MARITIME CANADA CLIMATE SUMMARY **January 2023**

Warmest January on Record at 5 Stations - Including Halifax and Charlottetown

With positive temperature anomalies of 4 to 6 C across the Maritimes, not surprisingly, new January records were set at Greenwood, Halifax (Airport and Shearwater), Yarmouth and Charlottetown, and at all stations the month ranked in the top 5 on record. Except for a brief spell of near normal temperatures in the middle of the month temperatures were consistently above normal. The warmth resulted in well-below normal snowfall across much of NS and, except for higher terrain, there was little to no snow on the ground at the end of the month. Winter sports enthusiasts would have had to travel to central/northern NB to find sufficient snow cover. However, except for northern Cape Breton, total precipitation was above to much above normal with rainfall running 200 to 350% of usual January totals. There was little to no ice growth in the Gulf of St. Lawrence with coverage of just 4% at the end of the month compared to the January average of 21%.

The Warmest (°C)

New Brunswick Sussex 12.2 Nova Scotia Bedford Range 14.0 Prince Edward Island St Peters 10.6

The Coldest (°C)

-33.4
-22.0
-18.8

The Wettest (Total mm)

New DruffSwick	
Mechanic Settlement	287.8
Nova Scotia	
Shelburne	286.2
Prince Edward Island	
Stanhope	233.9

The Capital Stats

	Mea	n Tempera	Extremes		
Station Name	Monthly Mean	Normal Mean	Diff from Normal	Max (Date)	Min (Date)
Charlottetown	-2.1	-7.7	5.6	9.2 (13)	-13.5(25)
Halifax	+1.3	-4.6	5.9	12.8 (14)	-11.3 (12
Fredericton	-4.1	-9.4	5.3	8.4 (26)	-19.9 (28)

	То	tal Precipit	Snowfall		
Station Name	Monthly Total (mm)	Normal Total (mm)	Percent Normal	Total (cm)	SOG End of Month
Charlottetown	179.8	101.0	178	58.3	0.0
Halifax	209.6	134.3	156	35.4	0.0
Fredericton	162.9	101.9	160	88.1	NA

Daily Temperature Records

Given the very large positive mean temperature anomalies, except for NS, there were few new daily record highs – just 5 in NB and only 1 in PEI. In NS there were 36 new daily highs. These were spread across the province on several different dates. The highest new record was 12.9 C at Port Hawkesbury on 14th. No new record low temperatures were recorded implying that much warmer than normal overnight temperatures played a large part in the widespread positive anomalies.

Significant Weather Events (information provided by Climate Services, ECCC)

In 1. A low-pressure system ushered in January with some rain and mild temperatures. Rainfall amounts generally ranged from 15-25 mm with locally higher amounts in western NS. Temperatures climbed into the double-digits for southern areas and resulted in a few maximum daily temperature records for NS.

Jall 13-17. A series of moisture impulses brought prolonged mixed precipitation to the region. Snowfall amounts were generally 15-30 cm across most of NB and western PEI with the most being reported in St. Hilaire, NB with 63 cm. Total precipitation amounts of 55-133 mm fell across the entire region which amounted to nearly the monthly total precipitation for some regions. Numerous hours of freezing rain fell in southeastern NB and northern NS and caused excessive ice build-up on infrastructure along with multi-day power outages.

Freezing rain causes power outages throughout N.S. | CBC News

Rainfall warnings in effect across P.E.I. | CBC News

Freezing rain closes schools and highways, leaves thousands without power | CBC News

Destruction, beauty in wake of N.B. ice storm | CBC News

Jall 20-21. – A low pressure system moved south of the region and brought snow to southern areas. This was the first significant snowfall of the season for western NS with 10-20 cm of snow accumulation.

Jall 23-24. Mixed precipitation was again falling across parts of the region, with snow across southern NB, most of PEI and northern NS and rain along the Atlantic coast of NS. Snowfall varied from 15-37 cm and rainfall varied from 35-66 mm in the hardest hit regions.

Jall 26. A system that originated from Texas brought abundant mixed precipitation and strong winds that spread across all regions. Strong southerly winds of 80-100 km/h blew across mostly coastal areas of all three provinces with maximum gusts of 130-150 km/h over Cape Breton. These winds caused thousands to lose power, especially in NS. Snow was confined to central and northern NB where 15-30 cm fell with the most rain in the Bay of Fundy region and Atlantic coast of NS where 40-50 mm was recorded.

Soggy winter storm closes N.B. schools, warnings in effect across the Maritimes | CTV News Thousands left without power after strong winds, rain blast Nova Scotia | CBC News

Compiled by Peter J. Lewis with data and information provided by Client Service Operations Atlantic, Meteorological Service of Canada Environment and Climate Change Canada / Government of Canada

Other CMOS News

CONGRESS 2023: The <u>2023 CMOS Congress</u> is being held at the Sheraton Newfoundland in the beautiful city of St. John's. The theme of the congress is *Connecting on the Rock: From the Marine Environment to the Blue Economy*. <u>Abstract submission deadline has been extended to Friday Feb. 24th.</u> We can't wait to see you all *On The Rock*!

Upcoming Eveni: What: National Weather Association Virtual Master Class, open to ALL!

When: Tuesday, March 7, 9-11PM AST

Where: Click here to register.

Details: The course will last around two hours long and structured in the format of a case study. After learning about how to forecast fire weather, participants will walk through the forecasting process using data from a recent high-impact fire weather event. In addition, participants will consider how to message the evolving wildfire threat through multiple interactive mediums.

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