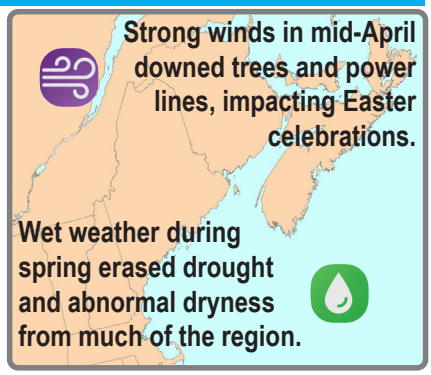
Quarterly Climate Impacts and Outlook

Gulf of Maine Region

June 2025

Gulf of Maine Significant Events – *March–May 2025*

Spring was **warmer than normal** for the Gulf of Maine region, ranking among the 10 warmest springs for some sites including Boston, MA; Halifax, N.S.; and Summerside, P.E.I. Much of the region saw **above-normal precipitation**, with this spring among the 10 wettest for a few sites including Concord, NH; Caribou, ME; and Saint John, N.B. In fact, Caribou saw a **record-tying 50 days with measurable precipitation** [0.25 mm (0.01 in.)] this spring, while Concord had its second-greatest number at 46 days. Many weekends during spring featured wet weather. **Spring snowfall was below- or near-normal** for most areas, with Boston not seeing measurable snowfall [0.25 cm (0.1 in.)] for only the fifth time on record. Conditions were favorable for maple syrup season in New Brunswick.



March

March was **warmer than normal**, aided by a prolonged warm spell in the middle of the month. This March ranked among the **10 warmest Marches** on record for several Maritimes sites including Moncton, N.B.; Halifax, N.S.; and Charlottetown, P.E.I. Above-normal temperatures led to **below-normal snowfall** for much of the region, even in areas that saw above-normal precipitation. For example, Saint John, N.B., reported nearly twice as much total precipitation as normal for March (its sixth wettest March on record), but saw only half its normal amount of snowfall. This March tied as the **least snowy** on record for Boston, MA, and the eighth least snowy for Concord, NH. Several storms during the month chipped away at **drought and abnormal dryness** in multiple areas.

April

For multiple locations, cooler-than-normal weather in early April was balanced, or in some cases overcome, by warmer conditions later in April. This caused temperatures for the full month to be **near or above normal**, with the warmest spots in New England. While monthly precipitation totals varied, this April wrapped up as the fifth wettest for Woodstock, N.B., and the 10th wettest for Caribou, ME. **Wet weather**, courtesy of several storms, **erased moderate drought** from a large portion of the region and allowed abnormal dryness to shrink in coverage. Most of the region saw **below- or near-normal snowfall**.

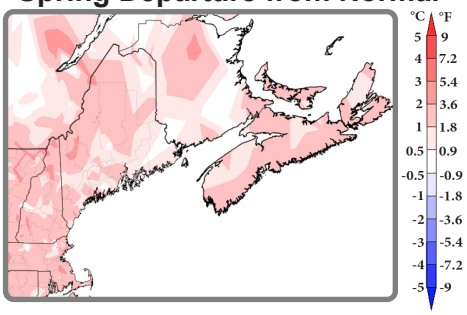
May

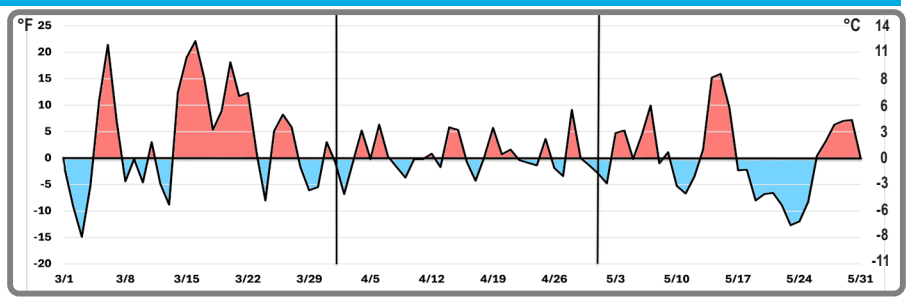
May was **exceptionally wet** in New England, ranking among the **10 wettest Mays** for multiple sites including Boston, MA; Concord, NH; and Portland and Caribou, ME. In fact, Concord had 10 consecutive days with measurable precipitation from May 1 to 10, tying its eighth-longest such streak since 1868. The site saw 18 days with measurable precipitation during the month, tying as its **third-greatest number for May**. The wet weather allowed drought and abnormal dryness to ease in many areas. For instance, Maine became **free of drought** for the first time since September 2024, while New Hampshire became **free of both drought and abnormal dryness** for the first time since June 2024. However, precipitation amounts were closer to normal in the Maritimes. The first half of May was quite warm, but the second half was generally cooler, keeping **monthly average temperatures close to normal** for most areas. On May 14, Charlo, N.B., had a high of 30.8°C (87°F), its **earliest day in the year** with a high of at least 30°C (86°F) since its records began in 1966.

