Iowa Monitoring Locations and Design Values for Sulfur Dioxide 2017-2019

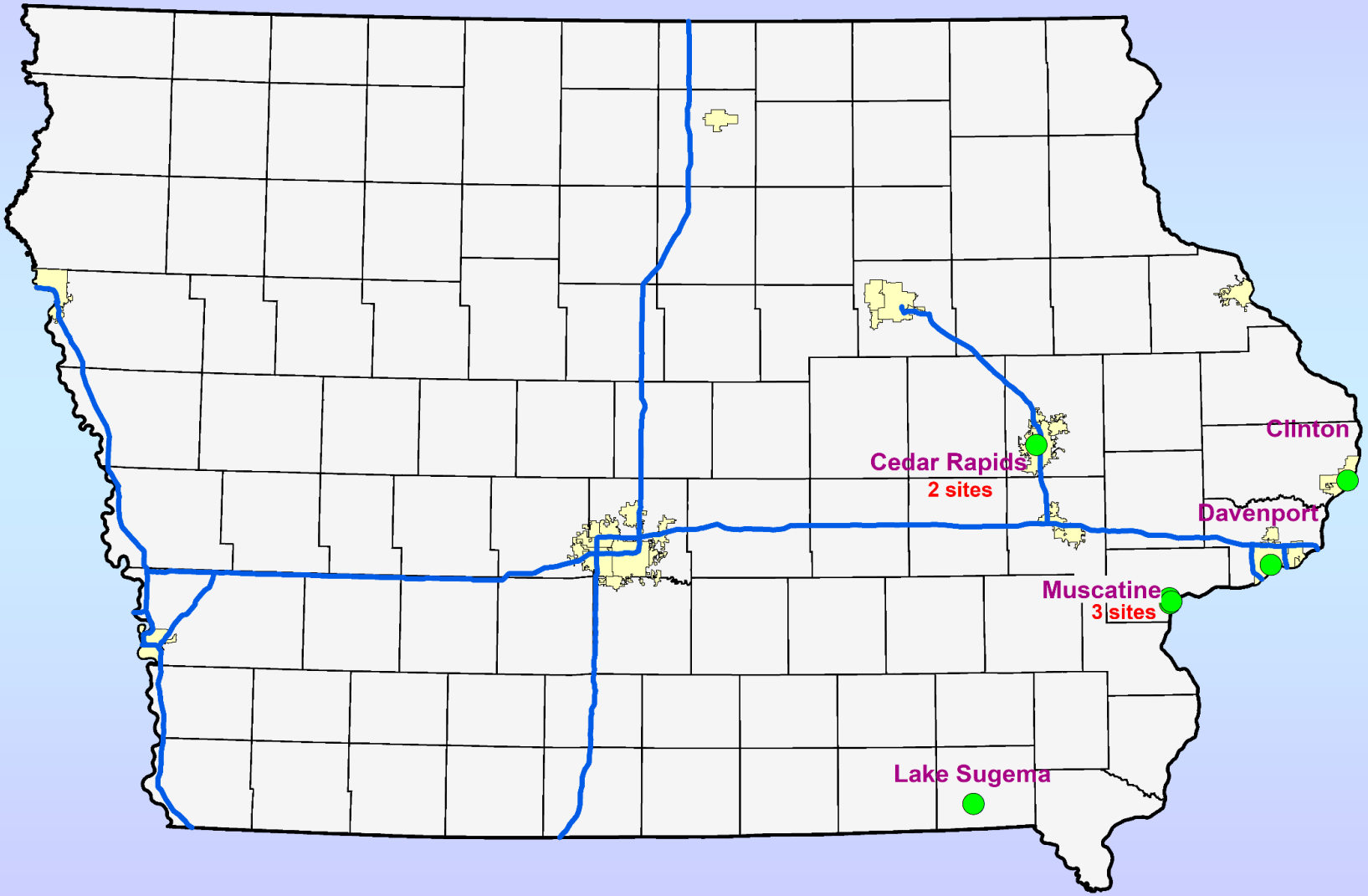
A design value is a tool that can be used to understand pollution levels at a specific location. A design value may be set for any pollutant. The U.S. EPA's official definition is explained this way: "a design value is the mathematically determined pollutant concentration at a particular site that must 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 sulfur dioxide (SO_2) monitor location and information is detailed on the following pages. The EPA design value for 1-hour SO_2 is equal to the average of the annual 99th percentile daily maximum 1-hour value for the most recent three years. The EPA revised the SO_2 NAAQS in June of 2010. A monitoring site must have a design value less than 76 parts per billion to be considered "in attainment" with the SO_2 NAAQS. Additional information on the revised SO_2 standard is available here: https://www.epa.gov/so2-pollution

