



How Winter is Changing in the Tug Hill Region

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NYS TUG HILL COMMISSION

WINTER WORKSHOP SERIES

Acknowledgments

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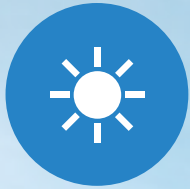
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30,000' View



WEATHER AND
CLIMATE



DATA SOURCES



TUG HILL
REGIONAL DATA



TUG HILL CLIMATE
NORMALS



RESULTS



STATEWIDE
COMPARISON



IMPLICATIONS



NEXT STEPS



Weather and Climate



Weather



Climate

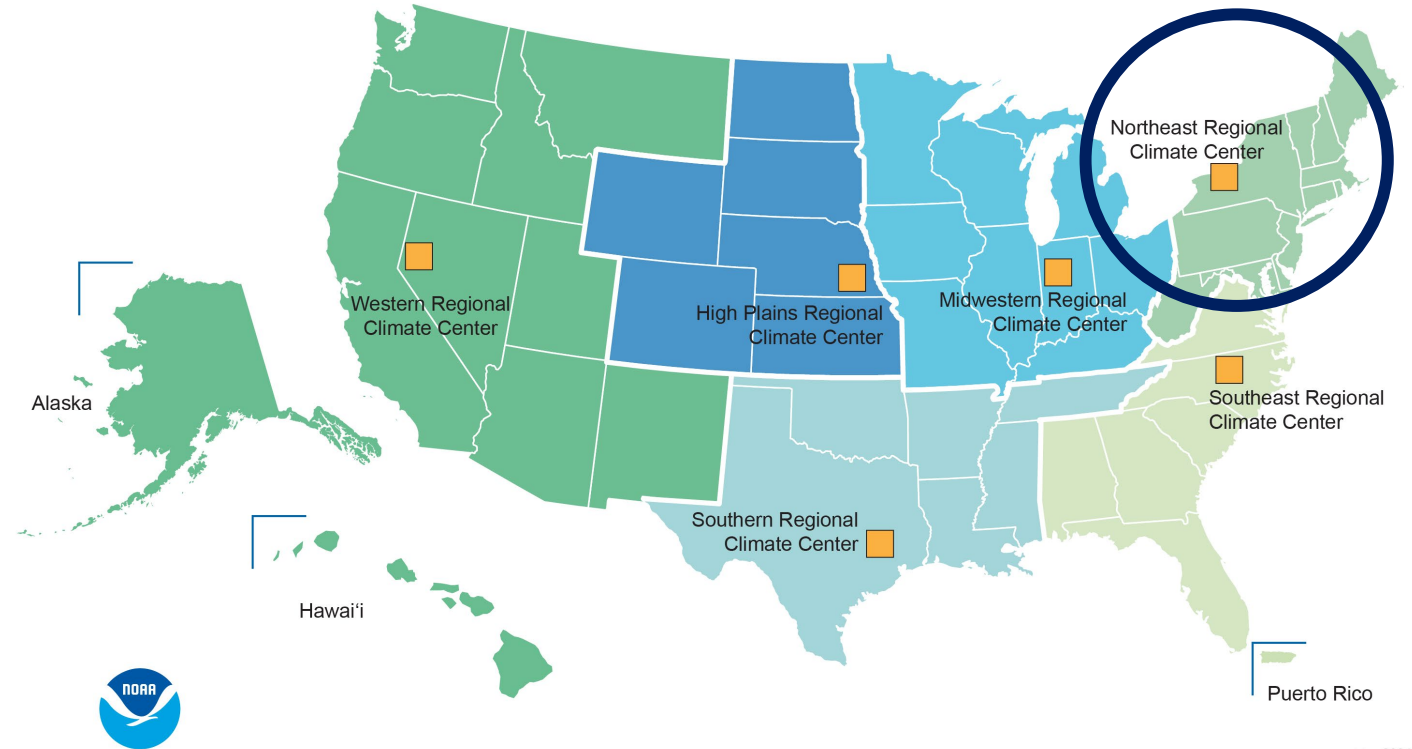
Data Sources



WORLD
METEOROLOGICAL
ORGANIZATION



NATIONAL CENTERS FOR
ENVIRONMENTAL INFORMATION

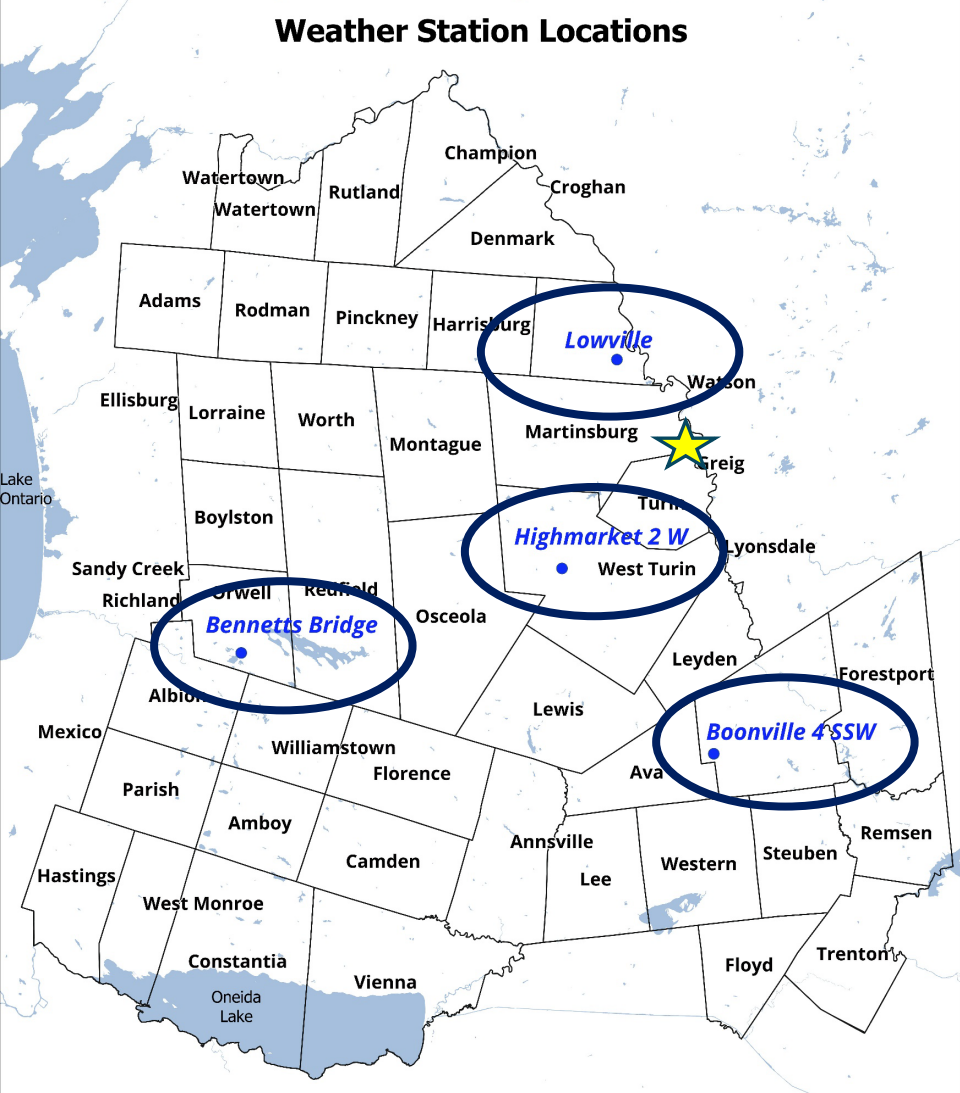


May 2021

<https://www.nrcc.cornell.edu/>



Weather Station Locations



Legend

- Weather Stations
- City and Town Boundaries
- Waterbodies



0 5 10 mi

Created by: NYS Tug Hill
Commission, JSL
Date Created: 03/03/2025
Data Sources: NYS Office of
Information Technology Services
GIS Program Office (2024), United
States Geological Survey
Base Map Sources: Sources: Esri,
NOAA, USGS



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Tug Hill Regional Climate Data

Station	Data Analyzed	Time Frame
Bennetts Bridge	Snowfall	1974-2024 (50 years)
Boonville	- Snowfall - Average Minimum Air Temperature - Average Maximum Air Temperature	
Highmarket	Snowfall	
Lowville	- Snowfall - Average Minimum Air Temperature - Average Maximum Air Temperature	



