

Ministry of Natural Resources

# Saugeen River Access Point Creel + Remote Camera Deployment

Project Code: LHA\_SC25\_DA1

# Overview

- Objectives
- Location
- Methods
- Creel Design
- Privacy
- Requirements
- Deliverables
- Considerations
- Summary



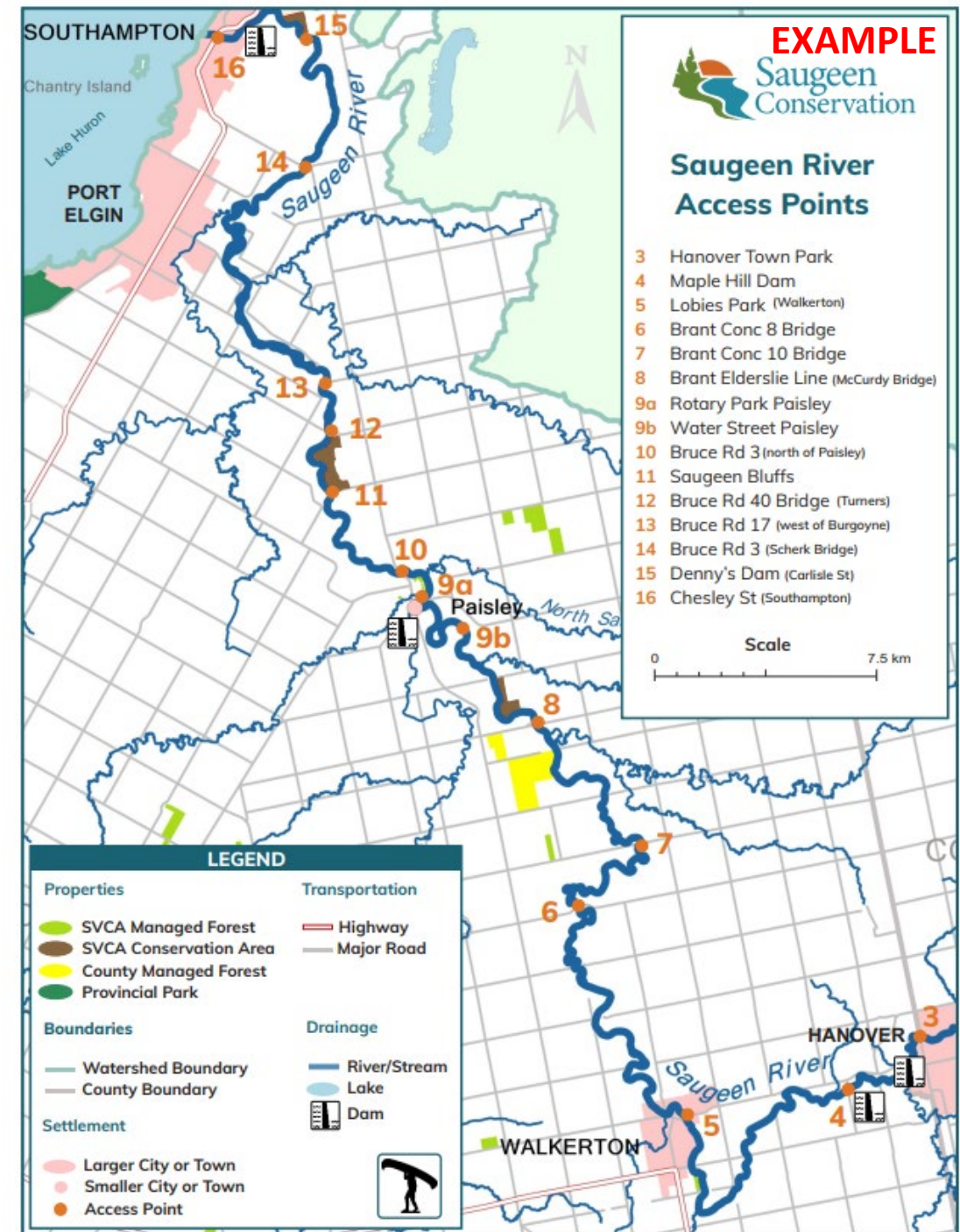
# Objective

## Access Point Creel Survey Design + Remote Cameras

- 1) To estimate angling effort, catch and harvest between Denny's Dam and Upstream extent of **Extended Fall Season**
- 2) Assess attributes of catch and harvest.
- 3) To provide socio-economic data regarding the angling population including the angler's origin
- 4) Identify differences between fall and spring fisheries
- 5) Compare results to the shore-based roving creel survey and recent population estimate for Rainbow Trout
  - 1) Effort, catch and harvest is additive

# Location

- Canoe route as basis for access point survey
  - Activity Count at each location
    - Anglers
    - Vehicle/trailer
- Seek to interview anglers completing angling trip
  - Completed trip interview
- Augment activity counts with low resolution activity cameras
  - Provide ability to more accurately estimate resource use
    - Angling effort

