

# What Can You Do?



***You've learned a lot of science  
about water quality –  
how will you put it into action?***





## Who are we?

- Samantha Muldoon
- Anne Marie Grewal
- Cassy Ordway
  - Local Orono Parents (9<sup>th</sup>, 8<sup>th</sup>, 7<sup>th</sup> Graders, & more)
  - Residents/Neighbors
  - Marketers, Writers, Moms...
  - Members of Long Lake Waters Association (founded in 2016)

## Long Lake Waters Association:

- A group of concerned neighbors that focus on water quality in the Long Lake Creek sub-watershed.





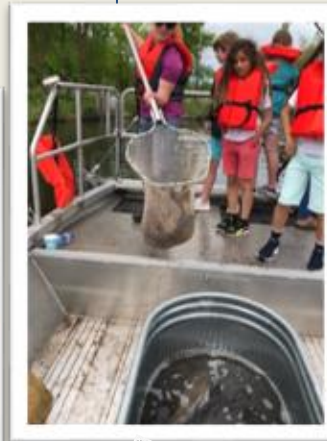
**FIRST, LET'S  
GO FISHING...**

# Carp Fishing

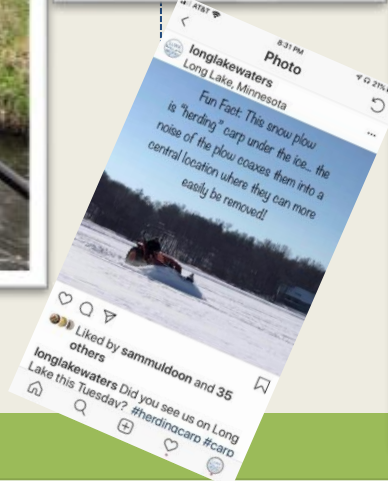


## Electrofishing

## Sedation



What do we do once we've caught them?



