# WINTER STORM SUMMARY FOR FEBRUARY 20, 2005 TO FEBRUARY 21, 2005 EVENT

## **Synopsis**

A guick moving area of low pressure organized across the Plains on Saturday, February 19th, 2005. This low pressure system then tracked into the Lower Great Lakes late on Sunday. As the storm system approached the region Sunday evening, snow began to overspread most of the area. The snow continued mainly north of a line from central New Castle County in Delaware to southern Atlantic County in New Jersey. Areas south of this line received little in the way of precipitation, with some areas near the mentioned line even seeing a little rain at the onset. Other areas continued to get snow Thursday night, however as milder air arrived early Monday morning, the snow mixed with sleet for a brief time then tapered off to some drizzle. Not a lot of rain occurred as the precipitation quickly ended early Monday morning. Gradually milder air arrived through the day on Monday with the Lehigh Valley, Poconos and northwest New Jersey holding onto the colder air the longest. As the storm departed on Monday, a lot of moisture remained across the region in the form of clouds and areas of drizzle. For a time Monday morning as the milder air arrived over the fresh snow cover, areas of dense fog formed. The fog eventually thinned out during the late morning and early afternoon hours on Monday. With the moisture lingering Monday night and some colder air arriving, areas of freezing drizzle or light freezing rain developed across the Lehigh Valley, Poconos, and northwest New Jersey. This activity came to an end around Midnight Tuesday, February 22nd.

### Watches/Warnings/Advisories

A Winter Storm Watch was issued at 2:50 PM Saturday, February 19th for Sunday night through Monday morning. This watch included the following counties, Carbon, Monroe, Berks, Lehigh, Northampton, Chester, Montgomery, Bucks, Delaware, and Philadelphia in Pennsylvania; Sussex, Warren, Hunterdon, Morris, Somerset, Mercer, Middlesex, Salem, Gloucester, Camden, Burlington, and the inland portions of Ocean and Monmouth in New Jersey; New Castle in Delaware; and Cecil in northeast Maryland. At 5:30 AM Sunday the 20th, the Winter Storm Watch for the above counties was upgraded to a Winter Storm Warning, however Kent County in Maryland was added to the warning. Also at 5:30 AM, a Winter Weather Advisory was issued for Sunday night for the following counties, Cumberland, Atlantic, Coastal Ocean and Monmouth in New Jersey; Kent in Delaware; and Queen Anne's, Talbot, and Caroline in northeast Maryland. At 3:00 PM on Sunday, all warnings and advisories were continued with no changes regarding the counties included. An update was issued at 10:40 PM Sunday, maintaining the same warnings and advisories. At 4:20 AM on Monday, February 21st, the Winter Storm Warning was cancelled for Kent County in Maryland. At the same time, the Winter Weather Advisory was cancelled for extreme southern New Jersey, northeast Maryland and central Delaware. The Winter Storm Warning however remained in effect until 9 AM Monday for all Pennsylvania counties, and from Camden County in New Jersey on northward. At 7 AM, the Winter Storm Warning was cancelled for the following counties, Camden, Gloucester, Burlington, Ocean, Salem and Western Monmouth in New Jersey; Cecil in northeast Maryland; New Castle in Delaware; Delaware and Philadelphia in Pennsylvania. The Winter Storm Warning continued until 9 AM for, Berks, Bucks, Carbon, Chester, Lehigh, Monroe, Montgomery, and Northampton in Pennsylvania; Hunterdon, Mercer, Middlesex, Morris, Somerset, Sussex and Warren in New Jersey. These warnings were allowed to expire at 9 AM Monday. A Winter Weather Advisory was issued at 5:20 PM Monday until Midnight for the following counties, Carbon and Monroe in Pennsylvania; Sussex in New Jersey. At 653 PM, the Advisory was expanded to include, Berks, Lehigh and Northampton Counties in Pennsylvania; Morris and Warren Counties in New Jersey. These were allowed to expire at Midnight.

# Precipitation/Temperatures/Winds

Temperatures before the storm arrived Sunday evening got above freezing in most areas. The air mass however was rather dry to begin with, therefore evaporational cooling allowed the precipitation to begin as all snow for areas north of a line from central New Castle County in Delaware to southern Atlantic County in New Jersey. Temperatures at the surface gradually climbed Thursday night, as temperatures aloft warmed. This resulted in the snow changing to a little sleet very early Monday morning. The snow and sleet then ended quickly early Monday morning as some flurries and drizzle. Temperatures continued to gradually climb across southern New Jersey, southeast Pennsylvania, Delaware and northeast Maryland Monday morning and right through the afternoon hours. Farther to the north, the colder air lasted longer, which kept temperatures right around freezing. As for snowfall amounts, 1 to 3 inches fell south of a line

from Reading, Pennsylvania to Toms River, New Jersey. South of a line from Wilmington, Delaware to central Cape May County, New Jersey, little or no snow occurred. North of a line from Reading, Pennsylvania to Toms River, New Jersey a general 4 to 7 inches of snow fell, with the highest amounts across northwest New Jersey and northeast Pennsylvania. Winds were generally from the east to southeast during this storm and averaged in the 10 to 15 mph range Sunday night then the winds became light and variable Monday morning.

## **Significant Impacts/Aspects**

This winter storm occurred over the Presidenti ½ 2 Day holiday weekend and wrapped up on Presidenti ½ 1/2 S Day. There was some impact however as the snow was wet Sunday night into early Monday morning, with some sleet and then drizzle occurring at the end. This made roads slushy to snow covered for a time, however with temperatures around freezing Monday morning for most locations, road conditions improved quickly. Since the snow was wet, it stuck to nearly all outdoor objects, which downed some small tree limbs across parts of the region. However, no power outages were reported due to the wet snow. Overall, this storm was a quick hitter which made roads a mess for a time late Sunday night into early Monday morning, however the timing was good as it was a holiday, therefore less traffic was on the roads. The fog that developed Monday morning lowered the visibility to one quarter of a mile for a couple of hours in several locations, impacting ground and air travel.

#### **Notes**

Information contained in this summary is preliminary. More complete and/or detailed information may be contained in subsequent monthly NOAA storm data publications.