

Iowa Monitoring Locations and Design Values for Nitrogen Dioxide 2021-2023

Data loss at the Lake Sugema monitoring site in 2021 resulted in loss of the design value at the site for this period. A valid design value for this site should be available for the 2022-2024 period.

A design value is a tool that can be used to understand pollution levels at a specific location. A design value may be set for any pollutant. The U.S. EPA's official definition is explained this way: "a design value is the mathematically determined pollutant concentration at a particular site that must be reduced to, or maintained at or below the National Ambient Air Quality Standard to assume attainment." The design value number tells us how a particular site or area compares with the National Ambient Air Quality Standards (NAAQS).

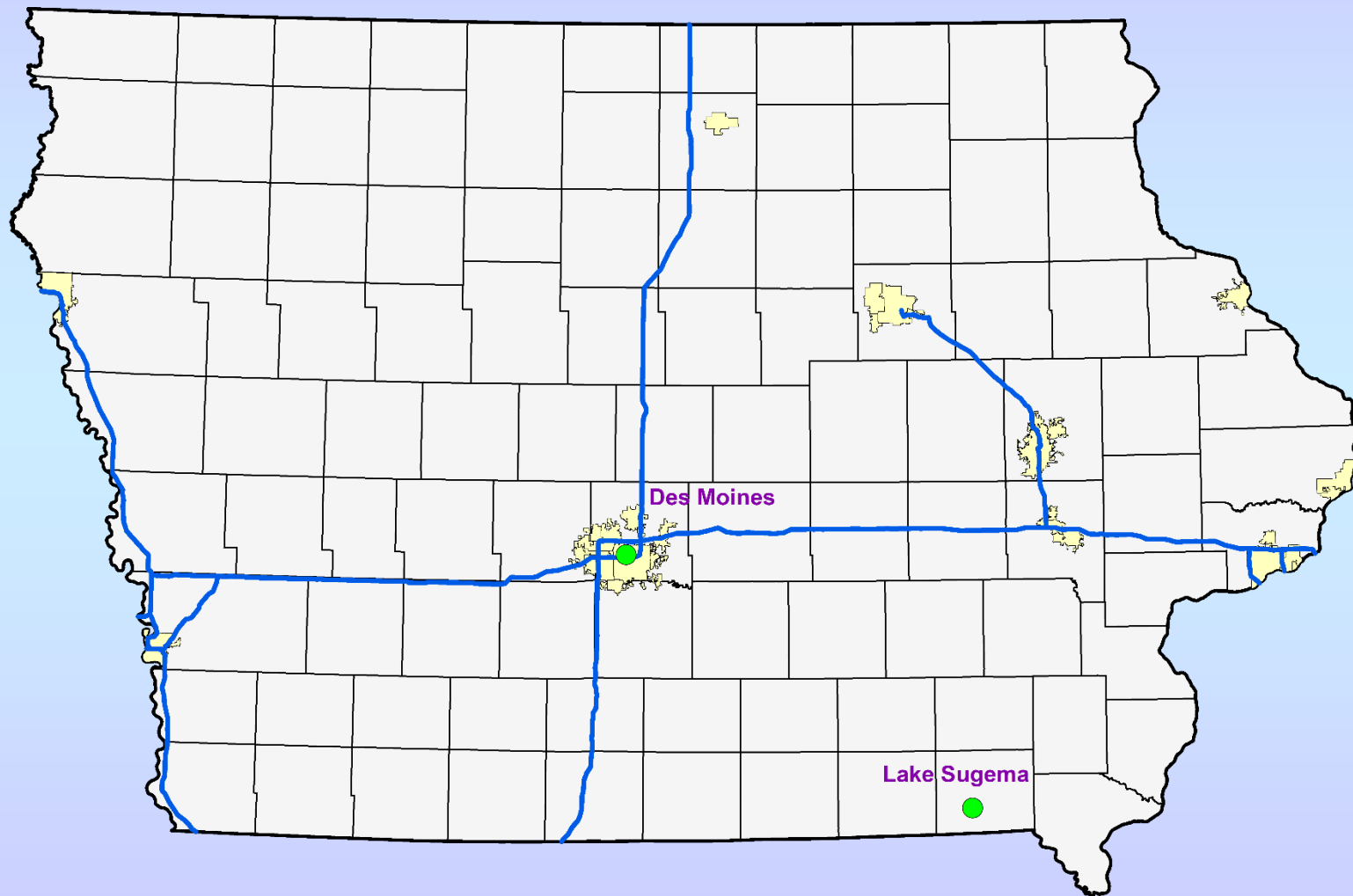
Iowa nitrogen dioxide (NO₂) monitor location and information is detailed on the following pages. The EPA design value for 1-hour NO₂ is equal to the average of the 98th percentile 1-hour value for the most recent three years. EPA revised the NO₂ NAAQS in April of 2012. A monitoring site must have a design value less than 100 parts per billion to be considered "in attainment" with the NO₂ NAAQS. All monitoring sites in Iowa are in attainment with the 1-hour NO₂ NAAQS. Additional information on the revised NO₂ standard is available here: <https://www.epa.gov/no2-pollution>

