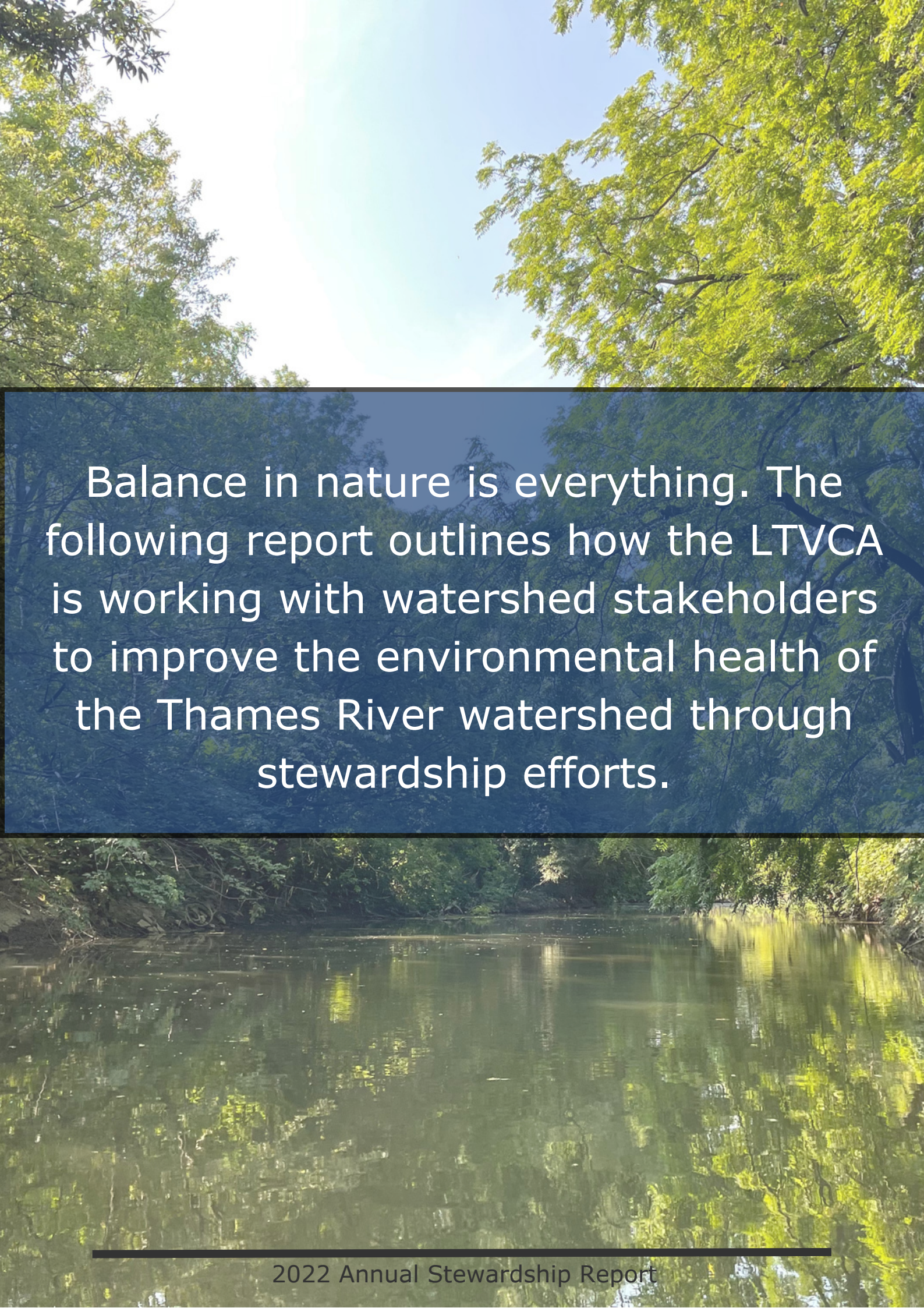




# Annual Stewardship Report 2022





Balance in nature is everything. The following report outlines how the LTVCA is working with watershed stakeholders to improve the environmental health of the Thames River watershed through stewardship efforts.