Regional Climate Overview – *March–May 2025*

Temperature

Spring Departure from Normal





Daily average temperature departure from normal during spring at Caribou, ME. Warmer-than-normal days are shaded red and colder-than-normal days are shaded blue.

Spring (averaged over March, April, and May) was up to 2°C (4°F) **warmer than normal***, ranking among the 10 warmest springs for a few sites like Boston, MA; Halifax, N.S.; and Summerside, P.E.I. **March** was up to 3°C (5°F) **warmer than normal**, ranking among the 10 warmest Marches on record for several Maritimes sites. **April** was up to 2°C (4°F) **warmer than normal**. **May** temperatures ranged from 1°C (2°F) **cooler than normal** in a few spots in New England to 2°C (4°F) **warmer than normal** in areas such as southeastern Massachusetts and parts of Nova Scotia.

*Normals based on 1991–2020 data.

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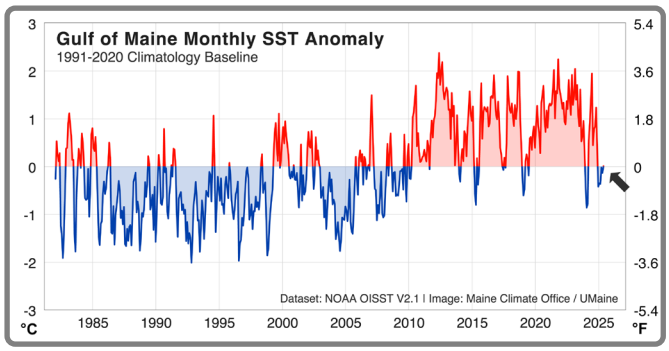
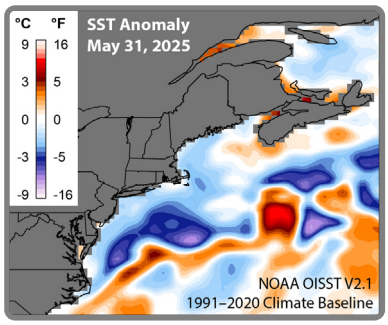
Regional Climate Overview – *March–May 2025*

Sea Surface Temperature

Spring monthly mean sea surface temperature (SST) averaged across the Gulf of Maine was **near the 1991–2020 climatological mean** all three months, resulting in the coolest March–May period since 2019. The chart shows all monthly SST anomalies from January 1982 to May 2025, estimated from NOAA OISST version 2.1. The arrow on the right of the chart points to the March–May values.

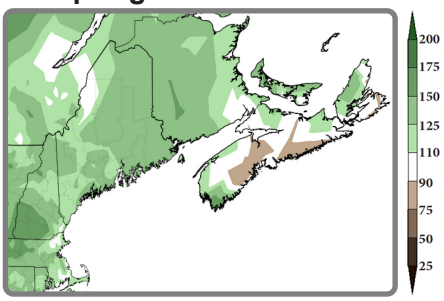




The map at left shows preliminary data for May 31. **Cool SST anomalies** are found across much the Gulf of Maine, with the exception of warm anomalies around Nova Scotia. Buoy observations indicate that deep areas of the Gulf have also seen cooler SSTs in recent months. See this recent report describing cool anomalies across the Gulf of Maine this past winter. Daily OISST data for the Gulf of Maine are available from the Maine Climate Office.

