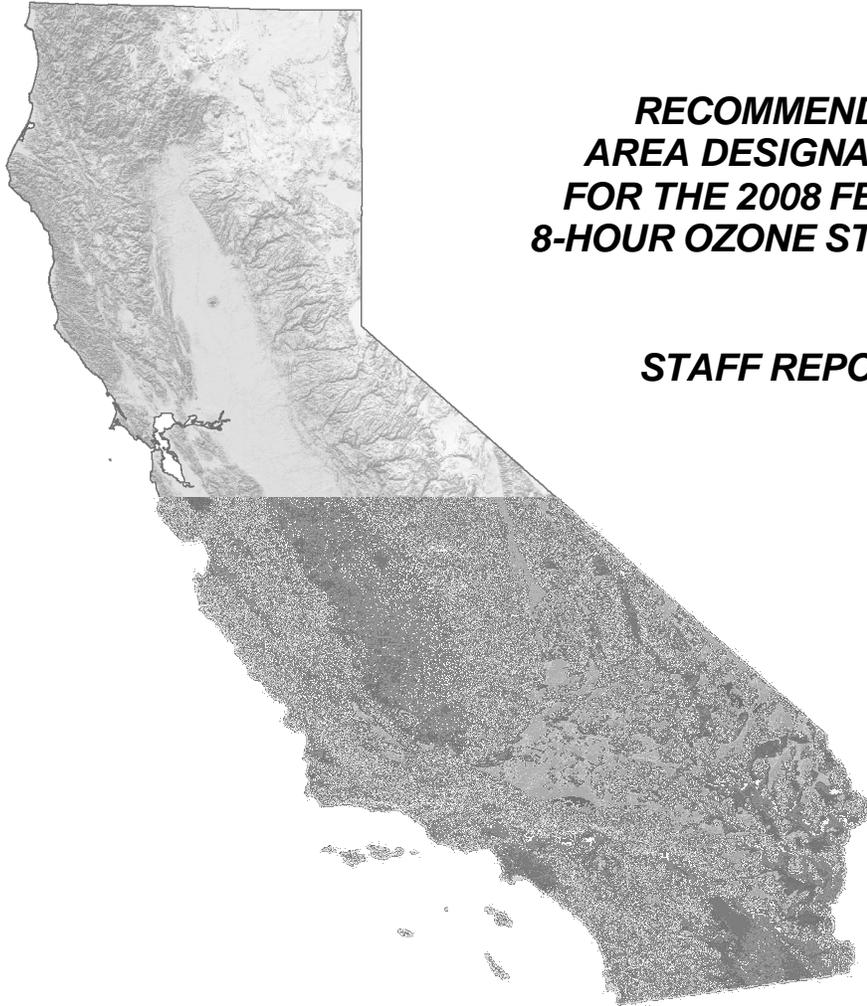


**State of California**

**AIR RESOURCES BOARD**



***RECOMMENDED  
AREA DESIGNATIONS  
FOR THE 2008 FEDERAL  
8-HOUR OZONE STANDARD***

***STAFF REPORT***

*Revised: March 3, 2009*

California Environmental Protection Agency



**Air Resources Board**



# TABLE OF CONTENTS

	Page
BACKGROUND .....	1
OZONE AIR QUALITY .....	2
RECOMMENDED AREA DESIGNATIONS .....	2
New Nonattainment Areas .....	6
Northeast San Bernardino County.....	6
Southern Inyo County.....	7
Pinnacles National Monument .....	8
San Luis Obispo County .....	9
Tuscan Buttes .....	9
Expanded Nonattainment Area .....	10
Eastern Kern County .....	10
Existing Nonattainment Areas .....	11
South Coast Air Basin .....	11
San Joaquin Valley .....	11
Sacramento Metro.....	11
San Francisco Bay Area .....	11
Ventura County.....	11
Western Mojave Desert .....	12
Antelope Valley.....	12
Coachella Valley.....	12
San Diego County.....	12
Imperial County.....	12
Sutter Buttes .....	12
Central Mountain Counties .....	12
Southern Mountain Counties .....	13
Western Nevada County.....	13
Butte County .....	13
Attainment Areas .....	13
Shasta County .....	13
Eastern Riverside County .....	14
Other Areas .....	14
Unclassifiable Areas .....	16

## LIST OF TABLES AND FIGURES

	Page
FIGURE 1: Recommended Area Designations for the Federal 8-Hour Ozone Standard .....	4
TABLE 1: Recommended California Nonattainment Areas for the Federal 8-Hour Ozone Standard Based on 2006-2008 Ozone Air Quality Data .....	5
TABLE 2: Recommended California Attainment Areas for the Federal 8-Hour Ozone Standard Based on 2006-2008 Ozone Air Quality Data .....	15
TABLE 3: Recommended California Unclassifiable Areas for the Federal 8-Hour Ozone Standard .....	16
<i>ATTACHMENT A: SUMMARY OF OZONE DATA POTENTIALLY IMPACTED BY EXCEPTIONAL EVENTS</i>	
<i>ATTACHMENT B: 2006-2008 FEDERAL 8-HOUR OZONE DESIGN VALUES BY SITE</i>	

