NWS Form E-5
(04-2006)
(PRES. BY NWS Instruction 10-924)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

HYDROLOGIC SERVICE AREA (HSA)

WFO Caribou, Maine

REPORT FOR:
MONTH YEAR

October 2025

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE

James Sinko - Meteorologist
Hydrology Program Manager

DATE

November 5, 2025

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

[X] An X inside this box indicates that no flooding occurred within this hydrologic service area.

October 2025

In October 2025, Maine's drought persisted, shifting into a groundwater and surface water drought despite some rainfall providing limited relief. The overall atmospheric pattern was not conducive to drought-busting conditions, and existing deficits were compounded. The synoptic pattern over the United States was highly amplified, driven by a significantly positive Pacific North American Pattern (PNA), which registered a monthly mean of +1.42 standard deviation. This was the strongest positive PNA observed in October since 2015 *(+1.78 SD)*. Further contributing to the pattern's amplification was notable blocking in the North Atlantic region, evident by the North Atlantic Oscillation (NAO) mean of -0.96 standard deviation. The position of this blocking to the north of Maine resulted in predominantly progressive weather systems, characterized by several episodes of high pressure, until a more substantial system crossed the area on Halloween. During October, subseasonal patterns like the NAO and PNA exert a greater influence than the El Niño-Southern Oscillation (ENSO), which was a weak La Niña. The Climate Prediction Center/NCEP declared in October that ENSO had successfully transitioned to a weak La Niña, with the Niño regions registering temperatures between 0.0°C and -0.6°C.

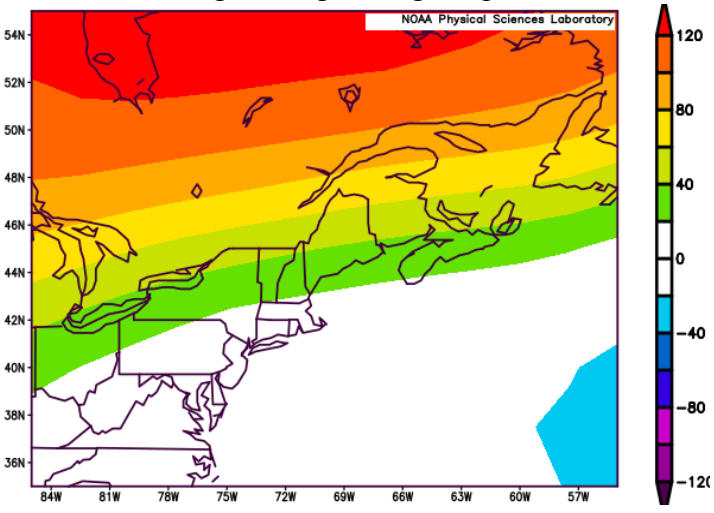


Figure 1: 500mb Geopotential Height (m) Anomalies *(1991-2020 Climo)*
October 2025