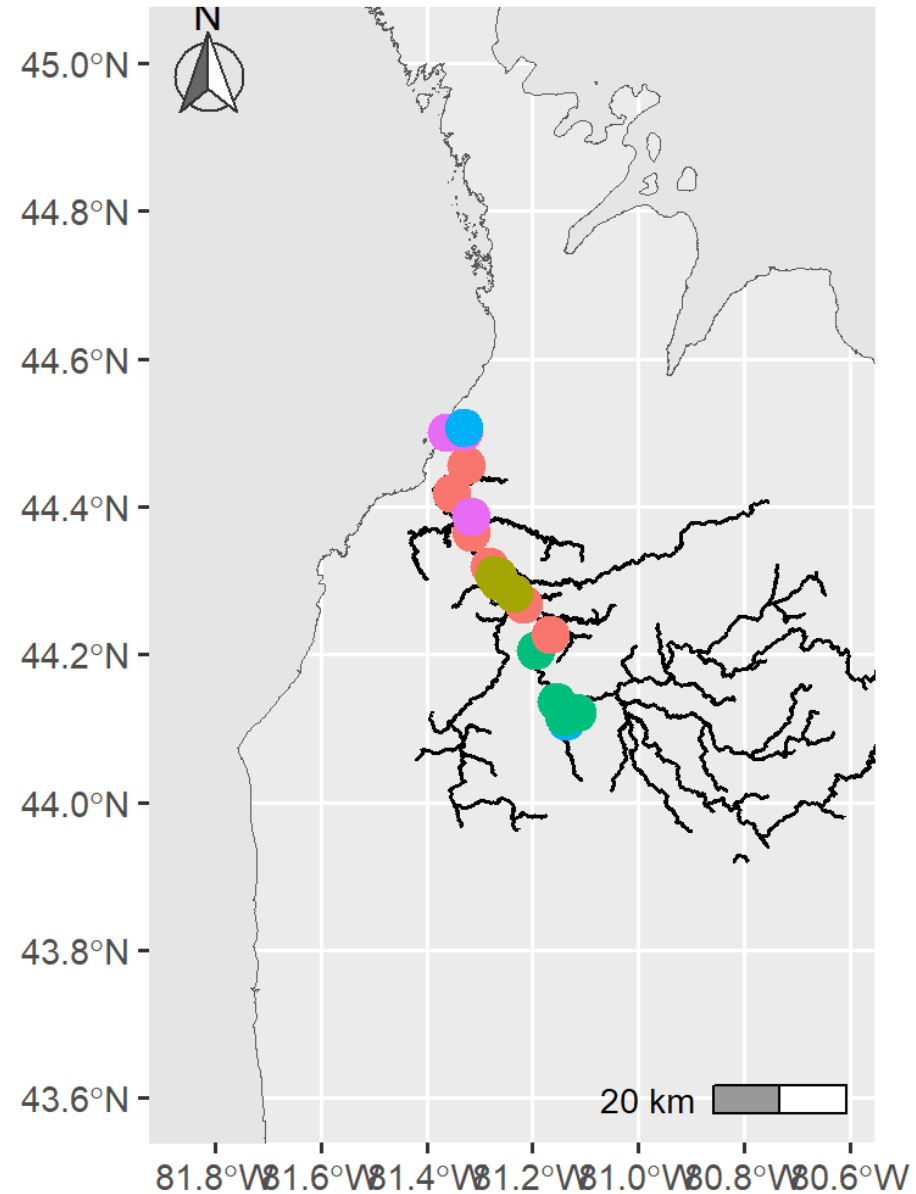


# Location Table – Thanks Toni!

Access Point	Other Name	Property	DD_LAT	DD_LON	COMMENTS	Contact	Camera
Access Point 5	Lobies Park	Municipality of Brockton	44.13584	-81.1558	Parking in park (40 cars)	Brad Thomson	1
Access Point 6		Municipality of Brockton	44.205478	-81.194435	Two Parking Lots	Brad Thomson	2
Access Point 7		County of Bruce	44.226651	-81.166602	Parking on west side of bridge	Andrew Beumer	3
Access Point 8		County of Bruce	44.267431	-81.216219	Two spots to park on same side of bridge	Andrew Beumer	4
Access Point 9A	Next to Historic Hose Tower	Municipality of Arran-Elderslie	44.305962	-81.27191	Parking on roadside or behind the old hotel	Carly Steinhoff	5
Access Point 9B	Rotary Park	Municipality of Arran-Elderslie	44.30591	-81.26444	Parking on roadside Campground in Oark	Carly Steinhoff	6
Access Point 10	North of Paisley	County of Bruce	44.318664	-81.28048	Long Skinny Lot	Andrew Beumer	7
Access Point 12		County of Bruce	44.365979	-81.315317	Long Skinny Lot	Andrew Beumer	8
Access Point 13		County of Bruce	44.417338	-81.352489	Small Lot	Andrew Beumer	9
Access Point 14		County of Bruce	44.456407	-81.325152		Andrew Beumer	10
Access Point 15	Denny's Dam South Side	Town of Saugeen Shores	44.503033	-81.330508	Medium sized lot extends in one direction. Boat launch and docking. Large parking lot extending east and west	Adam Parsons	11
