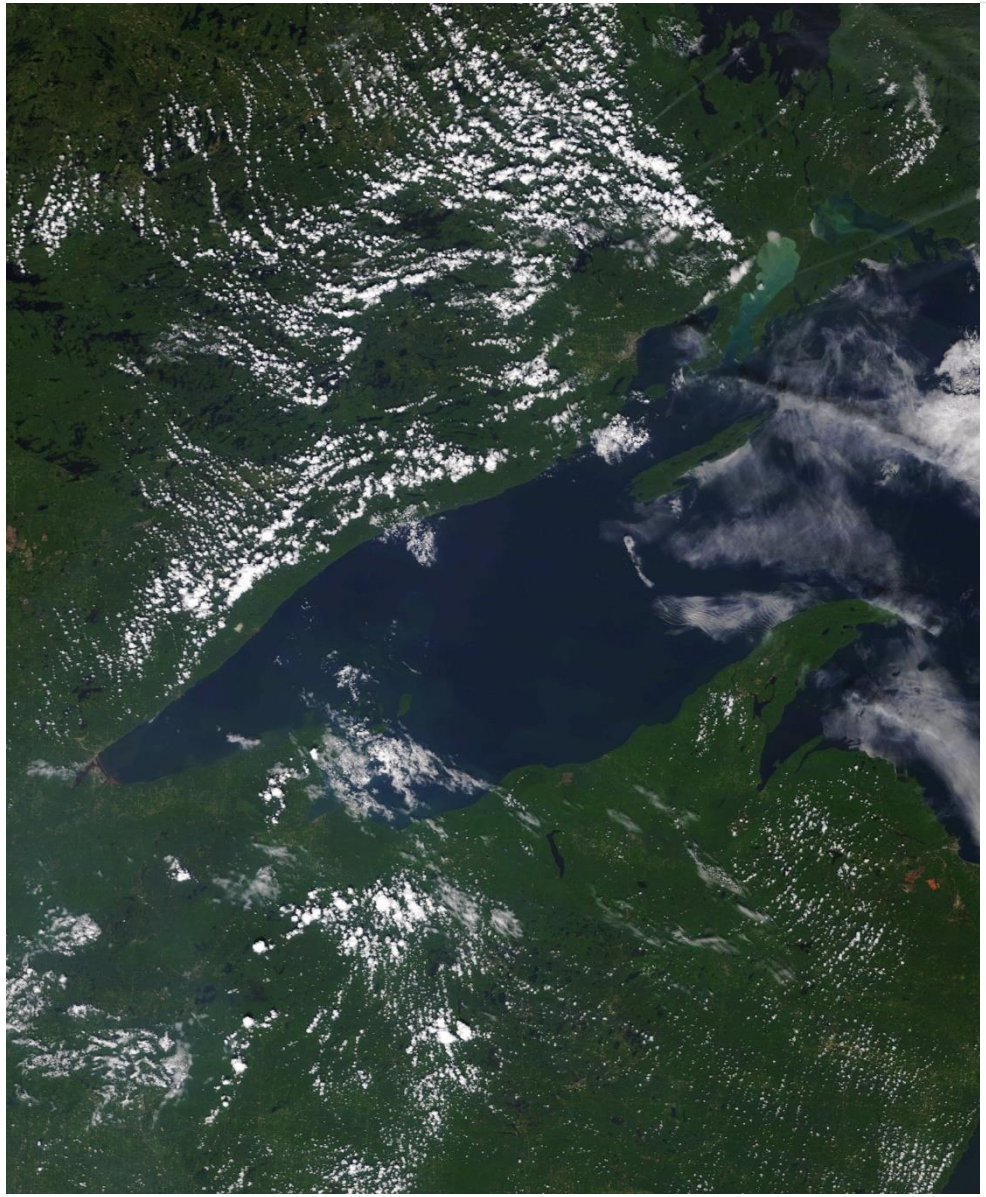
Blooms and the big lake

April 29, 2019



MODIS t1 satellite image from August 9, 2018 (acquired 4/23/19 from NOAA CoastWatch via GLERL)