## **BACKGROUND**

On March 12, 2008, U.S. EPA revised the federal 8-hour average air quality standard for ozone, lowering it from 0.08 parts per million (ppm) to 0.075 ppm. Both the primary and the secondary standard are set at the same level. Under the Clean Air Act, all states, including California, are required to develop recommendations for area designations and appropriate boundaries. The purpose of this report is to summarize the staff's technical analyses and area designation recommendations which are due to U.S. EPA by March 12, 2009. U.S. EPA then has one year to review these recommendations and will promulgate final designations by March 12, 2010. State implementation plans are due three years after the effective date of the final designations, with attainment dates ranging from 2013 to 2030, depending on the severity of the ozone problem.

ARB staff completed analyses to determine appropriate designation areas throughout the State using the criteria outlined in U.S. EPA's guidance memo (*December 4, 2008, Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards, Memorandum from Robert J. Meyers, Principal Deputy Assistant Administrator, Office of Air and Radiation to Regional Administrators, Regions I-X*). Determining an area's designation is based on comparing the design value to the level of the standard. The design value reflects a three-year average of the 4<sup>th</sup> highest 8-hour concentration. If the design value is 0.076 ppm or greater, it violates the federal standard. The recommendations in this report are based on design values reflecting 2006 through 2008 ozone data. However, ARB anticipates that U.S. EPA will base the final designations on the most recent data, which will most likely be data collected during 2007 through 2009.

Under U.S. EPA's guidance, air quality data may be excluded from the design value calculation if they were affected by an exceptional event. An exceptional event is an event, such as a wildfire, that causes an exceedance that is not reasonable to control through the regulatory process. During 2007 and 2008, wildfires impacted air quality throughout California. However, there is only one area in the State, Shasta County, where excluding such data makes a difference between attainment and nonattainment based on the design value for the 2006 through 2008 timeframe. Attachment A to this staff report includes a list of sites and dates for Shasta County that we are evaluating for identification as exceptional events.

In addition to Shasta County, other areas of California were also adversely impacted by wildfires. In some cases, the fire-impacted days may adversely impact design values, based on the 2007 through 2009 data that we expect U.S. EPA to use in determining the final area designations. Such measurements might also affect an area's classification with respect to the 0.075 ppm ozone

standard. ARB and the local districts are still investigating these impacts, and will submit documentation to U.S. EPA in accordance with established rules and regulations.

### ***OZONE AIR QUALITY***

ARB maintains a comprehensive network of federally sanctioned ozone monitors. This network comprises nearly 200 monitors, statewide. We are basing our initial recommendations on ambient ozone concentrations measured during 2006 through 2008 at locations sited and operated in accordance with federal requirements.

Ozone is not directly emitted, but is formed in the atmosphere via photochemical reactions. Because it takes time for these reactions to occur, high concentrations are often found at downwind locations, sometimes far away from the initial precursor emissions sources. In California, many of these transport-impacted areas do not have significant emissions sources of their own, and therefore are dependent on emissions controls in the upwind region to mitigate their ozone problem.

Our recommendations for several of California's new nonattainment areas recognize the importance of transport. Recent photochemical modeling completed as part of the planning process for the 0.08 ppm federal 8-hour ozone standard showed that many of the State's downwind transport-impacted areas will attain the standard as a result of upwind emissions controls. The modeling also showed that because ozone concentrations in the transport-impacted areas are generally lower, they should attain earlier than the upwind urban areas. This is particularly true for areas located downwind of the South Coast Air Basin. As a result, our recommended ozone nonattainment boundaries recognize these differences in the challenge, and also, differences in the level of control requirements, as well as local planning jurisdictions.

### ***RECOMMENDED AREA DESIGNATIONS***

Section 107(d)(1)(A) of the Clean Air Act defines a nonattainment area as any area that does not meet or that contributes to nearby areas not meeting the ambient air quality standard. U.S. EPA guidance recommends that the Core Based Statistical Area (CBSA) or Combined Statistical Area (CSA), which includes two or more CBSAs, serve as the starting point or "presumptive" boundary for an ozone nonattainment area. When a violating monitor is not located in a CBSA or CSA, U.S. EPA recommends that the boundary of the county in which the monitor is located serve as the presumptive boundary. In further refining the extent of the boundaries, U.S. EPA recommends that states evaluate each area on a case-by-case basis, considering nine factors:

- Air quality data
- Emissions data
- Population density and degree of urbanization
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology
- Geography/topography
- Jurisdictional boundaries
- Level of control of emission sources

