

# Iowa Monitoring Locations and Design Values for Nitrogen Dioxide 2019-2021

**Errors were discovered in the NO<sub>2</sub> data set after this report was originally posted. The errors resulted in the loss of a significant amount of data for 2021 at the Lake Sugema site. The voided data resulted in the loss of a design value for the site for the 2019-2021, 2020-2022, and 2021-2023 periods. This report has been updated accordingly.**

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).

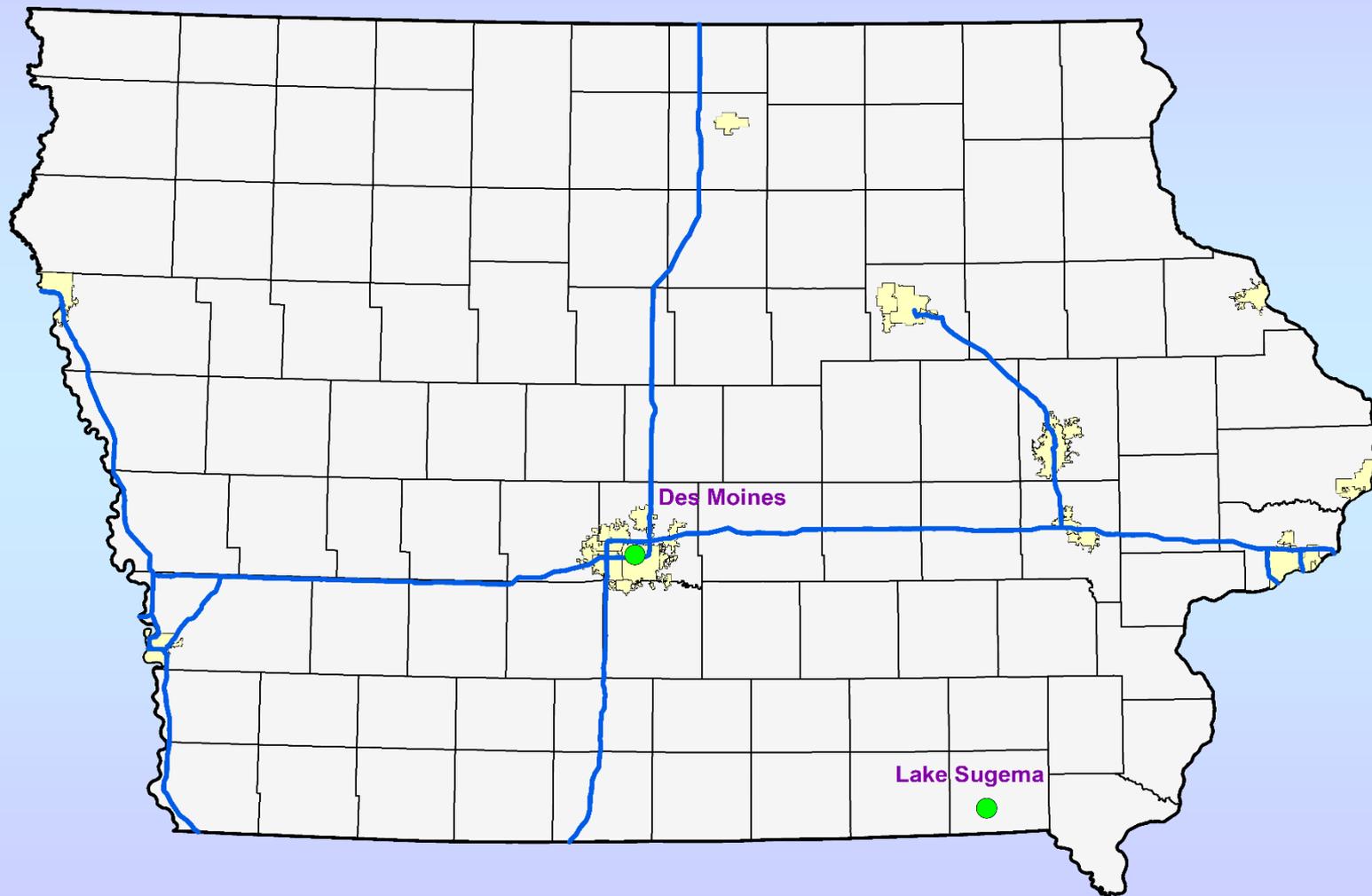
Iowa nitrogen dioxide (NO<sub>2</sub>) monitor location and information is detailed on the following pages. The EPA design value for 1-hour NO<sub>2</sub> is equal to the average of the 98th percentile 1-hour value for the most recent three years. EPA revised the NO<sub>2</sub> NAAQS in April of 2012. A monitoring site must have a design value less than 100 parts per billion to be considered "in attainment" with the NO<sub>2</sub> NAAQS. All monitoring sites in Iowa are in attainment with the 1-hour NO<sub>2</sub> NAAQS. Additional information on the revised NO<sub>2</sub> standard is available here: <https://www.epa.gov/no2-pollution>