# Soil Health Program



## Cover Crops Planted (Acres)

2020 - 2,769  
2021 - 10,828  
2022 - 9,785

**\$138,420.85**  
Provided to farmers  
to offset the cost of  
cover crops

**68**  
Participants



## Common types of cover crops include:

- Clover
- Radish
- Barley
- Oats

## Phosphorus Reduction through stewardship

2020- 1384.5 lbs  
2021 - 5414 lbs  
2022 - 4892.5 lbs

## SAR Outcomes

- Fewer algal blooms leading to more O2 for fish like the Endangered Norther Madtom
- Reduces runoff that carries harmful effluents into our watercourses

# Wetland Projects

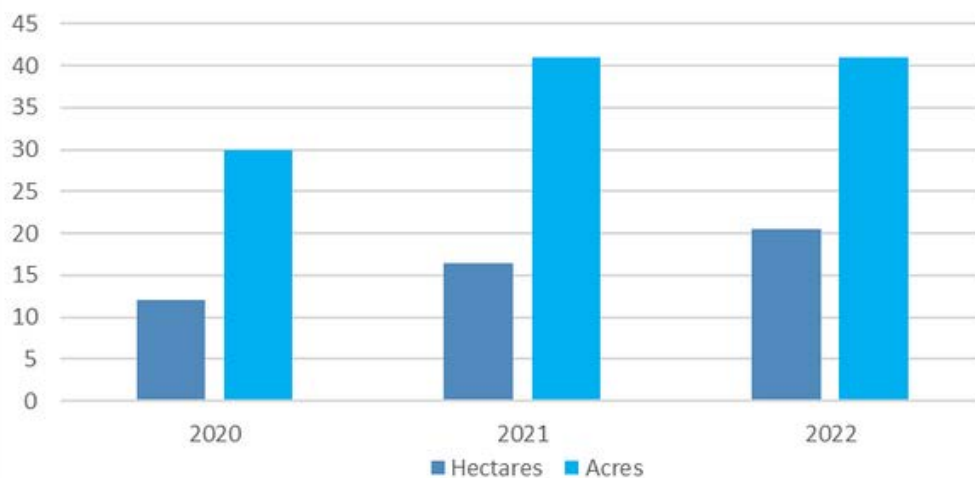


## Importance of Wetlands:

- Creates bird, reptile and amphibian habitat
- Improves water quality
- Provides flood protection
- reduces shoreline erosion



Total Wetland Habitat Restored



**WETLAND  
RESTORATION  
28 Projects**

## SAR Outcomes

- Filters nutrients that cause eutrophication and reduced O2 levels
- Creates nursery habitat for a diversity of fishes like the Endangered Lake Chubsucker

# Tree Planting Projects



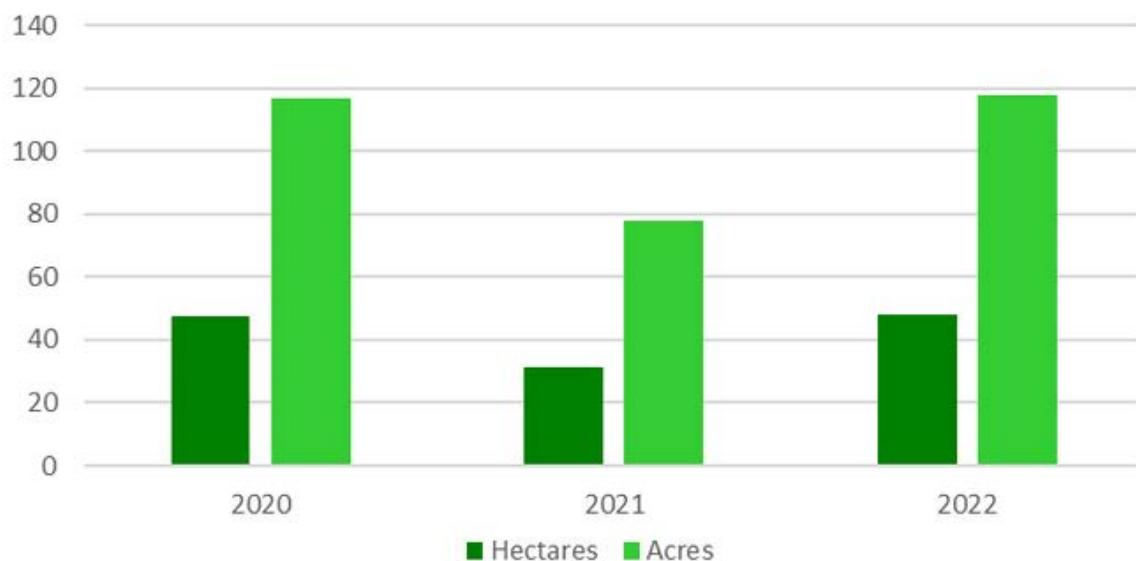
**SEEDLINGS SOLD**  
**94,867**

**Large Stock Trees**  
**SOLD 616**



**TREE PLANTING**  
**56 Projects**

Total Tree Habitat Restored



## Benefits of tree planting:

- reduces erosion
- stabilizes soil
- creates habitats or wildlife

## SAR Outcomes

- Creates riparian habitat necessary to cool streams
- Establishes a home for bugs that feed fish like the threatened Silver Shiner