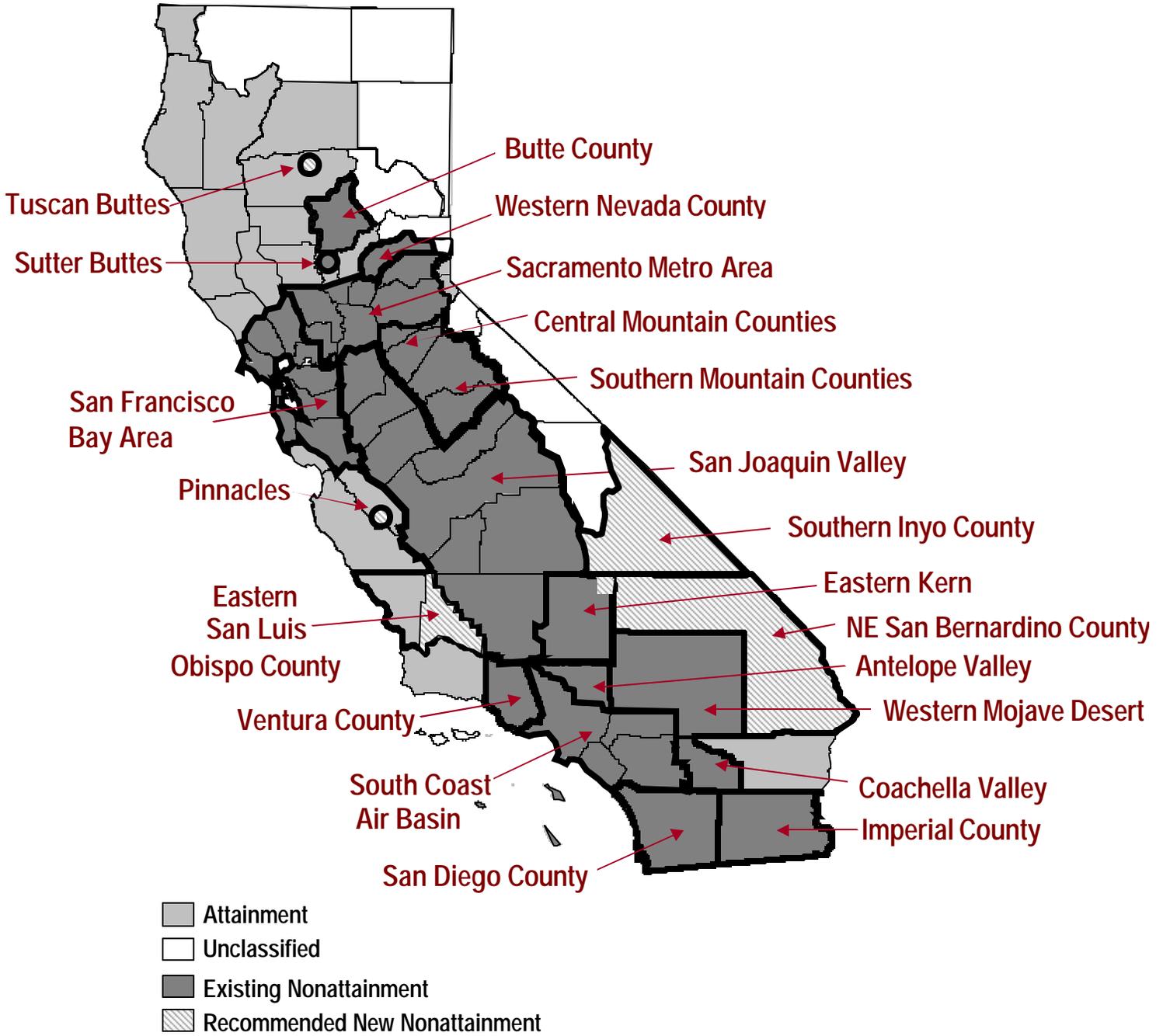
Evaluation of these factors may support nonattainment area boundaries that are either larger or smaller than the presumptive boundary. Although each of our recommended nonattainment areas is unique, the boundaries embody several broad principles:

- For existing 8-hour ozone nonattainment areas, we retained the same nonattainment area boundaries, with the exception of expanding one area.
- For new nonattainment areas, a single monitor showing violations of the 8-hour ozone standard places the area into nonattainment status. While the starting point for a new nonattainment area is generally the county, our consideration of factors outlined in U.S. EPA guidance justified a smaller nonattainment area in many cases.

As shown in Figure 1, most of California will be nonattainment for the 8-hour ozone standard. We are proposing the State be divided into 21 distinct nonattainment areas. We are also proposing that 12 areas be designated as attainment. Table 1 presents a summary of the recommended nonattainment areas and corresponding boundaries. Following the figure and table, we discuss each of the nonattainment area recommendations, followed by a discussion of areas that qualify as attainment and areas that qualify as unclassified.

