tool</b></p> <p><i>Presented by – Steve Auger, Sahila Abbasi and Yusef David</i></p> <p>November 5, 2020</p> 	<p><b>TRCA's Recent Floodplain Mapping Updates</b></p> <p>Wilfred Ho*, Christina Bright*, Mike Todd**</p> <p>* Flood Risk Management, Development &amp; Engineering Services ** Information Technology &amp; Records Management</p> <p>November 10, 2020</p> 	<p><b>Working with Indigenous Communities</b></p> <p>Lunch and Learn</p> <p>November 17, 2020</p> 
<p><b>Green Infrastructure in Asset Management Planning</b></p> <p>Presented by: Michelle Sawka, Senior Research Scientist Tracy Timmins, Research Analyst</p> <p>Ecosystem and Climate Science</p> <p>December 8, 2020</p> 	<p><b>Explore TRCA's Biodiversity</b></p> <p>How to get the most from our enormous natural heritage data set.</p> <p>Presented by: Gavin Miller, Flora Biologist, Paul Prior, Fauna Biologist, and Parth Sheth, GIS Technician.</p>  <p>December 17, 2020</p>	<p><b>Evaluating the effectiveness of fish habitat restoration across the Toronto waterfront</b></p> <p>Kaylin Barnes<sup>1</sup>, Lyndsay Cartwright<sup>1</sup>, Rick Porttiss<sup>1</sup>, Jon Midwood<sup>2</sup>, Christine Boston<sup>2</sup>, Monica Granados<sup>3</sup>, Thomas Sciscione<sup>1</sup>, Colleen Gibson<sup>1</sup>, Olusola Obembe<sup>1</sup></p> <p>ECS Lunch and Learn January 14, 2021</p> <p><sup>1</sup> Toronto and Region Conservation Authority <sup>2</sup> Fisheries and Oceans Canada <sup>3</sup> PRERreview.org</p> 	<p><b>Erosion Risk Management Program</b></p> <p>Lunch and Learn Presentation</p> <p>Presented by: Matt Johnston, Associate Director Ashour Rehana, Manager David Gingerich, Analyst</p> <p>January 27, 2021</p> 
<p><b>The Meadoway</b> Research Overview</p> <p><b>The Meadoway</b> COMMUNITY POWERED GREEN SPACES</p> <p>Presented by: TRCA</p>  	<p><b>TRCA's Natural Heritage System Update</b></p> <p>Presented by: Namrata Shrestha, Senior Research Scientist Andrew Chin, Research Analyst</p> <p>Ecosystem and Climate Science Watershed Planning and Ecosystem Science   Development and Engineering Services</p> <p>24 Mar 2021</p> 	<p><b>Thermal imaging for ecosystem conservation and restoration</b></p> <p><b>Jonas Hamberg</b> Mitsun Postdoctoral Fellow TRCA (ECS) &amp; University of Toronto Advisors: Jonathan Ruppert &amp; Patrick James (UofT)</p>  	<p><b>Lake Ontario Fish and Aquatic Ecosystem Health</b></p> <ul style="list-style-type: none"> <li><b>Eat Safe Fish:</b> A Collaborative Engagement with the Mississaugas of the Credit First Nation – by Valerie Francella</li> <li><b>Don River Mouth Naturalization Project:</b> Restoration of Fish Habitat in Toronto – The First Piece in a Very Large Puzzle – by Angela Wallace</li> <li><b>From Rivers Downstream to Lake Ontario:</b> 20 years of aquatic sampling through The Regional Watershed Monitoring and Toronto Waterfront Monitoring Programs – by Jan Moryk and Angela Wallace</li> </ul> 
<p><b>Lake Ontario Restoration Initiatives</b></p> <ul style="list-style-type: none"> <li><b>Determining Practical Key Performance Measures for Wetland Restoration Practitioners:</b> Challenges and considerations – by John Stille</li> <li><b>RAP Delisting and the Adoption of the Integrated Restoration Prioritization Tool:</b> Compiling TRCA data on waterfront and inland restoration planning and projects within the Toronto Area of Concern – by Andrew Ramesbottom and Colleen Gibson</li> <li><b>Winning the War One Battle at a Time:</b> Managing phragmites and DSV at a Toronto waterfront park – by Jennifer Smith</li> </ul> 	<p><b>Precision Biomonitoring Webinar Series:</b></p> <p><b>PRECISION BIOMONITORING</b> Intelligent DNA Solutions</p> <p><b>eDNA: Applications, Advantages and Implications!</b></p> 	<p><b>Lunch and Learn</b></p> <p><b>Wetlands, Warehouses or Both? – The Story of Project Lonestar and the Lower Duffins Wetland Complex.</b></p> <p>Presented by: Steve Heuchert, Development Planning and Permits Shauna Fernandes Chagani, Planning Ecology</p> <p>May 12, 2021</p> 	<p><b>Long-Term Monitoring of Lake Ontario Coastal Wetlands Reveals Distinct Water Quality Profiles Associated with Hydrogeomorphic Type</b></p> <p>Kathryn Thomas<sup>1</sup>, Krista Chomicki<sup>2</sup>, Andrea Kirkwood<sup>1</sup></p> <p><sup>1</sup> Ontario Tech University <sup>2</sup> Toronto and Region Conservation Authority</p> 



A person is walking a dog on a dirt path through a dense forest. The path is surrounded by tall trees and lush green foliage. The scene is captured from a slightly elevated angle, showing the path leading into the distance. The overall tone is serene and natural.

# Thank you

For questions about the ECS Lunch and Learn Series, please contact:

Sharon Lam  
[sharon.lam@trca.ca](mailto:sharon.lam@trca.ca)