

# Lake Simcoe Region Conservation Authority subwatershed plans:

Where have we come from, and what does the future hold?

Lake Simcoe Region Conservation Authority Board of Directors

March 24, 2023

Pam Strong



**Lake Simcoe Region**  
conservation authority



# Overview

- Early plans
- Current Conservation Authority subwatershed plans
- Implementation successes
- Lessons learned
- Development of a new subwatershed plan framework

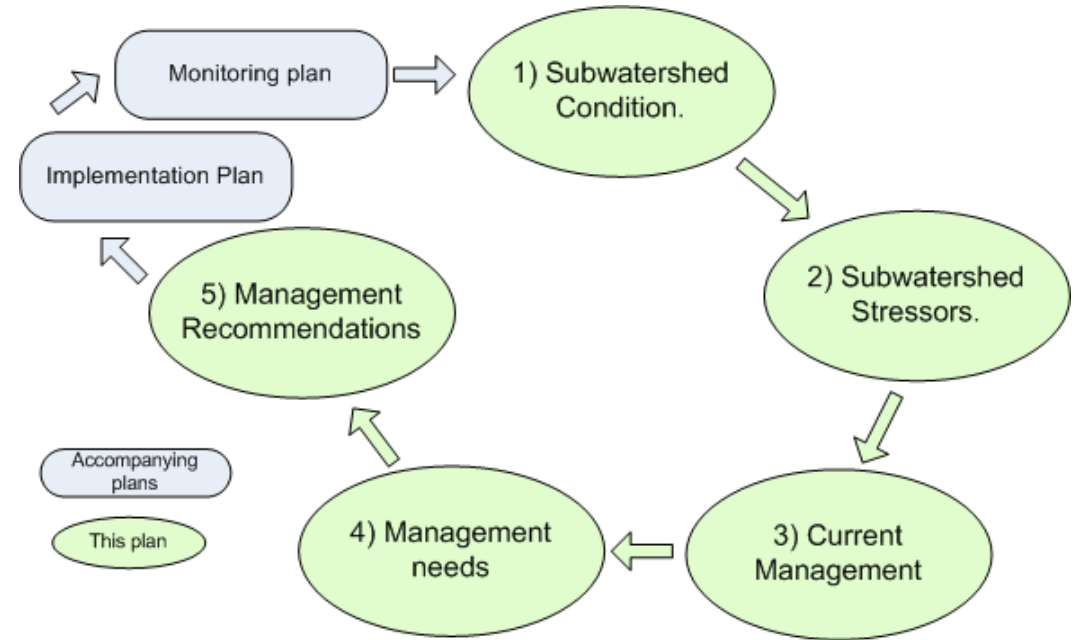
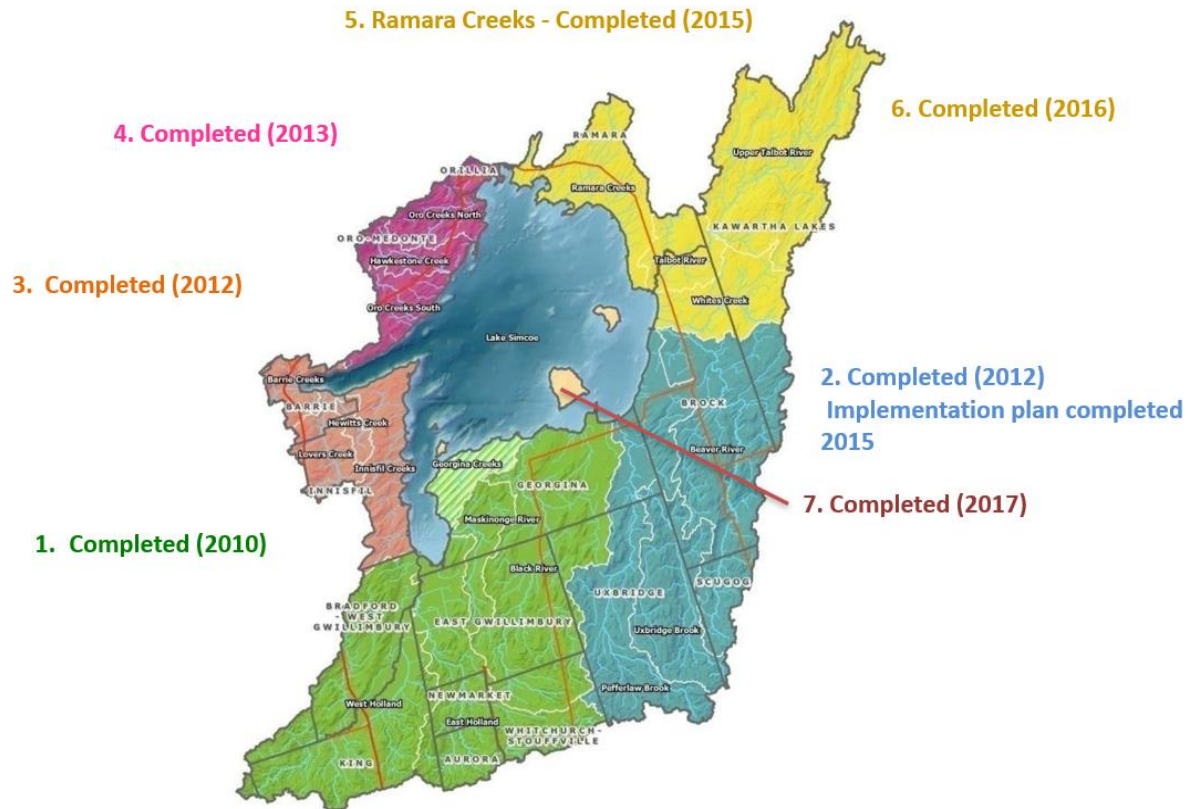