Precipitation

Spring Percent of Normal



Spring precipitation (accumulated from March to May) ranged from 75% of normal* to 175% of normal, ranking among the 10 wettest for a few sites. **March** precipitation ranged from 50% of normal to 200% of normal, with Saint John, N.B., having its sixth-wettest March. **April** precipitation ranged from 50% of normal to 200% of normal, ranking among the 10 wettest Aprils for Woodstock, N.B., and Caribou, ME. **May** precipitation ranged from 50% of normal in Nova Scotia to over 200% of normal in New England, ranking among 10 wettest Mays for multiple sites in New England.

*Precipitation normals based on 1991–2020 data.

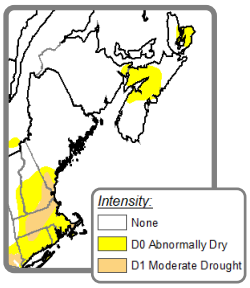
Regional Impacts – *March–May 2025*

Ice jam on the Saint John River in northern Maine on March 20. Credit: USGS

Spring Conditions

Several storms moved through the region during March. **Mild temperatures and rain** associated with a mid-month storm led to **rapid snowmelt**, resulting in ice jams and localized flooding in parts of Maine and New Brunswick. From March 29 to 31, the region saw a mix of precipitation types. This included a **prolonged period of freezing rain**, with the greatest totals around 13 mm (0.50 in.) in parts of New Hampshire. Storm impacts included power outages and school closures. Parts of New England saw **below-normal streamflow and/or groundwater levels** at times during March, with a few Massachusetts locations having mandatory water restrictions in place. Beneficial precipitation during the month chipped away at moderate drought and abnormal dryness in New Hampshire, Maine, New Brunswick, and P.E.I. There was minimal improvement in Massachusetts, while drier conditions in Nova Scotia allowed drought and abnormal dryness to persist or expand.

April featured several rounds of precipitation, **erasing moderate drought** and reducing abnormal dryness in many parts of the region. A notable exception was eastern Massachusetts, which saw moderate drought introduced on Cape Cod and limited improvement elsewhere. Below-normal streamflow and/or groundwater levels persisted in some areas. This was particularly true in Massachusetts, where **water restrictions** continued, intensified, or were enacted in several communities. On April 8, a snowstorm closed schools for nearly all of Nova Scotia. An interesting event occurred from April 19 to 21 when an intensifying storm system carried **dust from the southwestern U.S.** and deposited it, along with rain, on parts of New England. This storm system also produced **wind gusts** of up to 107 km/h (66 mph) across the Gulf of Maine region, with most gusts in the 48 to 97 km/h (30 to 60 mph) range. The winds fanned several brush fires, damaged trees, and knocked out power to thousands of customers, **disrupting Easter festivities**.



North American Drought Monitor as of April 30, 2025.

May was quite wet in New England, with Concord, NH, seeing 18 days with measurable precipitation, tying as its **third-greatest number for May**. The wet weather allowed drought and abnormal dryness to ease in many areas. For instance, Maine became **free of drought** for the first time since September 2024, while New Hampshire became **free of both drought and abnormal dryness** for first time since June 2024. Abnormal dryness also eased in southeastern New Brunswick but persisted in parts of Nova Scotia. Near-normal precipitation and temperatures **limited fire danger** for much of the Maritimes at month's end.

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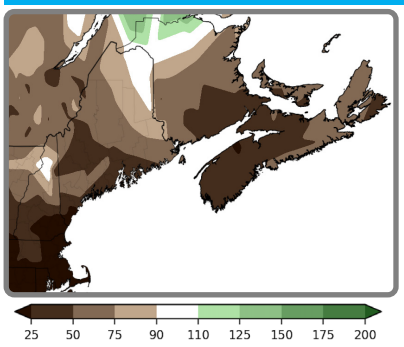
Regional Impacts – *March–May 2025*



Spring snowfall ranged from less than 25% of normal* to 150% of normal.
*Normals based on 1991–2020 data

