

# Grindstone Lake

## Site information:

AQS Site ID: **(none)**  
 NADP Site ID: **MN28**  
 Address: **Audubon Center of the North Woods**  
 City: **Sandstone**  
 County: **Pine**

Location Setting: **Rural**  
 Latitude: **46.1208**  
 Longitude: **-93.0042**  
 Elevation: **337 m**  
 Year Established: **1996**

## Monitoring parameters:

| PM <sub>2.5</sub> FRM | PM <sub>2.5</sub> Continuous | PM <sub>2.5</sub> Speciation | PM <sub>10</sub> | TSP/Metals | VOCs | Carbonyls | Carbon Monoxide | Ozone | SO <sub>2</sub> | NO <sub>x</sub> | Meteorological Data | Other* |
|-----------------------|------------------------------|------------------------------|------------------|------------|------|-----------|-----------------|-------|-----------------|-----------------|---------------------|--------|
|                       |                              |                              |                  |            |      |           |                 |       |                 |                 |                     | E      |

E = Existing, A = Proposed to Add, T = Proposed to Terminate  
 Sampling Frequency: 1/1 = Everyday, 1/3 = 1-in-3 day, 1/6 = 1-in-6 day

\*Acid Deposition



## Site description:

This NADP acid rain monitoring site is located approximately five miles west of I-35 at the Audubon Center of the North Woods, on the eastern shore of Grindstone Lake in Pine County. Land use in the area is a mix of agriculture and forest cover. Significant air emission sources are located more than 20 miles from the site.

## Monitoring objectives:

- Characterize precipitation chemistry to track long-term spatial and temporal trends, support research, and assess the effectiveness of State and Federal SO<sub>2</sub> emissions reduction programs.
- Demonstrate compliance with the Minnesota Wet Sulfate Deposition Standard (Minn. R. 7005.4010 to 7005.4050).

## Planned changes:

None