# Early management plans

- The Upper Holland Conservation Report was completed in 1953
  - Among first watershed management plans in Ontario
- Other subwatershed plans were completed in the 1980s and 1990s
- The most current plans were the first coordinated effort to cover the watershed



# Current subwatershed plans



- Developed between 2010 and 2017
- Completed for all subwatersheds and Georgina Island
- Large PDF documents
- Consistent structure

# Plan implementation

- Shared responsibility, coordinated by the Conservation Authority
- Tracked, and reported annually to Board and municipal Clerks
- Many successful collaborations and partnerships
- Achieved more than 90% of our recommendations



# Plans in action – Kettleby Creek barrier removal



- Provincially endangered Redside Dace found in Kettleby Creek
- Barriers and habitat alteration and degradation are major stressors



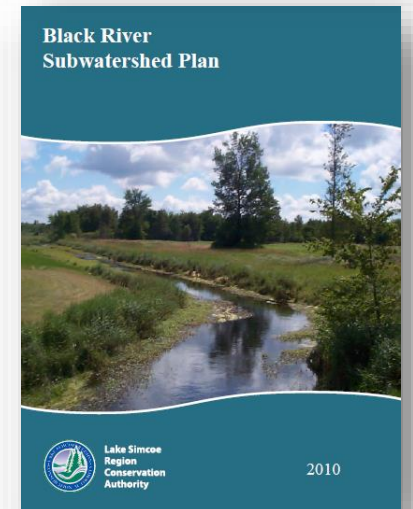
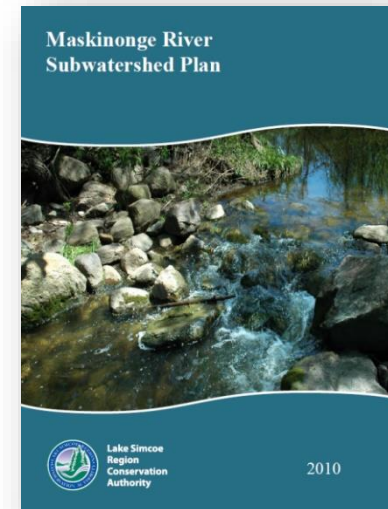
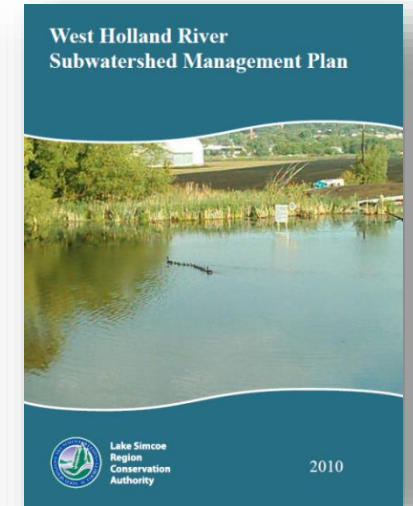
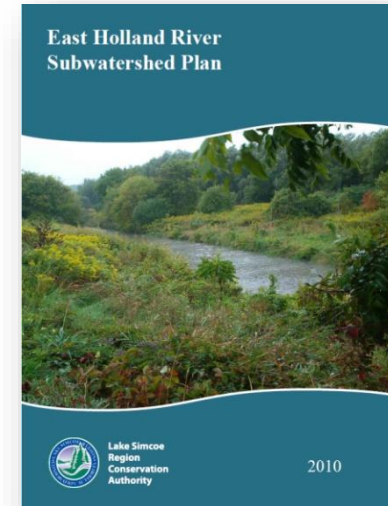
# Action on the ground



