



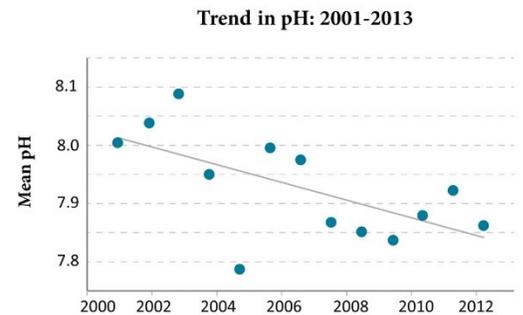
Assess Climate Change Impacts on Maine's Marine Species

Create a Science and Policy Advisory Council to address the impacts of climate change on Maine's marine species.

The Gulf of Maine is changing faster than almost all other oceans; we need to better understand the impacts of climate change on Maine's marine environment and economy.

Mainers must act now on climate change based upon ocean trends.

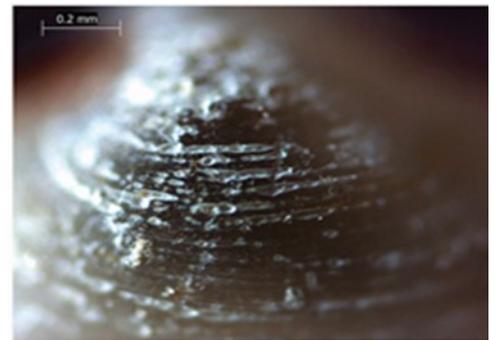
- Carbon dioxide from the burning of fossil fuels gets deposited in the ocean where it mixes with sea water to form carbonic acid which changes water chemistry. Those changes make it harder for shellfish to form healthy shells and stress lobsters.
- Warming water temperatures affect the base of Maine's rich marine food chain that sustains all marine organisms, including fish we eat.
- In warmer waters, invasive species displace and prey on native marine species.
- In 2017, Maine's valuable shellfisheries were closed for long periods due to new harmful species of microalgae that contaminated shellfish and threatened human and marine mammal health.



The pH of Casco Bay, in the Gulf of Maine, has been in a downward trend over the past 15 years.

Marine species already face sharp population declines and poor health due to climate change and Mainers who depend on these species already feel economic harm.

- Soft shell clam landings have declined 75% in the last 40 years; the rate of invasive green crab predation has climbed over 99%; and only .01% of Maine clams survive to commercial sizes.
- Invasive green crabs have been linked to the decline of mussel beds in Casco Bay.
- Rising ocean temperatures may affect the metabolism and development of crustaceans including lobsters.
- Landings of lobsters further north and farther out to sea may be evidence of shifts in populations due to warming temperatures.
- New findings reveal that earlier springs and hotter summers in the Northeast are making resident lobsters increasingly susceptible to epizootic shell disease.



A clam shell shows pitting and shell loss after being placed in acidic mud for two weeks.

A Science and Policy Advisory Council will:

- Recommend actions and adaptation strategies to protect our marine resources.
- Draw together top scientists and policymakers to determine how best to protect our marine resources from the effects of climate change.

Support Maine's Marine Species and Economy with an Advisory Council

For more information, contact Ivy Frignoca, Friends of Casco Bay, 207-799-8574 x202, ifrignoca@cascobay.org



Maine's Environmental Priorities Coalition

is a partnership of 31 environmental, conservation and public health organizations representing over 100,000 members who want to protect the good health, good jobs and quality of life that our environment provides.

We are counting on Maine policymakers to take the important steps needed to make wise use of Maine's extraordinary environment so Maine people and Maine communities can thrive.

Acadia Center	Maine People's Alliance
Appalachian Mountain Club	Maine Public Health Association
Atlantic Salmon Federation	Maine Rivers
Bicycle Coalition of Maine	Maine Wilderness Guides Organization
Conservation Law Foundation	Midcoast Conservancy
Environmental Health Strategy Center	Natural Resources Council of Maine
Environment Maine	Physicians for Social Responsibility, Maine Chapter
Friends of Casco Bay	RESTORE: The North Woods
Islesboro Island Trust	Sierra Club, Maine Chapter
Maine Association of Conservation Commissions	Southern Maine Conservation Collaborative
Maine Audubon	The Ocean Conservancy
Maine Center for Economic Policy	The Trust for Public Land
Maine Conservation Alliance	The Wilderness Society
Maine Council of Churches	Toxics Action Center
Maine Council of Trout Unlimited	Upstream
Maine Interfaith Power & Light	350 Maine
Maine Lakes Society	
Maine Organic Farmers & Gardeners Association	