# We Implant Pit Tags



- Video,  
Sept 2019

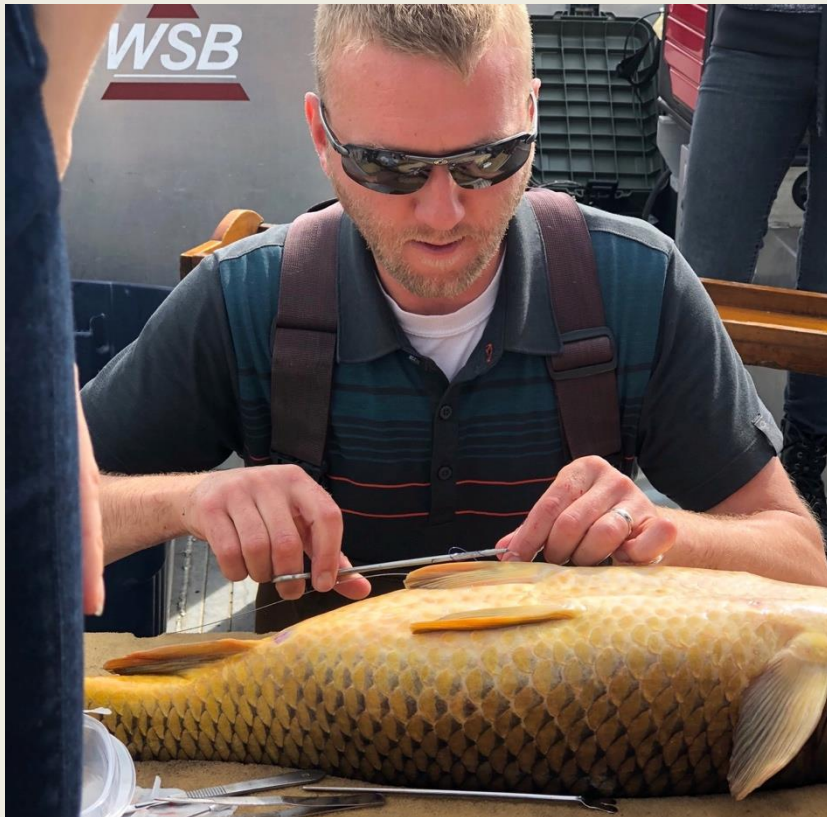


Measuring length  
Measuring weight  
Aging  
Population Estimates  
Tracking

# Or Radio Tags



## Carp Radio Tagging



# So We Can Track the Carp



## Radio/Signal Tracking



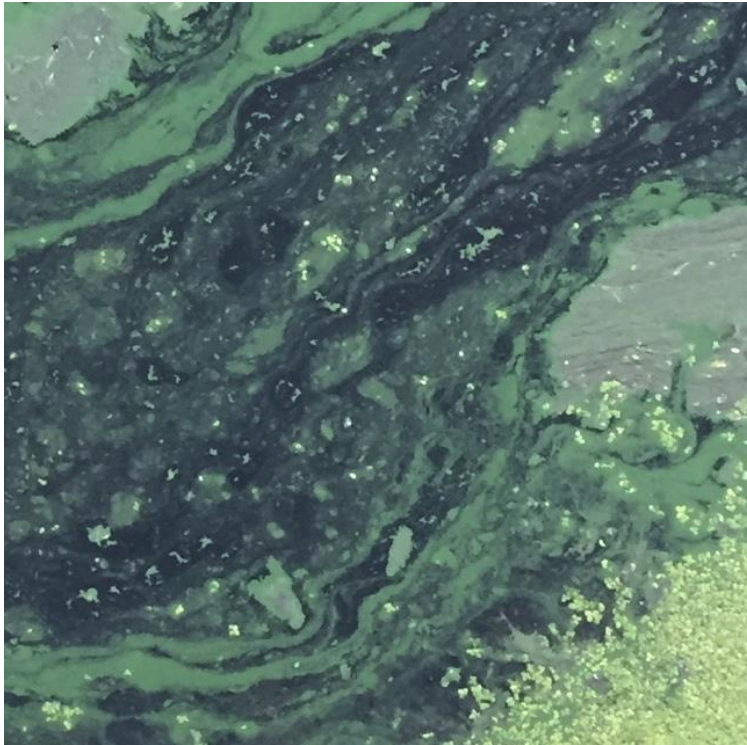
## Solar Power Pit Trackers





# WHY?

# We Have a Problem

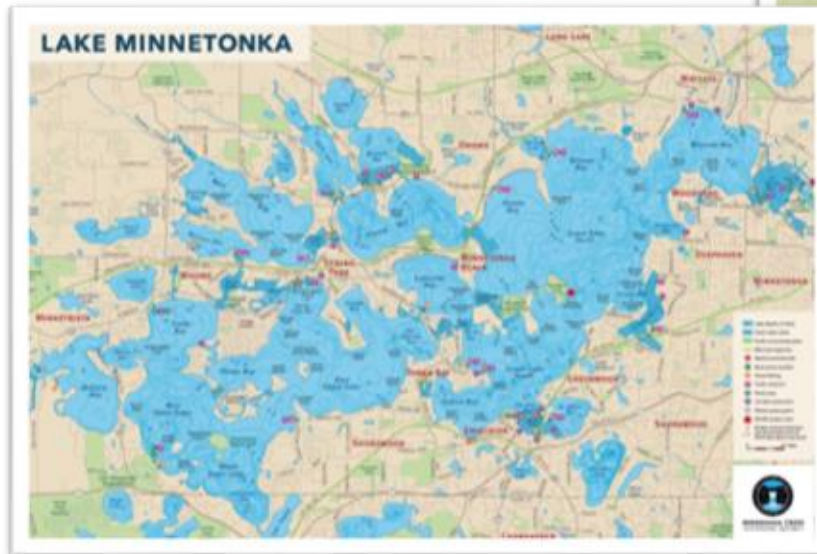
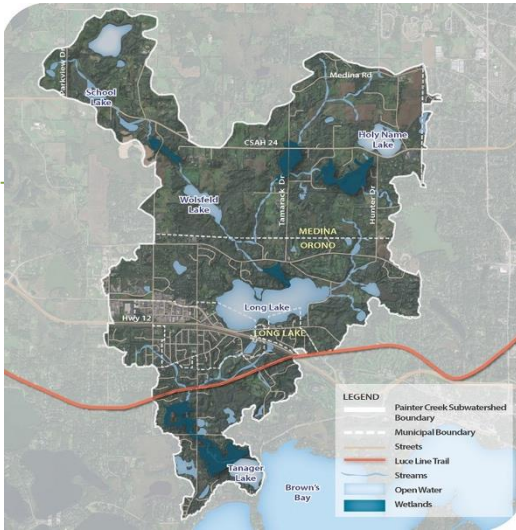


Blue Green Algae and E-coli lead to beach closures



Long Lake water quality in Long Lake currently rated "D"<sup>1</sup>

# It's all connected!



# Gulf of Mexico Dead Zone



## DEAD ZONE SETTING UP

## STORMTRACK

WQAD  
**8**

### CAUSE:

NUTRIENT POLLUTION  
FROM HUMAN ACTIVITIES  
(URBANIZATION & AGRICULTURE)

### EFFECT:

NUTRIENTS PRODUCE WIDESPREAD  
ALGAE BLOOMS

ALGAE DIES, SINKS

DECOMPOSING ALGAE  
MAKES WATER HYPOXIC  
(NO OXYGEN)

### CAUSED BY HUMANS:

CLIMATE CHANGE PRODUCED  
RECORD SNOW THIS WINTER

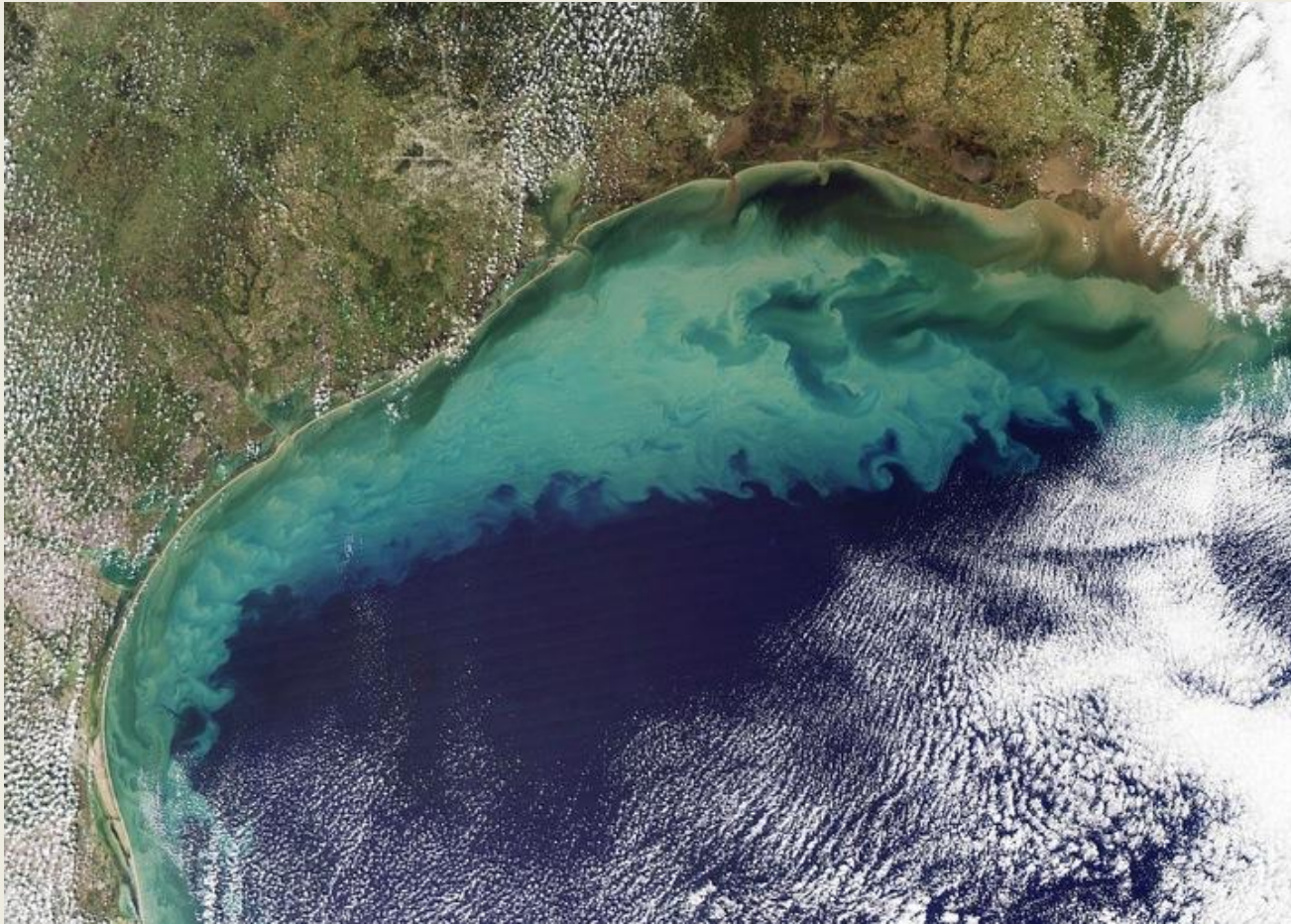
CLIMATE CHANGE PRODUCED  
RECORD RAIN THIS SPRING