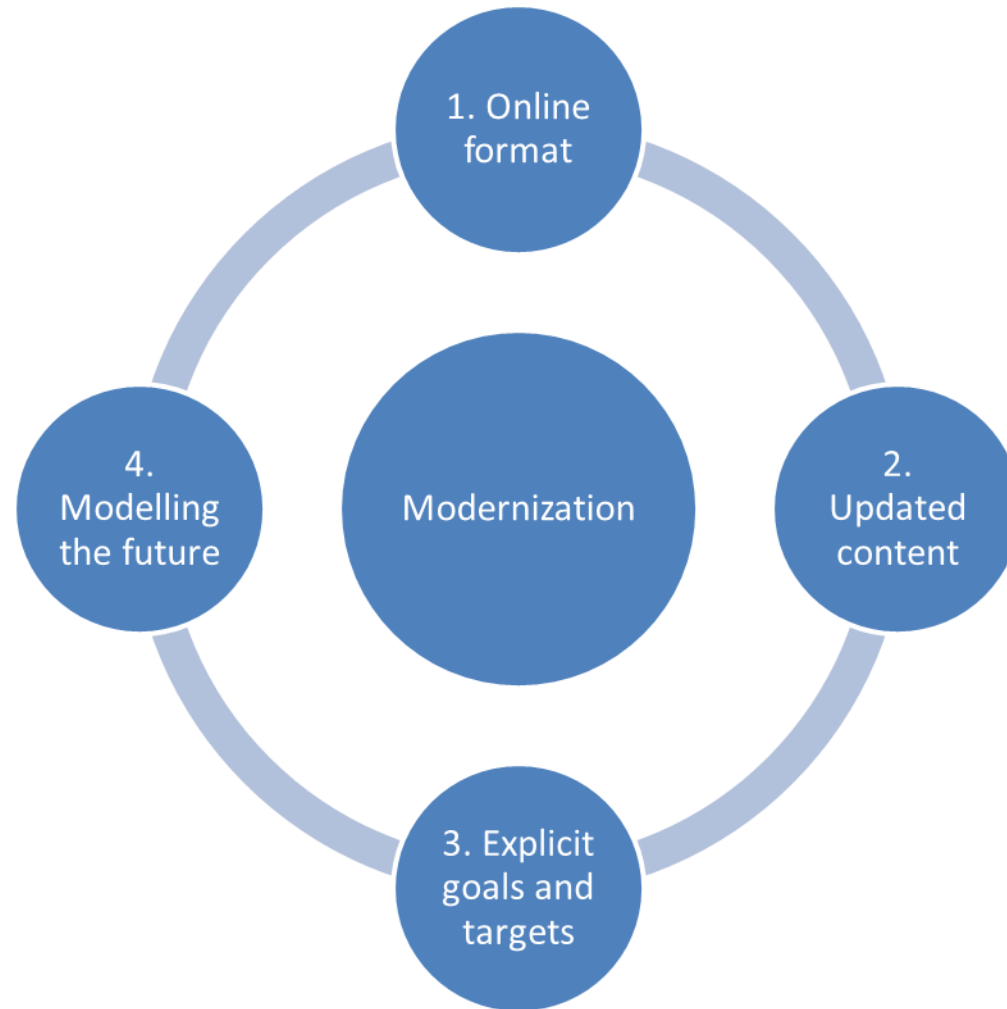


# Lessons learned

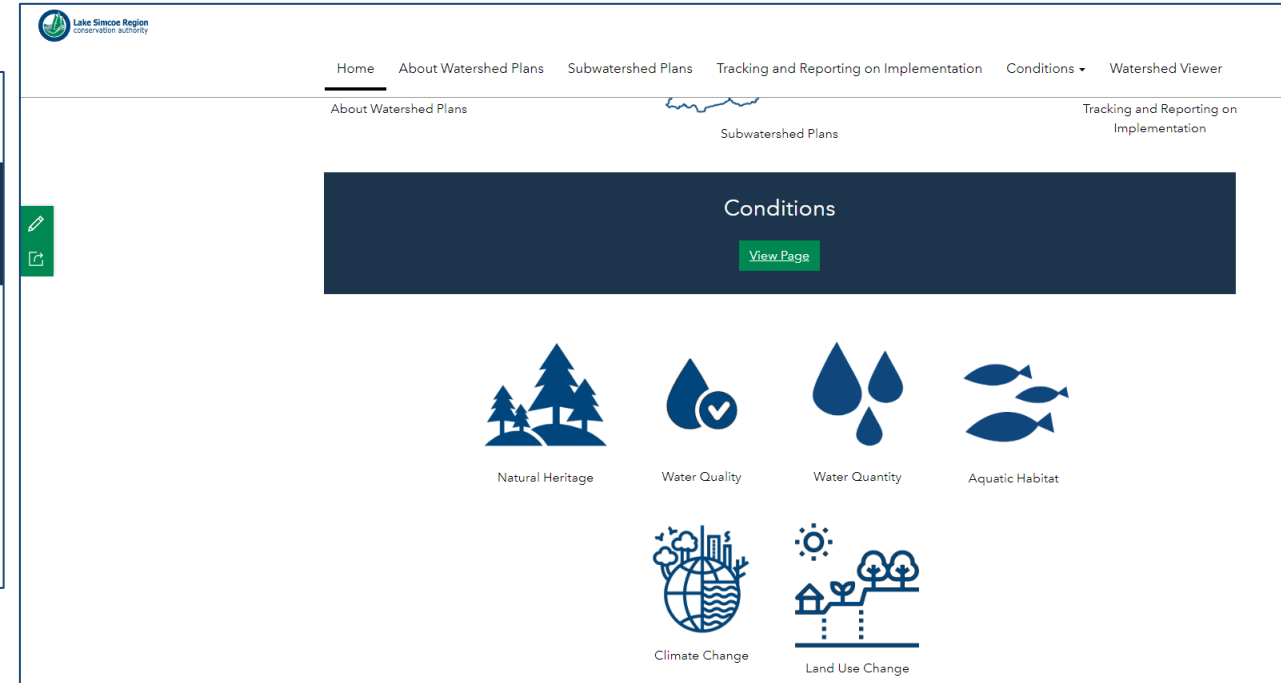
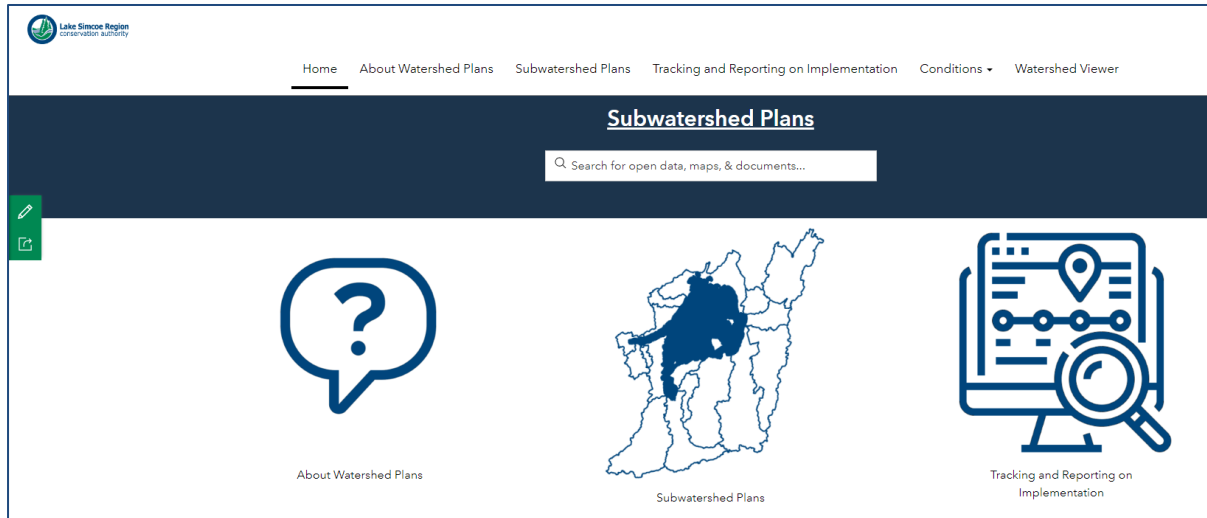
- PDF documents become dated quickly
- New information is available:
  - Policy changes: Conservation Authority, municipal, provincial
  - Conservation Authority studies
  - Models
  - More than 12 years of new monitoring data
- Need to address emerging issues (e.g. climate change)
- **Users are looking for a different approach**



