#### APPENDIX C

## MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

#### APPENDIX C

## MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

	Ambient Air Quality Standards (Updated 5/4/16)							
Pollutant	Averaging	California S	tandards ¹	National Standards <sup>2</sup>				
Politiani	Time	Concentration <sup>3</sup>	Method 4	Primary 3,5	Secondary 3,6	Method 7		
Ozone (O₃)s	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet Photometry	_	Same as Primary	Ultraviolet		
020110 (O <sub>3</sub> )	8 Hour	0.070 ppm (137 μg/m²)	,	0.070 ppm (137 μg/m²)	Standard	Photometry		
Respirable Particulate	24 Hour	50 μg/m³	Gravimetric or Beta	150 μg/m <sup>3</sup>	Same as Primary	Inertial Separation and Gravimetric		
Matter (PM10)	Annual Arithmetic Mean	20 μg/m <sup>s</sup>	Attenuation	_	Standard	Analysis		
Fine Particulate	24 Hour	-	-	35 μg/m <sup>s</sup>	Same as Primary Standard	Inertial Separation and Gravimetric		
Matter (PM2.5) <sup>,</sup>	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	12.0 µg/m²	15 μg/m <sup>s</sup>	Analysis		
Carbon	1 Hour	20 ppm (23 mg/m²)	Non-Dispersive	35 ppm (40 mg/m²)	_	Non-Dispersive		
Monoxide	8 Hour	9.0 ppm (10 mg/m²)	Infrared Photometry (NDIR)	9 ppm (10 mg/m²)	_	Infrared Photometry (NDIR)		
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m²)	(NDIIV)	1	_	(NDIIV)		
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m²)	Gas Phase	100 ppb (188 µg/m³)	_	Gas Phase		
(NO <sub>2</sub> )10	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	Chemiluminescence	0.053 ppm (100 μg/m³)	Same as Primary Standard	Chemiluminescence		
	1 Hour	0.25 ppm (655 μg/m <sup>3</sup> )		75 ppb (196 μg/m²)	_	I litro violet		
Sulfur Dioxide	3 Hour	-	Ultraviolet	-	0.5 ppm (1300 μg/m²)	Ultraviolet Flourescence; Spectrophotometry		
(SO <sub>2</sub> ) <sup>11</sup>	24 Hour	0.04 ppm (105 μg/m²)	Fluorescence 0.14 ppm (for certain areas) <sup>11</sup>		_	(Pararosaniline Method)		
	Annual Arithmetic Mean	_		0.030 ppm (for certain areas) <sup>11</sup>	_			
	30 Day Average	1.5 μg/m³		_	_			
Lead <sup>12</sup> , 13	Calendar Quarter	_	Atomic Absorption	1.5 μg/m³ (for certain areas)¹²	Same as Primary	High Volume Sampler and Atomic Absorption		
	Rolling 3-Month Average	_		0.15 μg/m <sup>s</sup>	Standard	/ todorption		
Visibility Reducing Particles <sup>4</sup>	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape		No			
Sulfates	24 Hour	25 μg/m³	lon Chromatography		National			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m²)	Ultraviolet Fluorescence		Standards			
Vinyl Chloride <sup>12</sup>	24 Hour	0.01 ppm (26 µg/m²)	Gas Chromatography					
See footnotes	on next page							

- 1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 11. On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
  - Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5  $\mu$ g/m³)as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

#### Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment, nonattainment, as shown below:

Attainment A
Nonattainment N
Nonattainment-Transitional NA-T
Unclassified U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

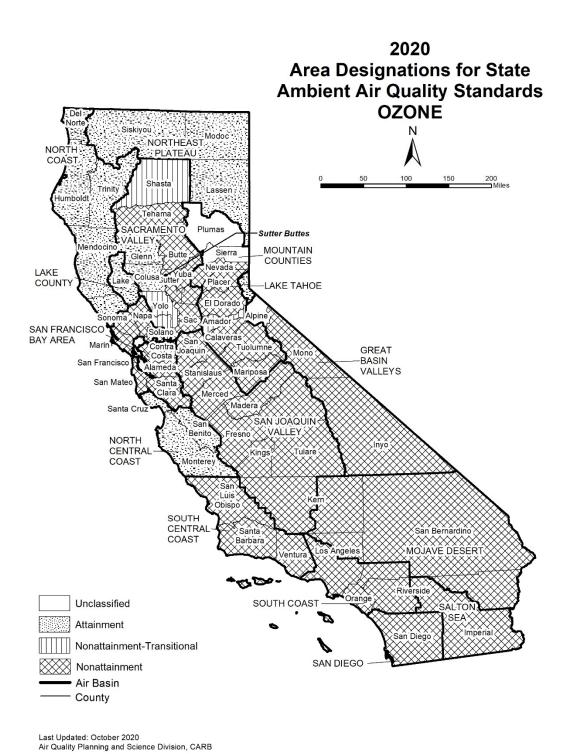


TABLE 1

#### California Ambient Air Quality Standards Area Designations for Ozone <sup>1</sup>

	N	NA-T	U	Α
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			Х	
Inyo County	Х			
Mono County	Х			
LAKE COUNTY AIR BASIN				Χ
AKE TAHOE AIR BASIN				Χ
MOJAVE DESERT AIR BASIN	Х			
MOUNTAIN COUNTIES AIR BASIN				
Amador County		Х		
Calaveras County	Х			
El Dorado County (portion)	Х			
Mariposa County	Х			
Nevada County	Х			
Placer County (portion)	Х			
Plumas County			Х	
Sierra County			Х	
Tuolumne County	Х			
NORTH CENTRAL COAST AIR BASIN				Χ
NORTH COAST AIR BASIN				Х