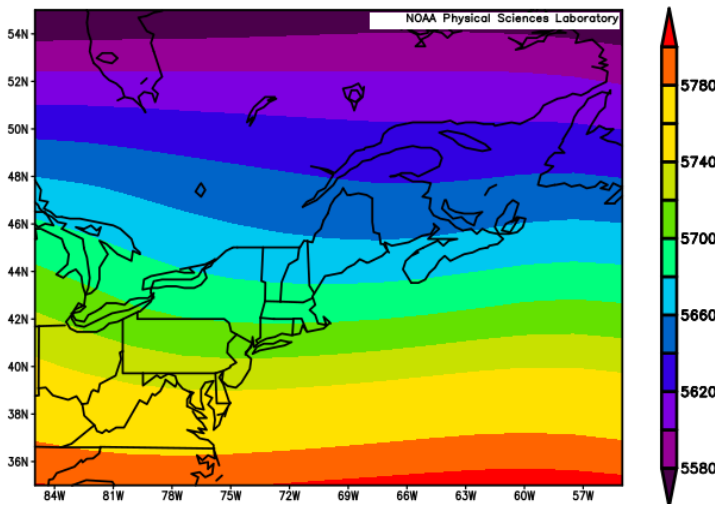


Figure 2: 500mb Geopotential Height (m) Composite Mean
October 2025

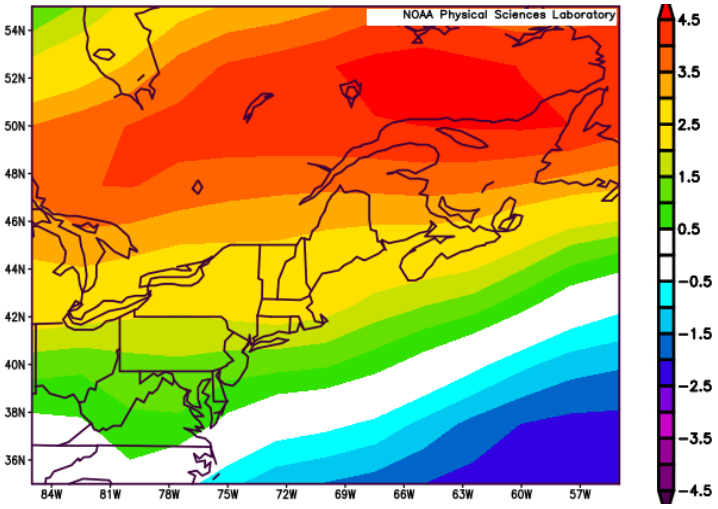


Figure 3: Sea Level Pressure (mb) Anomalies *(1991-2020 Climo)*
October 2025

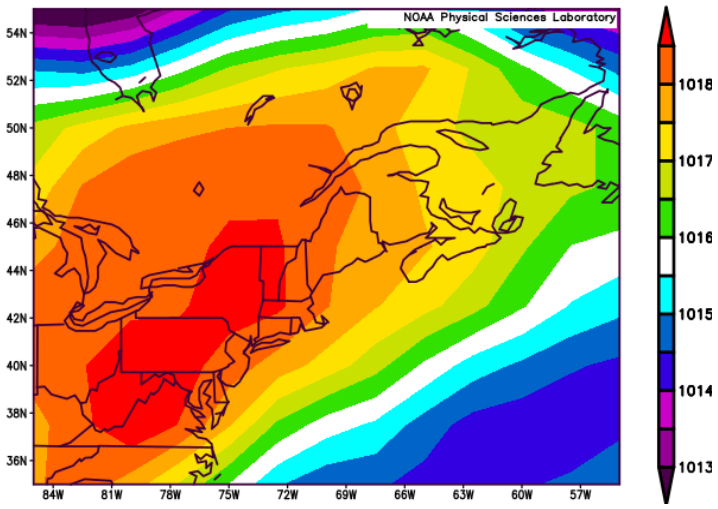


Figure 4: Sea Level Pressure (mb) Composite Mean
October 2025

Figure 1-4 Source: NOAA Physical Sciences Laboratory

Precipitation Totals for Select Locations *(All Units in Inches)*

Location	Total Precip	Normal Precip	Departure from Normal	% of Normal	Snowfall	Normal Snowfall	Departure from Normal	Greatest Snow Depth	Monthly Average Snow Depth
Frenchville*	2.88	3.46	**-0.58**	83.2%					
Fort Kent	2.44	4.26	**-1.82**	57.3%	0.0	1.1	**-1.1**	0	0.0
Van Buren	2.86	4.37	**-1.51**	65.4%	0.0	0.8	**-0.8**	0	0.0
Limestone	3.00	4.06	**-1.06**	73.9%					
Caribou	3.26	3.99	**-0.73**	81.7%	0.0	1.7	**-1.7**	0	0.0
Houlton	3.24	4.04	**-0.80**	80.2%					
Millinocket*	3.94	4.55	**-0.61**	86.6%	0.0			0	0.0
Greenville*	4.89	5.00	**-0.11**	97.8%					
Moosehead*	4.60	4.45	**0.15**	103.4%	0.0	1.2	**-1.2**	0	0.0
Dover-Foxcroft	3.72	4.82	**-1.10**	77.2%	0.0	0.5	**-0.5**	0	0.0
Corinna	2.75	4.77	**-2.02**	57.7%	0.0	0.3	**-0.3**	0	0.0
Old Town	2.74	4.27	**-1.53**	64.2%					
Bangor	2.69	4.58	**-1.89**	58.7%	0.0	0.6	**-0.6**	0	0.0
East Surry	3.80	5.06	**-1.26**	75.1%	0.0			0	0.0
Robbinston*	4.67	5.43	**-0.76**	86.0%					
Topsfield*	3.67	5.39	**-1.72**	68.1%	0.0	1.0	**-1.0**	0	0.0

**Millinocket snowfall measured at CoOp site, not the ASOS site. *Moosehead Site is in GYX CWA. *Topsfield Records date back to 2000. *Robbinston Records dates back to 1994. *Greenville data gap between 1975 and 1999. *Frenchville ASOS has documented issues with precipitation measurements in the winter months.*

Similar to September 2025, precipitation and drought were the primary weather concerns for October. All climate sites recorded below average precipitation. Bangor had the largest deficit, receiving only 2.69 inches of precipitation, which is 1.89 inches below climatological normal for October. Houlton received 3.24 inches of rain, and Caribou received 3.26 inches, each recording 0.8 and 0.73 inch deficits, respectively. Millinocket recorded 3.94 inches of precipitation, which is a 0.61 inch precipitation deficit. There were some wetting rain storms that moved through northern and eastern Maine, but as shown by the above deficits, none resulted in drought relief.

As a result, **drought** at the beginning of October showed, northern Maine, including northern Aroostook, northern Penobscot, northern Piscataquis, and northern Somerset, were abnormally dry. Southern Aroostook, central Penobscot, and central Piscataquis experienced moderate drought. Northern Washington, northern Hancock, central and southern Penobscot, southern Piscataquis were in severe drought. Coastal Washington and Hancock counties were in extreme drought. Conditions worsened by the end of the month, given prolonged precipitation deficits. Portions of northern Somerset, northwestern Aroostook, central Aroostook and northern Penobscot, upgraded to moderate drought. Central and southern Aroostook, northern and central Penobscot, Piscataquis, and portions of northern Somerset all became, or maintained, severe drought. By the end of October this became the worst drought in Maine since 2002. See below for additional drought graphics…

With the growing season concluded and the sun lower in the sky, evaporation demand dropped significantly in October. This reduction helped ease pressure on Maine's water system, meaning that any rainfall would be more effective at replenishing. However, due to continued precipitation deficits, **groundwater** levels suffered further decline across several regions, including Downeast, the Bangor Region, and the Central Highlands extending into Northern Maine. The worst groundwater conditions were recorded at the Millinocket and Clayton Lake U.S. Geological Survey (USGS) gages, with significant impacts also noted at the Kenduskeag and Hadley Lakes gages. Specifically, the Clayton Lake gage reached the lowest level on record *(deepest depth to water)* since measurements began in 1978 *(Maine gages typically have 30-50 years of record)*. While the Fort Kent and Calais gages remained within normal ranges for the month, all other measured sites fell into the below to much below normal categories. By the end of October, the Maine Dry Well Survey received additional reports, bringing the 2025 cumulative totals to: Penobscot (20 reports), Washington (19 reports), Hancock (12 reports), Piscataquis (6 reports), and Aroostook (3 reports).

October saw exceptionally low **streamflows** across Eastern and Northern Maine, with preliminary data indicating 6 sites set new record low monthly mean flows for the month. The St. John River basin was heavily impacted, with the St. John River at Nine Mile Bridge recording the lowest monthly mean flow in its 74 years of record at 160 cfs, and record lows also occurring at Dickey Bridge in Allagash (403 cfs, 80 years of record) and Fort Kent (570 cfs, 98 years of record). The Fish River system was also severely affected, as the Fish River gage at Fort Kent recorded a record low monthly mean flow of only 68 cfs (95 years of history). Even the St. Croix River at Baring, despite being heavily controlled by dam activity, experienced a record low monthly mean flow of 377 cfs (65 years of record), with dam operators reporting difficulties in maintaining both minimum flows and lake levels to the Maine Drought Task Force. Additionally, the Mattawamkeag River at Mattawamkeag recorded a record low monthly mean flow of just 96 cfs (90 years of record). Beyond these record lows, streamflows across the region were significantly diminished: eight other gages in Northern and Eastern Maine experienced "Much Below Normal" monthly mean flows (below the 10th percentile), and four additional gages were classified as "Below Normal," with monthly mean flows between the 10th and 25th percentiles. Monthly mean flows and percentile classes for all area rivers and streams in October 2025 are summarized in a table below.

Water storage across key river systems in Eastern & Northern Maine generally remained within near normal to below normal ranges through October with the impacts of the drought noticeable throughout the month. The

Penobscot River system began the month at 58.5% of capacity, or 4.2% below the long-term average. By the end of October, storage decreased to 52.3%, which became 3% below the long term average. Ripogenus Dam storage started the month near 18.5 billion cubic feet, consistent around the low end of the normal range for October, and ended the month down at 16.5 billion cubic feet which was just barely within the low end normal range. The Union River system started the month at 28.2% of capacity, 12.5% below the long-term average. By month's end, storage declined to 19.9%, or 23.6% below average. The drop off by the end of the month at many of the storage locations indicated the impacts of the lack of rainfall and ongoing drought conditions combined with seasonal draw down activity. Please note that water release schedules are subject to change based on evolving weather conditions and power system operational needs, and may not be reflected in monthly storage statistics.