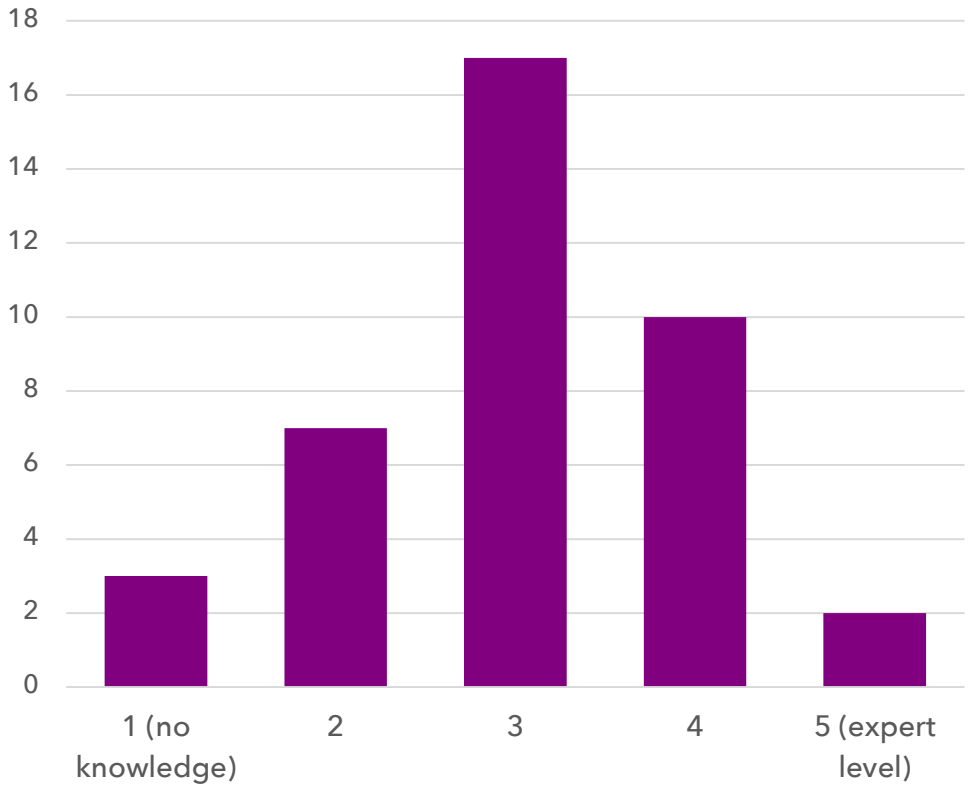
The New York Times

Algae Bloom in Lake Superior Raises Worries on Climate Change and Tourism

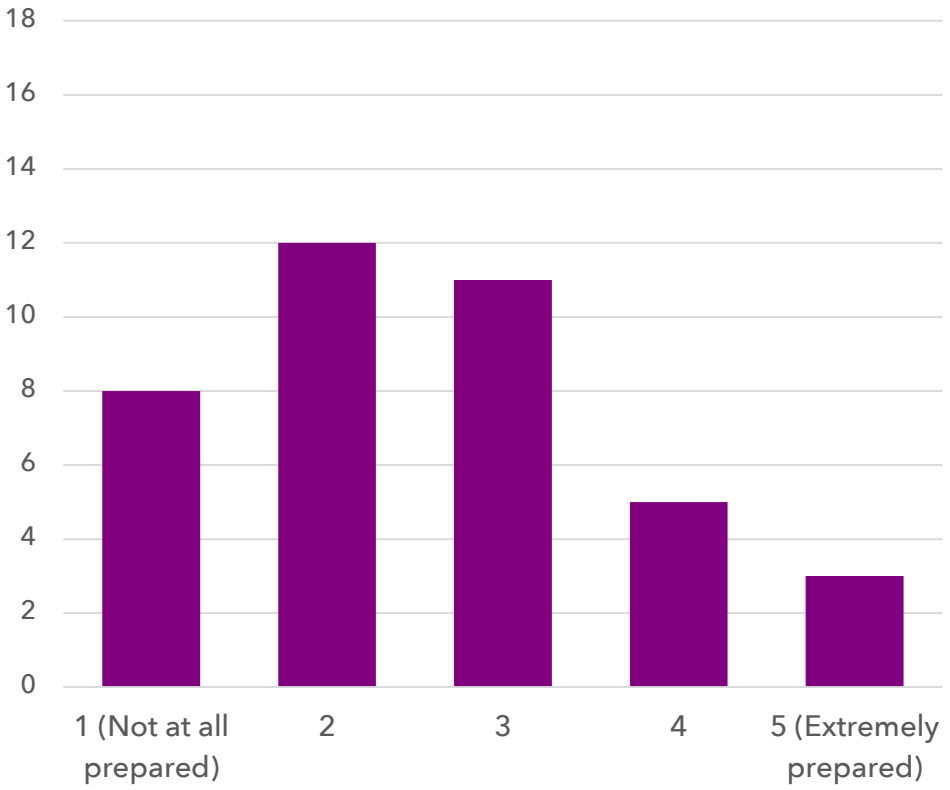
Scientists collecting samples of the algae. Lake Superior is one of several major bodies of water where algae blooms have drawn scientific scrutiny. Brenda Moraska Lafrancois

