# Pre-Visit Lesson 5: "State of the Lake: What is Drinkable, Fishable, and Swimmable Water?"

Grade: 4-6

**Discipline**: Science **Length**: 45 Minutes

## **Essential Question(s)**:

1. How clean is the water in Lake Champlain?

2. How do I use graphs and charts to learn about scientific data?

**Objective**: Students will learn more about the health of Lake Champlain using scientific data and graphs.

**Assessment**: Completed worksheets can be collected to assess understanding.

### Materials/Resources:

- State of the Lake Report 2024
- Worksheet

#### Vocabulary:

- > Cyanobacteria
- ➤ Mercury
- ➤ Coliform

**Lesson Summary**: This lesson uses the 2024 State of the Lake Report to expose students to looking at scientific data in graphs and charts. Students will read about how clean the water in Lake Champlain is and fill out the attached worksheet, which asks them to restate information in the reading and in-depth questions about one of the graphs.

#### **Outline of Lesson**

#### Introduction (5 minutes)

- Ask students the question: Why do we use graphs, charts, and tables? You might not get a lot of answers depending on their familiarity with them, but here are some takeaways to guide your conversation:
  - These three things are ways to show information in a different format than just writing it out. They help us because:
    - They can make information easier to read and understand

- They can organize information in a way that lets us see percentages, change over time, and the relationships between pieces of information.
- They can allow us to show a large amount of information without using very much space.

#### Main Lesson:

- Pull up the State of the Lake Report to show students. You can either use the PDF linked in the materials section or hard copies, which you can request from the Lake Champlain Basin Program. Explain that this report is published every three years and is intended to teach the public about the health of Lake Champlain.
- You'll be reading pages 6-8 for this lesson. There are some words that are challenging in this reading, so it might be helpful to read it together as a class. The worksheet linked under the materials section of this lesson plan is focused on these three pages of reading and can be done as you read together or individually by students afterwards.