**FIGURE 1**

**Recommended Area Designations for the  
Federal 8-Hour Ozone Standard**



**TABLE 1**

**Recommended California Nonattainment Areas for the Federal 8-Hour Ozone Standard  
Based on 2006-2008 Ozone Air Quality Data**

	<i>Nonattainment Area</i>	<i>Design Value<sup>1</sup> (ppm)</i>	<i>Area Included</i>	
<b>New Areas</b>	Northeast San Bernardino County	0.080	Remainder of the Mojave Desert portion of San Bernardino County outside the Western Mojave ozone nonattainment area	
	Southern Inyo County	0.081	Inyo County portions of federal hydrologic units 16060015, 18090202, 18090203, 18090204, and 18090205	
	Pinnacles	0.079	San Benito County portion of Pinnacles National Monument	
	Eastern San Luis Obispo County	0.084	Eastern San Luis Obispo County	
	Tuscan Buttes	0.085	Tuscan Buttes in Tehama County above 1800'	
<b>Expanded Area</b>	Eastern Kern County	0.086	Mojave Desert Air Basin portion of Kern County, including Indian Wells Valley	
	South Coast Air Basin	0.119	Western Los Angeles (including Catalina and San Clemente Islands), Orange, southwestern San Bernardino, and western Riverside counties	
	San Joaquin Valley	0.108	San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and western Kern counties	
	Sacramento Metro Area	0.102	Sacramento, Yolo, eastern Solano, southern Sutter, and western portions of El Dorado and Placer counties	
	San Francisco Bay Area	0.081	Marin, southern Sonoma, Napa, western Solano, Contra Costa, Alameda, Santa Clara, San Francisco, and San Mateo counties	
	<b>Existing Areas</b>	Ventura County	0.088	Continental portion of Ventura County (excludes Anacapa and San Nicolas islands)
		Western Mojave Desert	0.104	Central San Bernardino County
		Antelope Valley	0.094	Northeastern Los Angeles County
		Coachella Valley	0.097	Central Riverside County
		San Diego County	0.092	San Diego County
		Imperial County	0.082	Imperial County
		Sutter Buttes	0.085	Sutter Buttes in Sutter County above 2000'
		Central Mountain Counties	0.089	Amador and Calaveras counties
		Southern Mountain Counties	0.088	Tuolumne and Mariposa counties
		Western Nevada County	0.091	Portion of Nevada County west of the crest of the Sierra Nevada
	Butte County	0.085	Butte County	

<sup>1</sup>The design value is the 3-year average (2006-2008 data) of the annual fourth highest 8-hour ozone concentration at the highest monitor (if greater than 0.075 ppm = nonattainment; if less than or equal to 0.075 = attainment). 2008 data are preliminary.

## **New Nonattainment Areas**

### ***Northeast San Bernardino County***

San Bernardino County is the largest county in the nation, comprising over 20,000 square miles. Because of its size, it encompasses a very diverse landscape. Currently, the central portion of San Bernardino County, located in the Mojave Desert Air Basin, is defined as the Western Mojave Desert (WMD) nonattainment area. While the presumptive boundary for an expanded nonattainment area would include the entire Mojave Desert portion of San Bernardino County, ARB is recommending the area be designated as two separate areas, based on differences in the nature and severity of the ozone problems.

With a population of more than 350,000 (2006 estimate), the WMD portion of San Bernardino County is adjacent to the South Coast Air Basin. Given its proximity to the South Coast, major highways traveling through the WMD carry significant commuter and truck traffic in and out of the South Coast region. Principal cities in the area include Hesperia, Phelan, Victorville, Apple Valley, and Twentynine Palms. Previous transport assessments show that ozone concentrations in the WMD portion of San Bernardino County are impacted by transport from the South Coast and San Joaquin Valley air basins, which are the areas with the highest ozone levels in the state. Along with the transport impact, there is also a local component to the ozone problem in this area. The design value for the WMD is 0.104 ppm at the Joshua Tree-National Monument site. Design values for other sites in the area are similar in magnitude, though slightly lower.

In contrast to the WMD, the more remote northeast portion of San Bernardino County is sparsely populated. There are no sizable cities, and the area has few significant emission sources. Because the area lacks significant population centers and emissions sources capable of generating ozone locally, the transport component is even more important. Furthermore, the design value for this part of San Bernardino County is 0.080 ppm, which is substantially lower than the WMD design value.

Although the northeast portion of San Bernardino County is contiguous with the existing WMD nonattainment area and is part of the same county, ARB staff is recommending it be defined as a separate nonattainment area. The design value for the WMD portion of San Bernardino County is 30 percent higher than the design value for the northeast portion of the County. Although both areas will rely on controls from upwind areas to reach attainment, because the magnitude of their problems is so different, the northeast portion of San Bernardino County should attain the standard in a shorter timeframe. Designating the area separately would give them a classification consistent with their overall air quality problem and facilitate a more timely attainment finding.