	N	NA-T	U	Α
NORTHEAST PLATEAU AIR BASIN				Х
SACRAMENTO VALLEY AIR BASIN				
Colusa and Glenn Counties				Х
Shasta County		Χ		
Sutter/Yuba Counties				
Sutter Buttes	Х			
Remainder of Sutter County	Х			
Yuba County	Х			
Yolo/Solano Counties		Х		
Remainder of Air Basin	Х			
SALTON SEA AIR BASIN	Х			
SAN DIEGO AIR BASIN	Х			
SAN FRANCISCO BAY AREA AIR BASIN	Х			
SAN JOAQUIN VALLEY AIR BASIN	Х			
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County	Х			
Santa Barbara County	Х			
Ventura County	Χ			
SOUTH COAST AIR BASIN	Χ			

<sup>&</sup>lt;sup>1</sup> AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

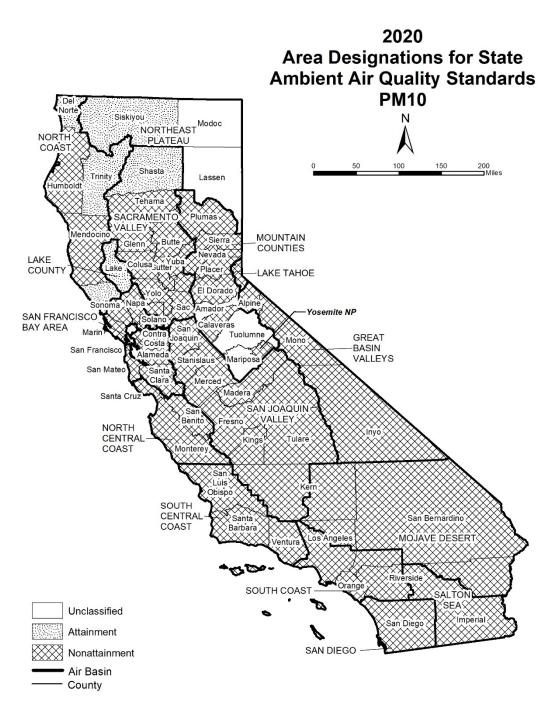


TABLE 2

# California Ambient Air Quality Standards Area Designation for Suspended Particulate Matter ( $PM_{10}$ )

	N	U	Α
GREAT BASIN VALLEYS AIR BASIN	Х		
LAKE COUNTY AIR BASIN			Χ
LAKE TAHOE AIR BASIN	Х		
MOJAVE DESERT AIR BASIN	Х		
MOUNTAIN COUNTIES AIR BASIN			
Amador County		Χ	
Calaveras County	Х		
El Dorado County (portion)	Х		
Mariposa County			
- Yosemite National Park	Х		
- Remainder of County		Χ	
Nevada County	Х		
Placer County (portion)	Х		
Plumas County	Х		
Sierra County	Х		
Tuolumne County		Χ	

	N	U	Α
NORTH CENTRAL COAST AIR BASIN	Х		
NORTH COAST AIR BASIN			
Del Norte, Sonoma (portion) and Trinity Counties			Χ
Remainder of Air Basin	Χ		
NORTHEAST PLATEAU AIR BASIN			
Siskiyou County			Χ
Remainder of Air Basin		Χ	
SACRAMENTO VALLEY AIR BASIN			
Shasta County			Χ
Remainder of Air Basin	Χ		
SALTON SEA AIR BASIN	Χ		
SAN DIEGO AIR BASIN	Χ		
SAN FRANCISCO BAY AREA AIR BASIN	Χ		
SAN JOAQUIN VALLEY AIR BASIN	Χ		
SOUTH CENTRAL COAST AIR BASIN	Χ		
SOUTH COAST AIR BASIN	Х		



TABLE 3

# California Ambient Air Quality Standards Area Designations for Fine Particulate Matter ( $PM_{2.5}$ )

	N	U	Α
GREAT BASIN VALLEYS AIR BASIN			Χ
LAKE COUNTY AIR BASIN			Χ
LAKE TAHOE AIR BASIN			Χ
MOJAVE DESERT AIR BASIN			
San Bernardino County			
<ul> <li>County portion of federal Southeast Desert Modified AQMA for Ozone<sup>1</sup></li> </ul>			Х
Remainder of Air Basin			Χ
MOUNTAIN COUNTIES AIR BASIN			
Plumas County			
- Portola Valley²	Х		
Remainder of Air Basin		Χ	
NORTH CENTRAL COAST AIR BASIN			Χ
NORTH COAST AIR BASIN			Χ
NORTHEAST PLATEAU AIR BASIN			Χ
SACRAMENTO VALLEY AIR BASIN			
Butte County	Х		
Colusa County			Χ
Glenn County			Χ
Placer County (portion)			Χ
Sacramento County			Χ
Shasta County			Χ
Sutter and Yuba Counties			Χ
Remainder of Air Basin		Х	

	N	U	Α
SALTON SEA AIR BASIN			
Imperial County			
- City of Calexico <sup>3</sup>	Χ		
Remainder of Air Basin			Χ
SAN DIEGO AIR BASIN	Χ		
SAN FRANCISCO BAY AREA AIR BASIN	Χ		
SAN JOAQUIN VALLEY AIR BASIN	Χ		
SOUTH CENTRAL COAST AIR BASIN			
San Luis Obispo County			Χ
Santa Barbara County		Χ	
Ventura County			Χ
SOUTH COAST AIR BASIN	Х		

<sup>&</sup>lt;sup>1</sup> California Code of Regulations, title 17, section 60200(b)

<sup>&</sup>lt;sup>2</sup> California Code of Regulations, title 17, section 60200(c)

<sup>&</sup>lt;sup>3</sup> California Code of Regulations, title 17, section 60200(a)

