

Tribal Engagement



NECASC

Northeast Climate Adaptation Science Center

The U.S. Geological Survey (USGS) Northeast Climate Adaptation Science Center (NE CASC) is part of a federal network of nine regional CASCs created to work with natural and cultural resource managers to gather the scientific information and build the tools needed to help fish, wildlife, and ecosystems adapt to the impacts of climate change.

NE CASC Academic Consortium and the 25 Federally Recognized Tribal Nations within the NE CASC footprint

Federally recognized Tribal Nations

Academic Consortium

- ① University of Vermont
- ② University of Massachusetts, Amherst
- ③ Woodwell Climate Research Center
- ④ Cornell University
- ⑤ Columbia University
- ⑥ USFS Northern Research Station

Mikmaq Nation
Houlton Band of Maliseet Indians
Passamaquoddy Tribe - Indian Township
Passamaquoddy Tribe - Pleasant Point
Penobscot Indian Nation

Saint Regis Mohawk Tribe

Mashpee Wampanoag Tribe

Wampanoag Tribe of Gay Head (Aquinnah)

Oneida Indian Nation
Onondaga Nation
Cayuga Nation
Tuscarora Indian Nation
Tonawanda Band of Seneca

Narragansett Indian Tribe
Mashantucket Pequot Tribal Nation
Mohegan Indian Tribe
Shinnecock Indian Nation

Seneca Nation of Indians

Rappahannock Tribe
Upper Mattaponi Indian Tribe
Pamunkey Indian Tribe
Chickahominy Indian Tribe - Eastern Division
Chickahominy Indian Tribe - West
Monacan Indian Nation
Nansemond Indian Nation

What do we do?

- Scientific research to help inform conservation actions and support conservation planning
- Investigate climate change impacts on wildlife and their habitats on land and in water
- Seek opportunities for climate adaptation planning and community resilience
- Build capacity to respond to climate change through partnerships and training the next generation of scientists
- Provide technical support and guidance for framing projects and seeking funding opportunities

We study:

Forests



C. Anderson

Shifting distribution of species, spread of invasives, and impact of droughts

Coasts



E. Cousins

Sea level rise, impacts on saltwater marshes, and coastal erosion

Rivers & Streams



E. Cousins

Changes in flow & temperature and response of cold water fish

Lakes



E. Cousins

Nutrient loading, algal blooms and their effects on water quality and fish

Projects and collaborations:

How and why is the timing and occurrence of [seasonal migrants in the Gulf of Maine changing due to climate?](#)

This is an investigation on how the timing and occurrence of migratory marine animals in the Gulf of Maine is changing due to a series of climatic and ecological drivers. This research will allow us to identify species that are relatively more or less adaptive or vulnerable to climate change. Results help to inform regional management and adaptation plans concerning marine species and interactions with coastal human communities.

[Climate Effects on the Culture and Ecology of Sugar Maple](#)

This research project addresses the impact of climate on the quality of maple sap used to make maple syrup. Informed by the needs of tribal, state and federal resource managers, and maple syrup producers, the research team is examining the chemical composition of sap collected throughout the northeast and comparing this to variation in climate across the region. Projections are available for maple syrup quality under future climate conditions and under a variety of management strategies.

[Indigenous Planning Summer Institute \(IPSI\)](#)

The IPSI is an introduction of concepts in Indigenous planning. The purpose is to train Indigenous students to be the next leaders, managers, and scientists in their communities; to be well versed in Indigenous planning concepts that address climate change, and build community resiliency.

Working with [United South and Eastern Tribes \(USET\)](#) to provide information and technical support

The NE CASC hosts the United South and Eastern Tribes (USET) Tribal Climate Science Liaison to provide information and technical support to Tribal Nations conducting climate change vulnerability assessments and adaptation plans. The NE CASC also partners with USET to host Tribal climate summits, trainings, camps, and workshops.

Network building with the [Northeast Indigenous Climate Resilience Network \(NICRN\)](#)

NICRN convenes Indigenous peoples to identify threats to Indigenous self-determination and ways of life while also developing initiatives to address climate change and its impacts.



USET Semi-annual meeting 2014.

We want to hear from you!

What are some of the climate-related issues that impact your Tribal Nation?

What information or tools does your Tribal Nation require to address these issues?

Is your Tribal Nation developing a climate change vulnerability assessment/adaptation plan and if so, what information is required to develop these plans?

NE CASC Tribal Liaison



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Learn more at:
necasc.umass.edu



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