New York Times Article posted August 29, 2018

Describe your level of **knowledge and understanding** of cyanobacterial blooms

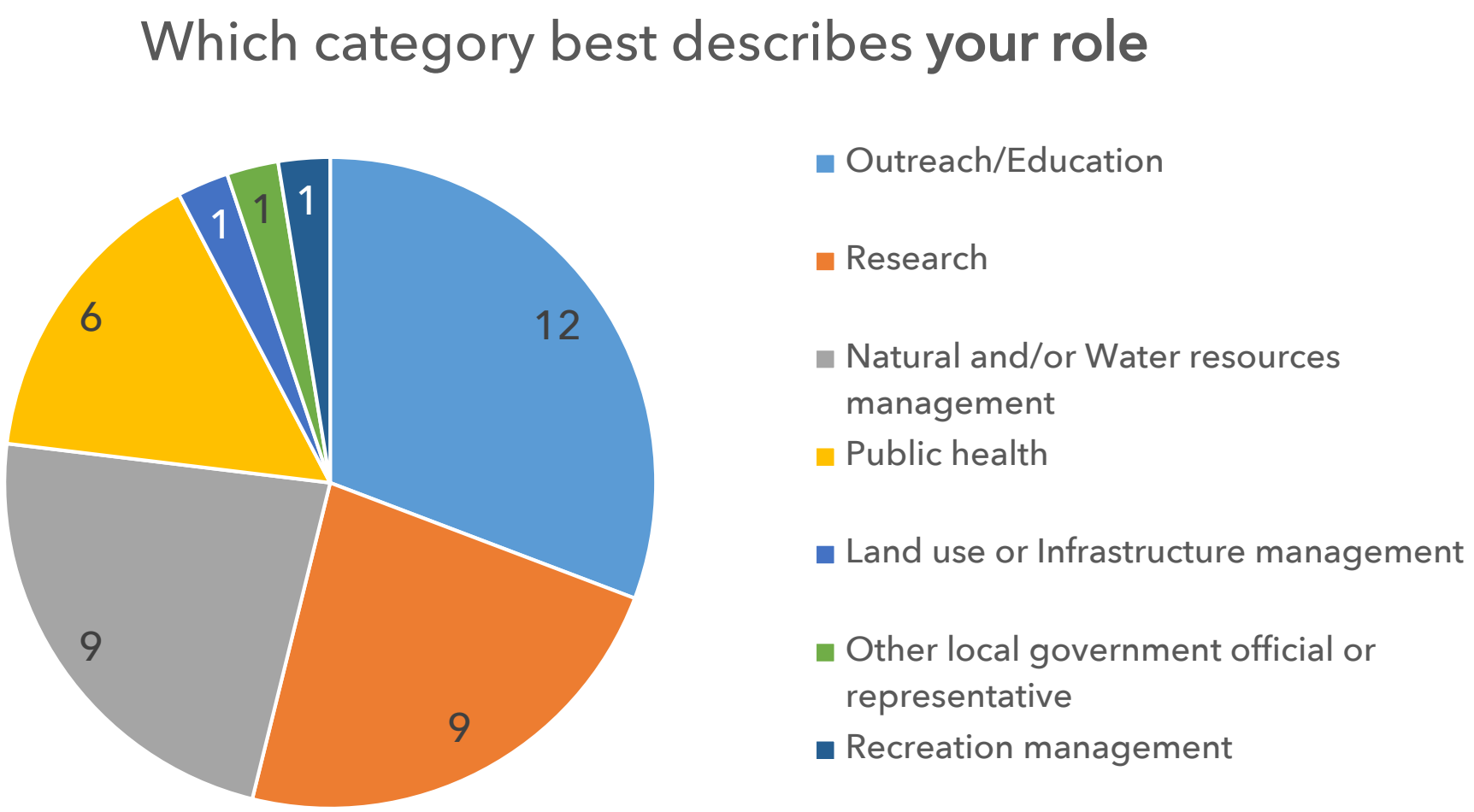


How **prepared do you feel** (in your professional role) to respond to a bloom

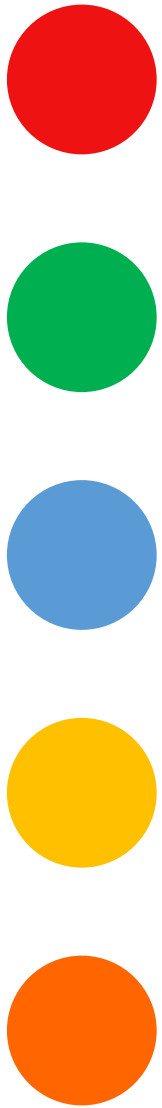


- Why are blooms in Lake Superior now occurring?
- Can we expect to see more blooms in the future?
- How are blooms measured?
- When is exposure to a bloom hazardous?
- How do I best communicate [to the public, the media, to colleagues] about a bloom event?

who's in the room?



dot yourself!



Water Science

Public Health & Safety

Education / Outreach

Water or Natural Resources Management

“Other”

5-minute introduction:

Find one person you don’t know well and share with each other what brought you to this event today.

plan for the day

morning:

blue-green algae 101

local context: research lightning talks

recreational water quality and h.a.b.s

Lunch (12-1)
Provided!

Take a break to network, explore the Center's exhibit hall and outdoor trails, or view the "Algae Petting Zoo" for tips on identifying cyanobacteria and algae.

afternoon:

h.a.b.s & health

what's the risk?

bloom scenario activity

final reflections & wrap up

Case Study

https://www.youtube.com/watch?v=arQ1MVxuwzY

Case Study

Discussion

- What were the news story's positive and negative messages?
- Was the story understandable for the general public?
- What did the story state was known vs. unknown?
- Was there a sense of compassion?

Group Discussion

What have your experiences been with communicating about blue-green algae to the general public?

- What went well?
- What was most challenging?
- What would you do differently next time?

bloom scenario exercise

What are we doing?

- A public health bloom scenario exercise!
- Think through a situation (in a group) where a harmful algal bloom is suspected and make decisions about how to respond
  - ► Think about what information you need to properly assess the situation
  - ► Consider risk communication strategies
  - ► You will not get all the information at once!

Instructions

- Six groups (no more than 6 people to a group)
- You will receive **Part 1** of a hypothetical bloom scenario. Read through, discuss, and take some notes on Part 1 (5 minutes)
- You will then receive and discuss **Part 2** (7 minutes)
- After you receive the final **Part 3**, take some time to discuss the remaining questions and be prepared to share some thoughts afterward (8 minutes)

Scenario 1: What unfolded?