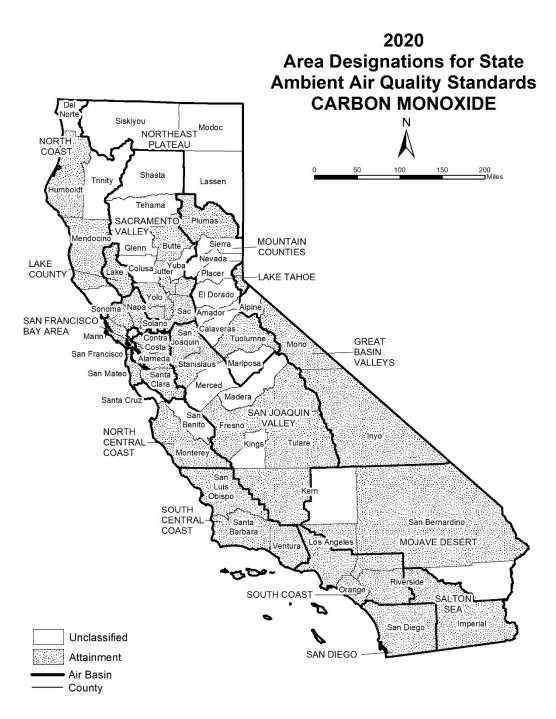


TABLE 4

## California Ambient Air Quality Standards Area Designation for Carbon Monoxide\*

	N	NA-T	U	Α
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			Χ	
Inyo County				Χ
Mono County				Х
LAKE COUNTY AIR BASIN				Х
LAKE TAHOE AIR BASIN				Χ
MOJAVE DESERT AIR BASIN				
Kern County (portion)			Χ	
Los Angeles County (portion)				Х
Riverside County (portion)			Χ	
San Bernardino County (portion)				Х
MOUNTAIN COUNTIES AIR BASIN				
Amador County			Χ	
Calaveras County			Χ	
El Dorado County (portion)			Χ	
Mariposa County			Χ	
Nevada County			Χ	
Placer County (portion)			Χ	
Plumas County				Χ
Sierra County			Χ	
Tuolumne County				Χ
NORTH CENTRAL COAST AIR BASIN				
Monterey County				Х
San Benito County			Χ	
Santa Cruz County			Χ	
NORTH COAST AIR BASIN				
Del Norte County			Χ	
Humboldt County				Х
Mendocino County				Х
Sonoma County (portion)			Χ	
Trinity County			Χ	
NORTHEAST PLATEAU AIR BASIN			Χ	

	N	NA-T	U	Α
SACRAMENTO VALLEY AIR BASIN		1100		
Butte County				Х
Colusa County			Х	
Glenn County			Х	
Placer County (portion)				Х
Sacramento County				Х
Shasta County			Х	
Solano County (portion)				Х
Sutter County				Х
Tehama County			Х	
Yolo County				Х
Yuba County			Х	
SALTON SEA AIR BASIN				Х
SAN DIEGO AIR BASIN				Χ
SAN FRANCISCO BAY AREA AIR BASIN				Χ
SAN JOAQUIN VALLEY AIR BASIN				
Fresno County				Χ
Kern County (portion)				Χ
Kings County			Χ	
Madera County			Х	
Merced County			Χ	
San Joaquin County				Χ
Stanislaus County				Χ
Tulare County				Х
SOUTH CENTRAL COAST AIR BASIN				Х
SOUTH COAST AIR BASIN				Χ

 $<sup>\</sup>ensuremath{^{\star}}$  The area designated for carbon monoxide is a county or portion of a county



TABLE 5

## California Ambient Air Quality Standards Area Designations for Nitrogen Dioxide

	N	U	Α
GREAT BASIN VALLEYS AIR BASIN	13	Ū	X
LAKE COUNTY AIR BASIN			Χ
LAKE TAHOE AIR BASIN			Χ
MOJAVE DESERT AIR BASIN			Χ
MOUNTAIN COUNTIES AIR BASIN			Χ
NORTH CENTRAL COAST AIR BASIN			Χ
NORTH COAST AIR BASIN			Χ
NORTHEAST PLATEAU AIR BASIN			Χ

	N	U	Α
SACRAMENTO VALLEY AIR BASIN			Χ
SALTON SEA AIR BASIN			Χ
SAN DIEGO AIR BASIN			Χ
SAN FRANCISCO BAY AREA AIR BASIN			Χ
SAN JOAQUIN VALLEY AIR BASIN			Χ
SOUTH CENTRAL COAST AIR BASIN			Χ
SOUTH COAST AIR BASIN			
CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	Х		
Remainder of Air Basin			Χ



TABLE 6

## California Ambient Air Quality Standards Area Designation for Sulfur Dioxide\*

	N	Α
GREAT BASIN VALLEYS AIR BASIN		Χ
LAKE COUNTY AIR BASIN		Χ
LAKE TAHOE AIR BASIN		Χ
MOJAVE DESERT AIR BASIN		Χ
MOUNTAIN COUNTIES AIR BASIN		Χ
NORTH CENTRAL COAST AIR BASIN		Χ
NORTH COAST AIR BASIN		Χ
NORTHEAST PLATEAU AIR BASIN		Х

	N	Α
SACRAMENTO VALLEY AIR BASIN		Χ
SALTON SEA AIR BASIN		Χ
SAN DIEGO AIR BASIN		Χ
SAN FRANCISCO BAY AREA AIR BASIN		Χ
SAN JOAQUIN VALLEY AIR BASIN		Χ
SOUTH CENTRAL COAST AIR BASIN		Χ
SOUTH COAST AIR BASIN		Χ

<sup>\*</sup> The area designated for sulfur dioxide is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.