Temperatures were above normal at all climate sites, with average temperatures generally 2-5 degrees above climatological normal. Monthly maximum temperatures were significantly above average for October, generally 3-5 degrees above climatological normal. Caribous average high temperatures were the warmest this month, being 4.9 degrees above normal. Millinocket was a close second, being 4.7 degrees above climatological normal. Houlton daily high temperatures were 4.5 degrees above climatological normal. Bangor was 3 degrees above normal. Caribou broke its all-time high temperature record for the month of October, 83 degrees, during a heat event on October 6th. During this same event, Millinocket reached 85, and Houlton reached 84 degrees, both of which also broke previous all-time high monthly records. Bangor recorded 84 degrees, which was the second highest temperature record, right behind a 86 degree record in 1968. The past 5 years have been within the top 10 warmest Octobers, with records dating back to 1953. Monthly minimum temperatures were generally 1-2 degrees above climatological normal. Millinocket had the largest deviation, being 2 degrees above normal. Caribou low temperatures were 1.9 degrees above normal. Bangor minimum temperatures were generally 1.4 degrees above normal. Lastly, Houlton had minimum temperature values roughly 1.3 degrees above climatological normal.

Town/City	Avg Monthly Temperature (°F)	Normal Monthly Temperature (°F)	Departure from Normal (°F)
Frenchville	47.2	43.8	**3.4**
Fort Kent	45.4	41.8	**3.6**
Van Buren	46.6	42.9	**3.7**
Limestone	47.1	42.3	**4.8**
Caribou	48.0	44.5	**3.5**
Houlton	47.1	44.3	**2.8**
Millinocket	49.3	46.0	**3.3**
Greenville*	48.3	44.9	**3.4**
Moosehead	47.1	43.8	**3.3**
Dover-Foxcroft	48.5	45.7	**2.8**
Corinna	50.6	47.9	**2.7**
Old Town	49.2	46.4	**2.8**
Bangor	50.4	48.2	**2.2**
East Surry	50.0	47.7	**2.3**
Robbinston*	50.2	48.0	**2.2**
Topsfield*	50.4	46.4	**4.0**

Read below for specific details & maps of Streamflows, Groundwater Levels, Non-Routine Hydrologic Products issued by WFO Caribou and Drought conditions.