Air Temperature

WINTER SEASON

DECEMBER-FEBRUARY

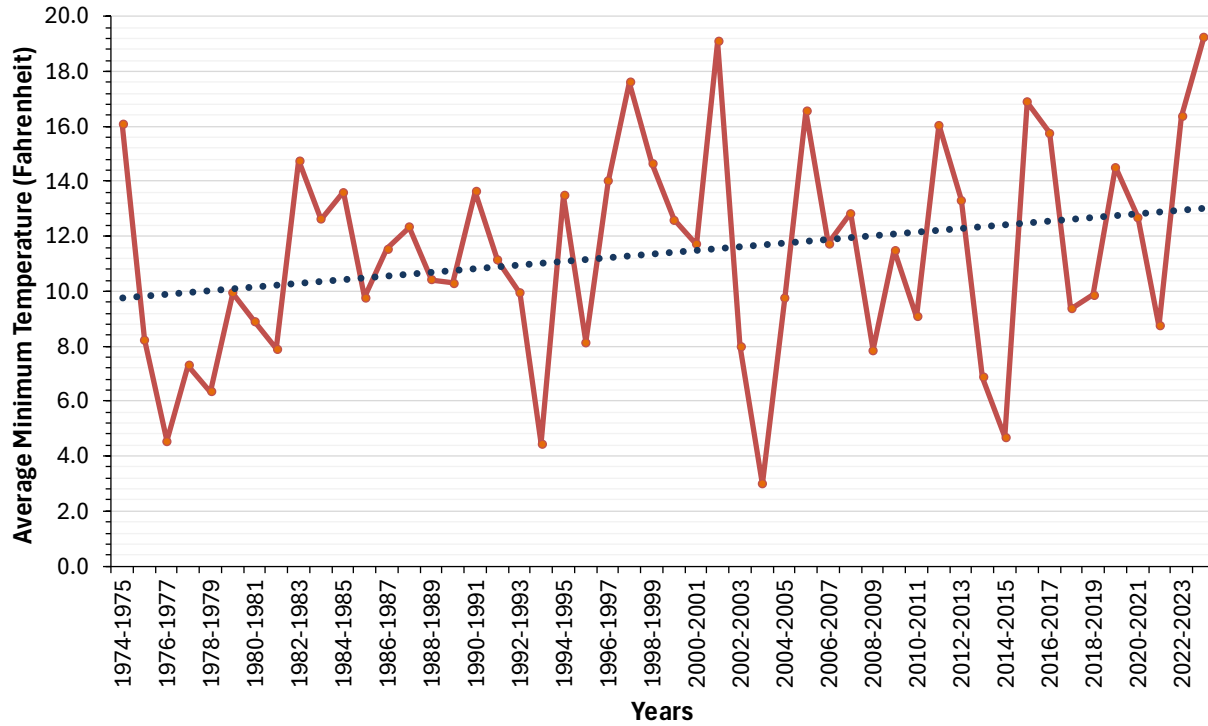


EXTENDED WINTER SEASON

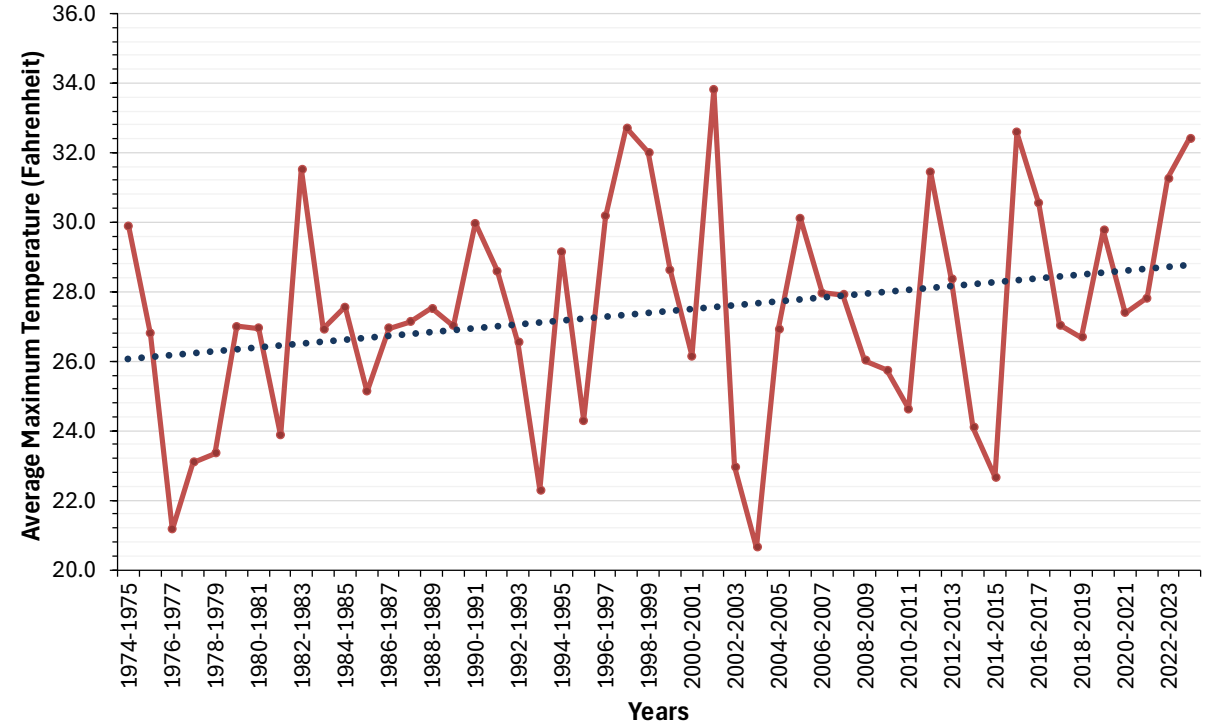
SEPTEMBER-MAY



Winter Seasons (December through February)
1974-2024