Access Point 16	Chesley Street Park	Town of Saugeen Shores	44.500006	-81.361651	east and west	Adam Parsons	12
Denny's Dam CA	Denny's Dam North Side	SVCA	44.5067	-81.33		Donna Lacey	13
DG1	parking at Paisley Arena	Municipality of Arran-Elderslie	44.307712	-81.273212	Foot access spot	Carly Steinhoff	14
DG2	Dr Milne Park Trail	Municipality of Arran-Elderslie	44.298835	-81.265652	Canoe launch/foot access	Carly Steinhoff	15
DG3	Concession 2 Elderslie south of Paisley	Municipality of Arran-Elderslie	44.282337	-81.236156	Canoe launch/foot access	Carly Steinhoff	16
DG4	The River Rd	Town of Saugeen Shores	44.386599	-81.315391	Canoe launch/foot access	Adam Parsons	17
DG5	Carrick Dam	SVCA	44.109303	-81.1372	Carrick Dam	Donna Lacey	18
DG6	Conc2 - Dead End	Municipality of Brockton	44.117087	-81.14049	Conc 2 road access - canoe launch	Brad Thomson	19
DG7	Upstream Extent of Fall Season	Municipality of Brockton	44.120588	-81.114858	Upstream Extent of Extended fall season	Brad Thomson	20

# Location - Revised

- 19-20 Locations from Denny's Dam Upstream to Upstream Extent of Fall Extended season for migratory salmonids
  - Denny's N side?
- One County
  - Bruce
- Three Municipalities
  - Arran Elderslie
  - Brockton
  - Saugeen Shores
- One Conservation Authority
  - SVCA



## Property

- County of Bruce
- Municipality of Arran-Elderslie
- Municipality of Brockton
- SVCA
- Town of Saugeen Shores