## ***Southern Inyo County***

Inyo County is the second largest county in California and one of the largest counties in the nation. It encompasses more than 10,000 square miles, from the below sea level floor of Death Valley to the 14,000 foot peaks of the Sierra Nevada. The only long-term ozone monitor in Inyo County is located at the Death Valley National Monument in southeast Inyo County. The site is operated by the National Park Service and has a design value of 0.081 ppm, which exceeds the federal standard. The area has an extremely low population, with only 0.22 residents per square mile, and lacks industrial emissions sources. While the presumptive boundary for the nonattainment area would include all of Inyo County, ARB is recommending a smaller nonattainment area because of the diversity of the area's geography and the nature of the ozone impact.

Previous studies suggest that ozone concentrations at the Death Valley site are substantially impacted by transport. Wind flow into the southern portion of the County is generally from the southwest to northeast, carrying pollutants and emissions from the highly urbanized South Coast and southern San Joaquin Valley air basins into southern Inyo County. Although Death Valley is the only monitoring site in southern Inyo County, data are also collected at the Trona site in San Bernardino County, just 2 miles south of the Inyo County line. These data suggest that exceedances are also likely to occur in the southwest portion of Inyo County. During 2004 through 2008, about half of the exceedance days at Trona coincide with exceedance days at Death Valley, indicating that the nonattainment area should include the southwest portion of Inyo County, as well as the Death Valley area.

In addition to these data, limited 2008 ozone monitoring data are available for a site at Bishop, in the northern portion of Inyo County. The site is operated by the Bishop Piute Tribe. The Bishop data show several days with concentrations above the federal 8-hour standard, but because the data are incomplete, it is not possible to calculate a valid design value for this site and determine if it would violate the standard. Furthermore, an analysis completed by the Great Basin Unified Air Pollution Control District (APCD) shows that emissions and pollutants from this area do not likely contribute to the exceedances at Death Valley.

In determining the appropriate nonattainment area boundary, ARB staff consulted with the local Great Basin Unified APCD. The recommended boundary for this area is based on federal hydrologic units. Hydrologic units are based on topography and drainage, similar in many respects to the way California's air basins are defined. Therefore, it is appropriate to use them in defining the nonattainment area boundary, since mountainous terrain affects the transport and mixing depth of pollution. In addition, hydrologic units have been used previously to define designated areas for ozone. ARB staff recommends the Southern Inyo County ozone nonattainment area comprise the Inyo County

portions of federal hydrologic units 16060015, 18090202, 18090203, 18090204, and 18090205. These units cover not only the areas exceeding the standard, but also the areas most heavily impacted by transport from the major upwind urban areas.

### ***Pinnacles National Monument***

San Benito County is located in California's north central coast region, just south of the San Francisco Bay Area (Bay Area). Although it is considered part of the coastal region, San Benito County is located inland. The federal ozone standard is exceeded at only one site in this area, the Pinnacles National Monument site, with a design value of 0.079 ppm.

With the exception of 2008, the trend in the design value for Pinnacles has been consistently downward. In fact, the 2006 and 2007 design values for this site (0.075 ppm and 0.074 ppm, respectively) show attainment. The higher value for 2008 likely reflects the impact of wildfires that burned throughout the State during the summer of 2008. If the impacted days were removed from consideration, the 2008 design value would be more consistent with values for previous years. However, the area would still be nonattainment. In contrast to Pinnacles, design values for sites in the surrounding north central coast region are all well below the level of the standard, ranging from 0.052 ppm to 0.069 ppm.

Pinnacles is an elevated site (1000 feet) located in an area of complex terrain within the boundaries of Pinnacles National Monument. Previous transport study indicates that exceedances measured at Pinnacles can be overwhelmingly impacted by transport aloft from the Bay Area. Although the San Francisco Bay Area does not yet attain the standard, design values for Bay Area sites have decreased since the early 2000s, similar to those for Pinnacles. As emissions in the Bay Area continue to decrease, ozone concentrations in downwind areas such as Pinnacles will also improve.

Because exceedances in San Benito County are measured only at Pinnacles and nowhere else in the local area, ARB recommends limiting the nonattainment area. The ozone problem at Pinnacles is attributable to transport from the Bay Area, which is already designated as nonattainment. Designating Pinnacles as nonattainment, as well, would adequately reflect the impact region for the upwind urban area. Specifically, ARB recommends limiting the nonattainment area to that portion of Pinnacles National Monument located within San Benito County. Using the Monument boundary would provide for an easily identifiable nonattainment area.

### ***Eastern San Luis Obispo County***

San Luis Obispo County is located in California's south central coast region and encompasses coastal, as well as inland areas. The design value for the County is 0.084 ppm, measured at the Carrizo Plains School-9640 Carrizo site in the eastern part of the County. This site is located in a populated area and was originally sited to provide information on transport impacts from the San Joaquin Valley. The design value for a second inland, eastern County site, Red Hills, is also above the standard at a level of 0.088 ppm, but only two years of data are available. In contrast to Carrizo Plains, the Red Hills site is located in an unpopulated area. Design values for all other sites in San Luis Obispo County are below the level of the standard, as are design values for sites in counties located both to the north and to the south of San Luis Obispo County.