Winter Seasons (December through February)
1974-2024

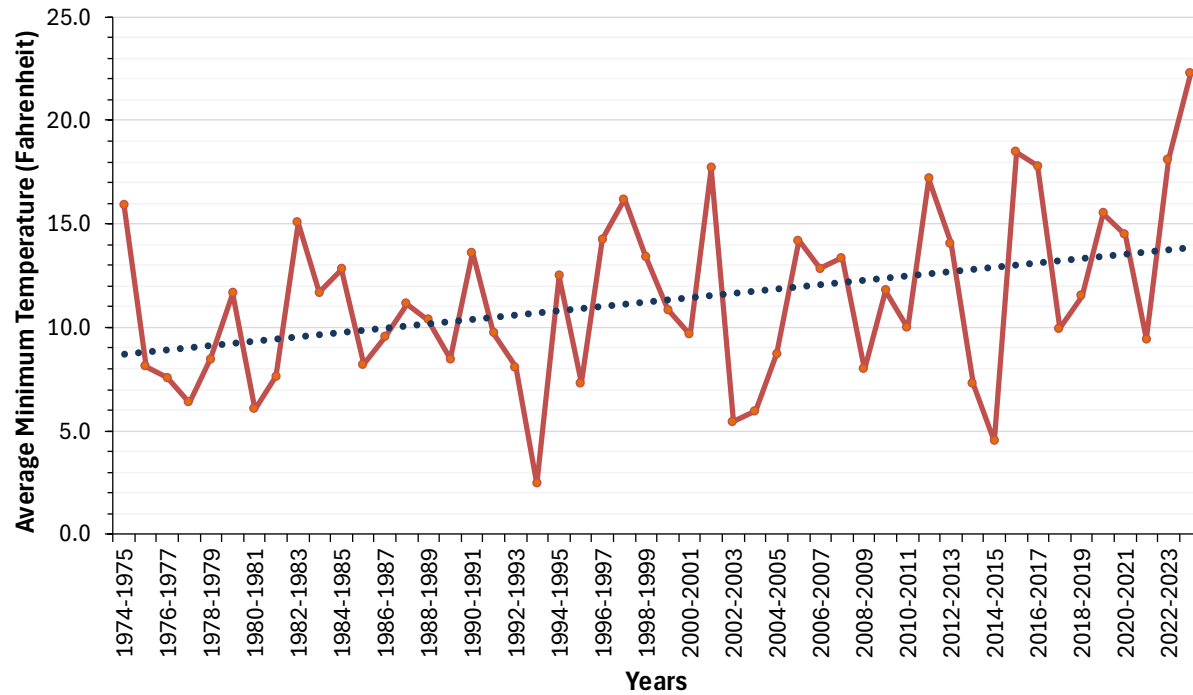


Boonville

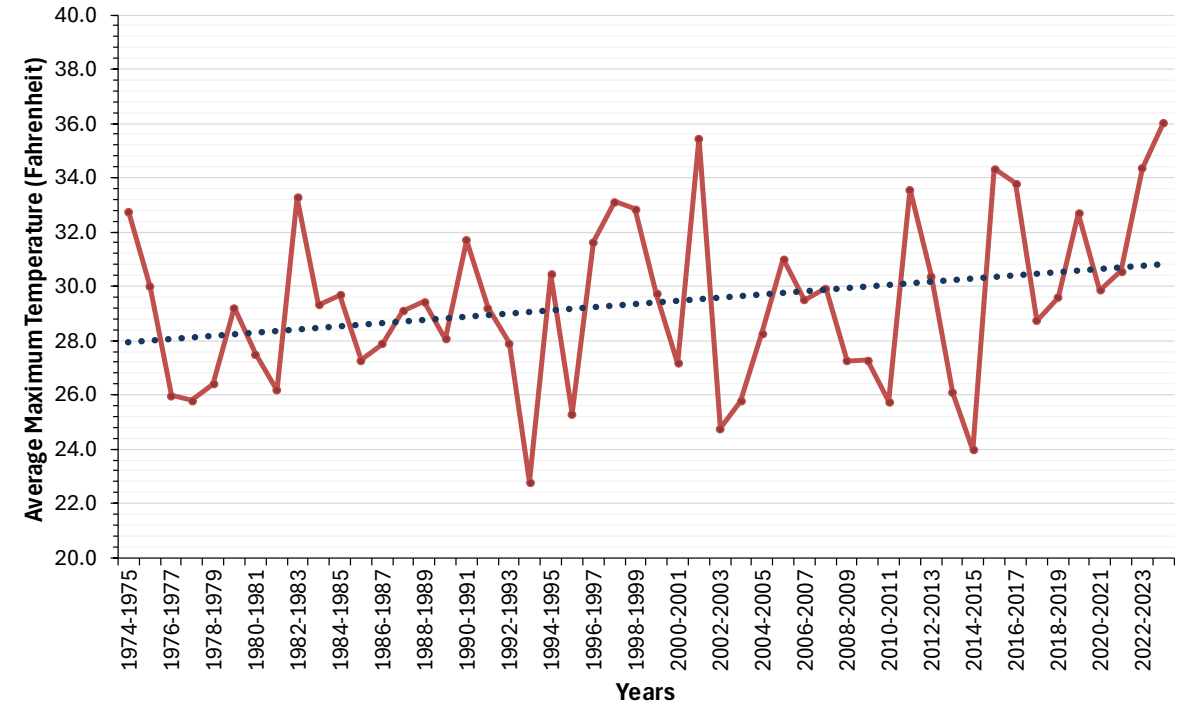
Minimum and Maximum Avg Air Temp



Winter Seasons (December through February)
1974-2024