# Iowa Nitrogen Dioxide Monitors (2021)

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

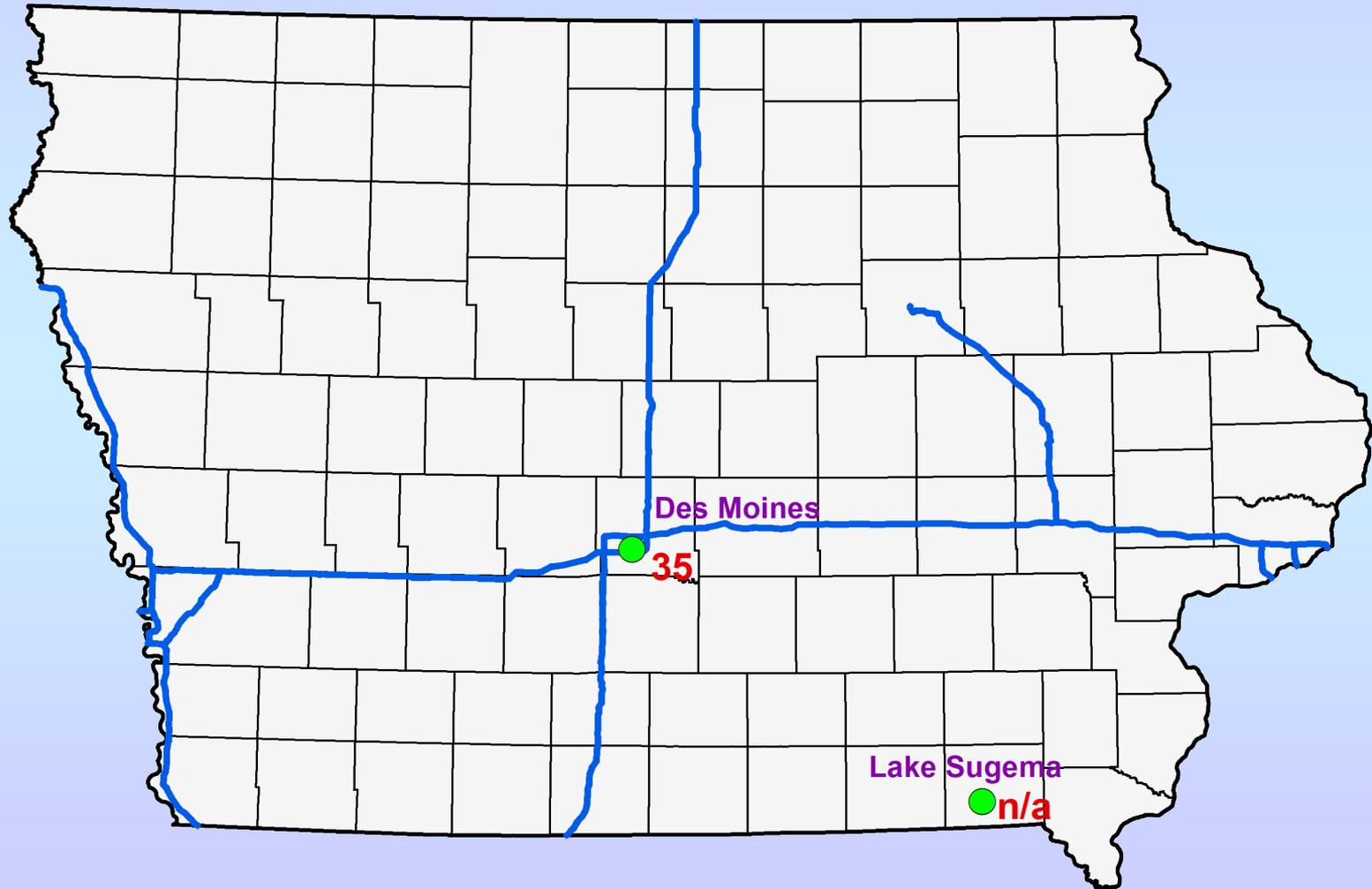
A site must be operational for at least three years to compute a design value and meet additional completeness requirements specified in [40 CFR 50 Appendix S](#).

