

Lake Effect Snow

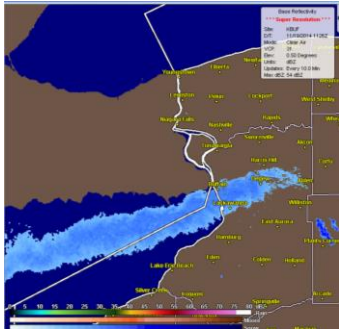


Click banner to view
'Wall of Snow'

Don't Get Wrecked by Lake Effect

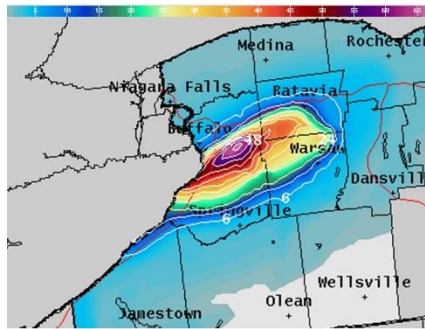
Lake Effect snow is a severe weather concern in the Buffalo area from late fall and through the winter. Lake effect refers to a snow band that forms off of Lake Erie and can dump considerable amounts of snow over a short period of time. Because the snow bands are usually 5 to 10 miles wide, an area of the city may be get dumped on by snow while another region only receives a dusting of snow. Also, an area may be experiencing sunny skies, while a few miles away another area is experiencing a snowy whiteout. These bands tend to migrate with changing wind directions, so that changing conditions from sunny to snowy may occur quickly.

Source: WeatherTap.com



A Lake Effect Snow Band

Source: NWS (Buffalo)

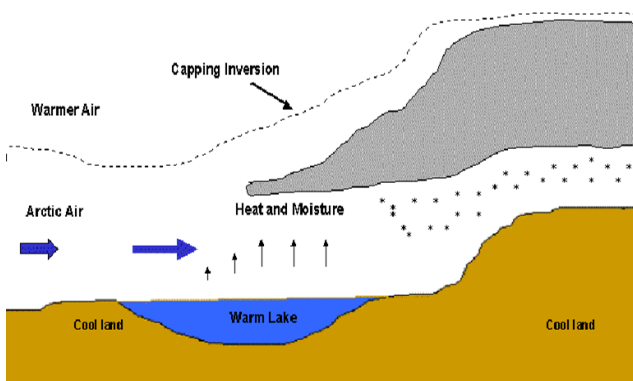


Snowfall differences – from a few inches to 65 inches over a short distance.

How to Prepare

On any given winter day it is important to be aware of the potential for lake effect. Forecasted cold air, a southwest wind, and open water in Lake Erie are the ingredients in a recipe for Lake effect snow. If these conditions exist, check the radar to see if a snow band has formed and where the snow band is located. Listen to the radio or check the National Weather Service site to learn if the snow band is migrating. Remember, what appears as a sunny day may turn into a snowy whiteout in a short period of time. As with extreme cold conditions, dress appropriately for the winter – a coat, hat, and gloves are a must (no shorts), as you may get caught in the snow.

A Quick Lesson



Source: NOAA

Quick Links



Radar Link (click on image)



Buffalo Weather Office Site (click on image)

To sign up for BUFF STATE ALERT, go to <http://buffstatealert.buffalostate.edu>



Go to our ['Extreme Cold'](#) page for some basic ideas, or click on icon for a more complete list.

The formation, intensity, and persistence of lake effect snow depends on the passage of cold air over a relatively warmer lake (Lake Erie in the case of the Buffalo, NY region), as well as a number of reinforcing conditions – collectively referred to as the 'lake effect machine'. The lake waters serve as a source of both moisture and energy needed for the production of snow. The air temperature must be below freezing and the lake water must not be ice covered (ice blocks the transfer of energy and water into the atmosphere). In simple terms: the greater the temperature difference between the two, the greater the potential to produce snow. It is the area to the lee (downwind) of a lake that receive lake effect snows. For Western New York, a SW wind brings snow to the city of Buffalo, while a WSW wind brings snow to the Southtowns and further south into the 'Southern Tier'.