MORE FLOW HARMS WILDLIFE  
AND ENTIRE ECOSYSTEM

**DEAD ZONE**  
7,829 SQUARE MILES

A map of the Gulf of Mexico coastline showing the extent of the dead zone. The dead zone is highlighted in a bright green and yellow color, indicating low oxygen levels. The text 'DEAD ZONE 7,829 SQUARE MILES' is overlaid on the map.

# Not Fake News: Science





We know there are  
**MANY** things that hurt  
our water quality...

CARP are just **ONE THING!**

# So why Carp?





Because lowering # of CARP can make a huge difference...

Other considerations:

- Visual (UGLY!) = great photos
- Visible = people can see the problem
- Tangible = Measurable progress = \$\$



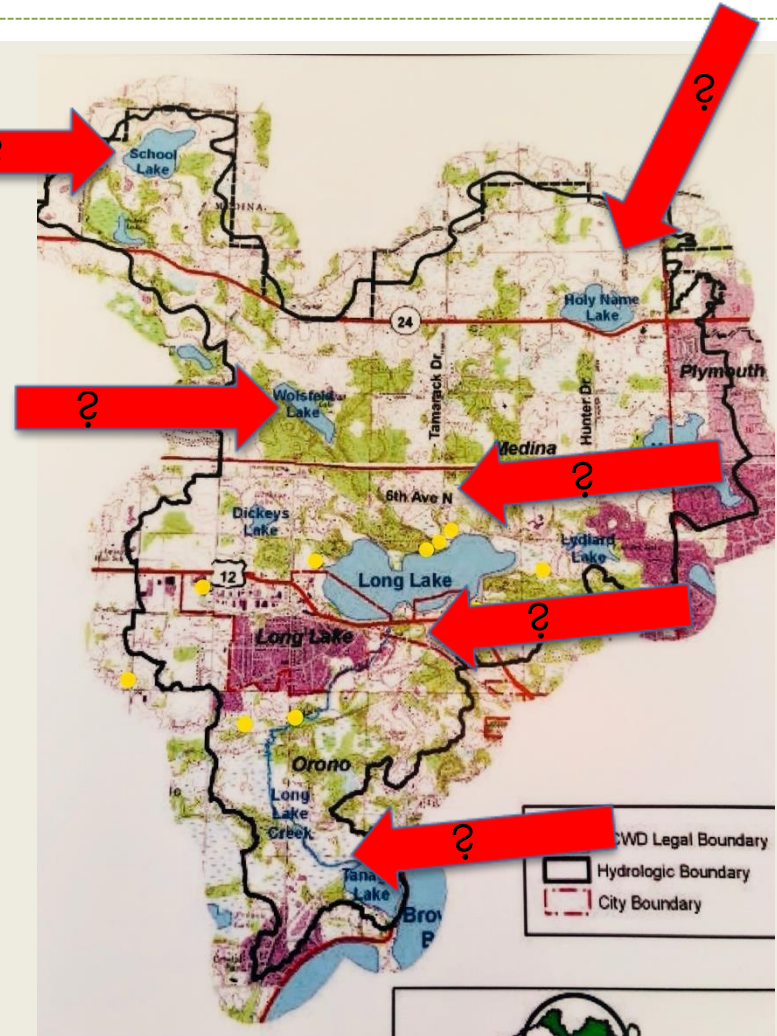
# Its all about the SPAWNING & MOVEMENT



- Where are they spawning?
- Where are the nurseries?
- Where do they live?
- Where are they moving?

➤ If you know where they are... you can eliminate them... !

= *Population  
Reduction/Balanc  
e*



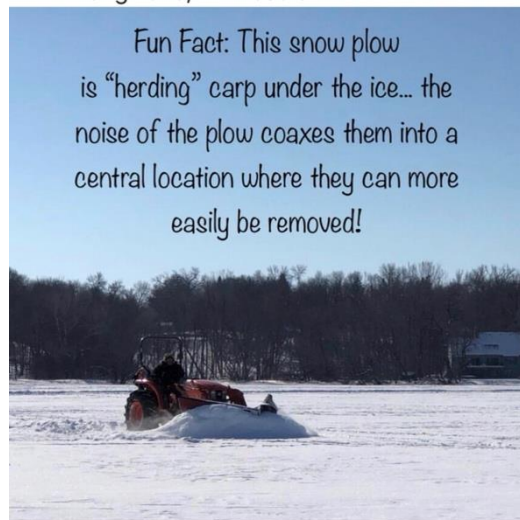
# But We Needed To Raise Awareness To Raise \$



"Nothing in science  
has any value to  
society if it is not  
communicated."