# Methods

## How and when will the **access point** creel be conducted?

- Survey September 1 to December 31, spring project to being Trout opener April 25
  - Capture extended fall and open winter fishery
- Two technicians – **separate crew from Roving creel**
  - Logger application will be that used for boat-access creel – adapted to stream access (SC15\_DA7)
- Instantaneous angler counts and interviews
  - Trip length
  - Fish species being targeted
  - What is being caught and released
  - Method of angling
  - Socio-economic details (i.e. anglers origin, accommodation type)
    - **Question on remote camera program participation**
- **Half-hour or one hour at each location – one day per location?**
  - **May adjust schedule based on camera counts**
- Min. One Remote Detection Camera at each location
  - Additional data
    - **Trailer count model**
    - Greenberg and Godin, 2015
    - Aerial model

## Activity/Check Counts

- | UGLMU Creel Log Form |  |                    |  | Project Code  |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|----------------------|--|--------------------|--|---|--|----------------|--|--------------------|--|---|--|-----|--|-------------|--|-----------------|--|--|
| Creel Log<br>Number  |  | Area<br>Code       |  | Sample<br>Start Time  |  | Mode<br>Code   |  | Year               |  | Month   |  | Day |  | Day<br>Code |  | Weather<br>Code |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| Count<br>Start Time  |  | Count<br>Stop Time |  | Activity<br>Count   |  | Check<br>Count |  | Interview<br>Count |  | <div style="text-align: right; padding-right: 10px;">Comments:</div> <div style="height: 200px;"></div> |  |     |  |             |  |                 |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  |                    |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| Mode                 |  | Day                |  | Weather   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| (S1) Boat            |  | (1) Sunday         |  | (0) no obvious adverse effect on fishing activity                                 |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| (S2) Shore           |  | (2) Monday         |  | (1) possible adverse effect on fishing activity                                   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| (W1) Open Ice        |  | (3) Tuesday        |  | (2) adverse effect on fishing activity  |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
| (W2) Hut             |  | (4) Wednesday      |  | <div style="text-align: right; padding-right: 10px;">Observer's Name: _____</div> |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  | (5) Thursday       |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  | (6) Friday         |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |
|                      |  | (7) Saturday       |  |   |  |                |  |                    |  |   |  |     |  |             |  |                 |  |  |

# Access Creel Design

## Stratification

- Space: 20 spaces
- Seasons: Fall, Winter and Spring
  - Fall extended angling season closes in this location December 31
  - Spring will correspond with Trout Opener
- Time: AM/PM (08:00-14:00/15:00-21:00)\*
- Day: working/non-working

## Effort Allocation

- All weekends and holidays
- Weekdays using 10 and 4 or 5 and 2 schedule
- Equal number of AM/PM surveys at each site



# Stratification

## How will we define sample strata?

### Seasons

Season 1: September 1 – 30, 2025

Season 2: October 1 – 31, 2025

Season 3: November 1 – 30, 2025

Season 4: December 1 – 31, 2025

Season 9: April 25 – May 31, 2026

### Day Type

Weekdays and Weekends: any statutory or provincially recognized holidays during this creel will be considered weekend days.

### Periods (vary by season and day length)

Season 1, September: 7:30 – 13:30 and 13:30 to 19:30, 6 hour periods

Season 2, October: 8:00 – 18:00, 10 hour period

Season 3, November: 8:00 – 16:30, 8.5 hour period

Season 4, December: 8:00 – 16:30, 8.5 hour period

Season 9, April 25 (opener) to May 31: 6:30 – 13:30 and 13:30 to 20:30, 7 hour periods

# Angler Optional Questions

Do we want to modify or add any additional optional questions?

ANGOP1: user defined, pertaining to boat usage for transportation to shore-based angling sites.