Iowa Nitrogen Dioxide Monitors (2023)

AQS Site ID	Site Name	Location	County	Design Value?
19-153-0030	Health Department	Des Moines	Polk	Yes
19-177-0006	Lake Sugema	Keosauqua	Van Buren	No

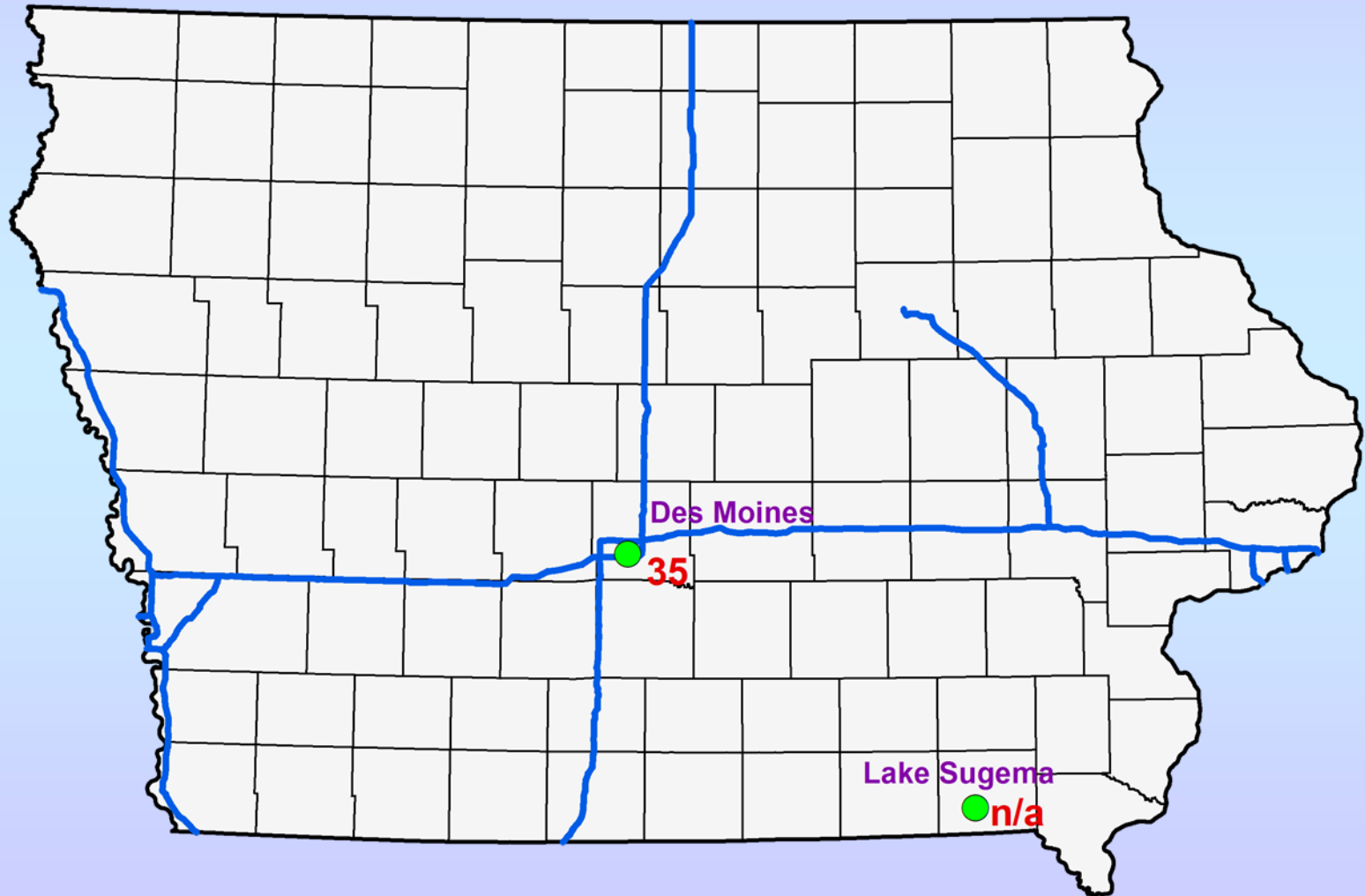
A site must be operational for at least three years to compute a design value and meet additional completeness requirements specified in [40 CFR 50 Appendix S](#).

Iowa NO₂ Monitoring Network 2023



Iowa NO₂ Design Values: 2021-2023

Concentrations listed in ppb. Values greater than 100 exceed the standard.

