

2024 Conference

Canada's Premier Stormwater and Erosion and Sediment Control Conference

#### Thank you to our sponsors!

#### **EXECUTIVE SPONSORS**













ımbrium<sup>o</sup>















#### **MEDIA SPONSOR**



#### HOSTS

Presented by:



In association with:







# **Managing Stormwater Ponds:**

A Comprehensive Approach to Fish 'Rescues'

Danny McIsaac

Ecologist, Project Manager

Groundwater Environmental Management Services (GEMS)





#### Background

- ☐ Master's of Science in stormwater pond and wetland ecology
  - Specializing in herpetology and fisheries
- Ecologist and Project Manager at GEMS
- ☐ Environmental specialists for the construction industry
- ☐ Involved in a variety of different projects
  - Environmental Impact Studies
  - Wildlife and Species at Risk
  - ☐ Fish and Wildlife Rescues





#### Background

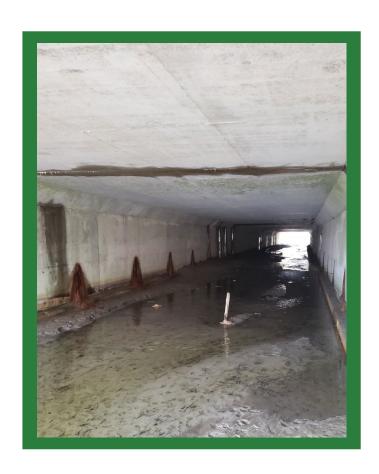
- ☐ Master's of Science in stormwater pond and wetland ecology
  - Specializing in herpetology and fisheries
- Ecologist and Project Manager at GEMS
- Environmental specialists for the construction industry
- Involved in a variety of different projects
  - Environmental Impact Studies
  - ☐ Wildlife and Species at Risk
  - ☐ Fish and Wildlife Rescues



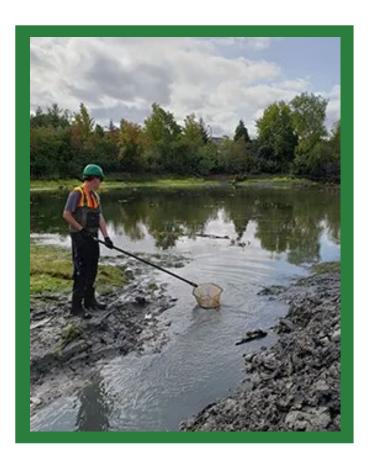


### What is a Fish Rescue?

□Removing or *Rescuing* fish and wildlife from construction areas









# Fish Rescues in SWM Ponds

- ☐ Contract obligation for SWM Pond Maintenance
- ☐ Considered *Ontario Waters* 
  - □ Connected to natural watercourses
- ☐ Fish and Wildlife introductions
  - Natural watercourse connection
  - ☐ Unlawful introduction from public
- ☐ Each SWM Pond will be assessed by MNRF



Largemouth Bass





#### "Wildlife"

#### Part of the Rescue

- ☐ Herpetofauna (reptiles and amphibians)
  - ■Snapping Turtles
  - ■Painted Turtles
  - ☐ Green Frogs/Tadpoles

#### **Not Part of the Rescue**

- Muskrats and Beavers
- ■Ducks and other Waterfowl



Common Snapping Turtle





### Prior to the Rescue

- 1. Permit Acquisition
  - ☐ Fish and Wildlife Collection Permits
  - □Turn around time is variable (~2-4 weeks)
  - Mandatory reporting the Ministry
- 2. Preparing the Pond
  - □Plan for dry weather
  - □Dewater pond1-3 feet







### Prior to the Rescue

- 1. Permit Acquisition
  - ☐ Fish and Wildlife Collection Permits
  - □Turn around time is variable (~2-4 weeks)
  - Mandatory reporting the Ministry
- 2. Preparing the Pond
  - □Plan for dry weather
  - □ Dewater pond1-3 feet







# Performing the Fish Rescue

- Qualified professionals
- ☐Siene and dip nets or electrofisher
- □ Relocate wildlife (Herpetofauna)
- □ Euthanize fish