Winter Seasons (December through February)
1974-2024



Lowville

Minimum and Maximum Avg Air Temp



Snowfall

WINTER SEASON

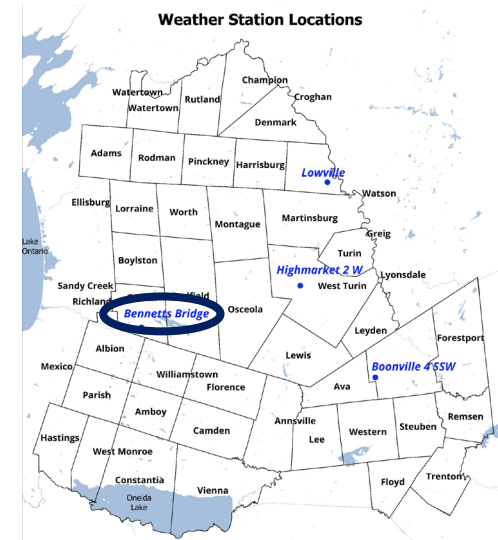
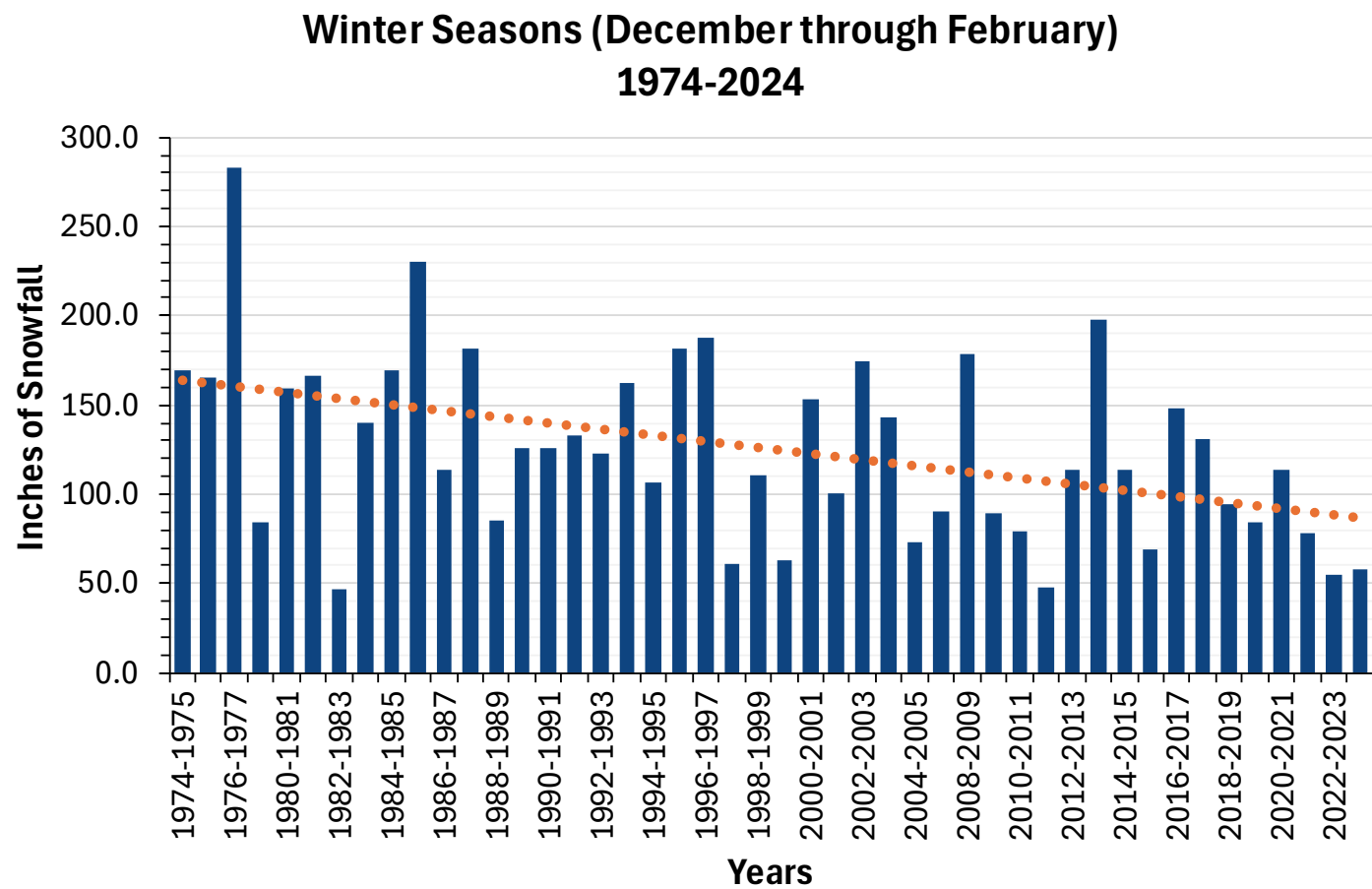
DECEMBER-FEBRUARY