TABLE 7

## California Ambient Air Quality Standards Area Designation for Sulfates

	N	U	Α
GREAT BASIN VALLEYS AIR BASIN			Χ
LAKE COUNTY AIR BASIN			Χ
LAKE TAHOE AIR BASIN			Χ
MOJAVE DESERT AIR BASIN			Х
MOUNTAIN COUNTIES AIR BASIN			Χ
NORTH CENTRAL COAST AIR BASIN			Χ
NORTH COAST AIR BASIN			Χ
NORTHEAST PLATEAU AIR BASIN			Х

N	U	Α
		Χ
		Χ
		Χ
		Χ
		Χ
		Χ
		Χ
	N	N U



TABLE 8

### California Ambient Air Quality Standards Area Designations for Lead (particulate)\*

	N	J	Α
GREAT BASIN VALLEYS AIR BASIN			Χ
LAKE COUNTY AIR BASIN			Χ
LAKE TAHOE AIR BASIN			Χ
MOJAVE DESERT AIR BASIN			Χ
MOUNTAIN COUNTIES AIR BASIN			Χ
NORTH CENTRAL COAST AIR BASIN			Χ
NORTH COAST AIR BASIN			Χ
NORTHEAST PLATEAU AIR BASIN			Χ
SACRAMENTO VALLEY AIR BASIN			Χ

	Ν	U	Α
SALTON SEA AIR BASIN			Χ
SAN DIEGO AIR BASIN			Χ
SAN FRANCISCO BAY AREA AIR BASIN			Χ
SAN JOAQUIN VALLEY AIR BASIN			Χ
SOUTH CENTRAL COAST AIR BASIN			Χ
SOUTH COAST AIR BASIN			Χ

<sup>\*</sup> The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

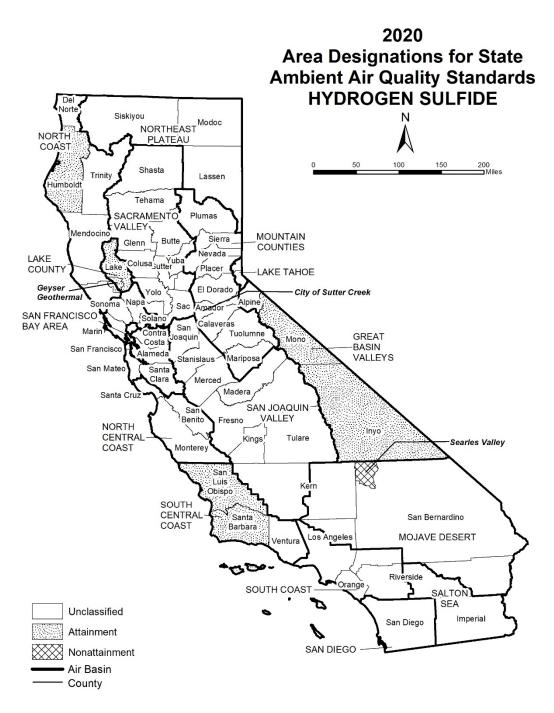


TABLE 9

## California Ambient Air Quality Standards Area Designation for Hydrogen Sulfide\*

	N	NA-T	U	Α
GREAT BASIN VALLEYS AIR BASIN				
Alpine County			Χ	
Inyo County				Х
Mono County				Х
LAKE COUNTY AIR BASIN				Х
LAKE TAHOE AIR BASIN			Х	
MOJAVE DESERT AIR BASIN				
Kern County (portion)			Х	
Los Angeles County (portion)			Х	
Riverside County (portion)			Χ	
San Bernardino County (portion)				
- Searles Valley Planning Area <sup>1</sup>	Х			
- Remainder of County			Χ	
MOUNTAIN COUNTIES AIR BASIN				
Amador County				
- City of Sutter Creek	Х			
- Remainder of County			Χ	
Calaveras County			Χ	
El Dorado County (portion)			Χ	
Mariposa County			Χ	
Nevada County			Χ	
Placer County (portion)			Χ	
Plumas County			Х	
Sierra County			Х	
Tuolumne County			Х	

	Τ	l	l	l <u>.</u>
	N	NA-T	U	Α
NORTH CENTRAL COAST AIR BASIN			Х	
NORTH COAST AIR BASIN				
Del Norte County			Χ	
Humboldt County				Χ
Mendocino County			Χ	
Sonoma County (portion)				
- Geyser Geothermal Area <sup>2</sup>				Χ
- Remainder of County			Χ	
Trinity County			Χ	
NORTHEAST PLATEAU AIR BASIN			Χ	
SACRAMENTO VALLEY AIR BASIN			Χ	
SALTON SEA AIR BASIN			Χ	
SAN DIEGO AIR BASIN			Χ	
SAN FRANCISCO BAY AREA AIR BASIN			Χ	
SAN JOAQUIN VALLEY AIR BASIN			Χ	
SOUTH CENTRAL COAST AIR BASIN				
San Luis Obispo County				Х
Santa Barbara County				Х
Ventura County			Χ	
SOUTH COAST AIR BASIN			Χ	

 $<sup>\</sup>ensuremath{^{\star}}$  The area designated for hydrogen sulfide is a county or portion of a county

<sup>&</sup>lt;sup>1</sup> 52 Federal Register 29384 (August 7, 1987)

<sup>&</sup>lt;sup>2</sup> California Code of Regulations, title 17, section 60200(d)