Iowa Sulfur Dioxide Monitoring Sites 2019

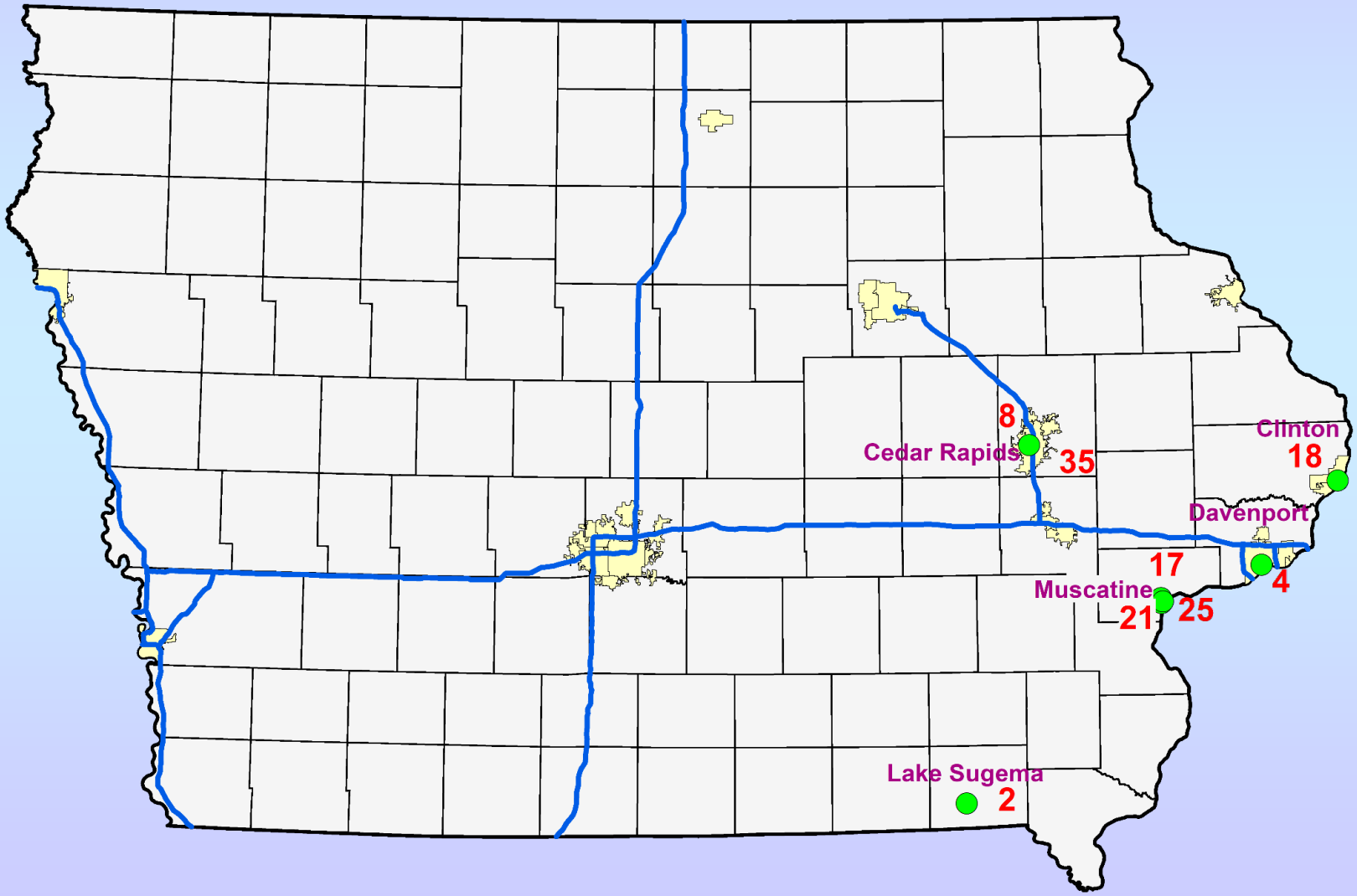
AQS Site ID	Site Name	Location	County
19-045-0019	Chancy Park	Clinton	Clinton
19-113-0040	Public Health	Cedar Rapids	Linn
19-113-0041	Tait Cummins Park	Cedar Rapids	Linn
19-139-0016	Greenwood Cemetery	Muscatine	Muscatine
19-139-0019	High School East Campus	Muscatine	Muscatine
19-139-0020	Musser Park	Muscatine	Muscatine
19-163-0015	Jefferson School	Davenport	Scott
19-177-0006	Lake Sugema	Keosauqua	Van Buren

Iowa SO_2 Monitoring Network 2019



Iowa SO_2 Design Values: 2017-2019

Concentrations listed in ppb. Values greater than 75 exceed the standard.