Previous studies have shown that ozone and ozone precursor emissions from the San Joaquin Valley are transported west, impacting sites in eastern San Luis Obispo County, including Carrizo Plains and Red Hills. Ozone concentrations can also be impacted by transport south from the San Francisco Bay Area. In the absence of transport, it is likely that exceedances would not occur at these sites. Therefore, reducing the transport impact will be critical to attaining the federal standard. Given that exceedances are limited to the eastern portion of the County, and all other sites meet the standard, ARB recommends that only the eastern portion of San Luis Obispo County be designated as nonattainment.

### ***Tuscan Buttes***

Tuscan Buttes in Tehama County is located in the Sacramento Valley, where the majority of the land is near sea level. There are two monitors in the County. The first site, Red Bluff-Oak Street, is in the town of Red Bluff at an elevation of 322 feet. While the design value for this site currently meets the standard, several of the high measurements at this site during 2008 may have been impacted by wildfires. The District and ARB are currently reviewing this data, and if warranted, ARB plans to include documentation to support the exclusion of these measurements as exceptional events when we submit our designation recommendations to U.S. EPA in March 2009.

The second monitor in Tehama County, Tuscan Buttes, has a design value of 0.085 ppm which exceeds the standard. Located at an elevation of 1,877 feet, the Tuscan Buttes monitor is similar to the Sutter Buttes monitor in Sutter County. Both of these monitors were sited to study high-elevation transport of pollutants from the Sacramento urban nonattainment region into the upper Sacramento Valley, and there are no pollution sources or populated areas near either site. Furthermore, design values for low elevation sites in areas

surrounding Tehama County (Colusa and Glenn counties and northern Sutter County) are below the level of the standard, lending additional support to the argument that the ozone problem at Tuscan Buttes is unique and isolated.

Because of the elevated location and lack of population exposure at the Tuscan Buttes site, ARB recommends the geographic scope of the nonattainment area be limited to that portion of the Tuscan Buttes area with an elevation of 1800 feet or more. This approach is consistent with the approach U.S. EPA used in designating the Sutter Buttes ozone nonattainment area.

### **Expanded Nonattainment Area**

#### ***Eastern Kern County***

Kern County is located in two different air basins: the San Joaquin Valley Air Basin and the Mojave Desert Air Basin. The eastern portion, located in the Mojave Desert Air Basin, falls under the jurisdiction of the Kern County Air Pollution Control District. Currently, the Eastern Kern nonattainment area, which does not include Indian Wells Valley, is designated as nonattainment based on a design value of 0.086 ppm for the Mojave-Poole Street site.

In contrast, Indian Wells Valley (defined as the Kern County portion of hydrologic unit 18090205), in the northeastern portion of Kern County, is designated as attainment for the 0.08 ppm ozone standard. Indian Wells Valley is a desert region that includes the China Lake Naval Air Weapons Station and the town of Ridgecrest. Similar to the rest of Eastern Kern, Indian Wells Valley is sparsely populated, with few significant emissions sources. Furthermore, previous studies have shown that ozone concentrations in both of these areas are overwhelmingly impacted by transport from the San Joaquin Valley and South Coast air basins.

Ozone data collected during 2006 through 2008 are available for a site located in the China Lake area of Indian Wells Valley. Although these data have not been reviewed or forwarded to U.S. EPA, the design value for the site, 0.081 ppm, exceeds the federal standard and is comparable to the design value of 0.086 ppm for the Mojave-Poole Street site in the existing Eastern Kern nonattainment area. Because the design values for these two areas are similar in magnitude and both areas are impacted by ozone transported from the same upwind areas, ARB staff recommends that the existing Eastern Kern nonattainment area be expanded to include Indian Wells Valley. As a result, the Eastern Kern ozone nonattainment area would include the entire Mojave Desert Air Basin portion of Kern County.

## **Existing Nonattainment Areas**

### ***South Coast Air Basin***

The South Coast Air Basin nonattainment area would continue to include all of the South Coast Air Basin: western Los Angeles (including Catalina and San Clemente Islands, which are not part of the Channel Islands), Orange, southwestern San Bernardino, and western Riverside counties. This nonattainment area violates the 8-hour standard with a design value of 0.119 ppm at the Crestline monitoring site in San Bernardino County.

### ***San Joaquin Valley***

The San Joaquin Valley nonattainment area would continue to comprise the entire San Joaquin Valley Air Basin: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and western Kern counties. The San Joaquin Valley violates the federal 8-hour standard with a design value of 0.108 ppm at the Arvin-Bear Mountain Blvd. monitoring site in Kern County.