EXTENDED WINTER SEASON

SEPTEMBER-MAY

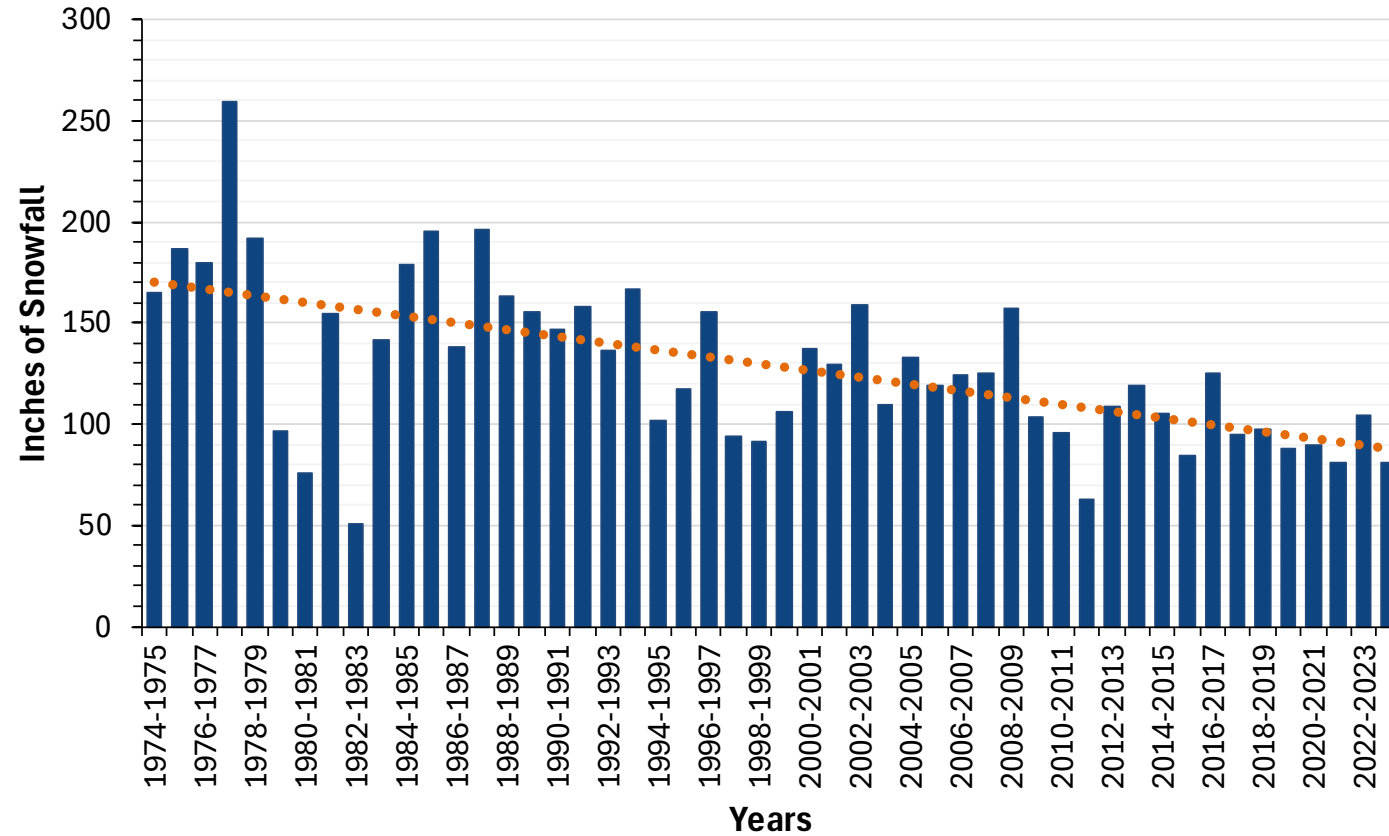