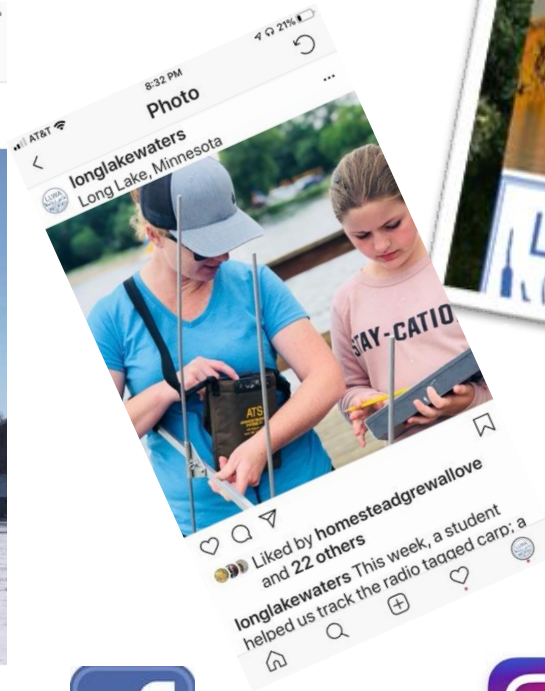
– Anne Roe

# Marketing



Liked by sammuldoon and 35 others

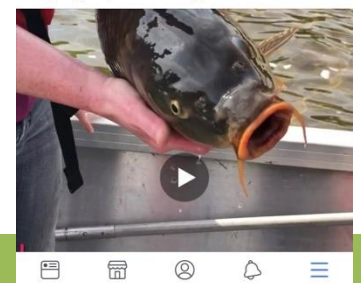
longlakewaters Did you see us on Long Lake this Tuesday? #herdingcarp #carp



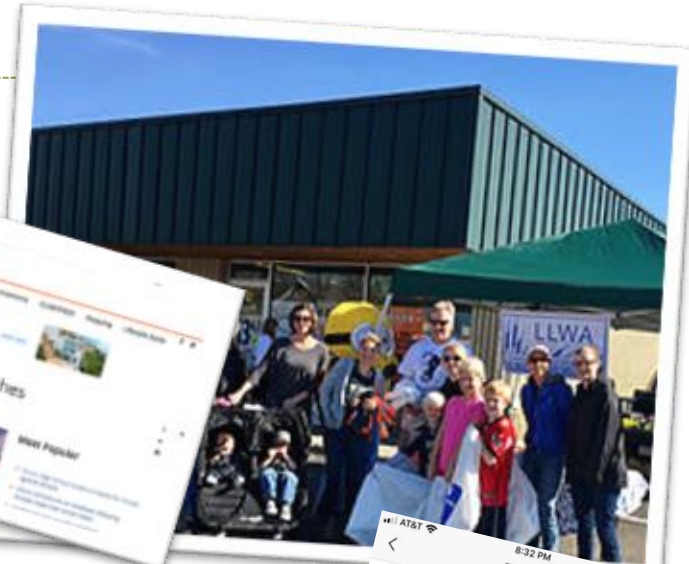
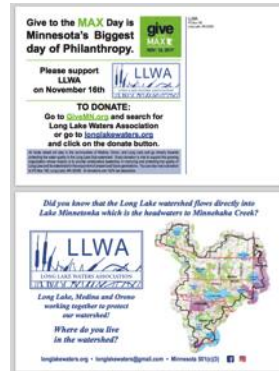
Long Lake Waters Association

Long Lake Waters Association is in Long Lake, Minnesota. Posted by Samantha Capen Muldoon September 16 ·

Come join us!! This Tuesday, September 17th from 2-3pm we will be at Nelson Beach in Long Lake. MCWD will provide demonstrations of some of the tasks underway as part of the Long Lake Creek subwatershed assessment, including how they tag carp for tracking. It's free... See More



# Marketing



# Review: Our Partnership Marketing



|                |                                                                                                                                                    | Rationale:                                                                                                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Logo           |                                                                   | Logo is <u>clear</u> , focused on <u>watershed</u> , <u>nature</u> and easily recognizable.                                                                                                   |
| Target         | <ul style="list-style-type: none"> <li>Local Residents</li> <li>City Governments (LL, Orono, Medina)</li> </ul>                                    | <ul style="list-style-type: none"> <li>Residents give money/time to help</li> <li>City Governments provide money and help to get anything done</li> </ul>                                     |
| Tagline        | <b>Seven Lakes · Three Cities · One Watershed</b>                                                                                                  | Addresses the SIZE and the partnership of CITIES and that we all connect together in ONE Watershed                                                                                            |
| Tone           | Neighborly, Science-based, Nature                                                                                                                  | Warm, serious but inspirational. Visual                                                                                                                                                       |
| Call to Action | Help Us Manage Carp in the Watershed                                                                                                               | Carp are <u>visual</u> , easy to <u>communicate</u> and a <u>tangible</u> first step that can yield results                                                                                   |
| Where          | <ul style="list-style-type: none"> <li>Local Residents: FB, Instagram, website and events</li> <li>City Councils: PR (newspapers, etc.)</li> </ul> | Online/PR is cheap, our targets are online/reading news, and it connects directly to raising money (>GIVE MN) and encouraging support. Events create relationships and PR raises our profile. |



What did all those small marketing efforts lead to?

+\$100,000!

[Home](#) [About](#) [Projects](#) [Permits](#) [Explore](#) [Get Involved](#) [Maps](#) [Data](#) [Education](#) [Invasives](#)



Wake surfer on Lake Minnetonka (credit: Samantha Hanus)



**MINNEHAHA CREEK WATERSHED DISTRICT**  
QUALITY OF WATER, QUALITY OF LIFE

Search MCWD Website

### WHO WE ARE

Minnehaha Creek Watershed District is a local unit of government responsible for managing and protecting the water resources in one of the largest and most heavily-used urban watersheds in Minnesota.