### ***Sacramento Metro Area***

The Sacramento Metro nonattainment area would continue to include all of Sacramento and Yolo counties, southern Sutter County, the Sacramento Valley Air Basin portion of Solano County, the Sacramento Valley and Mountain Counties air basin portions of Placer County, and the Mountain Counties Air Basin portion of El Dorado County. This area violates the standard with a design value of 0.102 ppm at the Folsom-Natoma Street site in Sacramento County. Although the nonattainment area involves multiple local air pollution control agencies, all but the Solano County portion are covered by a single transportation planning agency.

### ***San Francisco Bay Area***

The San Francisco Bay Area nonattainment area would continue to comprise all of the San Francisco Bay Area Air Basin: Marin, Napa, Contra Costa, Alameda, Santa Clara, San Francisco, and San Mateo counties and the San Francisco Bay Area Air Basin portions of Solano and Sonoma counties. The area's nonattainment designation is based on a design value of 0.081 ppm for the Livermore-793 Rincon Avenue site in Alameda County.

### ***Ventura County***

The Ventura County 8-hour nonattainment area would continue to include only the continental portion of Ventura County. Anacapa and San Nicolas Islands, two of the Channel Islands, would not be included. Ventura County violates the

federal standard with a design value of 0.088 ppm at the Simi Valley-Cochran Street site.

### ***Western Mojave Desert***

The Western Mojave Desert nonattainment area would continue to comprise the central portion of San Bernardino County that is located in the Mojave Desert Air Basin. Ozone concentrations at a number of sites in this area violate the federal 8-hour standard, and the area has a design value of 0.104 ppm at the Joshua Tree-National Monument site.

### ***Antelope Valley***

The Antelope Valley nonattainment area would continue to comprise the portion of Los Angeles County that is located in the Mojave Desert Air Basin. The area has a design value of 0.094 ppm at the Lancaster-43301 Division Street site.

### ***Coachella Valley***

The Coachella Valley ozone nonattainment area would continue to include the portion of Riverside County that is located in the Salton Sea Air Basin. The design value for this area is 0.097 ppm at the Palm Springs-Fire Station site.

### ***San Diego County***

The 8-hour nonattainment area would continue to include all of San Diego County. Ozone concentrations in the County exceed the standard at several sites, and the design value is 0.092 ppm at Alpine-Victoria Drive.

### ***Imperial County***

Similar to San Diego County, the Imperial County nonattainment area would continue to include the entire County. The design value for Imperial County is 0.082 ppm at both El Centro-9<sup>th</sup> Street and Westmorland-West 1<sup>st</sup> Street.

### ***Sutter Buttes***

The Sutter Buttes nonattainment area would continue to include that portion of the Sutter Buttes above 2000 feet elevation. Located in Sutter County, the design value for this area is 0.085 ppm at the Sutter Buttes site.

### ***Central Mountain Counties***

The Central Mountain Counties nonattainment area would continue to include all of Amador and Calaveras counties. The design value for this two-county area is 0.089 ppm at the San Andreas-Gold Strike Road site in Calaveras County.

### ***Southern Mountain Counties***

The Southern Mountain Counties nonattainment area would continue to include all of Mariposa and Tuolumne counties. The design value for this area is 0.088 ppm at the Turtleback Dome site in Yosemite National Park, which is in Mariposa County.

### ***Western Nevada County***

This nonattainment area would continue to comprise the western portion of Nevada County, up to the crest of the Sierra Nevada. The current design value for western Nevada County is 0.091 ppm at the Grass Valley-Litton Building site.

### ***Butte County***

This nonattainment area would continue to comprise all of Butte County. There are two monitoring sites in Butte County, and both have design values that violate the standard. The Paradise-4405 Airport Road site has the higher value, with a design value of 0.085 ppm.

### **Attainment Areas**

A number of areas in California have ozone monitoring data that are in attainment of the 2008 federal 8-hour standard according to the criteria established by U.S. EPA (*U.S. EPA, December 1998, Guideline on Data Handling Conventions for the 8-Hour Ozone NAAQS*). One of these areas, Shasta County, attained the 0.08 ppm standard but has ozone data showing violations of the federal 0.075 ppm standard. However, a number of days in this area during 2008 were impacted by wildfires, an exceptional event. If these days are excluded, Shasta County's design value is below the 2008 federal 8-hour ozone standard. A second area, Eastern Riverside County, was previously designated as unclassified because of incomplete data. Now that complete data are available, the area qualifies as attainment. The remaining ten areas all have design values in attainment of the 0.075 ppm ozone standard, and ARB recommends they also be designated as attainment. All of the recommended attainment areas are summarized in Table 2, below.

### ***Shasta County***

Currently, Shasta County in northern California is designated as attainment for the federal 0.08 ppm ozone standard. There are three monitoring sites in Shasta County: Anderson-North Street, Redding-Health Department Roof, and Lassen Volcanic National Park-Manzanita Lake. Using all data collected at these sites during 2006 through 2008, the design values for both Anderson (0.076 ppm) and Lassen (0.077 ppm) are just slightly above the federal standard.