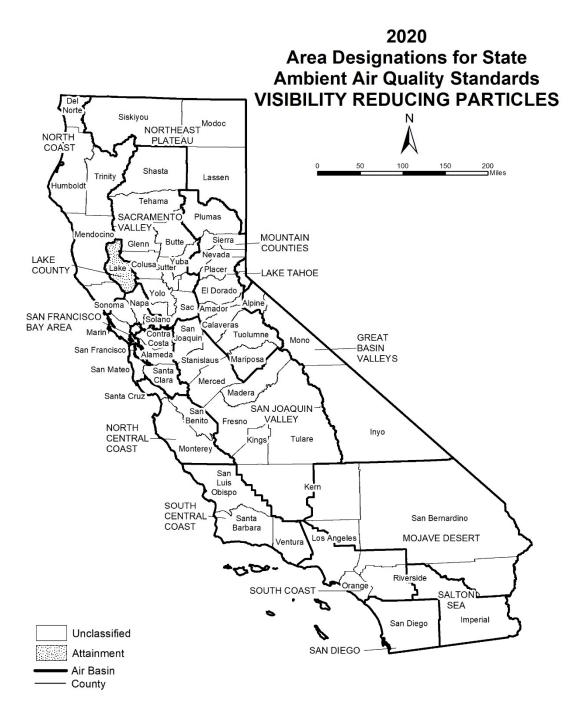


TABLE 10

## California Ambient Air Quality Standards Area Designation for Visibility Reducing Particles

	N	NA-T	J	Α
GREAT BASIN VALLEYS AIR BASIN			Χ	
LAKE COUNTY AIR BASIN				Х
LAKE TAHOE AIR BASIN			Χ	
MOJAVE DESERT AIR BASIN			Х	
MOUNTAIN COUNTIES AIR BASIN			Χ	
NORTH CENTRAL COAST AIR BASIN			Χ	
NORTH COAST AIR BASIN			Χ	
NORTHEAST PLATEAU AIR BASIN			Х	

	N	NA-T	U	Α
SACRAMENTO VALLEY AIR BASIN			Х	
SALTON SEA AIR BASIN			Х	
SAN DIEGO AIR BASIN			Х	
SAN FRANCISCO BAY AREA AIR BASIN			Х	
SAN JOAQUIN VALLEY AIR BASIN			Х	
SOUTH CENTRAL COAST AIR BASIN			Х	
SOUTH COAST AIR BASIN			Х	

#### Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

#### https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

#### https://www.epa.gov/criteria-air-pollutants

#### **Designation Categories**

Suspended Particulate Matter ( $PM_{10}$ ). The U.S. EPA uses three categories to designate areas with respect to  $PM_{10}$ :

- Attainment (A)
- Nonattainment (N)
- Unclassifiable (U)

Ozone, Fine Suspended Particulate Matter ( $PM_{2.5}$ ), Carbon Monoxide (CO), and Nitrogen Dioxide ( $NO_2$ ). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment (N)
- Unclassifiable/Attainment (U/A)

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Area designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary PM<sub>2.5</sub> standard of 12.0  $\mu$ g/m<sup>3</sup>. Area designations were finalized in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0  $\mu$ g/m<sup>3</sup> as well as the 24-hour standard of 35  $\mu$ g/m<sup>3</sup>, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO<sub>2</sub> standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO<sub>2</sub> standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO<sub>2</sub>). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment (N),
- Unclassifiable (U), and
- Unclassifiable/Attainment (U/A).

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO<sub>2</sub> standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual

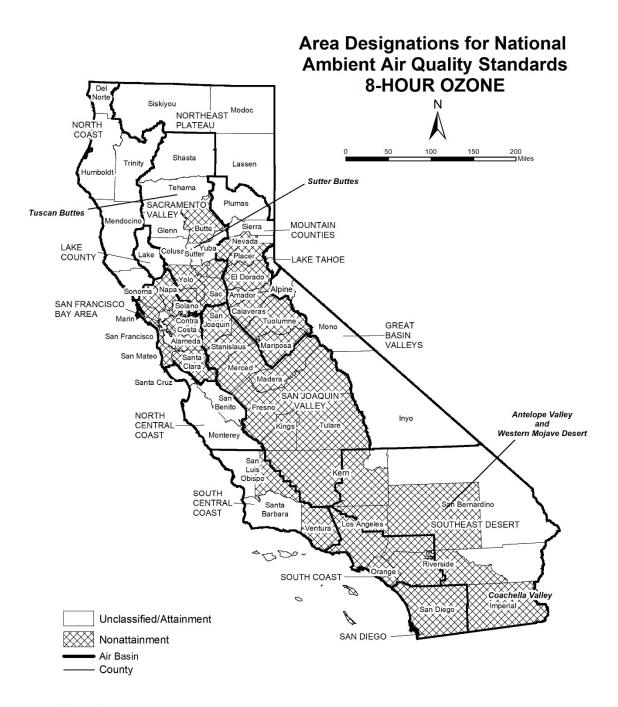
average standards. Area designations for the 1-hour  $SO_2$  standard were finalized on December 21, 2017 and are reflected in the area designations map.

Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15  $\mu$ g/m³. Designations were made for this standard in November 2010.

#### **Designation Areas**

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at:

https://ecfr.io/Title-40/se40.20.81 1305



Source Date: August 2019 Air Quality Planning and Science Division

#### **TABLE 11**

#### National Ambient Air Quality Standards Area Designations for 8-Hour Ozone\*

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		Х
LAKE COUNTY AIR BASIN		Х
LAKE TAHOE AIR BASIN		Х
MOUNTAIN COUNTIES AIR BASIN		
Amador County	Х	
Calaveras County	Х	
El Dorado County (portion) <sup>1</sup>	Х	
Mariposa County	Х	
Nevada County		
- Western Nevada County	Х	
- Remainder of County		Х
Placer County (portion) <sup>1</sup>	Х	
Plumas County		Х
Sierra County		Х
Tuolumne County	Х	
NORTH CENTRAL COAST AIR BASIN		Х
NORTH COAST AIR BASIN		Х
NORTHEAST PLATEAU AIR BASIN		Х
SACRAMENTO VALLEY AIR BASIN		
Butte County	Х	
Colusa County		Х
Glenn County		Х
Sacramento Metro Area <sup>1</sup>	Х	
Shasta County		Х
Sutter County		
- Sutter Buttes	Х	
- Southern portion of Sutter County <sup>1</sup>	Х	
- Remainder of Sutter County		Х
Tehama County		
- Tuscan Buttes	Х	
- Remainder of Tehama County		Χ