The watershed stretches 178-square miles from St. Bonifacius to south Minneapolis and includes Lake Minnetonka, the Minneapolis Chain of Lakes, Minnehaha Creek, and Minnehaha Falls. It includes eight major creeks, 129 lakes, and thousands of wetlands. [Learn more about the watershed.](#)

### PROJECTS

- > All Projects
- > Capital Projects
- > Water Quality Projects
- > Invasive Species (AIS) Projects
- > Land Conservation and Restoration
- > Low Impact Development
- > Studies

### MCWD STAFF CONTACT(S)

**Brian Beck**  
Research & Monitoring Program Manager  
[E-mail](#)  
952-471-8306

### ABOUT THE SUBWATERSHED

The **Long Lake Creek subwatershed** is located along the northern boundary of the Minnehaha Creek Watershed District (MCWD or District) and within the cities of Medina, Orono, and Long Lake. The subwatershed includes Long Lake, several other lakes, Long Lake Creek, large areas of undisturbed or low-density development (including two DNR Scientific

### Long Lake Creek Subwatershed Assessment

City: [Long Lake](#) [Medina](#) [Orono](#)  
Subwatershed: [Long Lake Creek Subwatershed](#)  
Project Type: [Studies](#)  
**Project Status:** Active  
**Current Status:**  
The assessment work is underway in the Long Lake Creek [subwatershed](#). After tagging carp this spring with radio tags, Research and Monitoring staff, along with project contractors, are busy with:

- Tracking carp movement throughout the watershed and conducting carp biomass estimates
- Compiling water quality and flow data for the subwatershed to inform the watershed and lake modeling
- Working with our project contractor to identify a subset of [wetlands](#) that will receive in-depth assessments

**About this project:**  
Five lakes in the Long Lake Creek Subwatershed are on the State's Impaired Waters List for excess nutrients - Holy Name, School, Wolsfeld, Long, and Tanager Lakes. A state-led study in 2014 identified the load reductions needed and potential nutrient sources, including stormwater [runoff](#), internal sediment release, and carp.

In recent years, a group of local partners, including the Cities of Medina, Long Lake, and Orono, Long Lake Waters Association (LLWA), and Minnehaha Creek Watershed District (MCWD), have been working together to develop a holistic plan to address water quality issues in these five lakes.



In order to cost-effectively address these impairments, additional data was needed enhance our understanding of the ecological and water quality issues in the Long Lake Creek Subwatershed. In 2017 and 2018, MCWD collected additional water quality data while Long Lake, Medina, and LLWA partnered to collect data on invasive common carp.

These recent [monitoring efforts](#) provided the catalyst for MCWD, with support from the partnership, to obtain a \$112,000 grant from the Minnesota Board of Soil and Water Resources to analyze the data and implement water quality improvement

# That's a lot of MONEY!!!



## **BUT WE'VE GOT A LOT OF CARP!**

## **HOW MANY CARP?**

# +25,000 CARP!!



# What is YOUR Idea?



**YOU HAVE CHOSEN AN ISSUE...**

**...AND YOU WANT TO COMMUNICATE IT...**

**WHAT WILL YOUR CAMPAIGN  
PROTOTYPE LOOK LIKE?**



# Design Your Campaign: Four elements

## Four Elements

1. Who?
2. What?
3. Where?
4. How?



- **WHO - Target Audience:**
  - Who are you going to talk to?
- **WHAT - Message:**
  - **Call to Action:** What should they do?
  - **Visuals:** What makes your point best? Logo?
  - **Tagline:** How do you reinforce your message?
- **WHERE – Medium or Media:**
  - Where will you put your message?
  - On what?
  - Where does the problem happen?
- **HOW - Tone:**
  - Are you Serious? Funny? Clever?  
Educational? Helpful?
  - Think about the target when considering tone

# Two Different Ideas, Two Different Targets



## Get people to pick up after their pets

- Who/Target?
- What/Message?  
Tagline?
- Where/Media?
- How/Tone?

## Get boaters to check for AIS on their boats

- Who/Target?
- What/Message?  
Tagline?
- Where/Media?
- Tone/How?



Saving wetlands?  
Leaf removal?

Traditionally, letters to the city council about an issue was a great way to effect change



But now, there are lots of new ways to spread a message

Pick the one that excites you, and works with what you are trying to say.

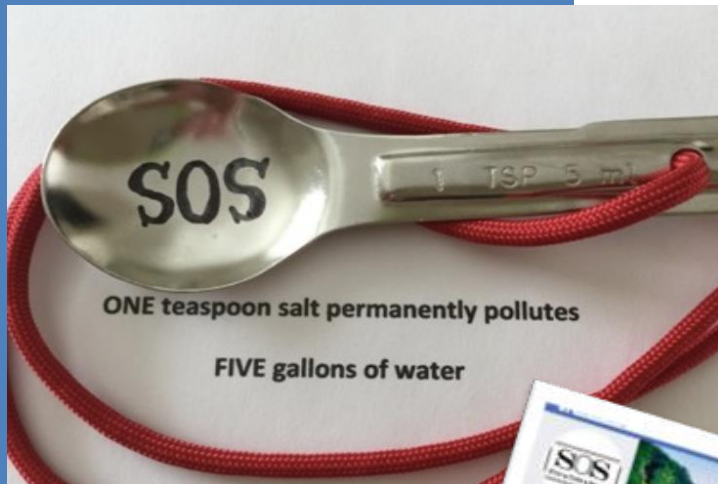




Think about where your message would resonate with your target.

# What is the best place for a message about Dog Poop?

## Or Road Salting?





## What about an Instagram or Tik Tok campaign?

What photos would you take? What would take advantage of the shareable, visual format? What could make it go viral?  
What are your hashtags?

WHAT MESSAGING WOULD THIS WORK FOR?





What about  
using a  
postcard?



Or an  
Infographic?





Where would you put it to make sure it gets noticed?



Will you create some meaningful art?