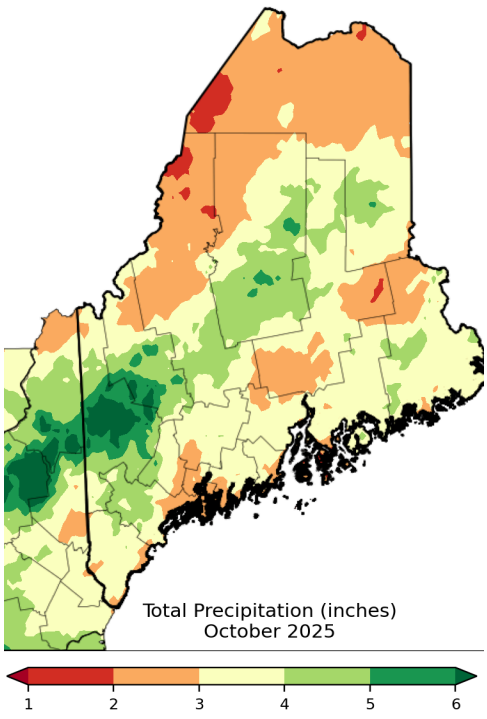


Figure 5. Total Precipitation (inches) October 2025

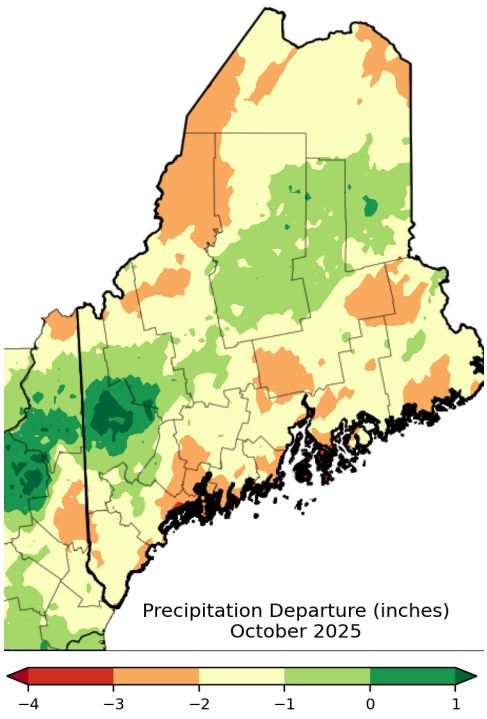


Figure 6. % of Normal Precipitation October 2025

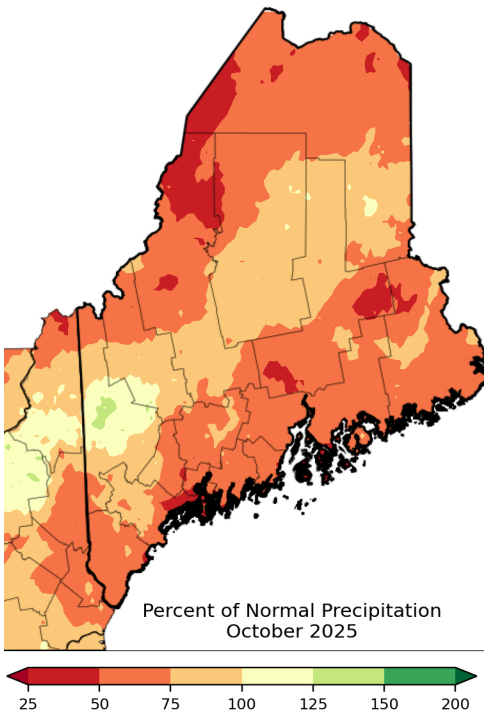


Figure 7. Precipitation Departure (inches) October 2025

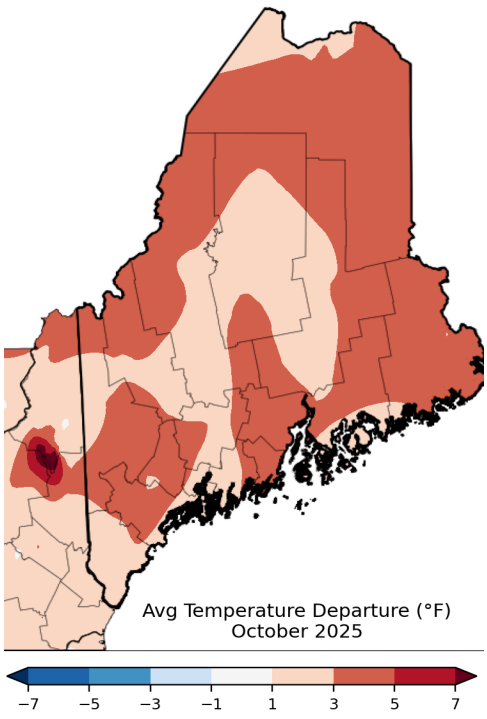


Figure 8. Avg Temperature Departure October 2025

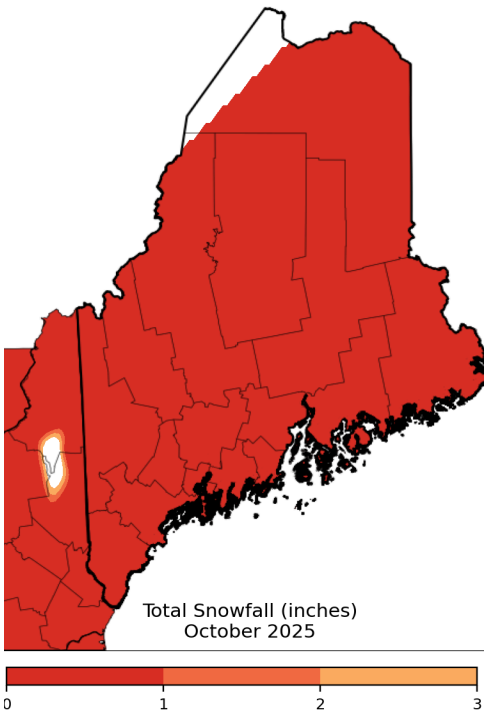


Figure 9. Total Snowfall October 2025

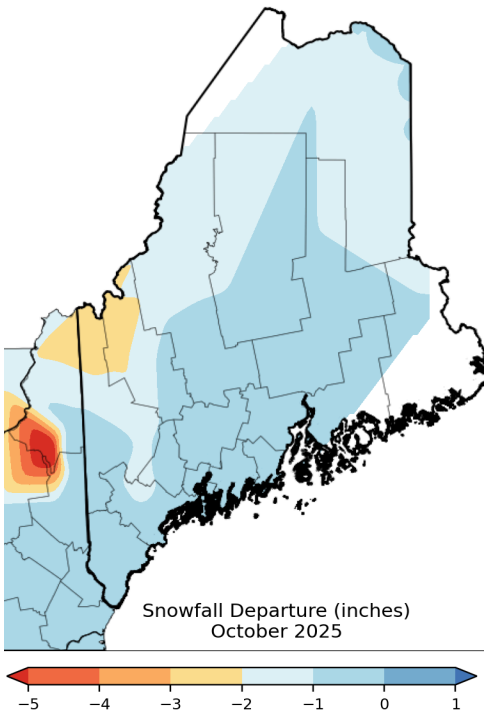


Figure 10. Snowfall Departure October 2025

Figure 5-10 Source: Northeast Regional Climate Center

October Average Monthly Streamflows

Data provided by the U.S. Geological Survey

River	Monthly Mean Flow (cfs)	% Normal (mean)	Percentile Class	Drainage (mi^2)	Years of Record
Big Black River near Depot Mtn	40	14%	Much Below Normal	171	41
St. John River at Nine Mile Bridge	160	7%	Low	1341	74
Allagash River near Allagash	353	26%	Below Normal	1478	95
St. John River at Dickey	403	11%	Low	2680	80
St. John River at Fort Kent	570	8%	Low	5929	98
Fish River near Fort Kent	68	8%	Low	873	95
Aroostook River near Masardis	210	19%	Much Below Normal	892	67
Aroostook River at Washburn	364	19%	Much Below Normal	1654	94
St. Croix River at Vanceboro	213	35%	Much Below Normal	413	95
St. Croix River at Baring	377	19%	Low	1374	65
Grand Lake Stream at Grand Lake Stream	200	58%	Below Normal	228.3	94
Narraguagus River at Cherryfield	52	17%	Much Below Normal	227	75
East Branch Penobscot River at Grindstone	455	33%	Below Normal	837	102
Mattawamkeag near Mattawamkeag	96	6%	Low	1418	90
Piscataquis River near Dover-Foxcroft	68	15%	Below Normal	298	122
Sebec River at Sebec	78	19%	Much Below Normal	326	68
Piscataquis River at Medford	286	16%	Much Below Normal	1162	93
Penobscot River at West Enfield	3352	37%	Much Below Normal	6422	122

October Monthly Average Groundwater Levels

Station	Percentile Class	Monthly Mean Depth to Water Level below land surface (feet)	Years of Record
Fort Kent	Normal	10.94	49
Clayton Lake	Low	16.63	47
Millinocket	Much Below Normal	11.69	32
Kenduskeag	Below Normal	26.29	47
Hadley Lakes	Below Normal	6.67	40
Calais	Normal	3.77	45