	N	U/A
SACRAMENTO VALLEY AIR BASIN (cont.)		
Yolo County <sup>1</sup>	Х	
Yuba County		Χ
SAN DIEGO COUNTY	Х	
SAN FRANCISCO BAY AREA AIR BASIN	Х	
SAN JOAQUIN VALLEY AIR BASIN	Х	
SOUTH CENTRAL COAST AIR BASIN <sup>2</sup>		
San Luis Obispo County		
- Eastern San Luis Obispo County	Х	
- Remainder of County		Х
Santa Barbara County		Χ
Ventura County		
- Area excluding Anacapa and San Nicolas Islands	Х	
- Channel Islands <sup>2</sup>		Χ
SOUTH COAST AIR BASIN <sup>2</sup>	Х	
SOUTHEAST DESERT AIR BASIN		
Kern County (portion)	Х	
- Indian Wells Valley		Χ
Imperial County	Х	
Los Angeles County (portion)	Х	
Riverside County (portion)		
- Coachella Valley	Х	
- Non-AQMA portion		Х
San Bernardino County		
- Western portion (AQMA)	Х	
- Eastern portion (non-AQMA)		Х

 $<sup>^{\</sup>star}$  Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. NOTE: This map and table reflect the 2015 8-hour ozone standard of 0.070 ppm.

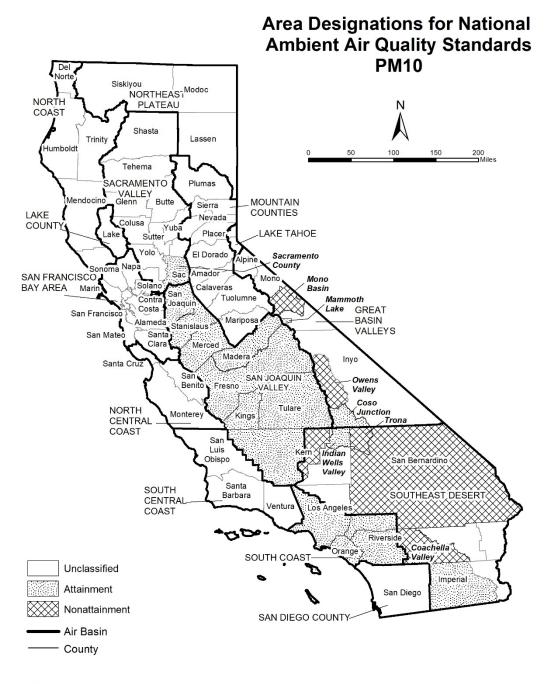
<sup>&</sup>lt;sup>1</sup> For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

<sup>&</sup>lt;sup>2</sup> South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands. Ventura County includes Anacapa and San Nicolas Islands.

South Coast Air Basin:

Los Angeles County includes San Clemente and Santa Catalina Islands.



Source Date: October 2020 Air Quality Planning and Science Division

**TABLE 12** 

## National Ambient Air Quality Standards Area Designations for Suspended Particulate Matter ( $PM_{10}$ )\*

	N	U	Α
GREAT BASIN VALLEYS AIR BASIN			
Alpine County		Χ	
Inyo County		•	
- Owens Valley Planning Area	Х		
- Coso Junction			Х
- Remainder of County		Χ	
Mono County			
- Mammoth Lake Planning Area			Х
- Mono Lake Basin	Х		
- Remainder of County		Χ	
LAKE COUNTY AIR BASIN		Χ	
LAKE TAHOE AIR BASIN		Χ	
MOUNTAIN COUNTIES AIR BASIN		•	
Placer County (portion) <sup>1</sup>		Χ	
Remainder of Air Basin		Χ	
NORTH CENTRAL COAST AIR BASIN		Χ	
NORTH COAST AIR BASIN		Χ	
NORTHEAST PLATEAU AIR BASIN		Χ	
SACRAMENTO VALLEY AIR BASIN			
Butte County		Χ	
Colusa County		Χ	
Glenn County		Χ	
Placer County (portion) <sup>1</sup>		Χ	
Sacramento County <sup>2</sup>			Х
Shasta County		Χ	
Solano County (portion)		Χ	
Sutter County		Χ	
Tehama County		Χ	
Yolo County		Χ	
Yuba County		Χ	

	-	1	1
	N	U	Α
SAN DIEGO COUNTY		Χ	
SAN FRANCISCO BAY AREA AIR BASIN		Χ	
SAN JOAQUIN VALLEY AIR BASIN			Χ
SOUTH CENTRAL COAST AIR BASIN		Χ	
SOUTH COAST AIR BASIN			Χ
SOUTHEAST DESERT AIR BASIN			
Eastern Kern County			
- Indian Wells Valley			Χ
- Portion within San Joaquin Valley Planning Area	Х		
- Remainder of County		Χ	
Imperial County			
- Imperial Valley Planning Area <sup>3</sup>			Χ
- Remainder of County		Χ	
Los Angeles County (portion)		Χ	
Riverside County (portion)			
- Coachella Valley <sup>4</sup>	Х		
- Non-AQMA portion		Χ	
San Bernardino County			
- Trona	Х		
- Remainder of County	Х		

 $<sup>^{\</sup>star}$  Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

<sup>&</sup>lt;sup>1</sup> U.S. EPA designation puts the Sacramento Valley Air Basin portion of Placer County in the Mountain Counties Air Basin.

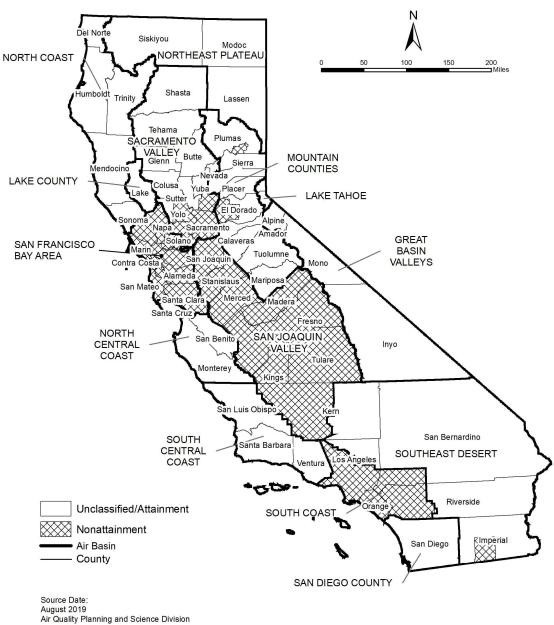
 $<sup>^{2}</sup>$  Air quality in Sacramento County meets the national PM<sub>10</sub> standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.