# Does this seem familiar?





## Will you design a t-shirt?

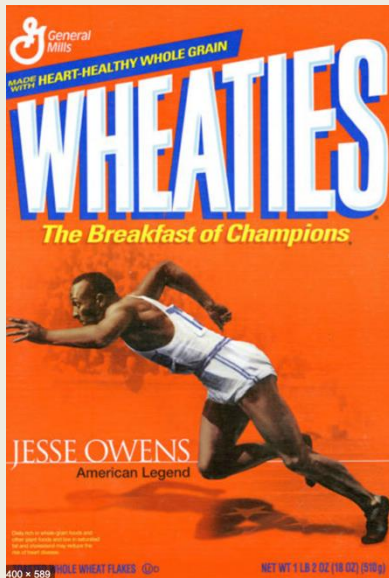
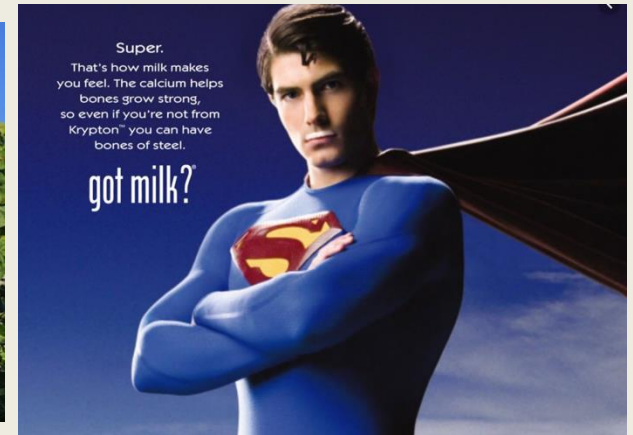
You could be serious, artistic, funny, inspirational, informational ... sarcastic?

Who would be this target? How would you encourage purchase?

# Tagline Examples



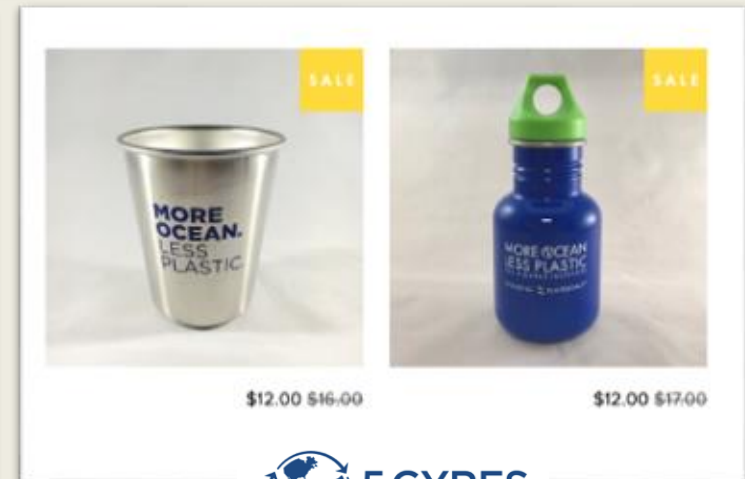
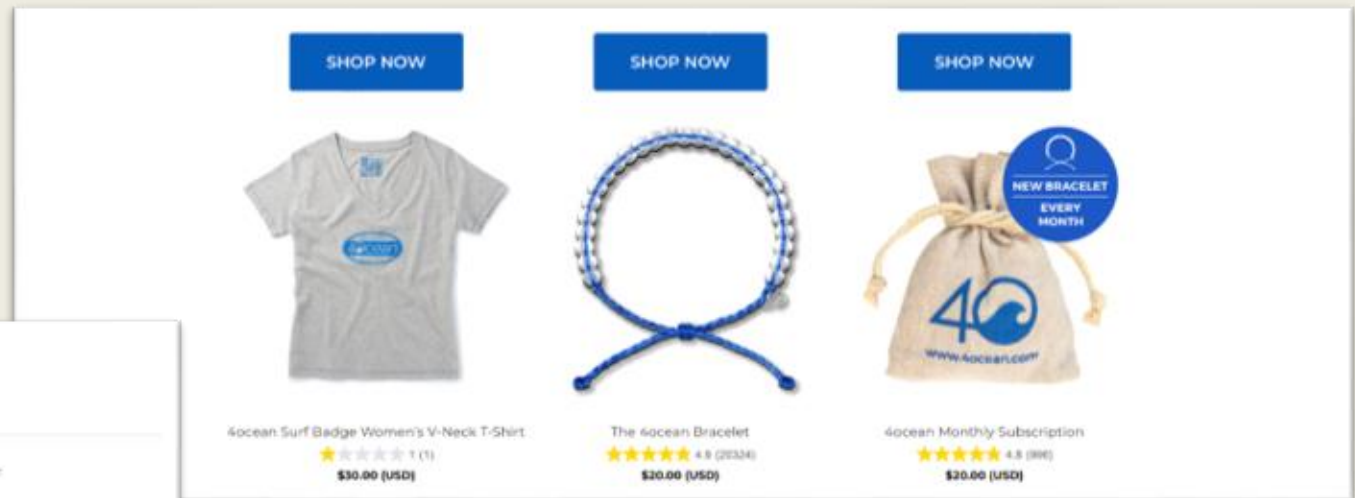
**JUST DO IT.** 



