Farming is an important part of Maine’s heritage, communities, economy, and way of life, and agriculture contributes more than $1 billion to Maine’s economy each year. But climate change is changing temperatures and bringing more extreme weather to Maine, threatening the viability of our crops and the Maine farmers who depend on them.

Climate change brings warmer temperatures, which can:

**Harm crops**
- Plants can grow faster up to a certain temperature, but growth declines with additional warming. Different crops have different ideal temperatures, so some traditional Maine crops are harmed by climate change.
- Maine's largest crop is potatoes. They grow best in cool weather—ideally, 60-64 °F, which is the current average temperature in Presque Isle during the growing season. Projected warming from climate change may reduce potato yields by 25-35 percent.¹
- Weeds may grow faster in warmer weather, outgrowing and stunting crops.²

**Increase pests**
- Warmer temperatures bring new pests that damage crops. For example, the blueberry gall midge, which has been a problem in southern areas in New Jersey, is now appearing in southern Maine and damaging crop yields.
- Higher temperatures can increase damage from insects already in Maine, like the Colorado potato beetle. The beetle currently reproduces once during our growing season, but with warmer temperatures and a longer season, it could complete multiple generations each summer, damaging more crops.

“A lot of the plant diseases that used to be confined to certain areas of the south are starting to move north. Viruses that are transported by southern bugs that would be killed off by frost here are gaining ground moving north.”

— Pete Zuck, Johnny's Selected Seeds

Abandoning Action to Address Climate Change

Climate change is warming Maine’s waters. For our lakes and streams this means more algae blooms, which can harm Mainers’ health and property values, too. Warmer waters also mean less habitat for cold water fish, like Maine’s treasured brook trout and lobster.

Repealing the Clean Power Plan

Trump’s EPA has proposed to repeal the Clean Power Plan, the United States’ signature climate policy, which set protective limits on carbon emissions from existing coal- and gas-fired power plants.

Stopping EPA efforts to address climate change

EPA’s work to understand and reduce the risks of climate change is set to be eliminated under Trump’s proposed EPA budget. Current EPA climate programs target the largest sources of climate-changing carbon pollution, promote voluntary reduction strategies, support research and data gathering, provide technical assistance and public education, and promote international activities to reduce climate-changing pollution around the world.

Withdrawing the U.S. from the Paris climate agreement

Trump plans to withdraw the United States from the Paris climate agreement, under which the United States had pledged to cut emissions by 26 to 28 percent below 2005 levels by 2025. The Trump Administration has formally notified the United Nations of its intent to withdraw, but it cannot complete the process until late 2020.

Delaying multiple rules that reduce airborne mercury and other air pollution from power plants

By “reviewing” a number of air pollution rules, Trump’s EPA is delaying setting limits to reduce the amount of mercury and other air pollutants power plants can emit. Mercury is a neurotoxin found in Maine’s lakes, rivers, fish, and wildlife, primarily due to power plant pollution from other states.

Increased Mercury and Other Air Pollution

The Maine Bureau of Health warns people to limit eating fish from all of Maine’s inland waters due to mercury contamination, which primarily comes from out-of-state air pollution. Maine depends on strong federal laws and the Environmental Protection Agency to limit pollution coming from other states.

Reopening a review of fuel-efficiency standards for cars and trucks

Trump’s EPA and Department of Transportation are reopening a review of fuel-efficiency standards for new cars and trucks, to which automakers have previously agreed. Rolling back these standards would create more air pollution for Maine, driving climate change and air pollution that lands in our waterways.

Sources:


Reduce fruit production

• Untimely warm spells between November and April can force fruit trees and other perennial crops to bud early, before the last spring freeze date. This puts those crops at risk from spring frosts. In November 2016, Maine apple trees blossomed too early in much of Maine, contributing to a smaller harvest.

Stress livestock

• Hot weather and humidity can stress livestock, undermining their health.
• Higher temperatures and humidity levels can affect livestock productivity, too. For example, dairy cows will produce less milk and fewer calves.

Climate change brings more extreme weather

More intense, sporadic rainfall

• Scientists say climate change will bring Maine more intense rains, which run off with less moisture absorbed into the soil. This can lead to more droughts, since rains aren’t replenishing as much soil moisture. In the summer of 2016 and 2017 Maine experienced drought conditions, despite higher than average rainfall.
• During the growing season, intense rains wash out newly planted fields, damage growing crops, bring more soil erosion and nutrient run-off, and leave soil less fertile by washing away nutrients.

Longer, warmer, drier growing seasons

• Longer summers and intense heat waves cause soil and plants to lose moisture faster, requiring crops to be watered more often and threatening crops that aren’t irrigated.

“If you’re doing the irrigation, then there’s plenty of fruit, but if you aren’t irrigating, then you might be in trouble.” — Joseph, blueberry farmer of Steep Hill Farm in Fayette