

Massive snowfall fueled by climate change hits Buffalo and Great Lakes region

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A massive snowfall is hitting Buffalo, New York, and other parts of the Great Lakes region and is predicted to continue through Sunday.

Already, by Friday afternoon over two feet of snow had hit Buffalo and surrounding towns and continues to come down as of this writing. At times, the snow was falling at a rate of two to three inches per hour.

Total accumulation could reach four to five feet, making it one of the worst storms to hit the region in recorded history.

On Friday, most major roads were closed and all flights in and out of Buffalo airport were canceled. The Buffalo Bills football game Sunday against the Cleveland Browns has been moved to Detroit, Michigan.

New York Governor Kathy Hochul has declared a state of emergency in 11 western counties and warns that this storm could be worse than the 2014 storm that killed 20 people.

Parts of Oswego County near Lake Ontario received two feet of snow by Thursday evening and Hamburg, about 15 miles south of Buffalo, reported 34 inches by 8 a.m.

Forecasters are predicting that areas south and east of lakes Erie and Ontario can still expect to see as much as three inches of snowfall per hour, while areas to the south and east of lakes Michigan and Superior can expect as much as two inches per hour.

About 6 million people in five Great Lakes states—from Upper Michigan to New York—were under snow alerts Friday. Lake-effect snow will continue through Sunday in areas downwind of the Great Lakes, according to the National Weather Service.

Lake-effect snow is common in the areas surrounding the Great Lakes. However, the frequency and intensity of these storms is increasing as global temperatures

warm, the direct result of carbon emissions into the atmosphere.

Such snowfalls are most common in autumn in the Great Lakes region when lake water temperatures are relatively warm, above 40F, and cold air systems blow across them condensing the moisture in the air into snow.

Global warming also warms the lakes, increasing the frequency and intensity of lake-effect storms. The warmer air above the lakes holds greater amounts of moisture, producing more snow when a cold air system blows through them.

Lake-effect storms grow less common and severe as winter progresses. As lakes cool, less evaporation of water into the atmosphere takes place, reducing the rate and quantity of snowfall in storms.

Ice cover on the lakes also reduces evaporation and lake-effect snowfall. The warming of the lakes means that ice cover is reduced and comes later in the year. This gives rise to more intense storms and more storms later in the winter.

This effect has long been understood and predicted by climate scientists.

In fact, two studies show that snowfalls have increased around the Great Lakes over the past decades. A 2009 study by K. E. Kunkel published in the *Journal of Great Lakes Research* restricted itself to verified measurements at weather stations and found that total snowfall along Lake Superior and Lake Michigan increased significantly from 1927 to 2007.

Another study performed by A.W. Burnett in 2003, published in the *Journal of Climate* and using broader measures, found significant snow increases for the entire Great Lakes region between 1931 and 2001.

As of this writing, no deaths have been reported. Unfortunately, that will likely change as emergency

crews are able to reach areas that they are currently blocked by deep snow and as they search cars which have been stranded on roadways.

Upstate and Western New York are home to massive poverty. Average household income in Buffalo is below \$40,000 annually, compared to over \$71,000 for the rest of the state. The official poverty rate is nearly 30 percent, nearly three times the national average of 11 percent.

There are nearly 10,000 people homeless on any given night in the five county region around Buffalo. While this number decreased during the COVID-19 pandemic, when a moratorium on evictions was in place, now that it has been lifted, evictions and homelessness are sure to go up.

Buffalo, like all major cities within the United States, has few facilities for the homeless, relying upon religious and non-profit organizations to provide the few shelters that exist.

Heavy snow also has a very damaging impact on older homes which cannot withstand the extra weight of the snow on roofs and porches. Many people have been seen with shovels and brooms seeking to knock the snow down as it has accumulated.

The storm was forecast several days ago, giving local and state officials more time to prepare than during previous storms. Officials also have the advantage that the storm hit Thursday evening, meaning that they will have most of the weekend to clear roads.

As global warming continues, extreme weather events, such as hurricanes, droughts and lake-effect snowstorms will become more frequent, intense and deadly with no serious response from the capitalist ruling elite.



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