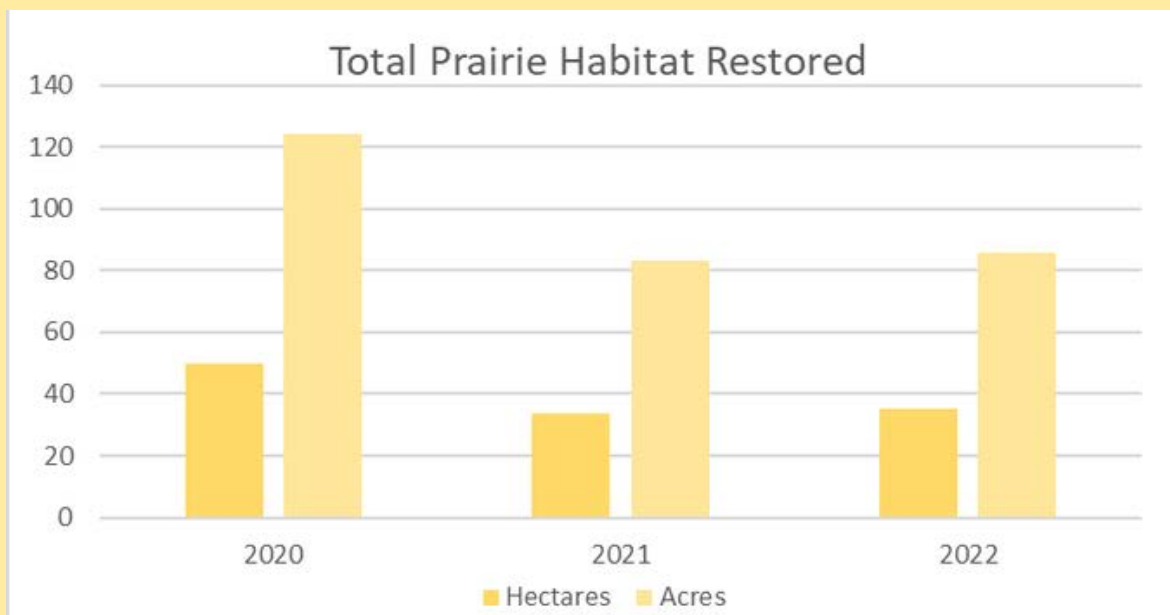
# Prairie Projects



## **PRAIRIE RESTORATION 17 Projects**

### **Advantages of Tall Grass Prairies:**

- reduce phosphorus loading
- improve soil conservation
- improve water retention
- attract pollinators
- provide wildlife habitats