Spring Snowfall

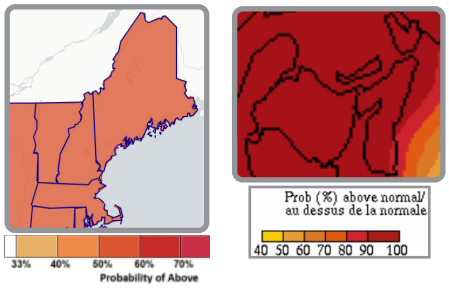
March snowfall ranged from less than 25% of normal in places like Massachusetts, southern New Hampshire, and Nova Scotia to near normal in northern Maine and northern New Brunswick. Snow on the ground at the end of March in the Maritimes was **below normal**. Ice jam flooding, which resulted in several road closures, was worse for rivers in New Brunswick this year compared to recent years. This was due to **greater ice build-up** tied to cold February temperatures and a **lack of snow** that typically insulates the ice against accelerated thickening. The cold February and lack of snow allowed the Saint John River at Fredericton, N.B., to have its **longest ice season since 2014** at 85 days.

April snowfall ranged from less than 25% of normal in parts of New England to over 200% of normal in central Nova Scotia, with most of the region seeing **below- or near-normal amounts**. Much of the Maritimes had **no snow on the ground** at the end of April. The notable exception was northern New Brunswick, which had above-normal snow depth at month's end.

As is typical in **May**, there was **little to no snow**. However, a late-season nor'easter brought Mount Washington, NH, 16.8 cm (6.6 in.) of snow on May 24, making it the site's **third-latest** snowfall of 15 cm (6 in.) or more since 1949. **Spring snowfall** (accumulated from March to May) was **below or near normal** for most of the region, with parts of New England seeing less than 25% of normal. It was **only the fifth time** since 1891 that Boston, MA, did not see measurable snowfall [0.25 cm (0.1 in.)] during spring.

Regional Outlook – *Summer 2025*

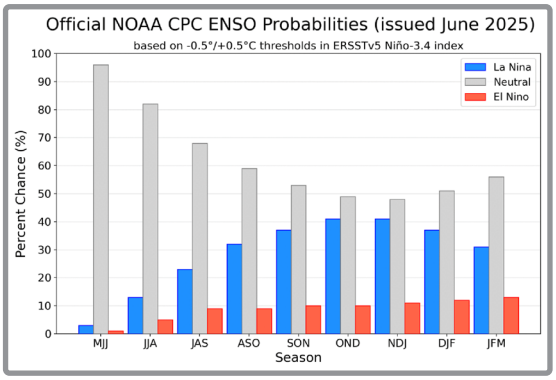
Temperature and Precipitation



CPC temperature map (left) produced May 15. ECCC temperature map (right) produced May 31.

For **June–August**, NOAA's Climate Prediction Center (CPC) and Environment and Climate Change Canada (ECCC) favor **above-normal temperatures** for the entire Gulf of Maine region. In New England, this is due in part to long-term trends.

CPC slightly favors **above-normal precipitation** for Massachusetts, New Hampshire, and most of Maine, driven by factors like long-term trends. Meanwhile, ECCC favors **below-normal precipitation** for Nova Scotia, P.E.I., and parts of New Brunswick. **Equal chances** of below-, near-, or above-normal precipitation were forecast for the rest of the region including northern Maine and western New Brunswick.



Atlantic Hurricane Season

	2025 Atlantic Season Outlook	1991-2020 Average Season
Number of Named Storms	13-19	14
Number of Hurricanes	6-10	7
Number of Major Hurricanes	3-5	3

NOAA is expecting an **above-normal Atlantic hurricane season** with 13–19 named storms, of which 6–10 are expected to become hurricanes, including 3–5 major hurricanes. **Multiple factors** such as ENSO-neutral conditions, warmer-than-normal Atlantic ocean temperatures, and forecast weak wind shear are expected to align to potentially make this season more active. The Atlantic hurricane season runs from **June 1 through November 30**, peaking from mid-August to late October. The Northeast Regional Climate Center's webinar in August 2025 will focus on the updated hurricane outlook.

ENSO

La Niña-like conditions of the tropical atmosphere faded to ENSO-neutral conditions in early spring and continued to be present in the equatorial Pacific Ocean as of early June. According to NOAA's Climate Prediction Center, **ENSO-neutral conditions are likely during summer**, with an 82% chance, and favored during autumn, with over a 50% chance. For the November–January period, ENSO-neutral is favored but with lower confidence at 48% as there is a smaller chance, 41%, that La Niña conditions could form.

Gulf of Maine Partners

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