- 0 – no (angler or party did not use boat as mode of transportation to shore-based site)
- 1 – yes (angler or party did use boat as mode of transportation to shore-based site)

ANGOP2: user defined, pertaining to boat use and launch site

- 0 - angler or party did not use boat as mode of transportation to shore-based site
- 1 - angler or party launched the boat and is taking out at different location
- 2 - angler or party launched and returning to launch site

# Biological Sampling

Sample all catch from willing anglers, be courteous!

Tag or Mark	Right Pectoral
Origin	Michigan
Lake Location	LH
Stocking Year	1995 - 2009

- **Length**
  - Fork & Total
- **Weight**
- **Scales**
  - All sport species
- **Clips**
- **Lamprey**
- **Tags**
  - External and CWT
- **External Sex**
- **External Gonad**



# Remote Camera Deployment

Low resolution remote cameras will be used to augment activity counts

- Low-Resolution modifications allow for camera use as no personal information will be collected
  - Previous use in forest access study in NE
  - Used mylar & tape
- Effective way to generate reliable activity counts
  - Passive approach
  - Theft concerns
- Able to monitor more locations than with standard access creel design
  - Counts are automated
- Will generate 10,000s of images
  - Data management
  - Image recognition software
    - Megadetector
    - TimeLapse
    - etc

# Remote Camera Deployment

## Camera Plan – Thanks Toni!

- Cameras will be placed to view the trails between the parking lot and the water access at each location.
- The number of cameras needed is dependent on the size of the trail, and objects which can be used to mount a camera (i.e. tree, kiosk, light pole, bridge etc.).
- A large sign is to be placed at the entrance of the parking lot to inform users that a camera is being used as well as project and contact information.
- Small signs along the trail, one on the water side and one on the parking lot side, will be placed before entering the field of view of the camera so users are aware they are about to be filmed.
- This is to coincide with privacy laws and to meet the requirements for permission by the managers of these access points (i.e. Bruce County).

# Privacy

## Example of privacy paperwork required along with a Notice of Digital Image Collection

Project/Initiative Title	Assessing the recreational fishery on the Saugeen River
Ministry/Agency	MNR
Program	Upper Great Lakes Unit
LRC Project Manager	Ronald Green (Biologist), ULGMU
Project Sponsor	N/A
Business Owner	Bruce Mighton

<sup>[1]</sup> Business Owner means any program director or equivalent having authority and accountability for business activities and business records related to those activities.

### Multi-use River Access Points - Camera notification

#### English notification

#### Notice of digital image collection

The Ministry of Natural Resources (MNR) is using trail cameras to study traffic use on the Saugeen River near:

- Saugeen Shores
- Arran-Elderslie
- Brockton

The collected images support research to help us better understand how people use Ontario’s fisheries resources.

CAMERAS DO NOT COLLECT PERSONAL INFORMATION. Cameras are equipped with lens filters to blur images so individuals are not identifiable. If a potentially identifiable image is accidentally captured, it will be deleted or altered to ensure the individual(s) are unidentifiable.

Cameras will be installed on select access points during fall 2025 and spring 2026.

[For Facebook only: More information about this study, including the planned camera location schedule by contacting Ronald Green.]

#### Ronald Green

Management Biologist | Upper Great Lakes Management Unit  
Ministry of Natural Resources | Ontario Public Service  
(519) 377-0431, [ronald.green@ontario.ca](mailto:ronald.green@ontario.ca)