### **Top plant species for pollinators:**

- Butterfly Milkweed
- Purple Coneflower
- Wild Burgamot
- Black-Eyed Susan

### **SAR Outcomes**

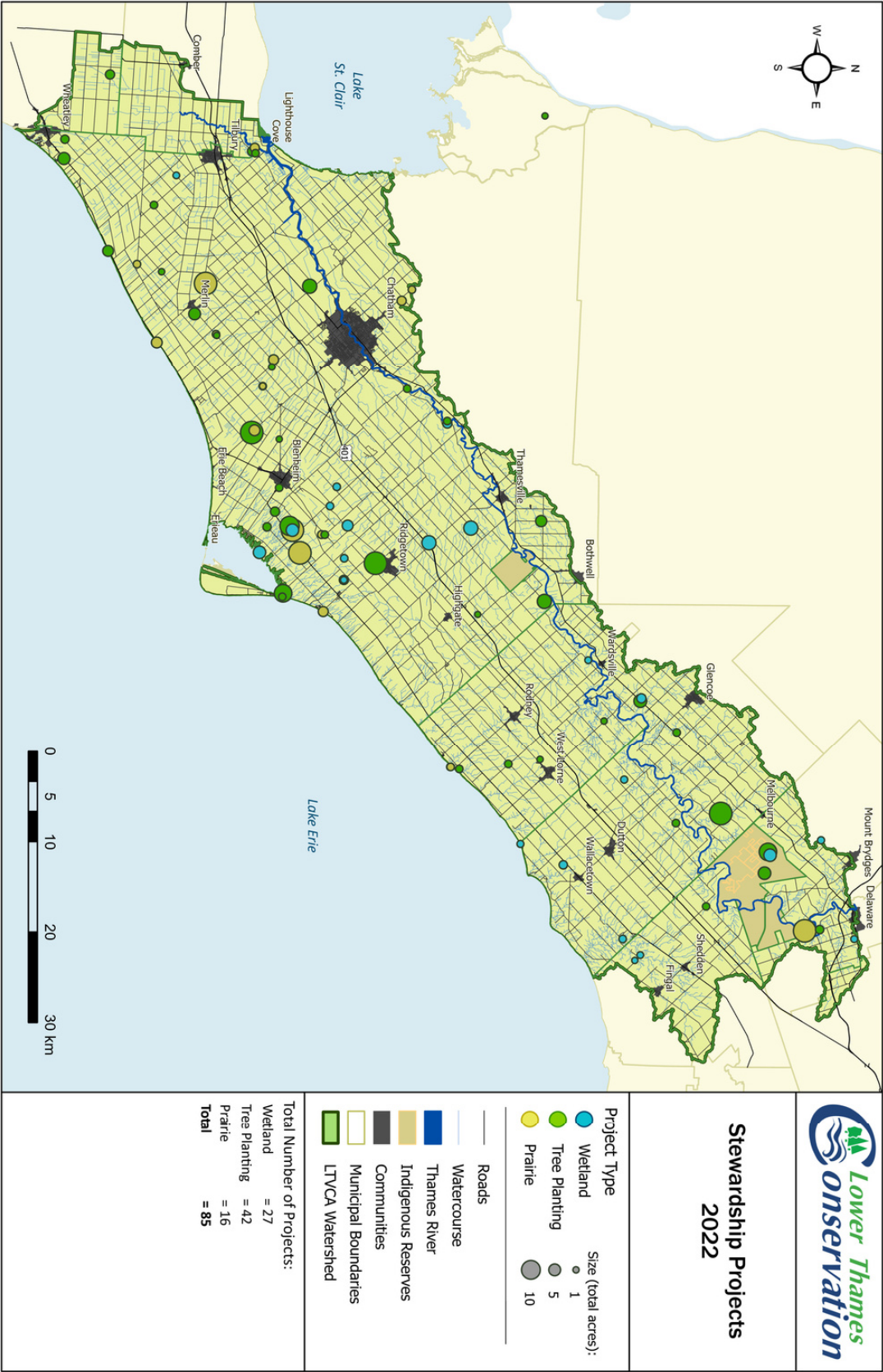
- Creates habitat for Monarch Butterflies
- Reduce siltation that may clog the gills of mussels like the Endangered Fawnsfoot



**Alternative Land Use Services (ALUS) helps farmers and ranchers integrate ecologically beneficial projects on their properties in marginal, inaccessible and environmentally sensitive areas.**

<b>ALUS Chatham-Kent</b>	<b>ALUS Middlesex</b>	<b>ALUS Elgin</b>
<b>25 New Projects</b>	<b>45 New Projects</b>	<b>41 New Projects</b>
<b>62 Acres Enrolled in 2022</b>	<b>285 Acres Enrolled in 2022</b>	<b>223 Acres Enrolled in 2022</b>
<b>\$330K Invested in Projects</b>	<b>\$500K Invested in Projects</b>	<b>\$594K Invested in Projects</b>
<b>1000+ In Community Outreach</b>	<b>1000+ In Community Outreach</b>	<b>4500+ in Community Outreach</b>

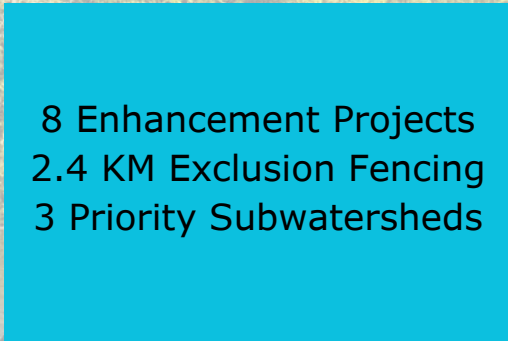

# Stewardship Project Location



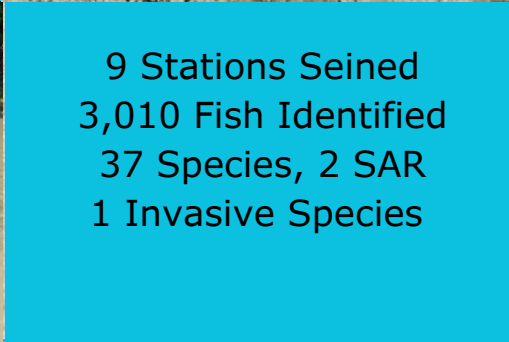

# Aquatic Species at Risk




**Aquatic surveys were conducted throughout the lower Thames River. Four stations were targeted to capture the Threatened Eastern Sand Darter (*Ammocrypta pellucida*). Three other stations were targeted to collect eDNA samples in an attempt to detect Gravel Chub (*Erimystax x-punctatus*), believed to be extirpated, in areas of former occurrence. Fish surveys occurred at two other stations in 2022 based on eDNA results from 2021 that detected SAR and invasive species.**