<sup>&</sup>lt;sup>3</sup> The request for redesignation to attainment for the Imperial Valley Planning Area was approved by U.S. EPA and in September 2020, effective October 2020.

 $<sup>^4</sup>$  Air quality in Coachella Valley meets the national PM $_{10}$  standards. A request for redesignation to attainment has been submitted to U.S. EPA.

#### FIGURE 13

### Area Designations for National Ambient Air Quality Standards PM2.5



Air Quality Planning and Science Division

#### **TABLE 13**

#### National Ambient Air Quality Standards Area Designations for Fine Particulate Matter (PM<sub>2.5</sub>)

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		X
LAKE COUNTY AIR BASIN		Χ
LAKE TAHOE AIR BASIN		Χ
MOUNTAIN COUNTIES AIR BASIN		
Plumas County		
- Portola Valley Portion of Plumas	Х	
- Remainder of Plumas County		Χ
Remainder of Air Basin		Χ
NORTH CENTRAL COAST AIR BASIN		Χ
NORTH COAST AIR BASIN		Χ
NORTHEAST PLATEAU AIR BASIN		Χ
SACRAMENTO VALLEY AIR BASIN		
Sacramento Metro Area <sup>1</sup>	Х	
Sutter County		Χ
Yuba County (portion)		Х
Remainder of Air Basin		Х

	N	U/A
SAN DIEGO COUNTY		Χ
SAN FRANCISCO BAY AREA AIR BASIN <sup>2</sup>	Х	
SAN JOAQUIN VALLEY AIR BASIN	Х	
SOUTH CENTRAL COAST AIR BASIN		Х
SOUTH COAST AIR BASIN <sup>3</sup>	Х	
SOUTHEAST DESERT AIR BASIN		
Imperial County (portion) <sup>4</sup>	Х	
Remainder of Air Basin		Х

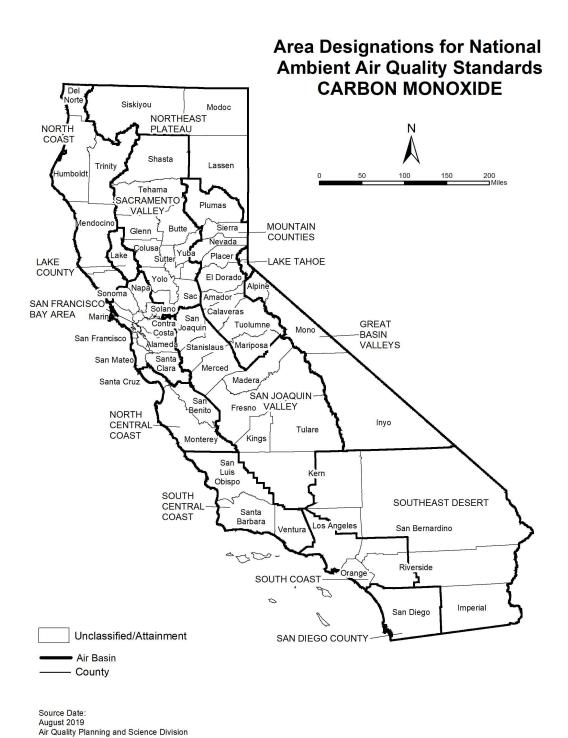
<sup>\*</sup> Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour  $PM_{2.5}$  standard as well as the 1997 and 2012  $PM_{2.5}$  annual standards.

 $<sup>^{1}</sup>$  For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national PM<sub>2.5</sub> standards. A Determination of Attainment for the 2006 24-hour PM<sub>2.5</sub> standard was made by U.S. EPA in June 2017.

 $<sup>^2</sup>$  Air quality in this area meets the national PM<sub>2.5</sub> standards. A Determination of Attainment for the 2006 24-hour PM<sub>2.5</sub> standard was made by U.S. EPA in June 2017.

 $<sup>^3</sup>$  Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

 $<sup>^4</sup>$  That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national PM<sub>2.5</sub> standards. A Determination of Attainment for the 2006 24-hour PM<sub>2.5</sub> standard was made by U.S. EPA in June 2017.



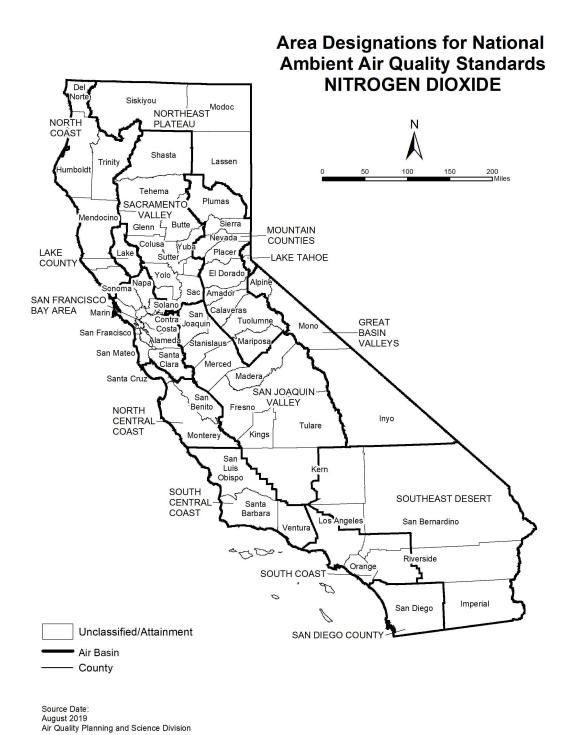
**TABLE 14** 

## National Ambient Air Quality Standards Area Designations for Carbon Monoxide\*

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		Х
LAKE COUNTY AIR BASIN		Х
LAKE TAHOE AIR BASIN		Х
MOUNTAIN COUNTIES AIR BASIN		Х
NORTH CENTRAL COAST AIR BASIN		Х
NORTH COAST AIR BASIN		Х
NORTHEAST PLATEAU AIR BASIN		Х