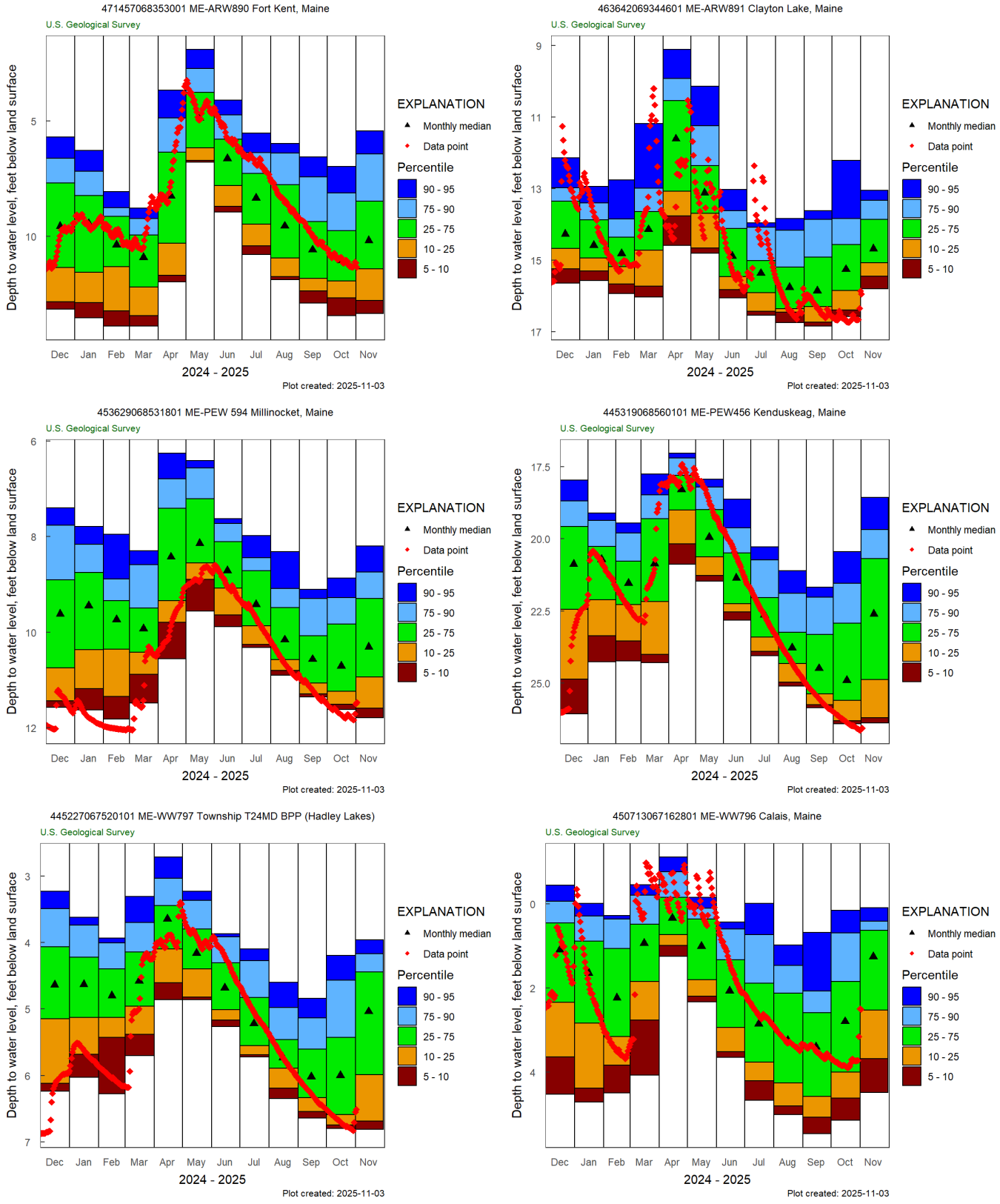
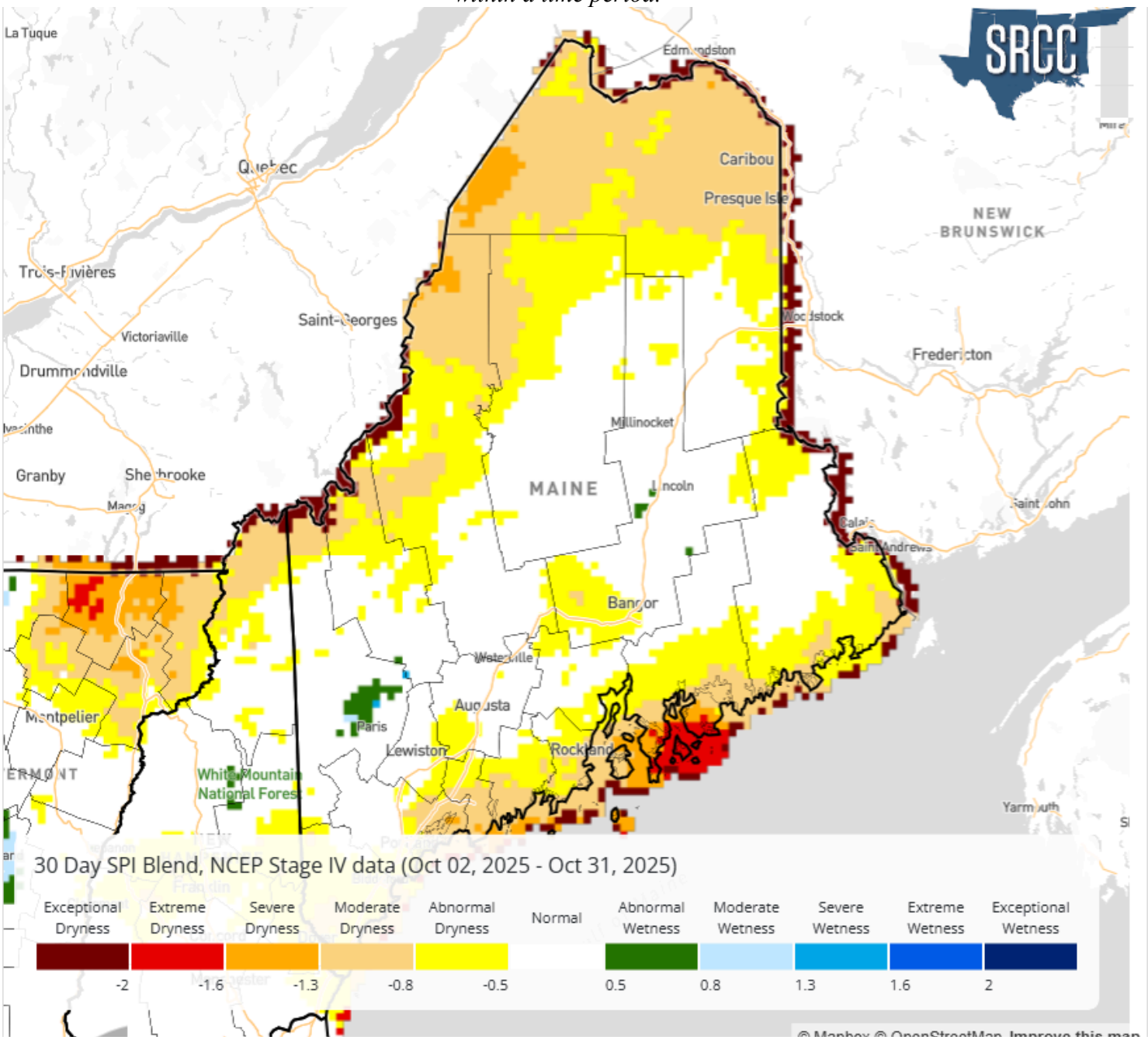


Figure 11-16: Groundwater Level Yearly Plots to Current
Source: United States Geological Survey