# ATTENTION ANGLERS



**PART OF THE AREA  
YOU ARE ABOUT TO  
ENTER IS BEING  
MONITORED BY A  
LOW-RESOLUTION  
CAMERA**

## Example of Signage for Camera Deployment

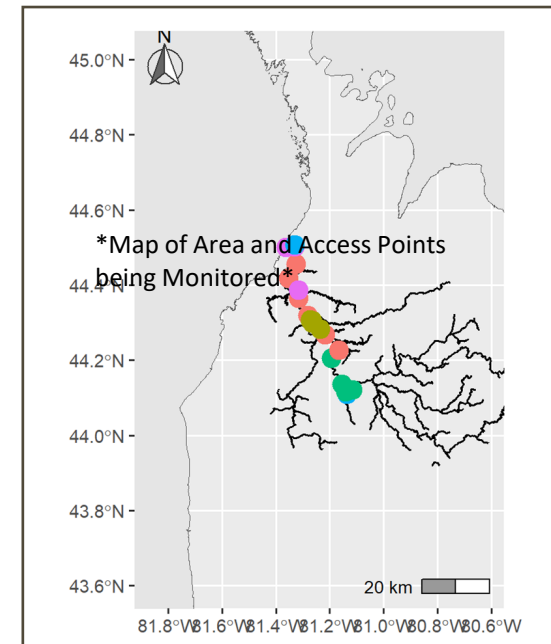
As part of an **angler creel survey** being conducted on the **Saugeen River**, cameras are being used to help estimate angler effort.

Creel surveys are conducted to characterize recreational fisheries, define species of interest and describe socio-economic impacts of the fishery on surrounding areas.

The area of this survey and other access points being monitored are shown.

This survey will be taking place between:

**Sept. 1 and Dec. 31, 2025**



For more information contact:  
Or the Upper Great Lakes Management Unit: (519) 371-0420



Ministry of  
Natural  
Resources  
Ministère des  
Richesses  
naturelles

**Ontario**

---

# ATTENTION ANGLERS

---

## NOTICE CAMERA IN USE



THE AREA YOU ARE  
ABOUT TO ENTER IS  
BEING MONITORED BY A  
LOW-RESOLUTION  
CAMERA

As part of an **angler creel survey** being conducted on the **Saugeen River**, cameras are being used to help estimate angler effort between **Sept. 1 – Dec. 31, 2025**

---

For more information contact:  
Or the Upper Great Lakes Management Unit: (519) 371-0420



Ministry of  
Natural  
Resources

Ministère des  
Richesses  
naturelles



# Requirements

What do we need to get the job done?

- Two technicians
  - Camera
- Vehicle
  - Car, van, truck
  - Easy access locations
- Data logger with access creel application
  - Maitland Creel SC15\_DA7 template
- 20 Remote Cameras
  - Solar Panels
  - Lock boxes
  - Subscriptions?

\$499.99 CAD for 2 pack



# Remote Cameras – Cell Enabled or Traditional

Do we spend the extra to get cellular connected remote cameras?

	Pros	Cons
Traditional Game Camera	<ul style="list-style-type: none"><li>• Cheaper</li><li>• Less likely to be stolen – will be concealed in lock box</li></ul>	<ul style="list-style-type: none"><li>• Need to be checked often</li><li>• Require SD cards</li></ul>
Cellular Game Camera	<ul style="list-style-type: none"><li>• Images are automatically sent</li><li>• Images are backed up</li><li>• May not require SD cards</li><li>• GPS enabled to know if stolen</li><li>• Image software</li><li>• Can remotely operate unit</li></ul>	<ul style="list-style-type: none"><li>• Expensive</li><li>• Subscription based</li></ul>

# Deliverables

Important information on middle river fishery

- **Project Completion and Summary Report**
  - Project requirements
- **Compare to shore-based roving creel survey**
  - How do lower river and middle river fisheries differ?
- **Creel survey data contributes to management decisions**
  - Angling regulations
  - Stocking plan

Lake Ontario Tributary angling effort estimates

Tributary	Total Effort (angler hours)			
	Fall	Winter	Spring	Total
Bronte Creek	16,823	2,393	4,124	23,340
Credit River	29,114	13,880	6,169	49,163
Humber River	1,208	982	2,143	4,333
Rouge River	3,470	2,449	2,298	8,217
Duffins Creek	18,633	13,970	5,728	38,331
Oshawa River	12,241	8,942	3,225	24,408
Bowmanville Creek	18,776	2,321	7,383	28,480
Wilmot Creek	5,649	2,214	1,981	9,844
Ganaraska River	24,289	5,205	20,226	49,720
Shelter Valley Creek	625	705	2,550	3,880
Total	130,828	53,061	55,827	239,716

# Considerations

## Questions and Comments

- How we include remote camera counts in the data model?
  - Hourly intervals (Greenberg and Godin, 2015)
  - Detection based collection
    - Add data similar to trailer count?