	Ν	U/A
SACRAMENTO VALLEY AIR BASIN		Х
SAN DIEGO COUNTY		Χ
SAN FRANCISCO BAY AREA AIR BASIN		Х
SAN JOAQUIN VALLEY AIR BASIN		Х
SOUTH CENTRAL COAST AIR BASIN		Χ
SOUTH COAST AIR BASIN		Х
SOUTHEAST DESERT AIR BASIN		Χ

 $<sup>^{\</sup>star}$  Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.



**TABLE 15** 

## National Ambient Air Quality Standards Area Designations for Nitrogen Dioxide\*

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		Х
LAKE COUNTY AIR BASIN		Х
LAKE TAHOE AIR BASIN		Х
MOUNTAIN COUNTIES AIR BASIN		Х
NORTH CENTRAL COAST AIR BASIN		Х
NORTH COAST AIR BASIN		Х
NORTHEAST PLATEAU AIR BASIN		Х

	N	U/A
SACRAMENTO VALLEY AIR BASIN		Х
SAN DIEGO COUNTY		Х
SAN FRANCISCO BAY AREA AIR BASIN		Х
SAN JOAQUIN VALLEY AIR BASIN		Х
SOUTH CENTRAL COAST AIR BASIN		Х
SOUTH COAST AIR BASIN		Х
SOUTHEAST DESERT AIR BASIN		Х

 $<sup>^{\</sup>star}$  Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.



Source Date: August 2019 Air Quality Planning and Science Division

**TABLE 16** 

#### National Ambient Air Quality Standards Area Designations for Sulfur Dioxide\*

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		Х
LAKE COUNTY AIR BASIN		Χ
LAKE TAHOE AIR BASIN		Х
MOUNTAIN COUNTIES AIR BASIN		Х
NORTH CENTRAL COAST AIR BASIN		Х
NORTH COAST AIR BASIN		Х
NORTHEAST PLATEAU AIR BASIN		Х
SACRAMENTO VALLEY AIR BASIN		Х
SAN DIEGO COUNTY		Х
SAN FRANCISCO BAY AREA AIR BASIN		Х
SAN JOAQUIN VALLEY AIR BASIN		
Fresno County		Х
Kern County (portion)		Х
Kings County		Х
Madera County		Х
Merced County		Х
San Joaquin County		Х
Stanislaus County		Х
Tulare County		Х

	N	U/A
SOUTH CENTRAL COAST AIR BASIN		
San Luis Obispo County		Х
Santa Barbara County		Х
Ventura County		Х
Channel Islands <sup>1</sup>		Х
SOUTH COAST AIR BASIN		Х
SOUTHEAST DESERT AIR BASIN		
Imperial County		Х
Remainder of Air Basin		Х

<sup>\*</sup> Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. NOTE: This map and table reflect the 2010 1-hour  $SO_2$  standard of 75 ppb.

<sup>&</sup>lt;sup>1</sup> South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands. Ventura County includes Anacapa and San Nicolas Islands.

Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

#### **Area Designations for National Ambient Air Quality Standards LEAD** Siskiyou Modoc NORTHEAST NORTH PLATEAU COAST Shasta 50 100 150 Lassen 200 Miles Humboldt Tehama ACRAMENTO VALLEY-MOUNTAIN € Butte Sierra Glenn COUNTIES Nevada sa Yuba Sutter Placer LAKE LAKE TAHOE COUNTY El Dorad SAN FRANCISCO Calaveras **BAY AREA GREAT** Tuolumne Joaquir Mono Costa BASIN San Francisco Alamed Stanislaus Mariposa **VALLEYS** Santa Merced Santa Cruz Madera SAN JOAQUIN San Benito Fresno VALLEY NORTH CENTRAL COAST Inyo Tulare Kings Montere San Obispo SOUTH SOUTHEAST DESERT CENTRAL COAST Barbara San Bernardino Riverside SOUTH COAST Imperial Unclassified/Attainment San Diego Nonattainment SAN DIEGO COUNTY Air Basin - County

Source Date: August 2019 Air Quality Planning and Science Division

**TABLE 17** 

## National Ambient Air Quality Standards Area Designations for Lead (particulate)

	N	U/A
GREAT BASIN VALLEYS AIR BASIN		Х
LAKE COUNTY AIR BASIN		Х
LAKE TAHOE AIR BASIN		Х
MOUNTAIN COUNTIES AIR BASIN		Х
NORTH CENTRAL COAST AIR BASIN		Х
NORTH COAST AIR BASIN		Х
NORTHEAST PLATEAU AIR BASIN		Х
SACRAMENTO VALLEY AIR BASIN		Х

	N	U/A
SAN DIEGO COUNTY		Χ
SAN FRANCISCO BAY AREA AIR BASIN		Х
SAN JOAQUIN VALLEY AIR BASIN		Χ
SOUTH CENTRAL COAST AIR BASIN		Х
SOUTH COAST AIR BASIN		
Los Angeles County (portion) <sup>1</sup>	Χ	
Remainder of Air Basin		Χ
SOUTHEAST DESERT AIR BASIN		Х

<sup>&</sup>lt;sup>1</sup> Portion of County in Air Basin, not including Channel Islands