# Subwatershed plan modernization



# Subwatershed plan site: a tour



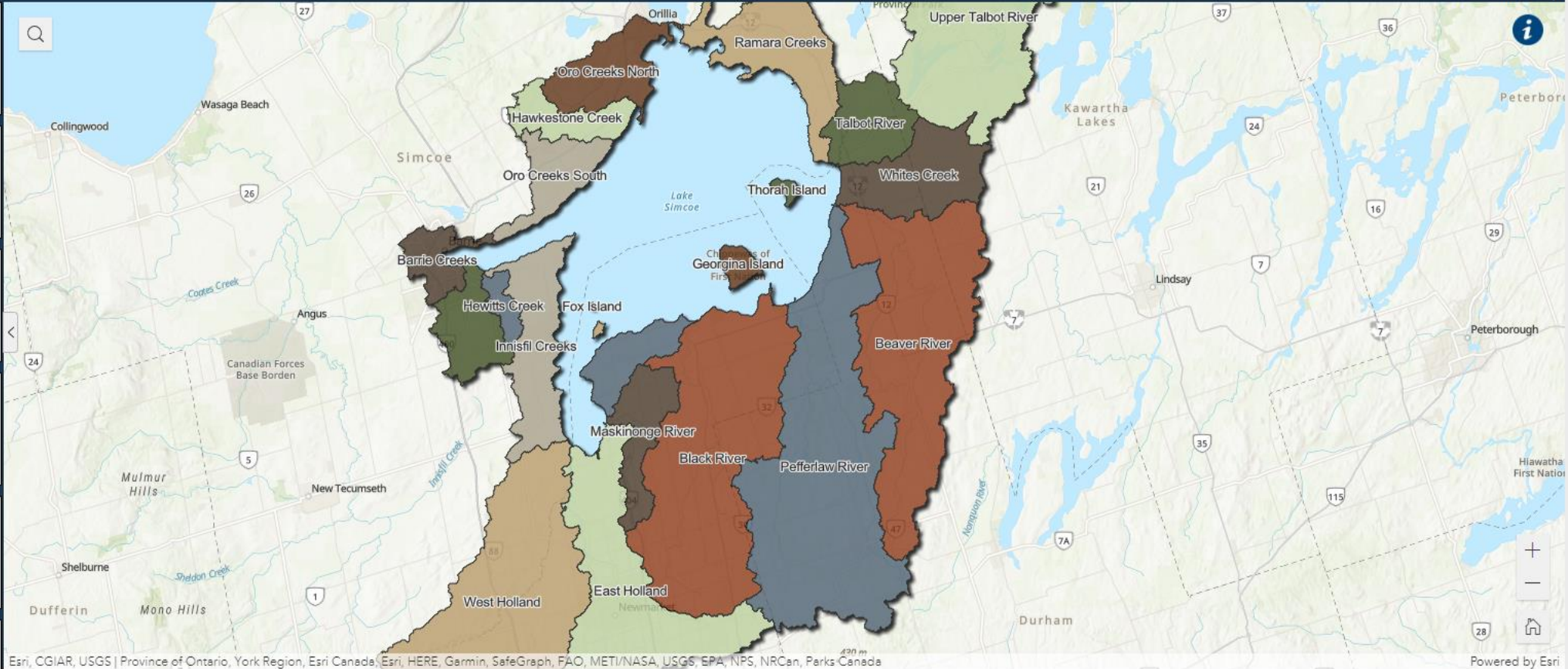
# Subwatershed plan site: a tour (continued)