During the summer of 2008, a significant number of wildfires in California impacted ambient ozone readings at sites throughout the State. Shasta County Air Quality Management District has documented these impacts and requested that high ozone measurements during 16 days in June and July 2008 be excluded as impacted by exceptional events (refer to Attachment A). ARB is still in the process of reviewing these data. However, if the measurements are excluded in accordance with U.S. EPA's exceptional events rule, the revised design value would be 0.073 ppm for all three sites in Shasta County.

If the impacted data are excluded, the design value for Shasta County is below the 2008 federal 8-hour ozone standard. Therefore, pending ARB concurrence with the District's evaluation, we recommend that Shasta County be designated as attainment for the federal 8-hour ozone standard.

### ***Eastern Riverside County***

Riverside County is subdivided among three air basins: South Coast Air Basin, Salton Sea Air Basin (Coachella Valley), and Mojave Desert Air Basin. The urbanized South Coast and Coachella Valley portions of the County have design values that violate the standard, and these areas are designated as nonattainment. In contrast, the eastern portion of Riverside County, located in the Mojave Desert Air Basin, is sparsely populated, with few emissions sources. This portion of the County is currently designated as unclassified for the federal 8-hour ozone standard.

When U.S. EPA designated areas for the 0.08 ppm ozone standard, complete ozone monitoring data were not available for eastern Riverside County, and the area was designated as unclassified. Since then, the ozone monitoring site at Blythe (Blythe-445 West Murphy Street) has continued to operate. The Blythe data show a design value of 0.063 ppm, based on data collected during 2006 through 2008. Because this value is below the standard, ARB recommends that eastern Riverside County be designated as attainment for the 2008 federal 8-hour ozone standard.

### ***Other Areas***

A number of other areas in California that were attainment or unclassified for the 0.08 ppm standard also qualify as attainment for the revised federal ozone standard of 0.075 ppm. These areas are listed in Table 2, along with their design values, based on data collected during 2006 through 2008. ARB recommends that all these areas be designated as attainment for ozone.

**TABLE 2**  
**Recommended California Attainment Areas**  
**for the Federal 8-Hour Ozone Standard**  
**Based on 2006-2008 Ozone Air Quality Data**

<i>Attainment Area</i>	<i>Design Value<sup>1</sup> (ppm)</i>	<i>Area Included</i>
North Coast Air Basin	0.058	Del Norte, Humboldt, Mendocino, and Trinity counties and the North Coast Air Basin portion of Sonoma County
Shasta County	0.073	Shasta County
Tehama County	0.075	Portion of Tehama County outside Tuscan Buttes area
Glenn County	0.065	Glenn County <sup>2</sup>
Colusa County	0.069	Colusa County
Sutter and Yuba Counties	0.072	Yuba County and portion of Sutter County outside Sacramento Metro Area and Sutter Buttes area
Lake County	0.062	Lake County
Lake Tahoe Air Basin	0.070	Lake Tahoe Air Basin portions of El Dorado and Placer counties
North Central Coast Air Basin	0.069	Monterey County, Santa Cruz County, San Benito County outside Pinnacles National Monument boundary
Santa Barbara County	0.073	Continental portion of Santa Barbara County (excludes San Miguel, Santa Barbara, Santa Cruz, and Santa Rosa islands)
Western San Luis Obispo County	0.068	Portion of County west of Eastern San Luis Obispo area
Eastern Riverside County	0.063	Portion of Riverside County in Mojave Desert Air Basin

<sup>1</sup>The design value is the 3-year average (2006-2008 data) of the annual fourth highest 8-hour ozone concentration at the highest monitor (if greater than 0.075 ppm = nonattainment; if less than or equal to 0.075 = attainment). 2008 data are preliminary.

<sup>2</sup> Reflects combined data from 2 monitoring sites.

**Unclassifiable Areas**

The areas listed in Table 3 have either no ozone monitoring data or the available monitoring data do not meet completeness criteria established by U.S. EPA. Therefore, ARB recommends they be considered unclassifiable at the current time.

**TABLE 3  
Recommended California Unclassifiable Areas  
for the Federal 8-Hour Ozone Standard**

<b><i>Unclassifiable Area</i></b>	<b><i>Area Included</i></b>
Great Basin Valleys Air Basin	Alpine County, Mono County, portion of Inyo County outside Southern Inyo County nonattainment area
Northern Mountain Counties	Plumas and Sierra counties
Northern Channel Islands	The islands located in the South Central Coast Air Basin, including Anacapa, San Miguel, San Nicolas, Santa Barbara, Santa Cruz, and Santa Rosa
Eastern Nevada County	Portion of Nevada County east of the crest of the Sierra Nevada mountains
Northeast Plateau Air Basin	Lassen, Modoc, and Siskiyou counties