# Iowa NO<sub>2</sub> Monitoring Network 2021



# Iowa NO<sub>2</sub> Design Values: 2019-2021

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

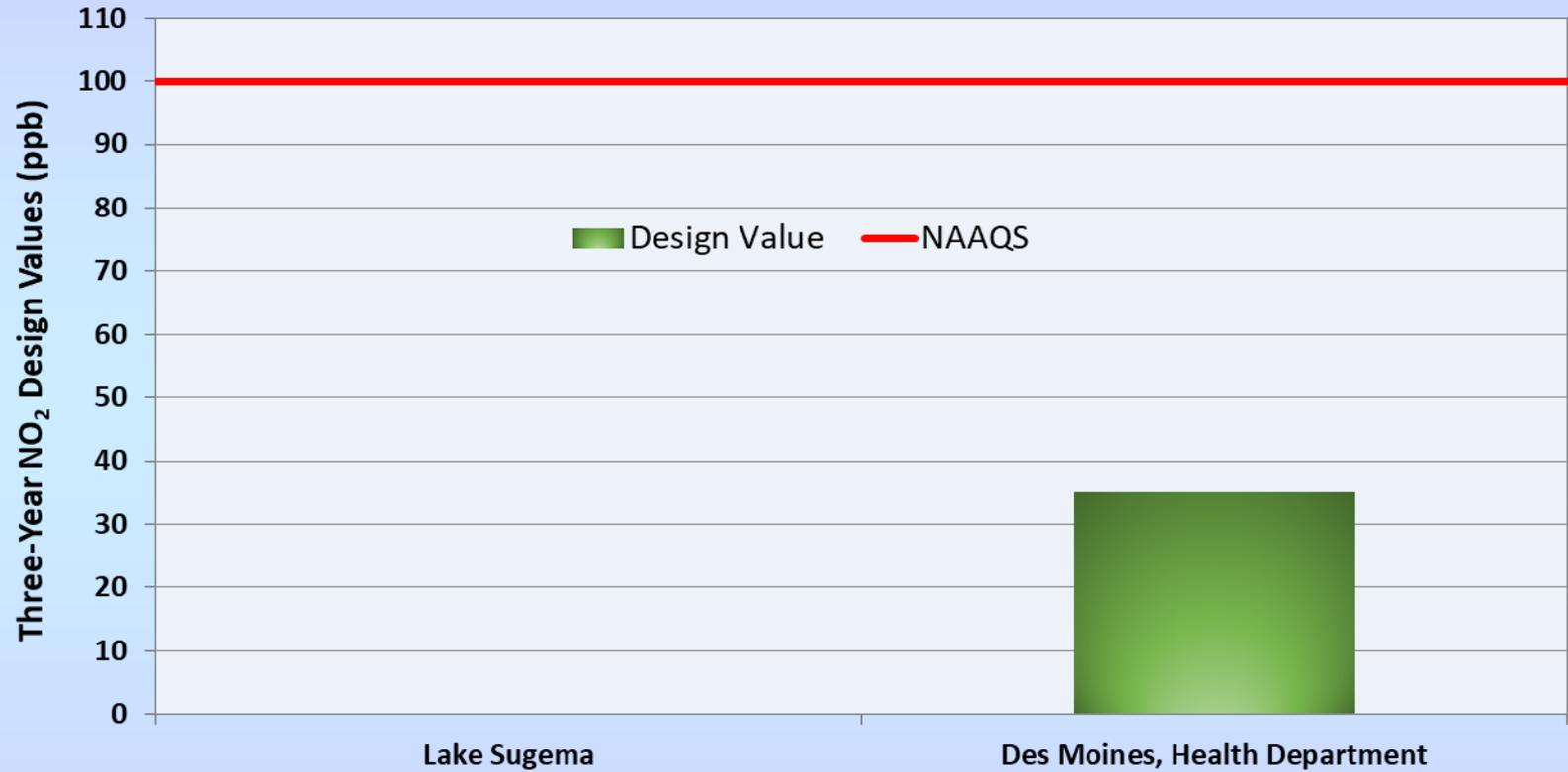


# Iowa NO<sub>2</sub> Design Values: 2019-2021

<b>Iowa NO<sub>2</sub> Design Values 2021</b>				
<b>County</b>	<b>City</b>	<b>EPA Site Id</b>	<b>Design Value 3-year Average of 98th Percentile (ppb)</b>	<b>Years Averaged</b>
Polk	Des Moines	191530030	35	2019-2021
Van Buren	Not in a City	191770006	n/a	2019-2021

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

# Iowa NO<sub>2</sub> Design Values Chart: 2019-2021



# 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>