

# 2023 Special Topic: Adapting to a Changing Climate

Students will learn about factors contributing to a changing climate, the effects of these changes on the environment and natural resources, and the unique challenges facing natural resource dependent communities. As they explore the impacts on human social and economic systems, they will learn about management strategies for mitigating and adapting to a changing climate, and the roles of innovative technologies and programs in responding to local and global changes.

Current Environmental Issue learning objectives include:

- Describe climate change and the process through which it occurs.
- Outline factors, both anthropogenic and natural, which influence climate and climate change.
- Describe major economic sectors that contribute to greenhouse gas emissions.
- Describe major energy sources and explain how each contributes to climate change.
- Describe the history of international collaboration on climate change and analyze the successes and shortcomings.
- Describe the various sources of scientific data which are used as evidence of climate change and explain how we know this data

to be reliable.

- Evaluate climate data and draw conclusions based on that data.
- Explain the use of modeling in forecasting climate and the sources of uncertainty in climate projections.
- Explain the consequences of climate changes on aquatic, forest, wildlife and soil ecosystems.
- Describe the social and economic impacts of climate change.
- Explain how various levels of government, non-governmental organizations and individuals are involved in mitigating and adapting to climate change at local, national and international levels.
- Describe innovative technologies and programs designed to combat climate change.
- Describe the unique challenges faced by regions largely dependent on primary resources (forestry, agriculture, fisheries), and how climate change influences these challenges.

Find study resources for the 2023 special topic at [www.envirothon.org](http://www.envirothon.org).



*During 2022, an ongoing drought caused Nebraska's Platte River to run dry at various points during the summer. Pictured is the dry Platte River bed near Fort Kearny State Recreation Area on Sept. 4, 2022.*

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## New Brunswick, Canada, Hosting 2023 NCF-Envirothon

The 2023 NCF-Envirothon will be hosted at Mount Allison University in Sackville, New Brunswick, July 23-29, 2023. New Brunswick relies heavily on primary resource sectors like forestry, agriculture, fisheries, mining and energy production. Climate change is expected to have direct and indirect impacts on the natural environment, which pose a threat to the viability of many New Brunswick resource-dependent communities.