# Summary

## Important points to remember

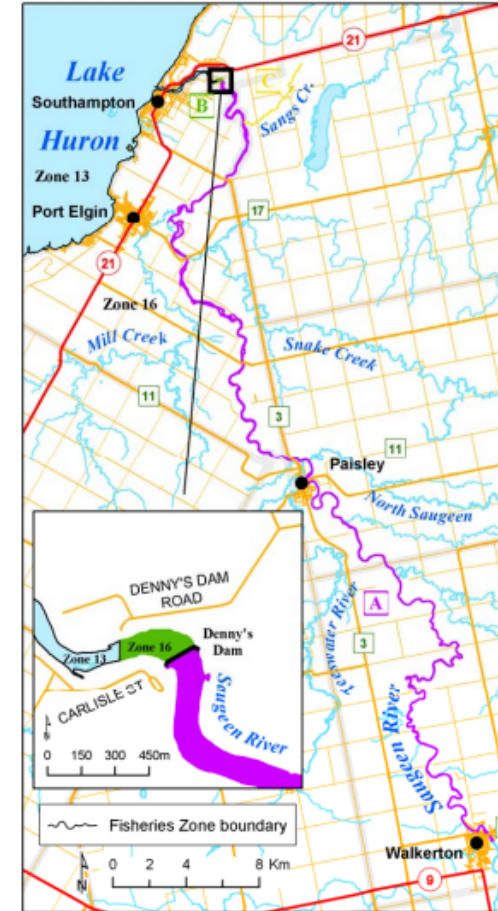
- **Assessing the fishery focusing on migratory salmonids in the middle Saugeen River**
  - Access Creel Design
- **Understand health of population and fishery**
  - Compare with mark-recapture population estimate
- **Compare results to shore-based roving creel of lower river**
  - Additive to fishery below Denny's Dam
  - Effort, catch and harvest
  - Angler behavior

# Saugeen River Fishing Regulations

Creel survey coverage will correspond with open angling seasons spatially and temporally

- Extended fall season from Denny's Dam upstream to Concession 2 Walkerton – December 31
- Extended fall season from Abutments to Denny's Dam – December 31
- Lower river below abutments remains open year round

## Selected Fishing Regulations for Saugeen River, Southampton, Ontario, Fisheries Management Zones 13 and 16



This map has been prepared by the Ministry of Natural Resources for convenience only. Fishing regulation information, including size limits, catch-and-possession limits by species and additional information can be found in the annual Ministry of Natural Resources Ontario Fishing Regulations Summary.

### Zones 13 and 16 Seasons

**Zone 13, open seasons, selected species**  
Brown Trout, Rainbow Trout and Pacific Salmon  
Open all year.

**Zone 16, open seasons, selected species**  
Brown Trout, Rainbow Trout and Pacific Salmon  
4th Saturday in April to Sept. 30

### Additional Fishing Opportunities

**A**

Saugeen River between the Truax Dam in the village of Walkerton to Denny's Dam (Bruce County).

**Rainbow Trout, Brown Trout and Pacific Salmon:**  
Extended fall season from 4th Saturday in April to Dec. 31

**B**

The waters of the Saugeen River from Denny's Dam to the westerly edge of the concrete abutments situated downstream from the said dam, County of Bruce.

**Rainbow Trout, Brown Trout and Pacific Salmon:**  
Extended fall season from 4th Saturday in April to Dec. 31.

Closed to night fishing Oct.1 to Oct 31 (from one half hour after sunset to one half hour before sunrise.)

### Exceptions to the Zone Regulations

**C**

The waters of that part of Sangs Creek and its tributaries lying within the Geographic Township of Arran in the County of Bruce.

**Fish Sanctuary – no fishing from 4<sup>th</sup> Saturday in April to May 31.**