## Subwatershed Plans

Click below for help

- Barrie Creeks  
**Open Subwatershed Plan**
- Beaver River  
**Open Subwatershed Plan**
- Black River  
**Open Subwatershed Plan**
- East Holland  
**Open Subwatershed Plan**
- Fox Island  
**Open Subwatershed Plan**
- Georgina Creeks



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# Subwatershed plan site: a tour (cont'd)

How to Use

**Phosphorus**

Chloride

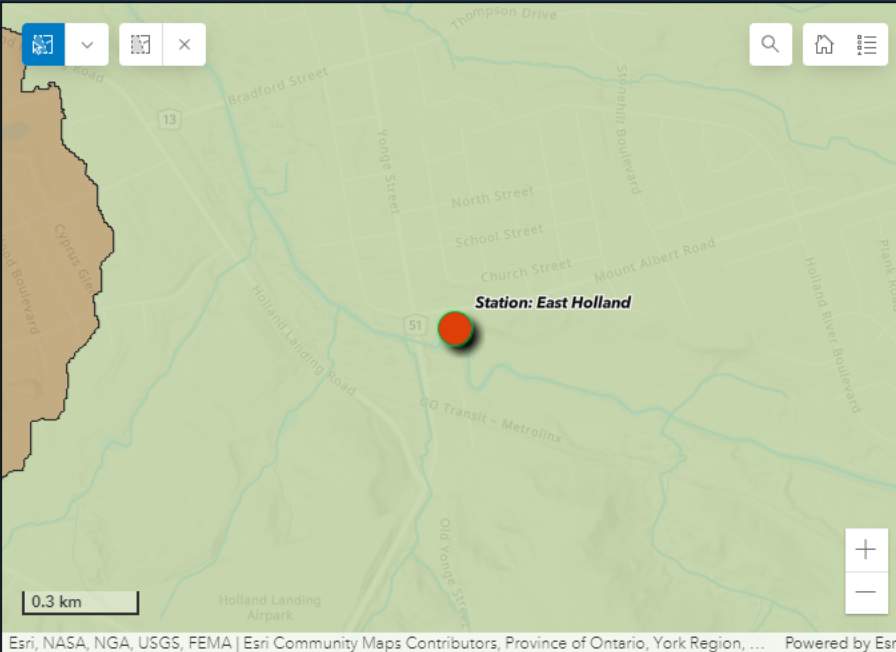
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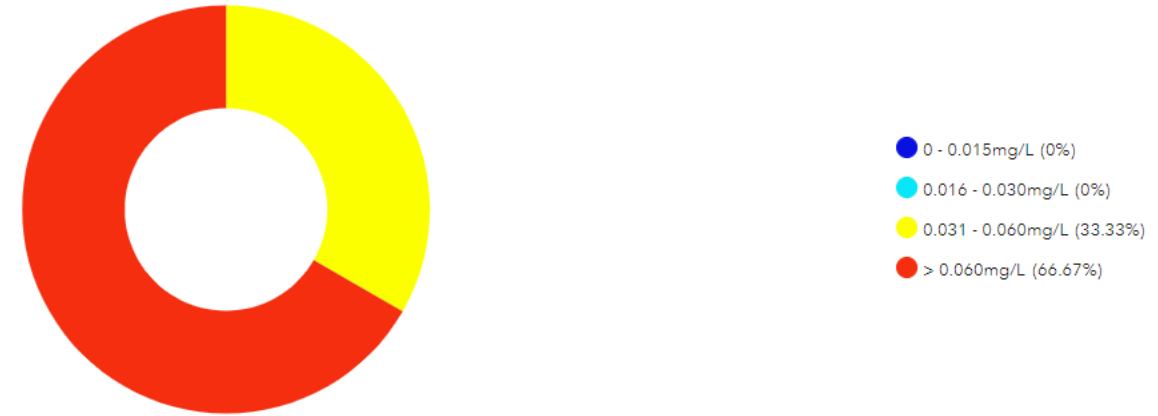
## (DRAFT) LSRCA Subwatershed Modernization - Water Quality - Phosphorus

