... The Great 1982 Flood in Northern Indiana...



All of the information contained within is from the report titled "Floods of 1982 in Indiana, Ohio, Michigan and Illinois" by the United States Geological Survey Professional Paper 1467.

The Autumn of 1981 and Winter of 1981-1982 through March 10, 1982.

Above average autumnal precipitation resulted in moist soil conditions as the onset of the first significant snowfall over the region on December 17, 1981. Additional snowfall during the remainder of the month produced a snow cover of 6 to 15 inches throughout the region. In this case the "Region" was comprised of Northeast Illinois, Southern Lower Michigan, Northern Indiana and Northwest Ohio.

Snow cover decreased the first week of January 1982 as temperatures rose to above 40 °F. Soil moisture increased as the unfrozen ground absorbed some of the melted snow.

Record snowfall and low temperatures prevailed during the remainder of January. High winds removed snow cover from unprotected locations and caused heavy drifting in shielded areas. Exposed ground froze quickly as temperatures plunged to record lows of -10 to -20 °F at many locations on January 10<sup>th</sup> and remained near or below zero for almost 2 days. Another mass of cold air accompanied by high winds and temperatures near -20 °F moved into the region January 17th and froze exposed soils to depths of up to 3 feet.

Moderate to heavy rainfall on January 23rd and January 30th saturated and compacted the snowpack. Subzero temperatures after each rain formed an ice layer at least 1 inch thick between the snow and the ground surface.

Heavy snowfall and temperatures below 32  $^{\circ}$ F produced and maintained an extensive snowpack. Temperatures below -10  $^{\circ}$ F were recorded at most locations in the study area on February 10<sup>th</sup>.

Snow depth decreased by months end as moderating temperatures and rainfall further compacted the snowpack. Additional snow and rain from March 1-9 added to a snowpack that already contained a high water equivalent.