

Climate Change and Lake Champlain

Grade: 6-8

Discipline: Science

Length: 45 Minutes

Essential Question(s):

1. How can I use scientific data to draw conclusions?
2. How has Lake Champlain been impacted by climate change?

Objective: Students will review what they learned on their field trip to Lake Champlain Maritime Museum and consider ways that they can help improve the health of the lake.

Assessment: Completed worksheets can be collected to assess understanding.

Materials/Resources:

- [State of the Lake Report 2024](#)
- Highlighters
- Worksheet

Lesson Summary: Students will read an excerpt from Lake Champlain Basin Program's 2024 State of the Lake Report, study a graph, and answer questions asking them to draw conclusions based upon scientific data.

Outline of Lesson

Introduction (5 minutes)

- Begin this lesson with a class discussion focused on students sharing what they know about the ice coverage on lakes in our area. You can ask students if they ice fish in the winter, if they have heard/seen warnings not to go on the ice anywhere, or another similar question. You can also tell them that there are people still alive who remember a time when it was common to drive loaded log trucks across Lake Champlain to take wood to the paper mill in Ticonderoga, NY and ask them if they think it would be safe to do that this winter.

Main Lesson:

- Read page 31 of the State of the Lake Report, which focuses on the impact of climate change on our watershed, together as a class. You can either have student just listen or project the page.
- Have students break up into pairs and hand out a copy of the worksheet to each pair. The worksheets have the same page of reading copied on them, a larger version

of the graph, and questions to answer. Students will re-read the page with their partner, highlighting anything they feel is important, and complete the back side of the worksheet.

Closing Activity Options:

- Go over worksheets verbally so that students can share their varying answers.
- Have a closing discussion with students about what changes to the lake scientists expect as a result of climate change and ask if they have any additional theories themselves.
- You could also extend this into a larger activity in which students research a way to help slow climate change and make posters that explain the impact of climate change on our lakes and ways to help.