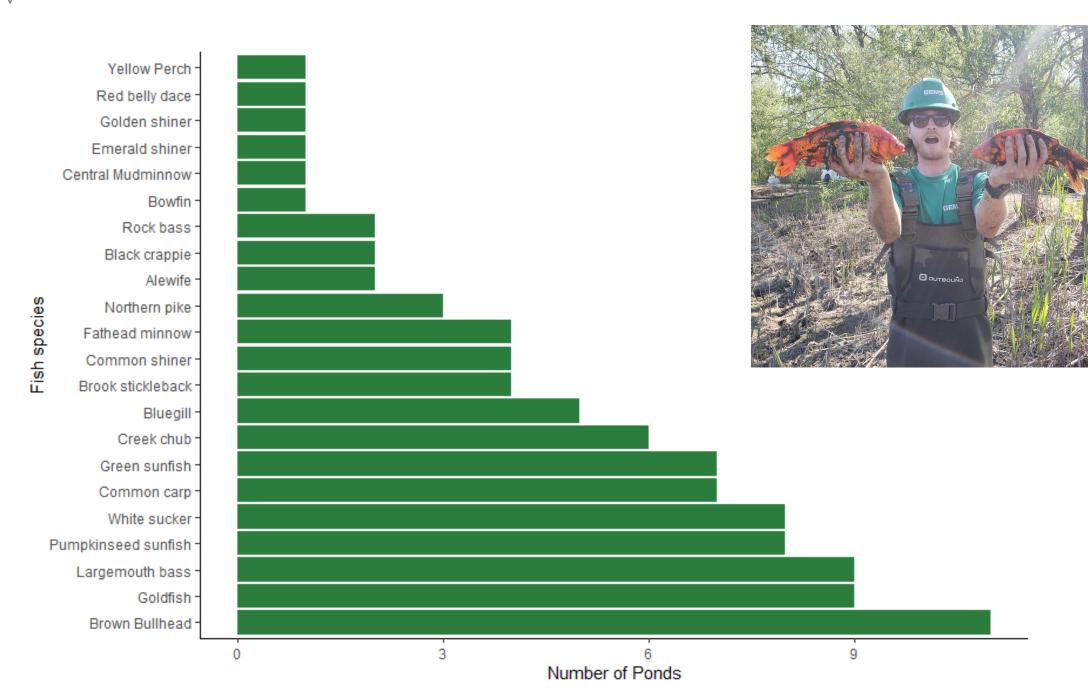










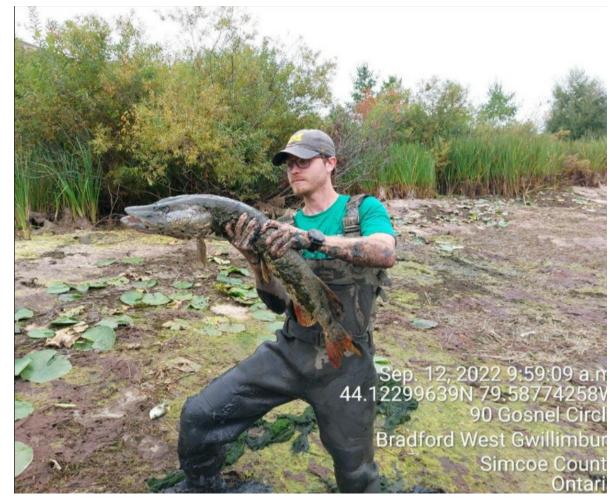






# Euthanization

- □ Sewage Works
  - ■Not Habitat
- ☐ Introduced species
  - ■Predator influx
- **□** Contamination



Northern Pike





- ☐ Species at Risk
- □ Pre-screening survey and report
- ☐ Unsafe conditions
- ■Works outside the window
- Resident concerns



Blanding's Turtle





- ☐ Species at Risk
- □ Pre-screening survey and report
- ■Unsafe conditions
- ■Works outside the window
- □ Resident concerns







- ☐ Species at Risk
- □ Pre-screening survey and report
- ☐ Unsafe conditions
- ■Works outside the window
- □ Resident concerns







- ☐ Species at Risk
- □ Pre-screening survey and report
- ☐ Unsafe conditions
- ■Works outside the window
- □ Resident concerns







2024 Conference

Canada's Premier Stormwater and Erosion and Sediment Control Conference

#### Thank you to our sponsors!

#### **EXECUTIVE SPONSORS**













ımbrium<sup>o</sup>















#### **MEDIA SPONSOR**



#### HOSTS

Presented by:



In association with:



