

US EPA ARCHIVE DOCUMENT



PECHANGA INDIAN RESERVATION
Temecula Band of Luiseno Mission Indians

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June 23, 2009

Deborah Jordan
Director, Air Division
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Request to Create a Separate Nonattainment Area for the Pechanga Indian Reservation or, Alternatively, Move the Northern Boundary of the San Diego Nonattainment Area to Include the Reservation of the Pechanga Band of Luiseno Indians

Dear Ms. Jordan:

This letter, submitted on behalf of the Pechanga Band of Luiseno Indians ("Pechanga" or "Tribe"), requests that the U.S. Environmental Protection Agency (EPA or Agency) create a separate nonattainment area for the Pechanga Reservation or, alternatively, move the northern boundary of the San Diego Nonattainment Area in the San Diego Air Basin (SDAB) northward to include the Pechanga Reservation.

The State of California's recent petition to EPA to "bump up" the ozone classification for the South Coast Air Basin (SoCAB) from "severe-17" to "extreme" will result in a 10 tpy major source threshold for ozone precursor (i.e., NOx and ROC) emissions, compared to the current 25 tpy threshold. This change will:

- thwart or significantly impair the Tribe's plan to develop a tribal air permit program for minor sources by increasing the number of facilities potentially subject to Nonattainment New Source Review (NNSR);
- increase the use and cost of Pechanga Environmental Department resources;
- severely compromise the Tribe's capacity to engage in economic development in the absence of a program for obtaining emission reduction credits for on-Reservation facilities subject to NNSR requirements under the lower major source threshold, which places on-Reservation facilities at a distinct disadvantage relative to similar facilities operating outside the Reservation; and
- reduce the threshold for the applicability of General Conformity requirements similarly from 25 tpy to 10 tpy.

Tribal Chairman:
Mark Macarro

Council Members:
Mark Calac
Corrine Garbani
Marc Luker
Andrew Masiel, Sr.
Russell "Butch" Murphy
Kenneth Perez

Tribal Treasurer
Christina "Tina" McMenamin

Tribal Secretary:
Darlene Miranda

The Tribe's request that EPA create a separate nonattainment area for the Pechanga Reservation would address these tribal concerns, and is a logical and technically sound initiative that addresses the nine factors suggested in EPA guidance for establishing or changing nonattainment area boundaries (see Attachment A). Moreover, although the accompanying rationale for a separate nonattainment area for the Pechanga Reservation is compelling, the accompanying discussion of the nine factors also would support a determination by EPA to move the northern boundary of the San Diego Nonattainment Area to include the Pechanga Reservation.

Accordingly, the Tribe respectfully requests that EPA fully consider and support the Tribe's request and justification for creation of a separate nonattainment area for the Pechanga Reservation. However, should EPA determine that creation of such an attainment area is not approvable, the Tribe requests that EPA adjust the boundary of the San Diego Nonattainment Area to include the Pechanga Reservation. In either event, we expect that EPA will closely consult with the Tribe before reaching a final decision.

We look forward to your response and working with EPA on these important issues. Coordination of your agency's consultation with the Tribe should be arranged through Ms. Syndi Smallwood, Director of the Pechanga Environmental Department. Questions or issues of a legal nature should be directed to Jim Cohen, Deputy General Counsel. Questions or issues of a technical nature should be directed to Gary Rubenstein at Sierra Research.

Sincerely,



Mark Macarro,
Tribal Chairman

cc: Colleen McKaughan, EPA Region 9
Gary Rubenstein, Sierra Research

Attachment A

Draft for Agency Review and Comment Request to Create a Pechanga Nonattainment Area or Move the Northern Boundary of the San Diego Nonattainment Area to Include the Pechanga Indian Reservation

EXECUTIVE SUMMARY

On October 14, 2008, a land transfer from the U.S. Bureau of Land Management (BLM) by Act of Congress modified the boundaries of the Pechanga Band of Luiseno Indians (Tribe) to increase the previous reservation area of 5,500 acres by more than 1.7 square miles (1,088 acres) including 119 acres in San Diego County, which county is geographically identical to the San Diego Air Basin (SDAB) and the San Diego Nonattainment Area. The SDAB, which includes this 119-acre area, has a less restrictive “basic or Subpart 1” ozone (8-hour) nonattainment designation compared to the “severe-17” designation for the South Coast Air Basin (SoCAB) or South Coast Nonattainment Area, in which the remainder of the reservation exists.

Because of the uniformity of topography and low level of air pollutant emitting activities throughout the reservation, the entire reservation should be designated as the Pechanga Nonattainment Area, or, in the alternative, included within an expanded San Diego Nonattainment Area. The SoCAB has had a more restrictive “severe-17” ozone nonattainment designation than is appropriate for the Pechanga Reservation. The June 1, 2007 Air Quality Management Plan of the South Coast Air Quality Management District requested that the SoCAB ozone nonattainment designation be “bumped up” from “severe-17” to “extreme,” which would give the reservation an even more inappropriate designation.

Leaving the majority of the Pechanga Indian Reservation in the South Coast Nonattainment Area will impose additional, unanticipated delays in developing Pechanga’s air program, including the Tribe’s plan to implement a tribal air permit program for minor sources. First, by reducing the major source “potential to emit” threshold for ozone precursor (i.e., NO_x and ROC) emissions in the SoCAB from 25 tpy for the severe-17 nonattainment designation to 10 tpy for the extreme nonattainment designation under the 8-hour average ozone standard, the reclassification will increase the number of facilities potentially subject to Nonattainment New Source Review (NNSR) requirements, thus increasing the use and cost of Pechanga staff resources. Second, the number of future facilities subject to Title V would be significantly increased because the threshold of 25 tpy is being reduced to 10 tpy. Finally, if the threshold for the applicability of General Conformity requirements is reduced from 25 tpy to 10 tpy, many more projects will be required to demonstrate that their emissions of criteria pollutants will not impede progress toward attainment with NAAQS.

For both existing and future facilities subject to NNSR on tribal lands, there is currently no system in place through which such facilities can obtain emission reduction credits. Unless EPA allows such sources to use emission reduction credits from the adjacent air basins, either through its own program or through a tribal permitting program, Native American-owned facilities will be placed at a disadvantage relative to similar facilities operating outside of Indian country.

Based on the nine factors in EPA guidance and common sense, the Pechanga Indian Reservation logically and technically should be its own nonattainment area, or, in the alternative, part of the San Diego Nonattainment Area. The factors pertaining to causes of nonattainment, low population density and lack of urbanization, low level of local traffic, slow growth rate, and level of emission source control show that the reservation holds far more in common with the San Diego Nonattainment Area than with the South Coast Nonattainment Area, while the factors dealing with air quality, lack of local emission sources, meteorology, and geography show that the Pechanga Reservation can just as logically be its own nonattainment area or a part of either the San Diego or South Coast Nonattainment Areas. The factor of jurisdictional boundaries suggests that the reservation should logically be its own nonattainment area.

INTRODUCTION

On October 14, 2008, a land transfer from the U.S. Bureau of Land Management (BLM) by Act of Congress modified the boundaries of the Pechanga Band of Luiseno Indians (Tribe) to increase the previous reservation area of 5,500 acres¹ by more than 1.7 square miles (1,088 acres) including 119 acres in San Diego County, which county is geographically identical to the San Diego Air Basin (SDAB) and the San Diego Nonattainment Area. The SDAB, which includes this 119-acre area, has a less restrictive “basic or Subpart 1” ozone (8-hour) attainment designation² than the “severe-17” designation for the South Coast Air Basin³ (SoCAB), in which the remainder of the total reservation⁴ exists.

Because of the uniformity of topography and low level of air pollutant emitting activities throughout the reservation, the entire reservation should be its own Pechanga Nonattainment Area, or, in the alternative, contained within an expanded San Diego Nonattainment Area. The SoCAB has had a more restrictive “severe-17” ozone attainment designation than is appropriate for the Pechanga Reservation. The June 1, 2007 Air Quality Management Plan of the South Coast Air Quality Management District

¹ Pechanga Band of Luiseno Indians, <http://www.pechanga-nsn.gov/page?pageld=6>, accessed December 30, 2008.

² USEPA. *Classifications of 8-Hour Ozone Nonattainment Areas*, Green Book, <http://www.epa.gov/oar/oaqps/greenbk/gnc.html#Note>, updated as of March 12, 2009, accessed May 1, 2009.

³ Ibid.

⁴ Based on $(5,500+1,088-119)/(5,500+1,088)$.

requested that the SoCAB ozone nonattainment designation be “bumped up” from “severe-17” to “extreme,”⁵ which would give the reservation an even more inappropriate designation.

Keeping the Pechanga Indian Reservation in a nonattainment area with such a restrictive major source threshold means that the Tribe cannot implement a meaningful Minor Source permitting program because the regulation would be applicable only to a small set of potential future emitting sources, whose emissions would be lower than 10 tpy of both NO_x and ROC. Several additional years will be needed for the Tribe to develop a Major Source permitting program and gain approval for such a program from EPA.

The purpose of this document is to present the logical and technically-based rationale to create a Pechanga Nonattainment Area, or, in the alternative, move the northern boundary of the San Diego Nonattainment Area northward to include the entire Pechanga Reservation, rather than having it bisect the reservation as it does now. It will be shown that the reservation has substantial differences from the South Coast Air Basin, and properly belongs in its own nonattainment area, or at least in the San Diego Nonattainment Area. It makes no sense for the reservation to remain inside the SoCAB nonattainment area, which is the principal source of the emissions that cause the monitored violations of the ozone NAAQS on Tribal lands. EPA has authority under Clean Air Act Section 110(k)(6) to create a new nonattainment area, or make a correction to the San Diego Nonattainment Area boundary to include the remainder of the Pechanga Indian Reservation.

RATIONALE

The following discussion is organized according to the nine factors published in USEPA guidance.⁶

Factor 1: “Air quality data”

The air quality on the Pechanga Reservation is generally good (i.e., highest 8-hour average ozone concentration of 0.057 ppm during the period July 1 – December 31, 2008)⁷, much like the remainder of the SDAB to the south, except where air quality is degraded for locales near the coastal cities. In contrast, air quality throughout the SoCAB to the north and west is degraded not only by the regional mix of pollutants, but also by dense industrial and population centers. SoCAB emissions are high enough to also

⁵ The South Coast Air Quality Management District described the request in the June 1, 2007 Board-approved 2007 Air Quality Management Plan, and initiated the request September 27, 2007.

⁶ USEPA. *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, December 8, 2008.

⁷ The Pechanga monitoring station has only been operating since May 28, 2008.

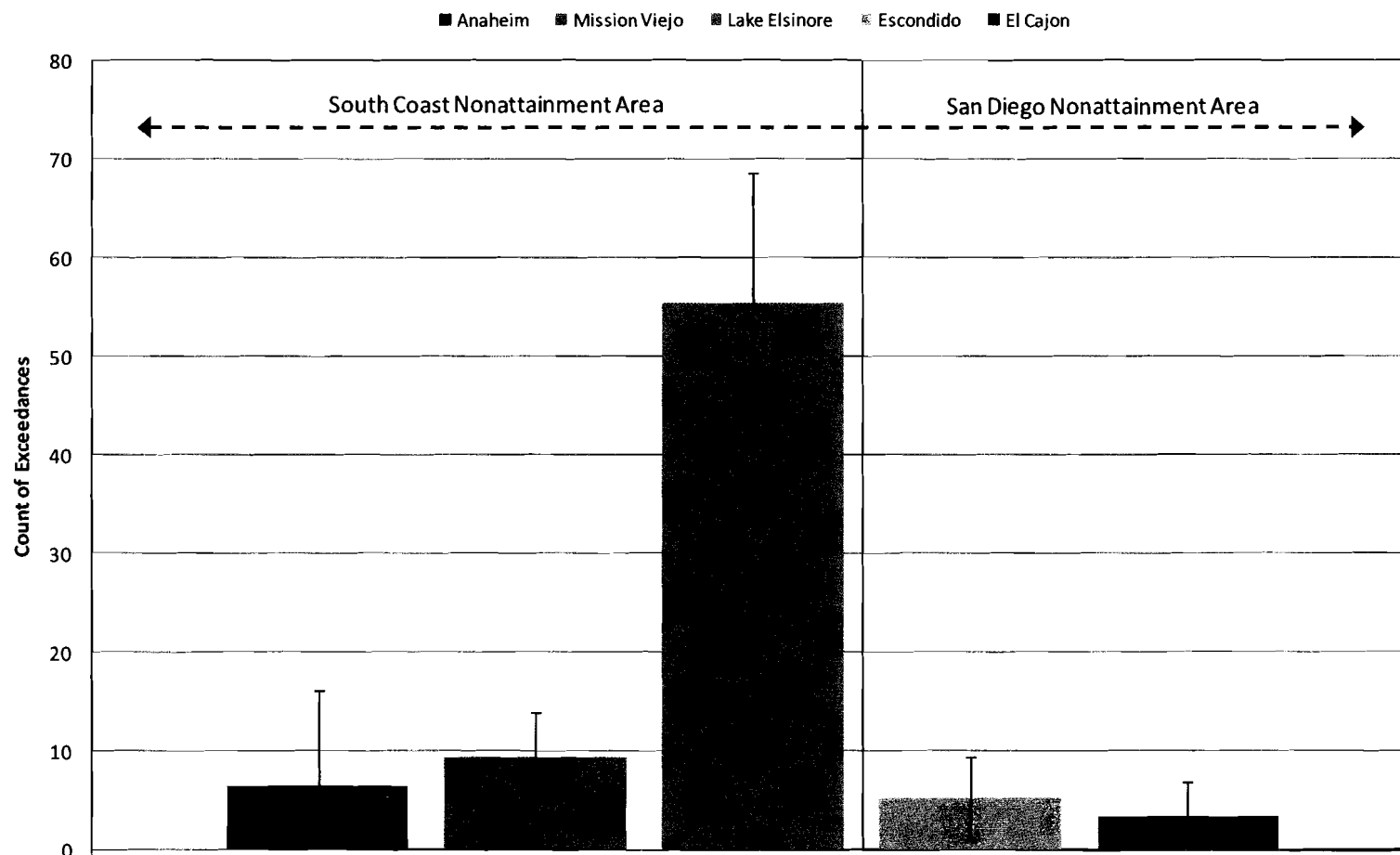
degrade the air quality of coastal portions of the SDAB by “overwhelming” transport of regional air pollutants (e.g., ozone).⁸

Ozone, generated by atmospheric reactions of its precursor emissions of NO_x and VOC over periods of hours, is by its nature a regional pollutant. High levels that exceed the 8-hour ozone NAAQS are widespread throughout the SoCAB, and because of the combination of local emissions and transport, are also widespread throughout the coastal portions of the SDAB.

As can be seen in Figure 1, the average annual number of exceedances of the current 8-hour ozone NAAQS from monitoring stations near the Pechanga Reservation is highest at Lake Elsinore, much higher than the exceedances at the other four monitoring stations (see Figure 2 for the locations of the monitoring stations). Figure 3 shows that the temporal trends of the number of ozone exceedances as measured at the Anaheim and Mission Viejo monitoring stations in the SoCAB are relatively synchronous with those at the Escondido and El Cajon monitoring station in the SDAB. Figure 4 shows that the average annual maximum 8-hour ozone concentration is relatively uniform between four of the monitoring stations, but a substantially higher concentration occurs at Lake Elsinore. Figure 5 shows the relatively uniform and synchronous temporal changes between the stations from year to year. Figure 6 shows the uniformity of the annual 4th highest 8-hour ozone concentrations between four of the stations, much as Figure 4 showed for the average annual maximum 8-hour ozone concentrations. Figure 7 does not show the same consistent synchronous temporal changes from year to year in the annual 4th highest 8-hour ozone concentrations that were seen in Figure 5 for the average annual maximum 8-hour concentration.

⁸ Air Resources Board. *Assessment of the Impacts of Transported Pollutants on Ozone Concentrations in California*, March 2001, <http://www.arb.ca.gov/regact/trans01/isor.pdf>.

Figure 1. Average Annual Number of Excedances of the 8-Hour Ozone NAAQS (0.075 ppm) from 1998-2008



Full site name of El Cajon, Escondido, Anaheim, Mission Viejo and Lake Elsinore are El Cajon-Redwood Avenue, Escondido-E Valley Parkway, Anaheim-Pampas Lane, Mission Viejo-26081 Via Pera and Lake Elsinore-W Flint Street, respectively.

Notes: The vertical line across the top of each bar represents one standard deviation around the arithmetic mean.

Figure 2. Monitoring Station Locations

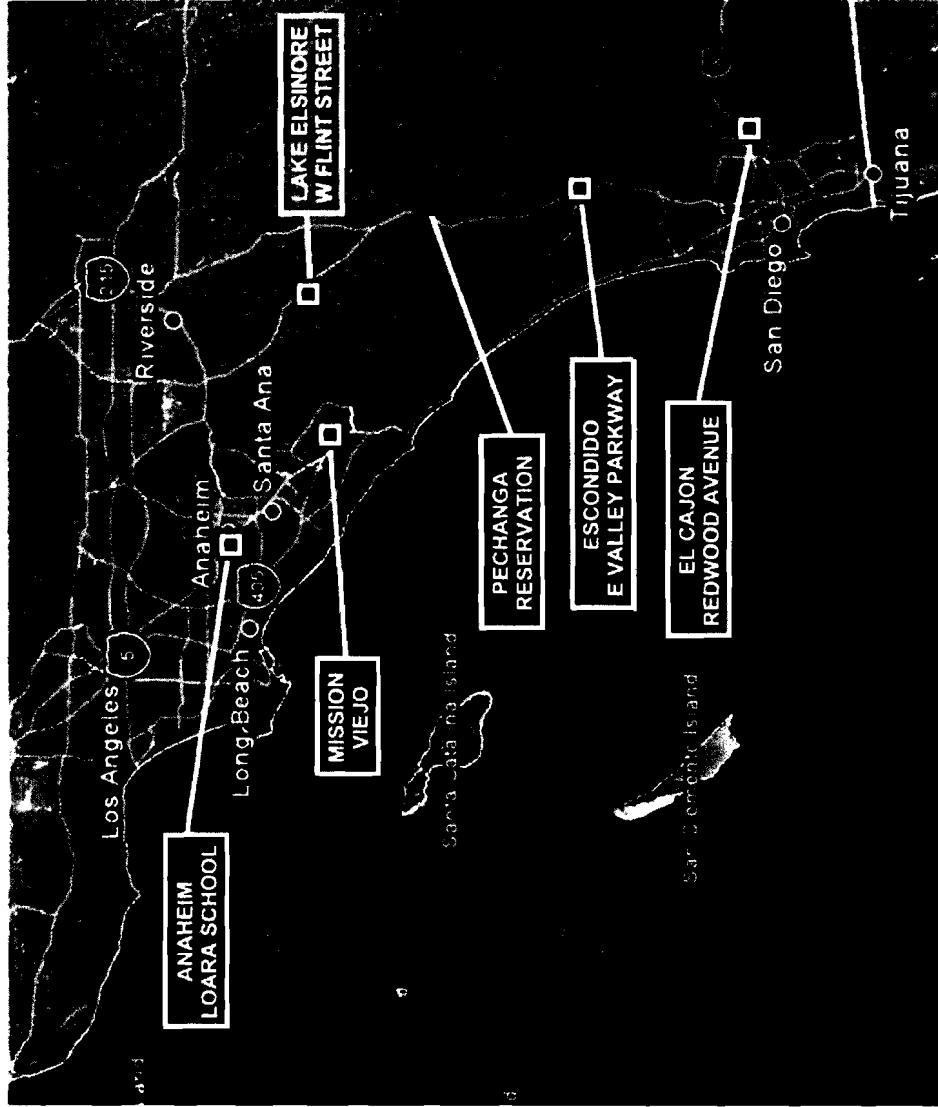


Figure 3. Average Annual Number of Exceedances of the 8-Hour Ozone NAAQS (0.075 ppm) Normalized to Lake Elsinore

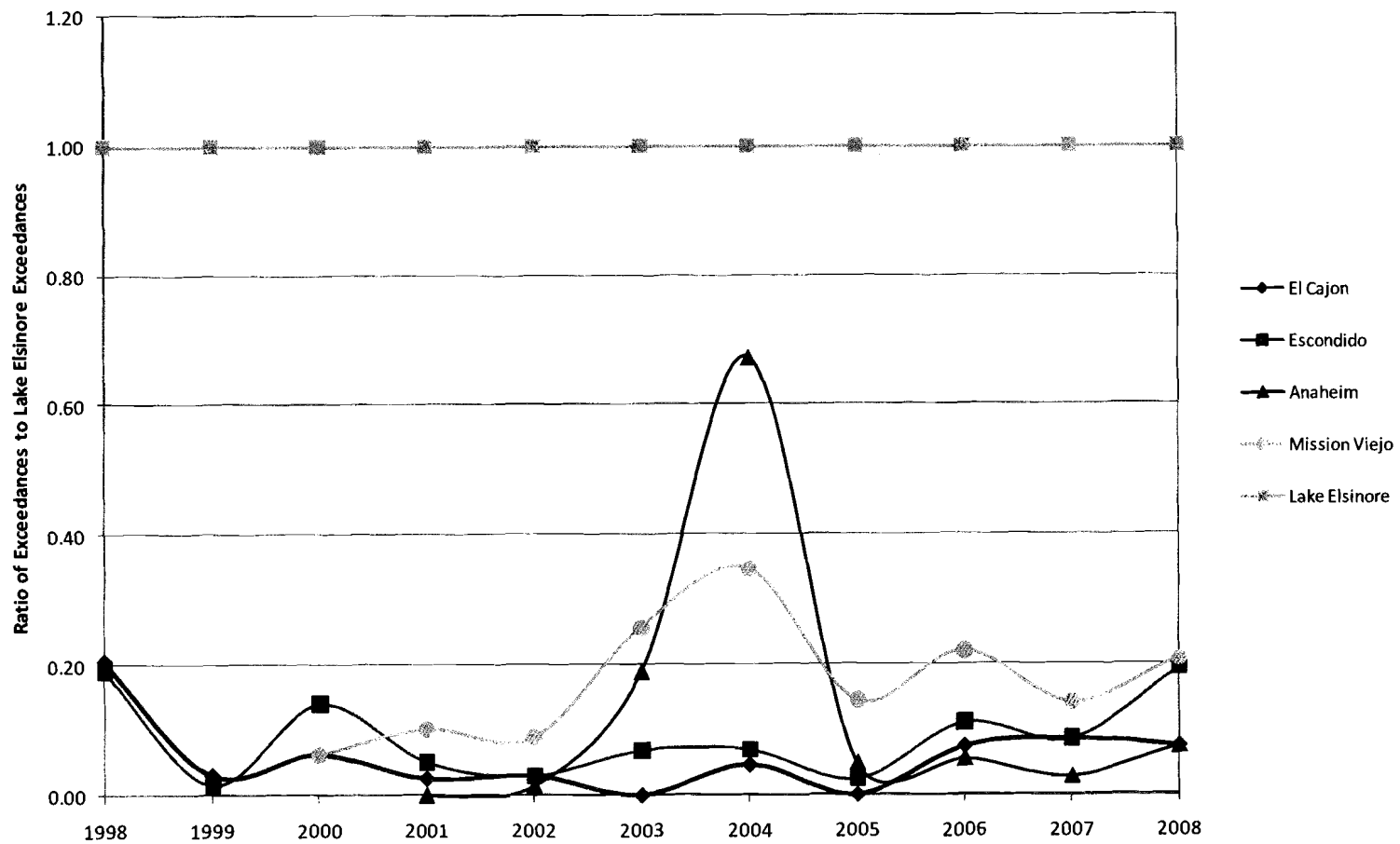
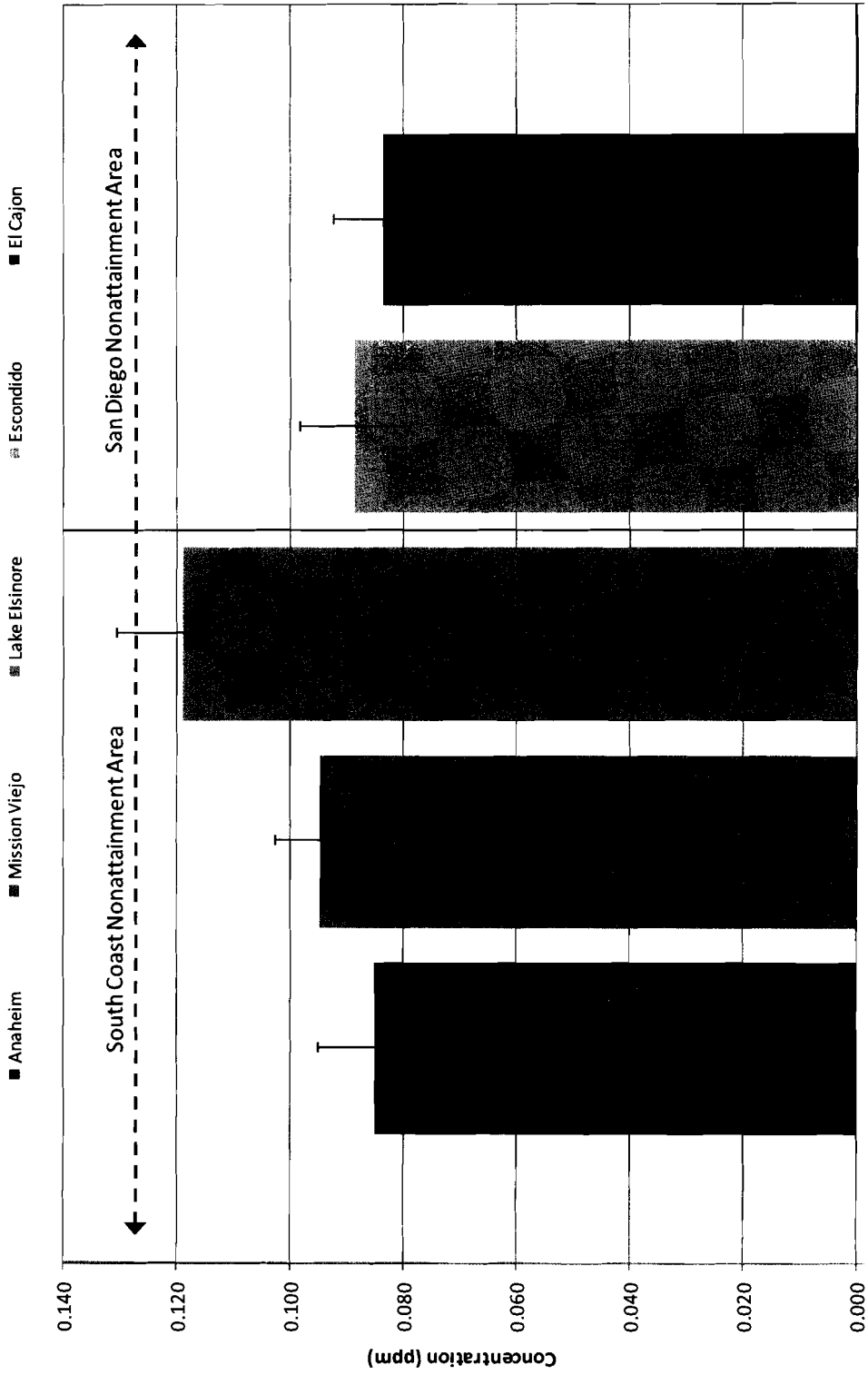


Figure 4. Average Annual Maximum 8-hour Ozone Concentration from 1998-2008



Full site name of El Cajon, Escondido, Anaheim, Mission Viejo and Lake Elsinore are El Cajon-Redwood Avenue, Escondido-E Valley Parkway, Anaheim-Pampas Lane, Mission Viejo-26081 Via Pera and Lake Elsinore-W Flint Street, respectively.
 Notes: The vertical line across the top of each bar represents one standard deviation around the arithmetic mean.

Figure 5. Annual Maximum 8-hour Average Ozone Concentration Normalized to Lake Elsinore

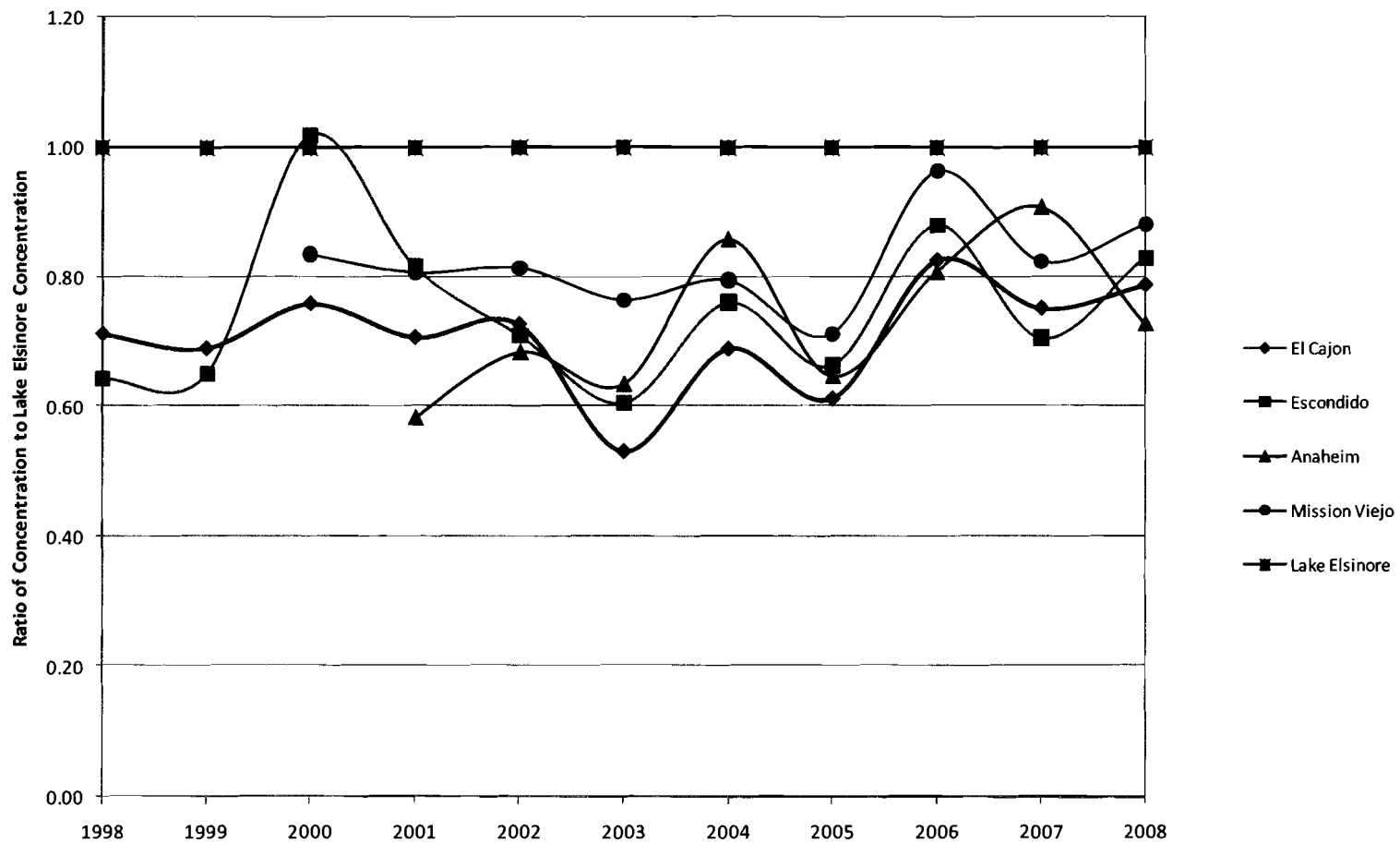
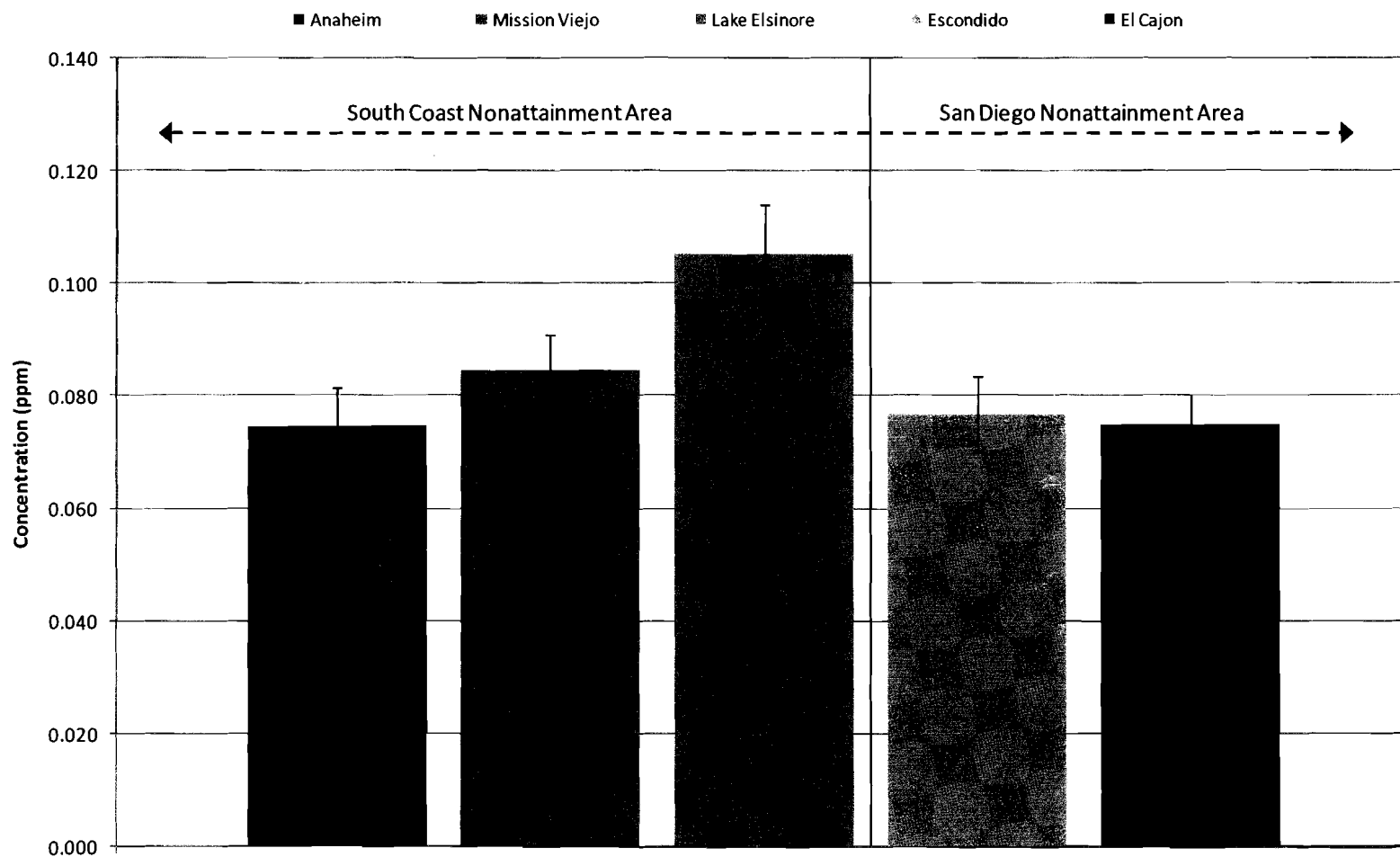


Figure 6. Average Annual 4th Highest 8-hour Ozone Concentration Averages from 1998-2008



Full site name of El Cajon, Escondido, Anaheim, Mission Viejo and Lake Elsinore are El Cajon-Redwood Avenue, Escondido-E Valley Parkway, Anaheim-Pampas Lane, Mission Viejo-26081 Via Pera and Lake Elsinore-W Flint Street, respectively.

Notes: The vertical line across the top of each bar represents one standard deviation around the arithmetic mean.

**Figure 7. Annual 4th Highest 8-hour Average Ozone Concentration
Normalized to Lake Elsinore**

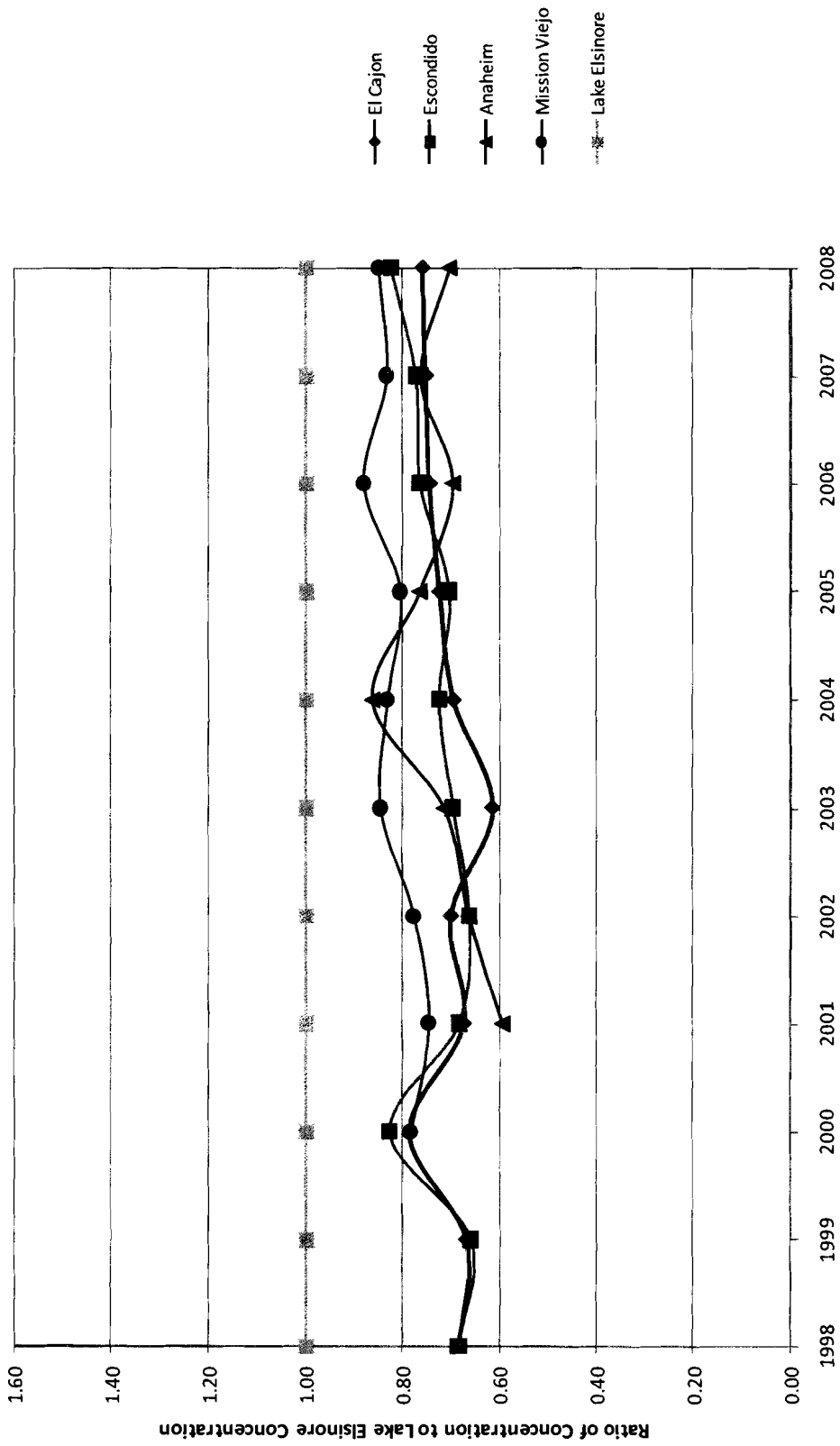


Table 1 lists the maximum ozone concentrations measured at the three monitoring stations stretching northwest from the Pechanga Reservation into SoCAB (i.e., Lake Elsinore, Mission Viejo, and Anaheim), and at two monitoring stations stretching southeast from the reservation into the SDAB.

Table 1 Maximum Ozone Concentrations^a 2008 (ppmv)						
Pollutant	Averaging Time	Anaheim Monitoring Station ^b	Mission Viejo Monitoring Station ^c	L. Elsinore Monitoring Station ^d	Escondido Monitoring Station ^e	El Cajon Monitoring Station ^f
O ₃	1-hour	0.105	0.118	0.139	0.116	0.107
	8-hour	0.086	0.104	0.119	0.099	0.093
^a Data Source: California Air Quality Data, California Air Resources Board website, http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start . ^b ARB Site No. 30178 ^c ARB Site No. 30002 ^d ARB Site No. 33158 ^e ARB Site No. 80115 ^f ARB Site No. 80131						

As can be seen in Table 2, the two-station average peak ozone concentration measured at the SDAB monitoring stations is less than the three-station average peak measured at the SoCAB monitoring stations.

Table 2 Basin Comparison of Maximum Ozone Concentrations^a 2008 (ppmv)			
Pollutant	Averaging Time	SoCAB Monitoring Station Average	SDAB Monitoring Station Average
O ₃	1-hour	0.121	0.112
	8-hour	0.103	0.096
^a Data Source: California Air Quality Data, California Air Resources Board website, http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start . ^b ARB Site No. 30178. ^c ARB Site No. 30002. ^d ARB Site No. 33158.			

Because air quality monitoring on the Pechanga Reservation did not begin before 3rd quarter 2008, the second half of 2008 is used to compare 8-hour maximum ozone concentrations as shown in Table 3.

Table 3 Basin and Reservation Comparison of Maximum Ozone Concentrations July 1 to December 31, 2008 (ppmv)				
Pollutant	Averaging Time	SoCAB Three-Station ^a Average	Pechanga Monitoring Station ^b	SDAB Two-Station ^a Average
O ₃	1-hour	0.115	0.069	0.103
	8-hour	0.090	0.057	0.083
^a Data Source: California Air Quality Data, California Air Resources Board website, http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/start . Data period selected to match the availability of data from the Pechanga monitoring station. ^b Quality Assurance Consulting. Third and Fourth Quarter 2008 Ambient Air Monitoring Data Reports, Pechanga Ambient Air Monitoring Station, November 4, 2008 and February 13, 2009, respectively.				

Although comparable data is available only for a half year, the low magnitude of the maximum 1- and 8-hour ozone concentrations measured on the reservation suggests that the Pechanga Reservation should be its own nonattainment area.

Factor 2: “Emissions data (location of sources and contribution to ozone concentrations)”

Due to the sparse population of the Pechanga Reservation, the limited emissions from the few sources on the Reservation are close to only a few nearby receptors. This same sparse distribution of emission sources and nearby receptors characterizes the other Indian reservations and communities located throughout most of the SDAB. Far different is the close proximity of the dense residential areas of the Riverside County portion of the SoCAB to transportation, commercial, and industrial emission sources clustered in urban centers such as the Riverside-San Bernardino-Ontario Metropolitan Statistical Area.

Table 4 presents a comparison of emissions from the Pechanga Reservation, the SDAB, and the Riverside County portion of the SoCAB, separated into stationary, area, and mobile source categories. The emissions in both the SDAB and Riverside County portion of the SoCAB are well in excess of the emissions on Tribal lands and, as a result, these data suggest that the Pechanga Reservation can just as logically be its own nonattainment area, or, in the alternative, a part of either adjoining nonattainment area.

The ozone precursor emission density on the Pechanga reservation is about 1/50 that in the SDAB or in the Riverside County portion of the SoCAB, as shown in Table 5.

The emissions from the Pechanga Reservation⁹ are from similar sources and in similarly small amounts as from other Indian reservations and communities located throughout the SDAB, far smaller in quantity and less industrial/commercial in nature than emissions from the large urban centers in the SoCAB, including the Los Angeles Consolidated Metropolitan Statistical Area (CMSA).

These emission data suggest that the Pechanga Reservation can just as logically be its own nonattainment area as be a part of either the San Diego or South Coast Nonattainment Area.

⁹ For example, 2007 NO_x emissions were approximately 4.2 tons per year.

Table 4					
Emission Inventories*					
Location and Source Type	Criteria Pollutant				
	NO _x	SO _x	CO	VOC	PM ₁₀
Pechanga On-Reservation	Daily Emissions^a (tons/day)				
Stationary Sources	0.012	0.00036	0.015	0.0015	0.010
Area Sources	0.00044	0.000019	0.00050	0.0034	0.000024
On-Road Mobile Sources	De Minimis				
Total Pechanga Reservation	0.012	0.00038	0.015	0.0049	0.010
San Diego County - SDAB	Daily Emissions^b (tons/day)				
Stationary Sources	9.2	0.4	26.4	31.9	10.5
Area Sources	2.7	0.2	28.1	35.8	94.5
On-Road Mobile Sources	113.9	1.0	613.5	58.7	5.8
Other Mobile Sources	66.5	2.8	242.7	40.6	6.2
Total San Diego County SDAB	192.3	4.4	910.7	167.0	117.0
Riverside County - SoCAB	Daily Emissions^b (tons/day)				
Stationary Sources	4.1	0.4	1.6	8.4	2.4
Area Sources	2.2	0.1	10.4	16.9	36.4
On-Road Mobile Sources	72.0	0.6	313.6	28.0	3.6
Other Mobile Sources	24.3	0.4	69.9	14.3	1.6
Total Riverside County SoCAB	102.5	1.3	395.5	67.7	44.0
* Summation differences result from rounding errors.					
^a Sierra Research emission inventory for on-reservation sources only.					
^b ARB. Almanac Emission Projection Data, 2006 Estimated Annual Average Emissions, http://www.arb.ca.gov/app/emsmv/emseic1_query.php?F_DIV=-4&F_YR=2006&F_SEASON=A&SP=2007&F_COAB=Y&F_AREA=CO&F_CO=37&F_DD=Y .					

Table 5			
Emission Density			
(tons per year per square mile)			
Area	NO _x	ROC	Ozone Precursors
Pechanga Reservation	0.43	0.17	0.60
SDAB	16.7	14.5	31.2
Riverside County, SoCAB	17.3	11.4	28.7

Factor 3: “Population density and degree of urbanization (including commercial development)”

Low population density and lack of urbanization characterize the Pechanga Reservation, and the majority of the SDAB inland of San Diego and the other coastal cities in the county. As one moves northwest from the Pechanga Reservation, population density and degree of urbanization rapidly increase upon reaching nearby Temecula, and reach the highest levels found in the Los Angeles CMSA upon moving further northwest up the coast. Once the high density coastal cities in SDAB are included, the population density of the SDAB overall is much higher than that found inland or on the Pechanga reservation (see Table 6). Table 6 shows that the population density of the Pechanga reservation is less than 1/14 that of the SDAB, and less than 1/31 that of the SoCAB.

The Pechanga Reservation is sparsely populated enough so that the limited emissions from the few sources on the Reservation are close to only a few nearby receptors. This same sparse distribution of emission sources and nearby receptors characterizes the other Indian reservations and communities located in the SDAB. Far different is the close proximity of the dense residential areas of the SoCAB to transportation, commercial, and industrial emission sources clustered in the urban centers of the SoCAB, including not only the Los Angeles CMSA, but also the nearby city of Temecula.

Geographical Area	Population Density (mi ⁻²)
Pechanga Reservation	45
SDAB	650
SoCAB	1,418

These population data suggest that the Pechanga Reservation would more logically be its own nonattainment area, or at least a part of the San Diego Nonattainment Area.

Factor 4: “Traffic and commuting patterns”

Traffic and commuting throughout the Pechanga Reservation are at low levels. Similarly, traffic and commuting throughout much of the SDAB is light, while heavy traffic is concentrated on Interstate-5 (I-5), I-15 (see Table 7), I-8, and State Route (SR)-78. State routes near the reservation for which traffic data are available include SR-76 to the south and SR-79 to the north, which carry moderate levels of traffic and commuting as shown in Table 7.

The SoCAB, in comparison, is characterized by the highest levels of traffic and commuting found in the nation. These high levels are found throughout the basin, including on I-15 through nearby Temecula.

These traffic level data suggest that the Pechanga Reservation would more logically be its own nonattainment area, or, in the alternative, a part of the San Diego Nonattainment Area.

Road	AADT ^{a,b}
SR-76 east side of I-15	13,700
SR-79 (southern segment) near I-15	64,000
I-15 between intersections with SR-76 and southern segment of SR-79	121,000 – 136,000
I-10 Riverside County SoCAB	91,000 – 235,000

^a Annual Average Daily Traffic Count.
^b California Department of Transportation. *2005 Annual Average Daily Truck Traffic on the California State Highway System*, November 2006.

Factor 5: “Growth rates and patterns”

Both the Pechanga Reservation and the adjacent north part of San Diego Air Basin are similarly mostly open space containing relatively isolated communities connected by SR-79 and a few county roads. Growth of population and traffic has been high throughout Riverside County on the SoCAB side of the reservation (see Table 8), while quite low on average for San Diego County. Hence, the Pechanga Reservation growth rate is more consistent with that in the San Diego Air Basin than with Riverside County in the SoCAB on its north side. These growth rate data suggest that the Pechanga Reservation can just as logically be its own nonattainment area, or, in the alternative, a part of the San Diego Nonattainment Area.

Geographical Area	Population	Population Growth Rate (%/yr)	Area (sq. miles)	Population Density (mi ⁻²)
Pechanga Reservation	~500 ^a	0.6 ^b	10.3	77
San Diego Air Basin/ County ^c	2,974,859	0.8	4,200	708
Riverside County	1,877,000 ^d	4.3 ^d	7,207 ^e	260
Riverside-San Bernardino-Ontario MSA ^f	4,026,135 ^e	3.9	27,298 ^e	148
Los Angeles County	9,941,000 ^g	0.8	4,061 ^e	2,448
Los Angeles-Long Beach-Santa Ana MSA	12,950,139 ^e	0.9	4,850 ^e	2,670
South Coast Air Basin	16,653,000 ^h	1.3 ^h	10,743 ⁱ	1,489

^a GIS Department, Pechanga Band of Luiseno Indians. Estimate of 165 residential structures and average of three persons in each, March 20, 2009.