8 Enhancement Projects  
2.4 KM Exclusion Fencing  
3 Priority Subwatersheds



9 Stations Seined  
3,010 Fish Identified  
37 Species, 2 SAR  
1 Invasive Species



7 E-DNA Sampling Sites  
62 Species Detected  
8 Species at Risk  
17 Mussel Species



1 "Surprise" Capture  
Endangered Northern  
Madtom

# Terrestrial Species at Risk



**Environment and Climate Change Canada's Habitat Stewardship Fund (HSP) contributed to bioacoustics monitoring in two Conservation Areas - the public Mosa Forest and private Ashton Forest. Ecological Land Classifications identified vegetation communities and bioacoustics monitoring provided valuable information on the diversity of bird and bat species present, particularly SAR, which will inform management plans tailored for each Conservation Area.**

2 Conservation Areas  
13 Habitats  
8 Field Unit Check  
Days



1 Breeding Bird survey  
23 Bird species Heard  
2 Amphibian Call  
Counts  
3 Frog Species Heard

4 Anabat Swift  
Detectors  
4 Song Mini Meters  
2 Species at Risk Bats



# 2022 Events



The LTVCA hosted and attended a number of events in 2022! Some of these included conferences, webinars, high school presentations and a tour displaying various completed projects across Chatham Kent.

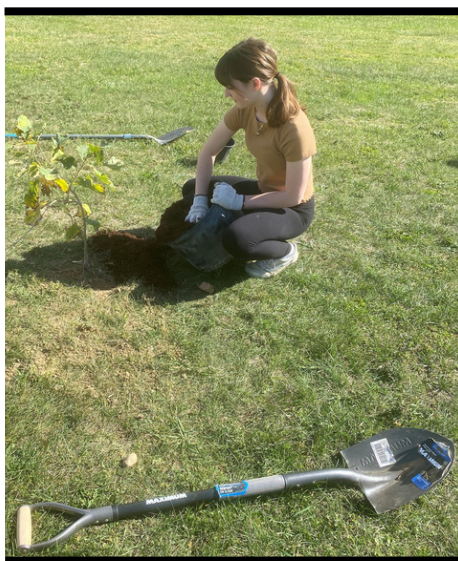
16

EDUCATIONAL  
PRESENTATIONS



11

COMMUNITY  
EVENTS



11

EVENTS  
PROMOTING  
PROJECTS



If you want to get involved in any of our projects or become a volunteer email [info@ltvca.ca](mailto:info@ltvca.ca).

# Thank You

**Ontario Land and Trust Association (OLTA)**  
**Canada Summer Jobs (CSJ)**  
**Employment and Social Development Canada (ESDC)**  
**Canada Nature Fund for Aquatic Species at Risk (CNFASAR)**  
**Fisheries and Oceans Canada (DFO)**  
**Habitat Stewardship Program (HSP)**  
**Environment and Climate Change Canada (ECCC)**  
**Agriculture and Agri-Food Canada (AAFC)**  
**Ontario Soil & Crop Improvement Association (OSCIA)**  
**Ontario Ministry of Agriculture, Food, & Rural Affairs (OMAFRA)**  
**Environment and Climate change Canada (ECCC)**  
**South Kent Wind Community Fund (CK Community Foundations)**  
**Intact Municipal Climate Change Resiliency Grant (IMCCRG)**  
**Invasive Species Centre (ISC)**  
**Elgin Clean Water Program (ECWP)**  
**Ontario Power Generation (OPG)**  
**Retired Teachers Association; Brand 33 (RTO 33)**  
**Wildlife Habitat Canada (WHC)**  
**Grassland Stewardship Initiative (GSI)**  
**Canada Wildlife Federation (CWF)**  
**World Wildlife Fund (WWF)**  
**Evolugen**  
**Walpole First Nation**  
**TogetherCK**  
**Enbridge**  
**TD Bank**  
**ALUS Elgin**  
**ALUS CK**  
**ALUS Middlesex**  
**Tree Canada**  
**R Landfill CT**  
**Retro Suites**  
**Maple City Homes**  
**Forests Ontario**  
**Ridgetown Rotary**