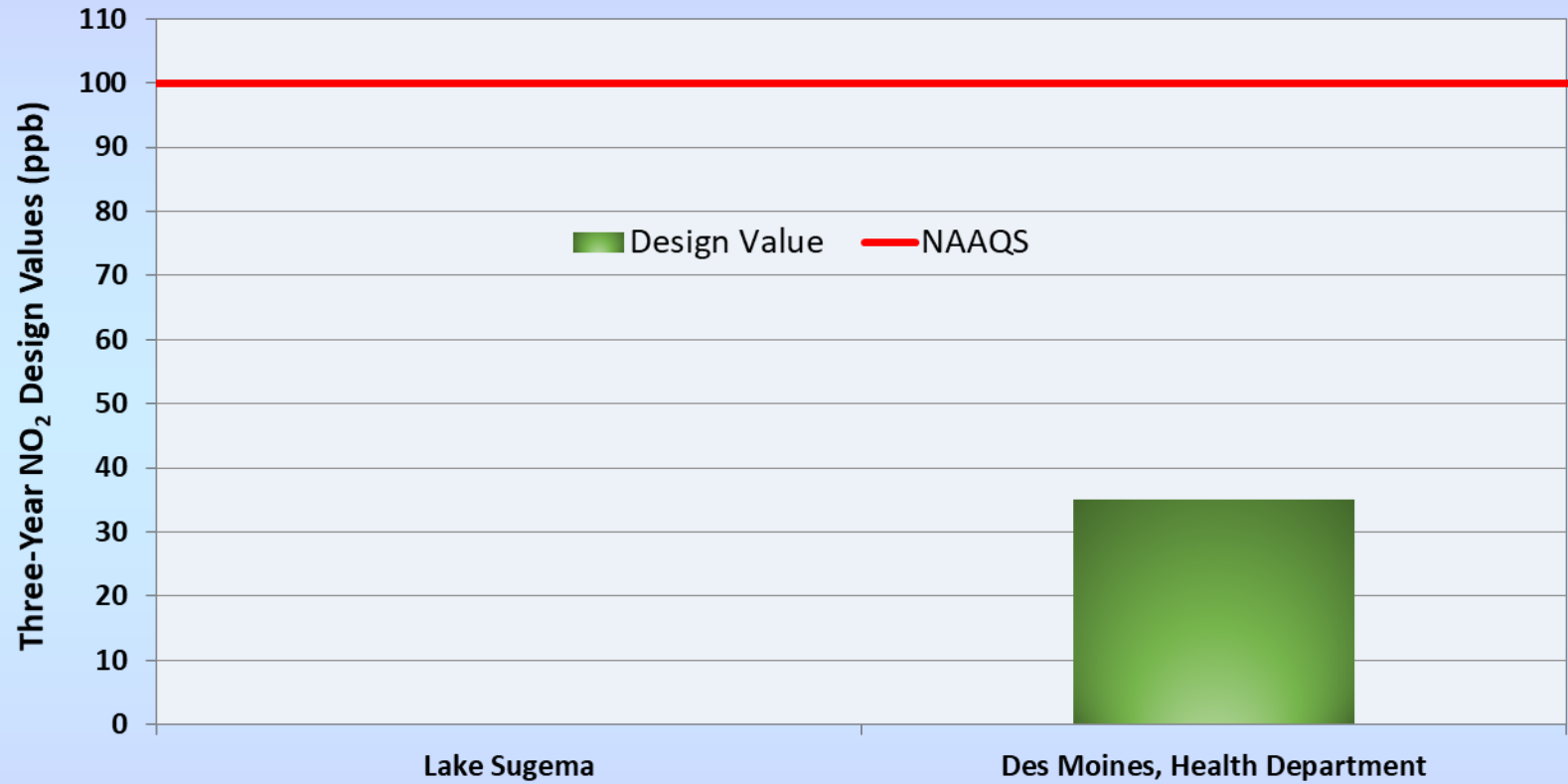


Iowa NO₂ Design Values: 2021-2023

Iowa NO₂ Design Values 2023				
County	City	EPA Site Id	Design Value 3-year Average of 98th Percentile (ppb)	Years Averaged
Polk	Des Moines	191530030	35	2021-2023
Van Buren	Not in a City	191770006	n/a	2021-2023

(Three Year Averages Greater Than 100 ppb Indicate Non-Attainment with the 1-hour NAAQS)

Iowa NO₂ Design Values Chart: 2021-2023



Web Resources

Iowa Real-time Data Reporting :

In Polk County:

<https://www.polkcountyiowa.gov/public-works/air-quality/air-quality-monitoring/current-aqi-real-time-data/>

In Linn County:

<https://monitoring.linncleanair.org/>

Outside Polk and Linn Counties:

<https://www.shl.uiowa.edu/env/ambient/data.xml>

Design Values for All Pollutants Nationwide:

<https://www.epa.gov/air-trends/air-quality-design-values>

Trends in Nitrogen Dioxide Levels:

<https://www.epa.gov/air-trends/nitrogen-dioxide-trends>

Historical Air Pollution Data for Iowa and Other States:

<https://www.epa.gov/outdoor-air-quality-data>