Iowa Sulfur Dioxide Design Values 2019

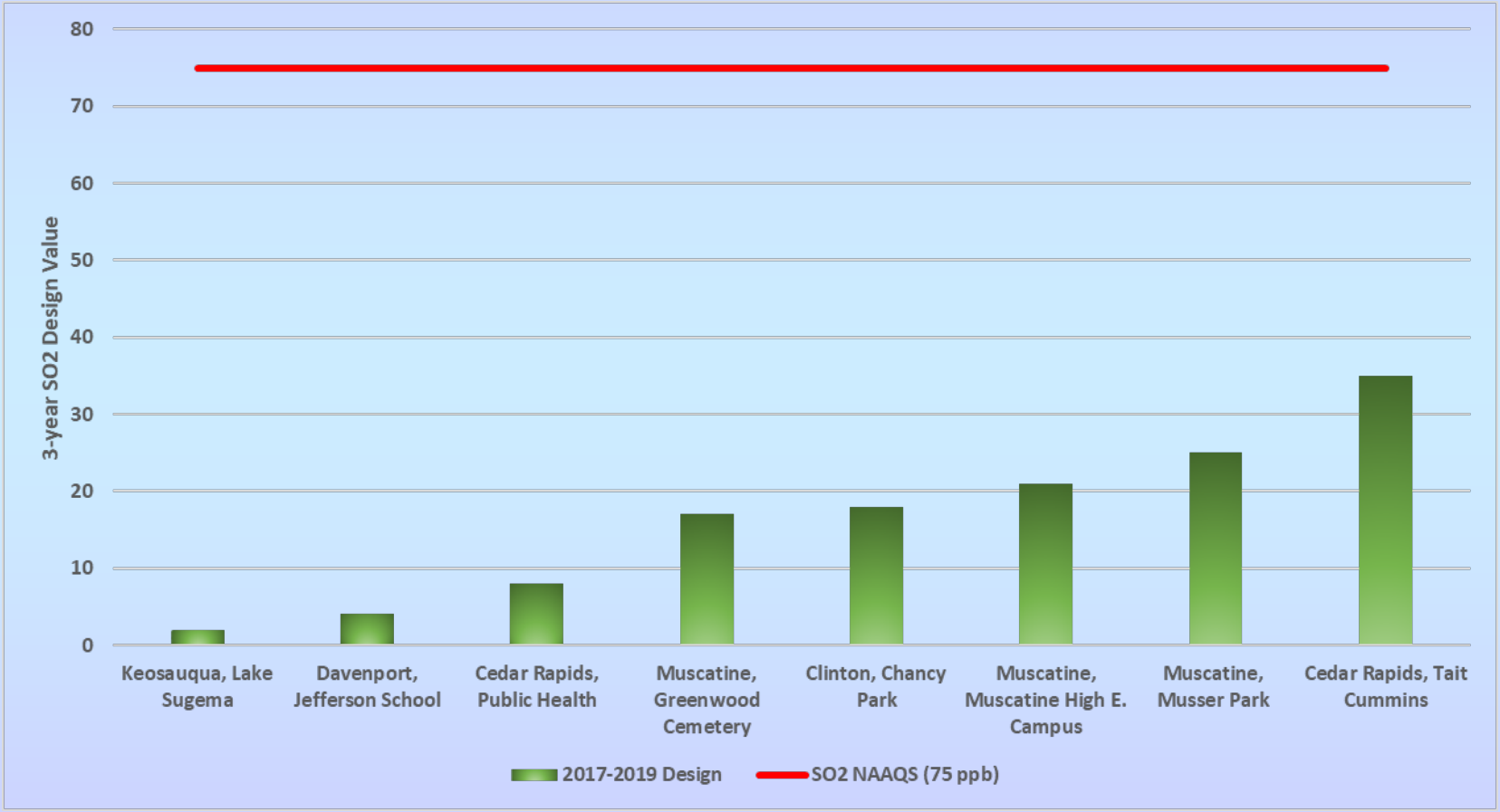
County	City	EPA Site ID	Year	99th Percentile Daily Maximum Hourly SO_2 Concentration (ppb)	3-year Average of 99th Percentile (ppb)	Years Averaged
Clinton	Clinton	19-045-0019	2017	15.9		
			2018	24.6		
			2019	14.7	18	2017-2019
Linn	Cedar Rapids	19-113-0040	2017	7.9		
			2018	10.1		
			2019	6.4	8	2017-2019
Linn	Cedar Rapids	19-113-0041	2017	53.0		
			2018	28.0		
			2019	24.7	35	2017-2019
Muscatine	Muscatine	19-139-0016	2017	20.1		
			2018	15.1		
			2019	15.7	17	2017-2019
Muscatine	Muscatine	19-139-0019	2017	20.2		
			2018	16.3		
			2019	25.0	21	2017-2019
Muscatine	Muscatine	19-139-0020	2017	34.5		
			2018	24.0		
			2019	16.4	25	2017-2019
Scott	Davenport	19-163-0015	2017	3.7		
			2018	4.5		
			2019	5.0	4	2017-2019
Van Buren	Keosauqua	19-177-0006	2017	4.0		
			2018	1.5**		
			2019	1.4	2	2017-2019

** Data substitution performed due to low data capture

Three year averages greater than 75 ppb indicate non-attainment with the 1-Hour NAAQS.

Values are based on preliminary data. Data will be certified in May 2020.

Iowa SO_2 Design Values Chart: 2017-2019



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:
http://www.shl.uiowa.edu/env/ambient/index.xml

Design Values for All Pollutants Nationwide:
https://www.epa.gov/air-trends

Trends in Sulfur Dioxide Levels:
https://www.epa.gov/air-trends/sulfur-dioxide-trends

Historical Air Pollution Data for Iowa and Other States:
https://www.epa.gov/outdoor-air-quality-data