

Wisconsin NADP National Trends Network (NTN)

OVERVIEW: The National Trends Network (NTN) project provides a long-term record of the acids, nutrients and base cations in Wisconsin precipitation. This project has been on-going since 1980 and is a portion of a nationwide network of over 245 National Atmospheric Deposition Program (NADP) - NTN stations.

ABSTRACT: Since 1980 Wisconsin has participated in a national program collecting precipitation samples for chemical analysis. This network is called the National Trends Network (NTN) and was established by the National Atmospheric Deposition Program (NADP) to measure atmospheric deposition and study its effects on the environment. Presently, Wisconsin DNR operates seven (7) NTN stations in Wisconsin. There now are 245 active sites in the NTN network including stations across the U.S. and Canada. Additional NTN sites are pending as this network continues to grow.

Historical levels of pollutants in the atmosphere provide important clues as to what is happening to the chemistry of Wisconsin's precipitation today. Scientists and policy makers use the data provided by the NTN to examine the effectiveness of air quality regulations, determine whether changes in land use are affecting atmospheric conditions and answer other questions regarding atmospheric deposition. Long-term changes in the atmosphere occur very slowly, obscured by wide month-to-month variability in chemistry measurements. In order to see beyond the short-term changes, it is necessary to analyze the precipitation chemistry of NTN sites over many years. Key support for analysis of trends and patterns is provided by data from the NADP National Trends Network (NTN). NTN data indicate that atmospheric deposition has improved in positive ways as intended by the Clean Air Act Amendments (CAAA) of 1990. The length and continuity of record in NADP – NTN measurements is essential for future assessments of Clean Air Act related policy. The NADP – NTN data record is fundamental to the process of providing answers to ecological science questions.

This statewide NTN Program is long-term in its commitment toward the measurement of trends and patterns in atmospheric deposition in Wisconsin. Wisconsin DNR proposes to continue the uninterrupted operation of seven (7) NTN stations over a multi-year period to provide long-term trend precipitation chemistry data for Wisconsin.

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