^b Fire Department, Pechanga Band of Luiseno Indians. Estimate based on one new structure constructed per year, March 20, 2009.

^c US Census Bureau, *State & County QuickFacts*, <http://quickfacts.census.gov/qfd/states/06/06073.html>.

^d Coachella Valley Economic Partnership, *Population Trends*, data for 2005, http://cvep.com/pop_trends.shtml.

^e US Census Bureau. QuickFacts web site for 2000 and estimated 2006 data, <http://quickfacts/census.gov>.

^f MSA = Metropolitan Statistical Area.

^g US Census Bureau, *State & County QuickFacts*, <http://quickfacts.census.gov/qfd/states/06/06037.html>.

^h South Coast Air Quality Management District. *1997 Air Quality Management Plan, Chapter 8, Future Air Quality, Desert Nonattainment Areas*, <http://www.aqmd.gov/aqmp/97aqmp/chapters/m-chap8.html>.

ⁱ South Coast Air Quality Management District, <http://www.aqmd.gov/aqmd/>.

Factor 6: “Meteorology (weather/transport patterns)”

The meteorology and climatology of the Pechanga Reservation is similar to that in the north to south central strip of the SDAB, except that the Rainbow Gap in the mountains through which I-15 passes provides a window for the ocean sea breeze to cross the open Camp Pendleton Marine Corps base and reach the reservation with relatively clean air. The western or coastal north to south strip of the SDAB is heavily influenced by the ocean sea breeze during the day and lighter land breeze during the night. The eastern north to south strip is characterized more by the desert meteorology found further east in the Salton Sea Air Basin. The SoCAB, like the coastal strip of the SDAB, experiences a substantial frequency of marine layer accompanied by calm winds under an inversion that leads to cooler temperatures, but higher concentrations of pollutants. Meteorology and atmospheric transport characteristics suggest that the reservation could be its own nonattainment area, or, in the alternative, a part of either the San Diego or the South Coast Nonattainment Areas.

Factor 7: “Geography/topography (mountain ranges or other air basin boundaries)”

The geography and topography of the Pechanga Reservation consist of rough terrain and plateaus ranging in elevation between 1,100 and 2,600 feet within the central strip of the SDAB and along the west flank of the Cleveland National Forest. Because the reservation is located at the northwest corner of the Cleveland National Forest, the geography and topography become flatter and less wooded as one moves locally north through the Temecula area of the SoCAB. On the larger scale of the air basins, the western half of the SoCAB and western third of the SDAB are coastal areas heavily influenced by the proximity of the Pacific Ocean and generally westerly flow of air, accounting for the frequent sea breezes during the day and strength of the marine layer. This coastal influence wanes towards the eastern half of the SoCAB because of the blocking by the San Gabriel, San Geronio, and San Jacinto mountain ranges. As mentioned for Factor 6 on meteorology, the geographical position of the reservation is just east of Rainbow Gap through the mountains, providing a window for the ocean sea breeze to reach the reservation.

Geography, topography, and hydrology information all suggest that the reservation could logically be its own nonattainment area, or a part of either the San Diego or the South Coast Nonattainment Areas.

Factor 8: “Jurisdictional boundaries (e.g., counties, air districts, existing nonattainment areas, Reservations, metropolitan planning organizations (MPOs))”

The most important jurisdictional boundaries to nonattainment area definition and designation in the vicinity of the Pechanga Reservation are those of the reservation itself, and that between the SoCAB and SDAB. The boundary between the two air basins was also the complete south boundary of the reservation until the recent land transfer from the BLM added 119 acres within the SDAB.

With regard to jurisdictional boundaries, neither EPA nor the State of California acknowledged the existence of the Pechanga Reservation as a separate, sovereign jurisdiction or recognized the major implications for the Tribe of the recommendation to “bump up” the area designation for the SoCAB from “severe-17” to “extreme,” nor when the air basin and nonattainment area boundaries were originally drawn, to the Tribe’s detriment. The Tribe’s economic and governmental interests, specifically its inherent authority with respect to reservation air quality planning, and its nascent regulatory and permitting authority under the Tribal Authority Rule, are supposed to be protected by the EPA until the Tribe can formally assume these responsibilities.

Jurisdictional boundaries suggest that the reservation should logically be its own nonattainment area.

Factor 9: “Level of control of emission sources”

The key difference between the SDAB and SoCAB levels of control of emission sources is that a source in the SDAB must emit at least 50 tons per year of a nonattainment criteria pollutant or precursor to be subject to the more stringent federal New Source Review requirements for a major source, compared to the requirements for a minor source. In the SoCAB, sources need emit only 10 tons per year or more of a nonattainment criteria pollutant or precursor to be subject to the more stringent New Source Review requirements.

Large emission reductions are needed in the SoCAB to allow it to make reasonable further progress towards attainment, and also to allow the SDAB to reach attainment because of the “overwhelming” transport from the SoCAB into the SDAB. Only a modest level of emission reductions is needed from sources in the SDAB to prevent local sources from impeding reasonable further progress towards attainment. One of the important distinctions between the ozone nonattainment designations in the two basins is that the regional emission reduction needed under the SoCAB’s severe-17, soon to be extreme, nonattainment designation, is much larger and more difficult to achieve than the reduction needed under SDAB’s basic nonattainment designation.

The factor of emission source level of control suggests that the reservation could logically be its own nonattainment area, or, in the alternative, a part of the San Diego Nonattainment Area.

CONCLUSION

Based on the nine factors suggested in EPA guidance and common sense, the entire Pechanga Indian Reservation logically and technically should be its own nonattainment area or, in the alternative, a part of the San Diego Nonattainment Area. The factors pertaining to causes of nonattainment, lack of local emission sources, low population density and lack of urbanization, low level of local traffic, growth rate, and level of emission source control show that the reservation holds far more in common with the San Diego Nonattainment Area than with the South Coast Nonattainment Area.

Leaving the Pechanga Indian Reservation outside of the San Diego Nonattainment Area will impose additional, unanticipated delays in developing Pechanga’s air program, including the Tribe’s plan to implement a tribal air permit program for minor sources. First, by reducing the major source “potential to emit” threshold for ozone precursor (i.e., NO_x and ROC) emissions from 25 tpy to 10 tpy under the 8-hour average ozone standard, the reclassification will increase the number of facilities potentially subject to Nonattainment New Source Review requirements, thus increasing the use and cost of Pechanga staff resources. Second, the number of future facilities subject to Title V would be significantly increased because the threshold of 25 tpy is reduced to 10 tpy. Third, if the threshold for the applicability of General Conformity requirements is reduced from 25 tpy to 10 tpy, many more projects would be required to demonstrate that their emissions

of criteria pollutants will not impede progress toward attainment with national ambient air quality standards. Finally, because the Pechanga Tribal Government was not consulted in the drawing of the nonattainment area boundaries, it is a matter of basic fairness for the Administrator to now take actions squarely within her authority pursuant to Clean Air Act Section 110(k)(6) to correct the boundary at this time.