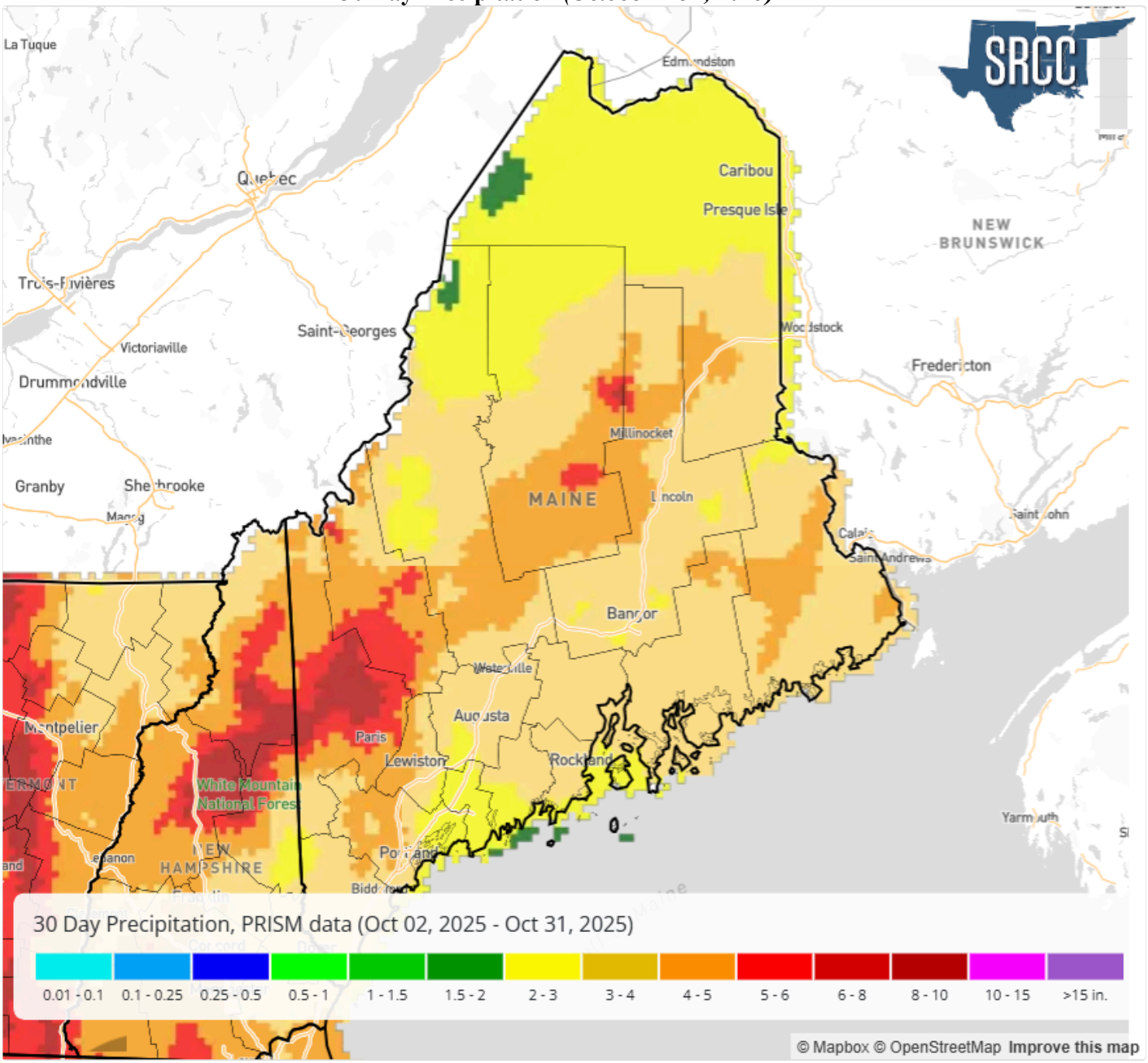
Flow or Water Level	Percentile Range	Explanation
Ice Impacted	NA	Ice impacted resulting in No Data available
Low	0^{th}	The monthly mean streamflow or median water level during this month is the lowest ever recorded during the period of record for this site.
Much Below Normal	0^{th} to 10^{th}	The monthly mean streamflow or median water level during this month is less than the 10^{th} percentile when compared to all of the months during the period of record for this site.
Below Normal	10^{th} to 25^{th}	The monthly mean streamflow or median water level during this month is between the 10^{th} and 25^{th} percentiles when compared to all of the months during the period of record for this site.
Normal	25^{th} to 75^{th}	The monthly mean streamflow or median water level during this month is between the 25^{th} and 75^{th} percentiles when compared to all of the months during the period of record for this site.
Above Normal	75^{th} to 90^{th}	The monthly mean streamflow or median water level during this month is between the 75^{th} and 90^{th} percentiles when compared to all of the months during the period of record for this site.
Much Above Normal	90^{th} to 100^{th}	The monthly mean streamflow or median water level during this month is greater than the 90^{th} percentile when compared to all of the months during the period of record for this site.
High	100^{th}	The monthly mean streamflow or median water level during this month is the highest ever recorded during the period of record for this site.

30 Day SPI Blend *(October 2-31, 2025)*

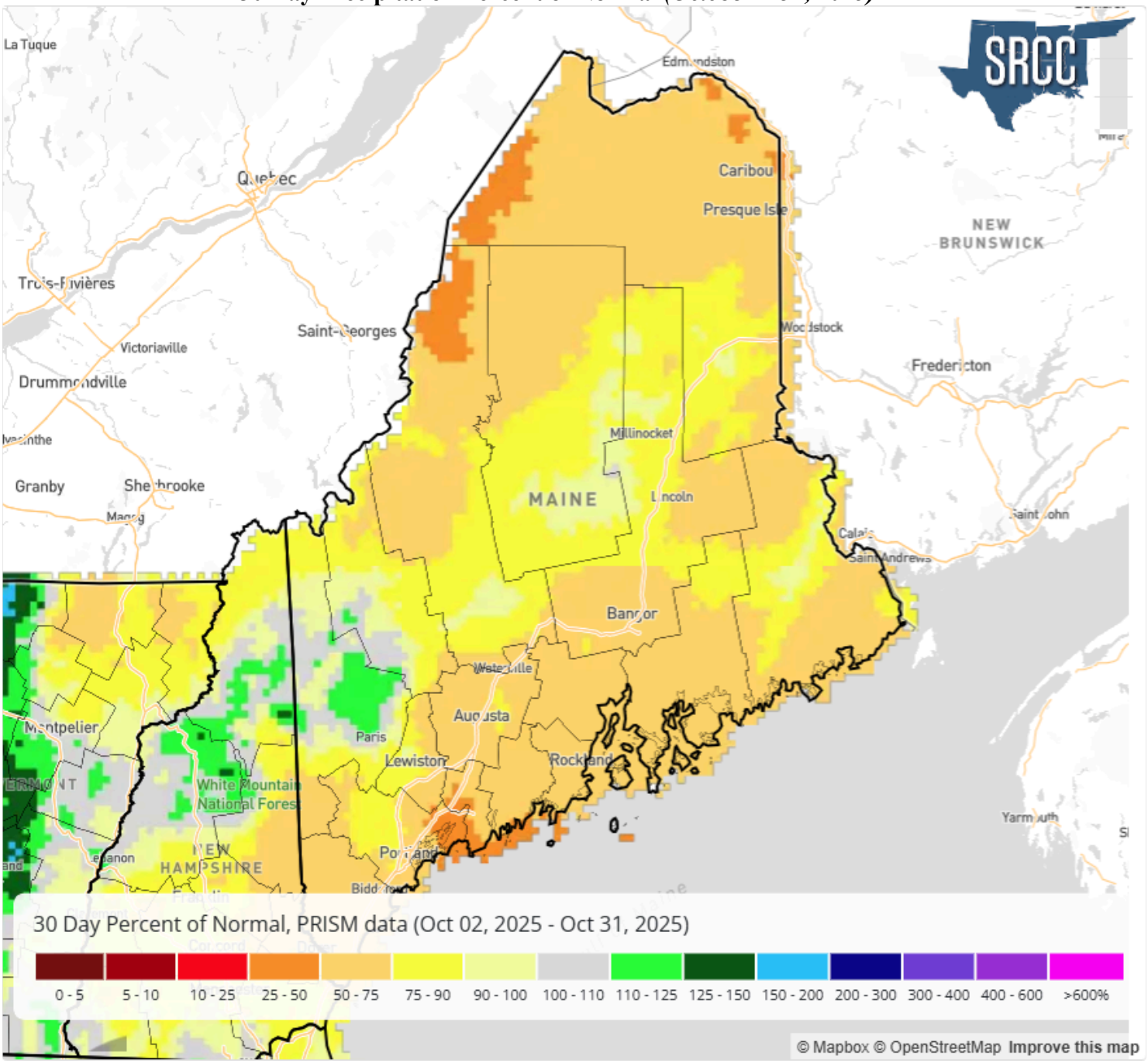
The SPI Blend is a modified version of the Standardized Precipitation Index (SPI) that is used to assess drought conditions by considering precipitation data on multiple time scales. It uses a linear weighting system, giving more weight to recent precipitation within a given time period. This approach allows for a more nuanced understanding of drought conditions compared to the traditional SPI, which considers all precipitation equally within a time period.