Station Selected: **East Holland**

[Help](#)

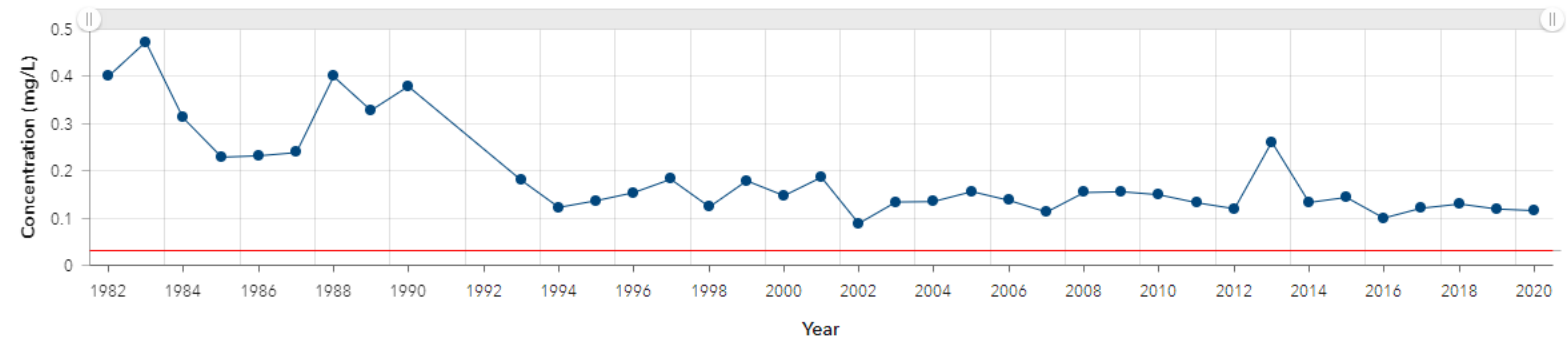


### 2020 Phosphorus Concentrations by Percentage of Samples



Provincial Water Quality Guideline is 0.03mg/L

### Annual Average Phosphorus Concentration



Provincial Water Quality Guideline is 0.03mg/L

Average Phosphorus Concentration for 2020

**0.08mg/L**

Phosphorus Concentration Trend, 2011-2020



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# Next steps



- Remainder of site content to be developed
- Goal and target setting
- Develop recommendations
- Produce subwatershed plan documents
- Completion of Watershed-Based Resource Management Strategy

# Thank you

Questions?

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