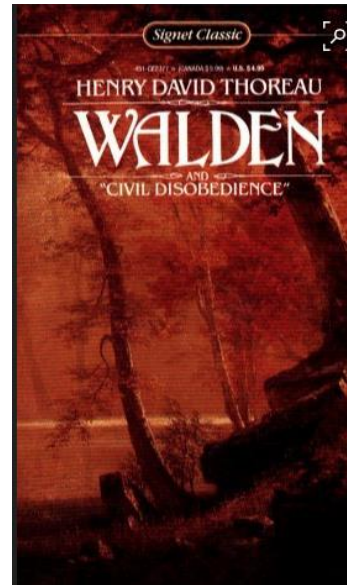
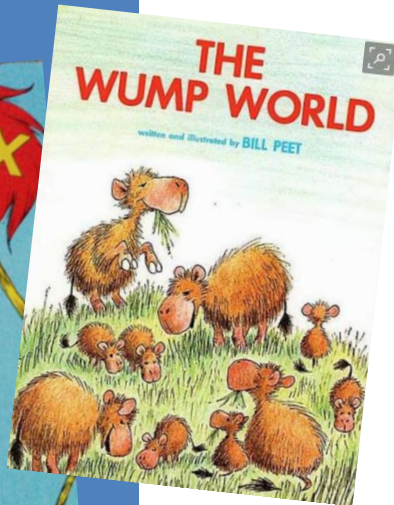
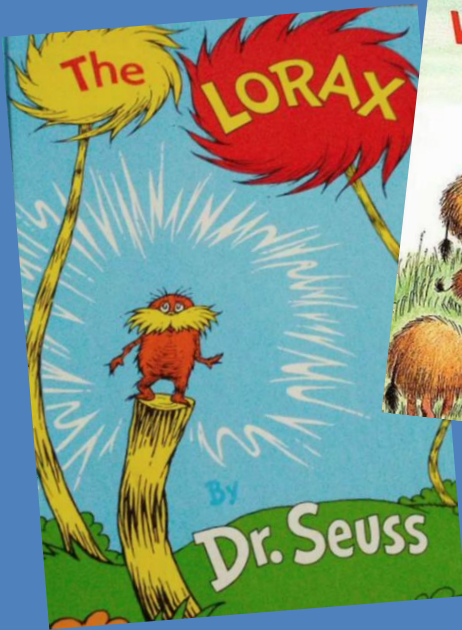
# What about a product to support an effort?



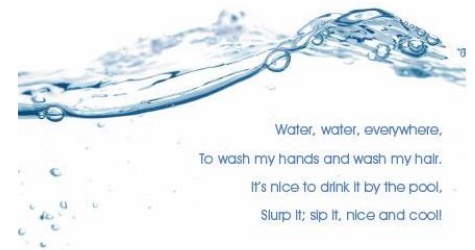
*If you are talking to youth, with a great logo and message, a product that raises funds can really help generate awareness AND money to help.*



**5 GYRES**  
SCIENCE TO SOLUTIONS



## WATER, WATER, EVERYWHERE



Water, water, everywhere,  
 To wash my hands and wash my hair.  
 It's nice to drink it by the pool,  
 Slurp it; sip it, nice and cool!

It comes from clouds don't you know,  
 Falls in rain and also snow.  
 Keep it clean or you will be,  
 Sick as sick, as sick can be!

We are lucky here at school,  
 To have clean water to keep us cool.  
 Think of others when you get paid,  
 And give a bit to Water Aid!

By Charlie Woodhouse age 10

What about a children's book?

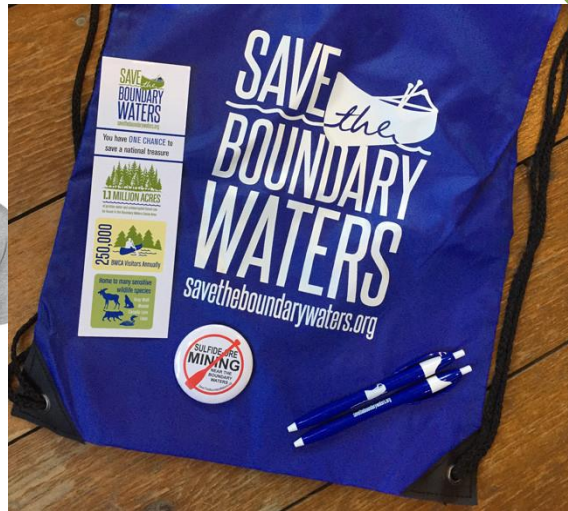
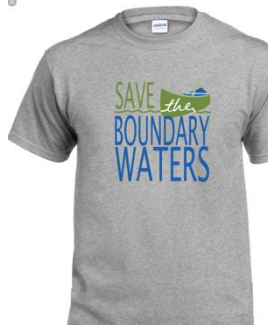
The written word – a book, a  
 poem, a short story that  
 creatively spreads the word.  
 Or a song?



This was a project in  
Burnsville, MN!

What about a stencil project?

# Save The Boundary Waters



# Focus on One Strong Element



- **Who/Target:** Boaters who love nature
- **What/Message:** The Boundary Waters are Worth Saving
- **Tagline:** "Save the Boundary Waters"
- **Where/Media:** Outdoor clothing/waterproof hoodie
- **How/Tone:** Urgent ("SAVE"), Nature loving and using (Boat image)