30 Day Precipitation *(October 2-31, 2025)*



30 Day Precipitation Percent of Normal *(October 2-31, 2025)*



Non-Routine Hydrologic Products from WFO Caribou, ME
October 2025

Product	How Many Issued	Reason for Issuance
None	NA	NA

CoCoRaHS Complete Precipitation Reports
www.cocorahs.org
October 2025

Station Number	Station Name/Location	Total Precipitation (inches)
ME-AR-15	Presque Isle 1.3 WSW	2.75
ME-AR-18	New Sweden 4.9 NNW	2.08
ME-AR-28	Presque Isle 4.2 S	2.83
ME-AR-40	Houlton 2.2 SW	2.27
ME-AR-41	Castle Hill 1.0 S	2.24
ME-AR-42	Houlton 2.5 NNW	2.81
ME-HN-2	East Surry	3.75
ME-HN-4	Mariaville 1.4 ESE	3.35
ME-HN-42	Bucksport 3.3 NNW	3.13
ME-HN-56	Surry 2.5 SSE	3.67
ME-HN-58	Sullivan 2.4 SSE	3.42
ME-HN-64	Southwest Harbor 0.9 NW	4.20
ME-HN-68	Southwest Harbor 2.2 SE	3.50
ME-HN-69	Mount Desert 2.3 NE	3.74
ME-PN-10	Lincoln 4.3 NE	2.91
ME-PN-47	Milford 0.8 SSW	2.26
ME-PN-51	Hermon 1.2 W	3.10
ME-PN-55	Orono 1.1 SSW	3.00
ME-PN-58	Hudson 2.4 ESE	3.08
ME-PN-63	Dixmont 4.5 NE	4.00
ME-PS-9	Abbot 4.6 WNW	4.59
ME-WS-10	Pembroke 5.4 SSE	4.46
ME-WS-11	Whiting 2.3 WSW	3.95
ME-WS-31	Eastport 1.4 ESE	4.04
ME-WS-34	Perry 3.8 NNW	3.92

***Additional CoCoRaHS reports were not complete with 31 days of record**
Source: https://cocorahs.org/ViewData/TotalPrecipSummary.aspx

Drought Monitor October 7, 2025

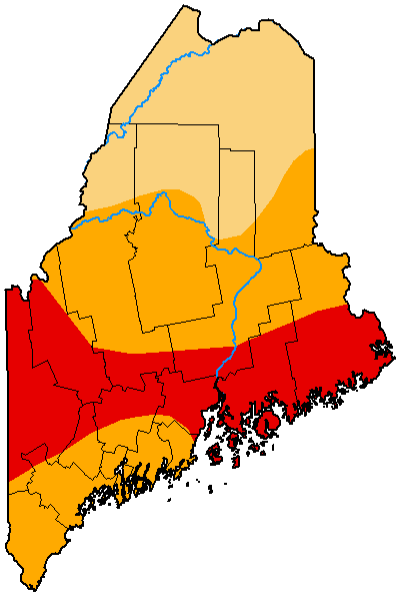
U.S. Drought Monitor

Maine

October 7, 2025

(Released Thursday, Oct. 9, 2025)

Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:

Curtis Riganti
National Drought Mitigation Center

droughtmonitor.unl.edu

Drought Monitor October 28, 2025

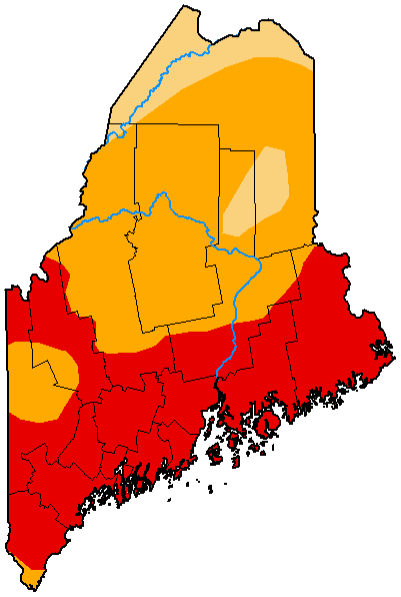
U.S. Drought Monitor

Maine

October 28, 2025

(Released Thursday, Oct. 30, 2025)

Valid 8 a.m. EDT



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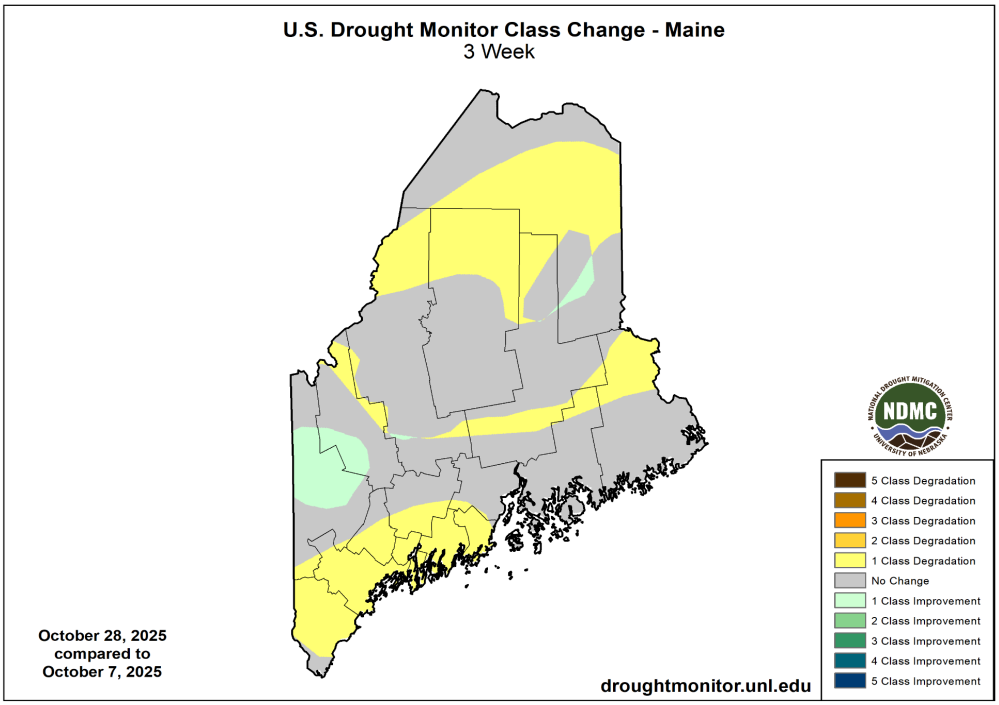
Author:

Richard Tinker
CPC/NOAA/NWS/NCEP

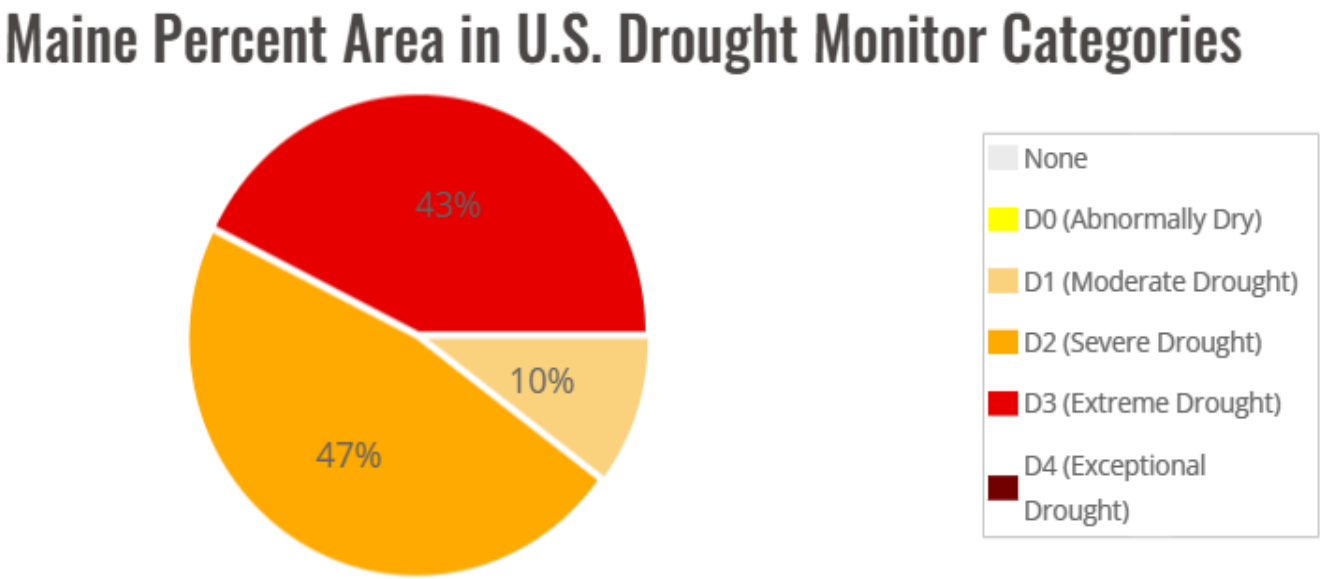
droughtmonitor.unl.edu

Drought Monitor Change in October 2025



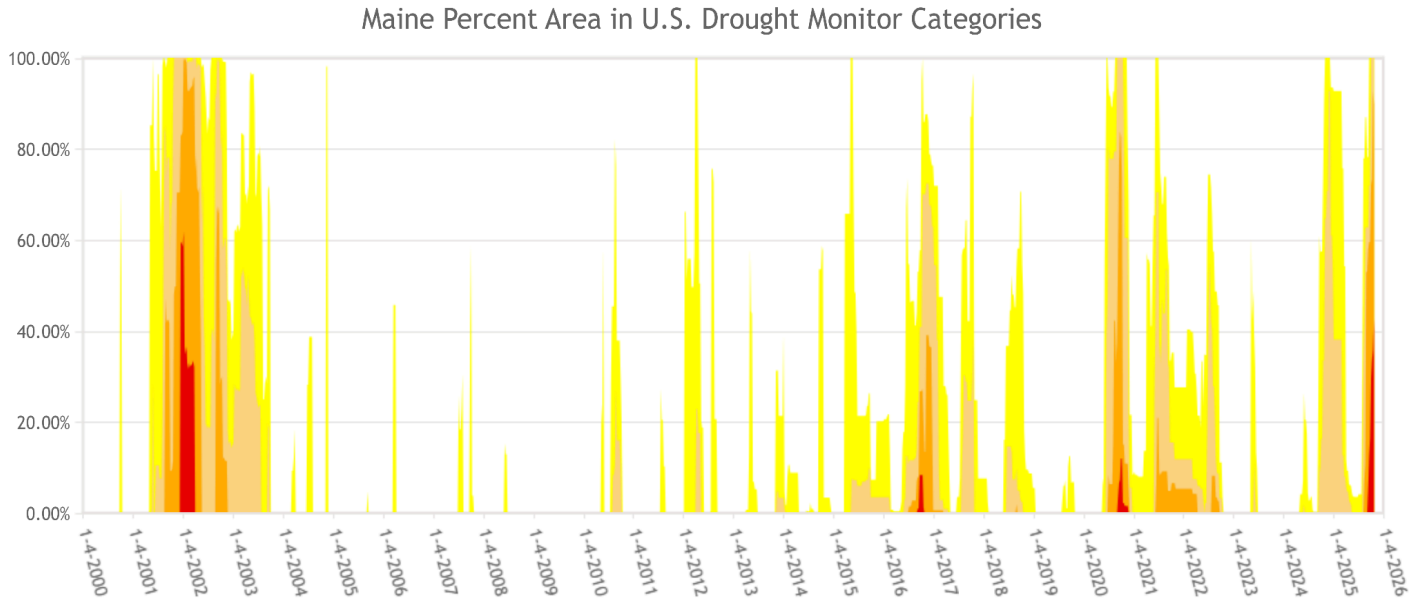
Week	None (%)	D0-D4 (%)	D1-D4 (%)	D2-D4 (%)	D3-D4 (%)	D4 (%)	DSCI
October 7th	0	100	100	71.92	29.55	0	301
October 28th	0	100	100	89.80	42.65	0	332
Change	0	0	0	17.88	13.10	0	31

Pie Chart of Maine's Drought at the end of October 2025



Percent of Maine in Drought since 2000

2025 is the worst drought, ranked by USDM, since the 2001-2002 drought.



From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 11-5-2025