Bennetts Bridge

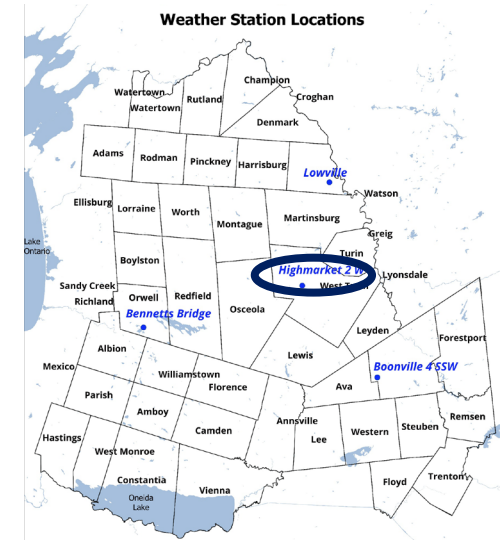
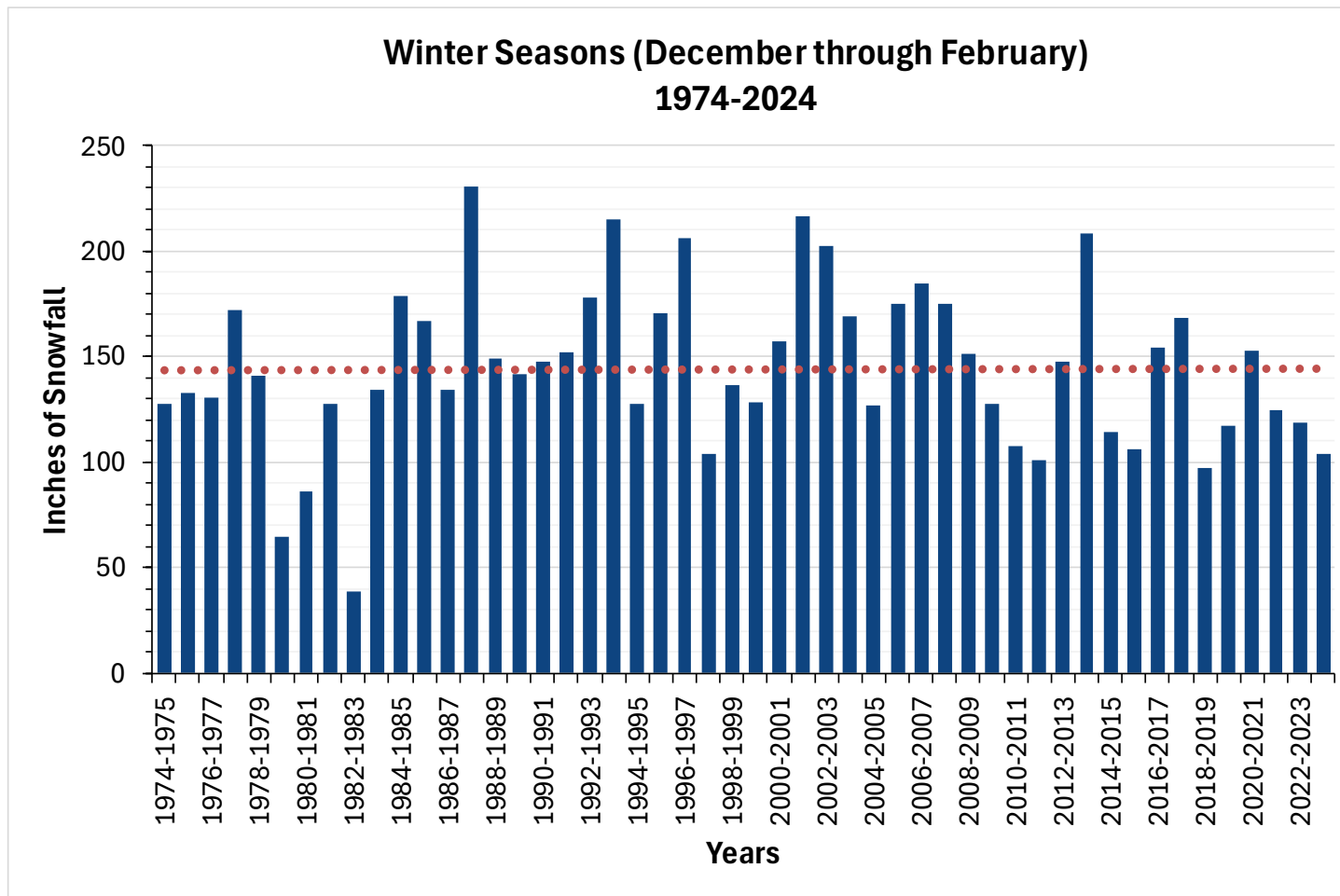