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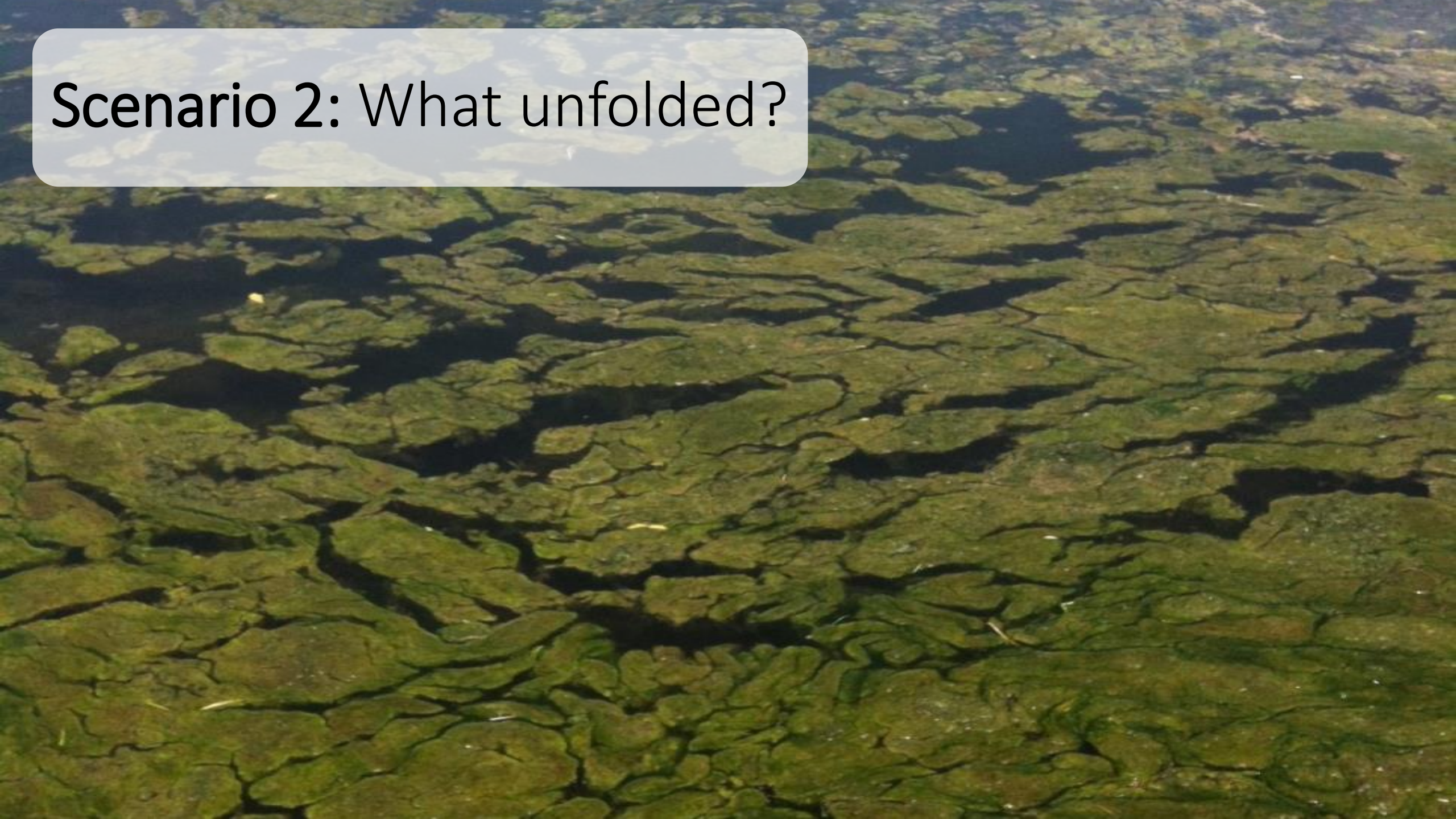
- Cyanobacterial mats reported at a lakeside summer camp by a camp counselor (who used to be a water specialist)
- Concerns that kids recreating in the lake are at risk
- Person who reported asks to remain anonymous
- Local health department unsure about what they are seeing
- WI DNR confirms a benthic cyanobacterial mat floating on the surface
- While benthic mats can be toxic, there are no criteria for determining their level of health risk

Scenario 1 Questions

1 – This scenario asked you to put yourself in the role of a local public health specialist. **How did you ultimately decide to respond to this report of an algal bloom?**

2 – What were the factors that **influenced how you responded?**

Scenario 2: What unfolded?



Scenario 2: What unfolded?

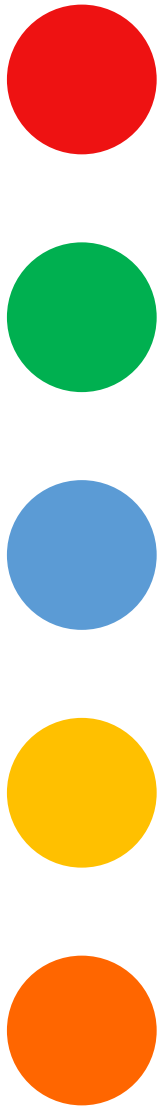
- A family from Chicago gets sick after swimming in a Northern WI lake; they believe blue-green algae made them sick
- The family complains to the local lake association, who responds by going out and examining conditions. They do not believe it's blue-green algae, and tells the family as much.
- The upset family "goes public" with their frustration. Soon the local news, health department, and elected officials are getting questions about the dangers in the water.
- The lake association reaches out to the health department, who asks WI DNR for their opinion (based on a photo of the conditions).
- The DNR concludes the growth is non-harmful filamentous green algae.

Scenario 2 Questions

1 – What are some of the **factors that caused this situation** (which ultimately did *not* stem from harmful blue-green algae) **to escalate**?

2 – Put yourself in the role of the local health department and/or the lake association. Given the DNR's determination, what are your **next steps**? How do you **frame or communicate information** at this point?

dot yourself!



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wrap-up Qs

1) Have you encountered any information today that seems particularly important to your role?

2) What ideas do you have to continue algal bloom learning beyond this event today, and what support do you need from within your role group to make it happen? From those in other role groups?