# The Story of a Cup

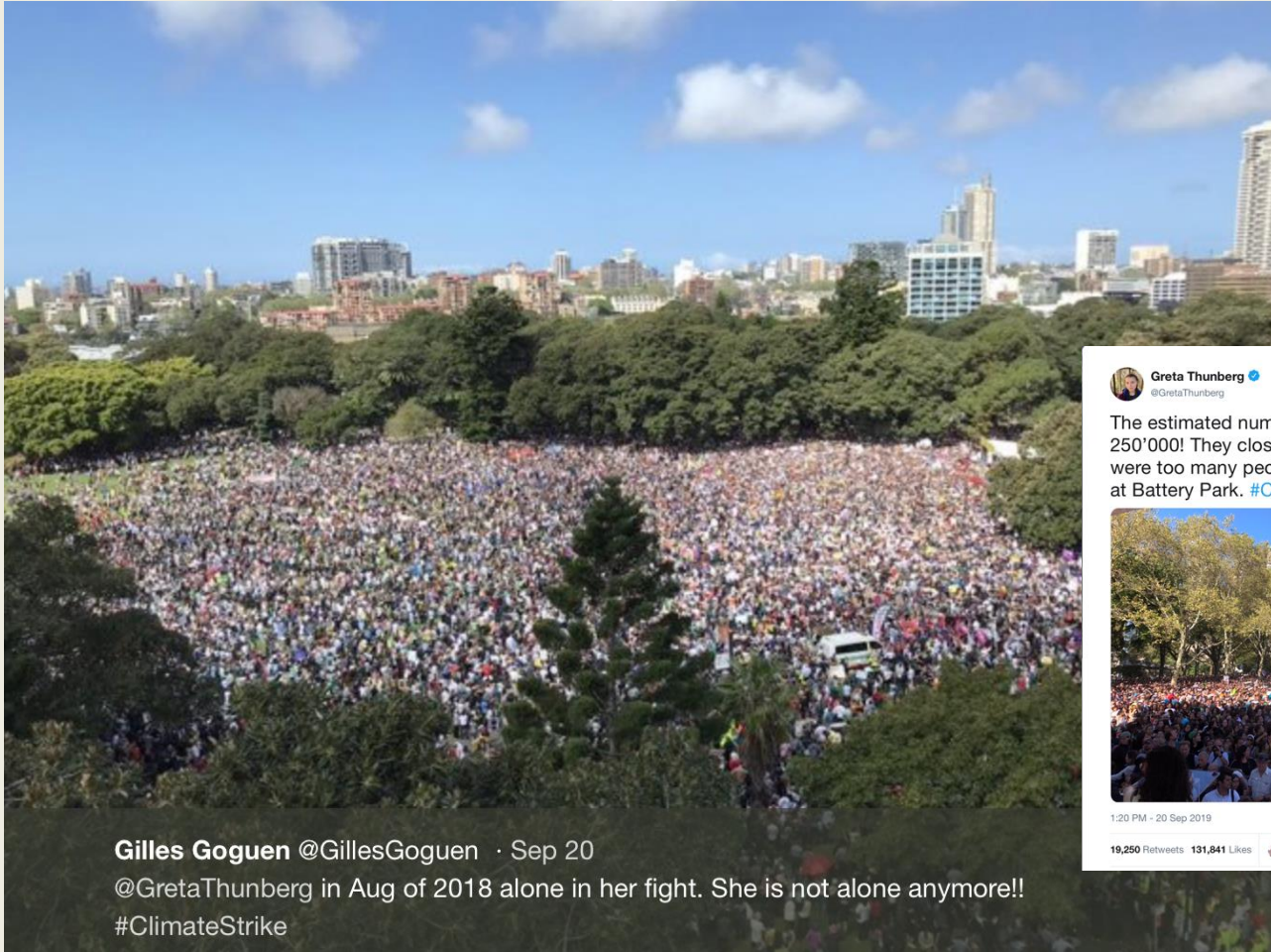


# This is Greta Thunberg at age 15...



Alone, about a year ago, holding her first climate strike

# Greta Thunberg, one year later



**Gilles Goguen** @GillesGoguen · Sep 20

@GretaThunberg in Aug of 2018 alone in her fight. She is not alone anymore!!

#ClimateStrike

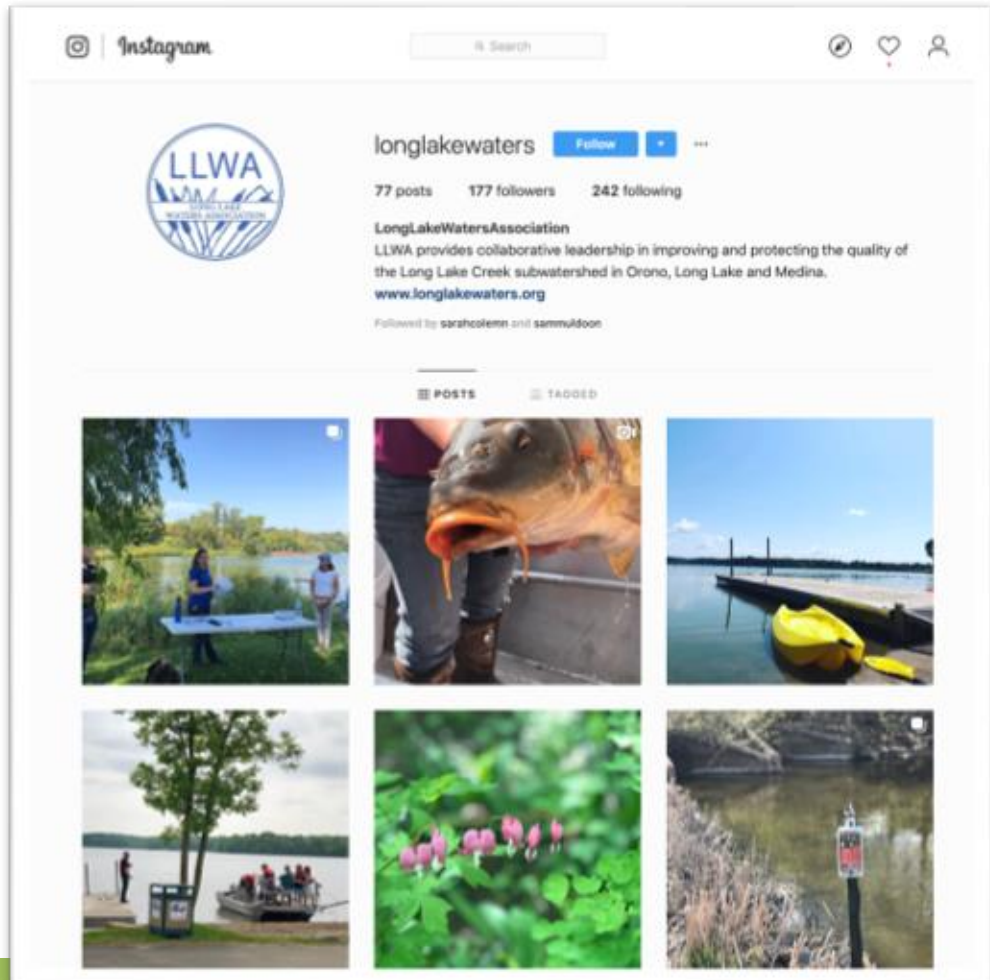




# Long Lake Waters Association

Membership is open to all

- You can email [longlakewaters.org](mailto:longlakewaters.org)
- Follow us on Instagram! Follow us on FB!





**Good Luck!**