Winter Seasons (December through February) 1974-2024



Boonville

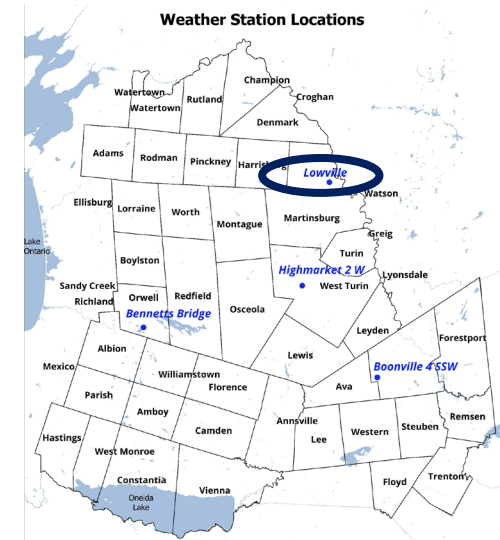
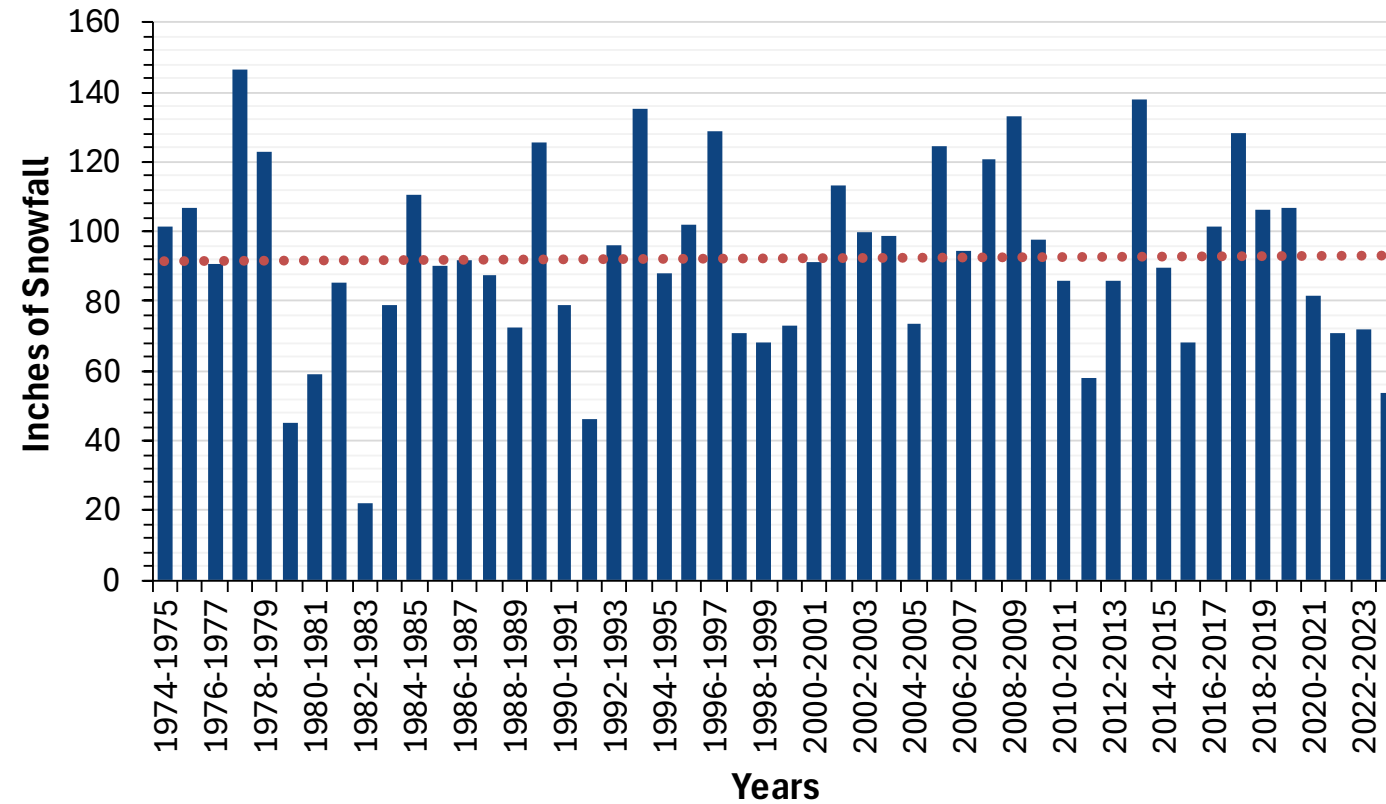




Highmarket



Winter Seasons (December through February) 1974-2024



Lowville



Results

Air Temperature

Station	Average Minimum Air Temperature		Average Maximum Air Temperature	
	Winter Season	Extended Winter Season	Winter Season	Extended Winter Season
Boonville	Increasing/warming	Increasing/warming	Increasing/warming	Increasing/warming
Lowville				

Snowfall

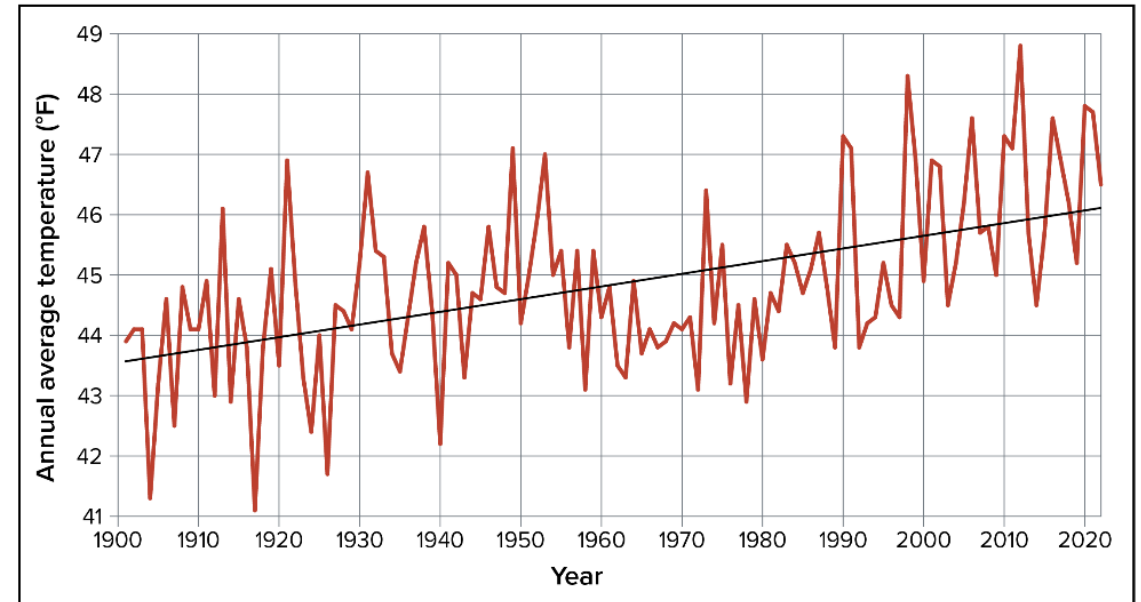
Station	Snowfall Trend	
	Winter Season	Extended Winter Season
Bennetts Bridge	Decreasing	Decreasing
Boonville	Decreasing	Decreasing
Highmarket	Steady/little change	Steady/little change
Lowville	Steady/little change	Steady/little change



Our State is Warming

NYS Climate Impacts Assessment

- Since 1901, the average temperature has increased by almost 2.6°F
- The warmest 10-year period has been since 2000
- Projected temperature increases by 4.6-6.7°F by the 2050s and 6.1-10.9°F by the 2080s.

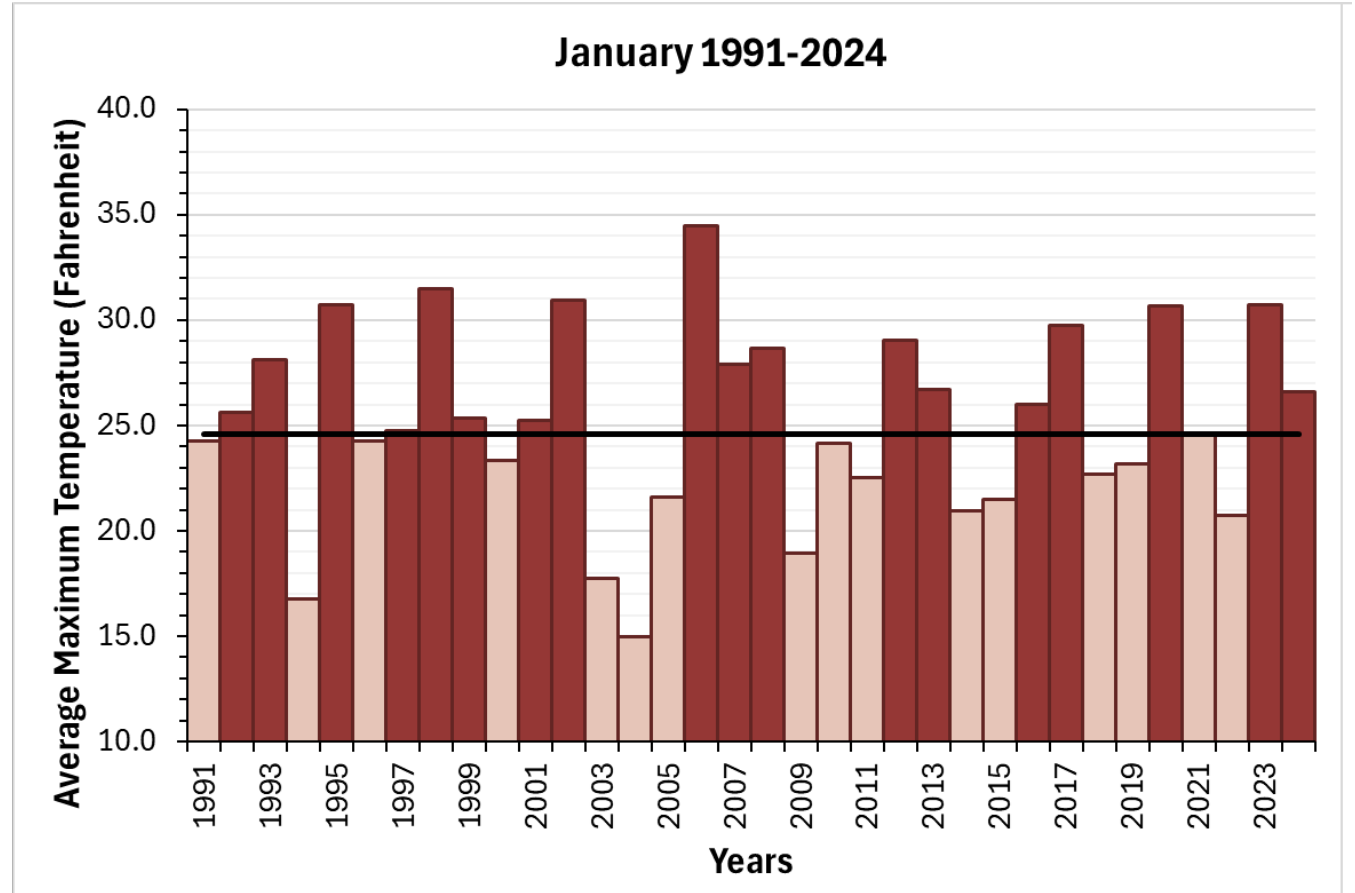


Annual average temperature in New York State, 1901-2022

Source: Lamie et al. 2024

Climate Normals

JANUARY, FEBRUARY,
MARCH, NOVEMBER, AND
DECEMBER 1991-2024



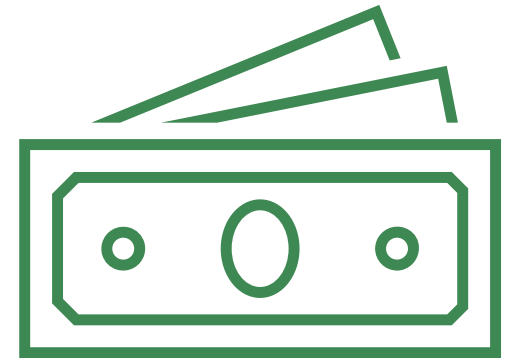
Above Normal Year

Below Normal Year

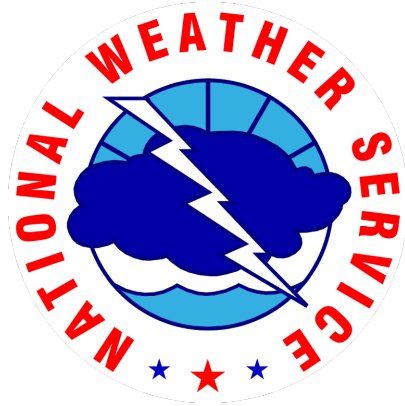
Avg Max Temp Normal



What does this mean for the Tug Hill region?



Additional Resources



National Weather Service

Boonville, NY



Northeast Regional Climate Center



Northeast Regional Climate Center

Questions?

[https://tughill.org/publications/
technical-issue-papers/](https://tughill.org/publications/technical-issue-papers/)

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