

the basin also has elevated levels of fluoride and boron (California Department of Water Resources 2003).

3.3 CLIMATE AND AIR QUALITY

This subsection describes the climate and air quality of the Imperial County region.

3.3.1 Climate

3.3.1.1 California

The State of California has a very diverse climate range, extending over four out of the six major global climate zones. A Mediterranean climate zone exists in the coastal regions, with wet winters and dry summers, and varies greatly up and down the coast. A semiarid, or steppe, climate zone encompasses much of the San Joaquin Valley and the fringes of the Mojave Desert. There is less rainfall in this zone, and temperatures are generally warmer than in the Mediterranean zone. A microthermal, or Alpine, climate zone is found in the higher elevations of the Sierra Nevada, the Modoc Plateau, and the Klamath Mountains. This mountain climate has short, cool summers and snowy winters; average temperatures in the coldest month are below freezing. A desert climate exists in the southeastern third of the state, east of the Sierra Nevada and Peninsular ranges and in the southwestern part of the San Joaquin Valley. Cut off by mountains from westerly moisture-laden Pacific storms, this leeward rain shadow region receives very little precipitation. Summer temperatures in this region are the highest in the state and can average more than 100°F (38°C). The diversity of California's climate is illustrated by a precipitation range from about 80 in. (203 cm) in the more temperate Mediterranean north coast to less than 3 in. (8 cm) in the desert region in Imperial County. The more generally prevailing winds statewide in California are incoming westerlies³ from the Pacific Ocean. These winds are reflective of the eastern Pacific high pressure zone centered off the California coast that typically is the major influence on California's climate.

3.3.1.2 Regional

The desert region that includes Imperial County is classified under the modified Köppen Climate Classification System as arid, low-altitude desert (hot). Imperial County is in one of the hottest and driest parts of California, characterized by hot, dry summers and relatively mild winters. During the summer, the Pacific high pressure zone is well-developed to the west of California and a thermal trough overlies California's southeast desert region. The intensity and

³ Wind direction is conventionally described as the direction *from* which a wind blows. Thus "westerlies" are winds that come from the west. Throughout the discussions in this EIS, a wind direction describes the direction from which a wind is blowing.

orientation of the trough varies from day to day. Although the rugged mountainous country surrounding the Imperial Valley inhibits circulation, the influence of the trough does permit some interbasin exchange of air with more westerly coastal locations through the mountain passes.

Relative humidity in the summer is very low, averaging 30 to 50% in the early morning and 10 to 20% in the afternoon. During the hottest part of the day, a relative humidity below 10% is common, although the effect of extensive agricultural operations in the Imperial Valley tends to raise the humidity locally. The prevailing weather conditions promote intense heating during the day in summer, with marked cooling at night.

As Table 3.3-1 and Figure 3.3-1 show, the normal maximum temperature in January in the Imperial County region is about 70°F (21°C), and the normal minimum temperature is around 41°F (5°C). In July, the normal maximum temperature is more than 107°F (42°C), while the normal minimum temperature is about 75°F (24°C). Average annual precipitation is less than 3 in. (7 cm).

Figure 3.3-2 is a wind rose plot that illustrates the annual distribution of hourly wind direction and speed measurements made over a 10-year period from 1993 through 2002 at the Imperial U.S. Weather Service weather station (identification number 747185) located at Imperial County Airport, south of Imperial, and at an elevation of -56 ft (-17 m). This site is located approximately 10 mi (16 km) northeast of the IV Substation and is fairly central to Imperial County. As Figure 3.3-2 shows, the annual winds are somewhat dichotomous in nature, mainly either westerly or east/southeasterly. However, they are predominately westerly, which is reflective of the statewide prevailing incoming westerlies referred to in Section 3.3.1.

Figures 3.3-3, 3.3-4, and 3.3-5 are wind rose plots showing the seasonal distribution of hourly wind direction and speed measurements over the same 10-year period for the fall months of September, October, and November; the winter months of December, January, and February; and the spring months of March, April, and May. As the figures show, the wind rose distributions for these seasons are consistent and very similar to the annual distribution.

TABLE 3.3-1 Average Temperatures and Precipitation in Imperial County^a

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
Average high temperature (°F)	70.2	74.5	79.3	86.1	94.0	103.4	107.0	105.7	101.1	90.9	78.1	69.7	88.3
Average low temperature (°F)	41.3	44.9	48.7	53.5	60.6	68.4	75.8	76.6	70.6	59.2	47.3	40.5	57.3
Precipitation (in.)	0.51	0.36	0.31	0.05	0.03	0.01	0.06	0.32	0.36	0.35	0.17	0.43	2.96

^a Average readings from 1971 to 2000 at the El Centro 2 SSW Weather Station of the U.S. Weather Service, in Imperial County at latitude 32°46'N, longitude 115°34'W, at an elevation of -30 ft (-9 m). The site is approximately 5 mi (8 km) south of the Imperial U.S. Weather Service Station.

Figure 3.3-6 shows the distribution of hourly wind direction and speed measurements for the summer months of June, July, and August. The figure also shows a dramatic reversal to a predominately east-southeasterly wind pattern, with a strong westerly component remaining.

Figures 3.3-7, 3.3-8, 3.3-9, 3.3-10, and 3.3-11 are wind rose plots illustrating the distribution of wind direction and speed in Mexicali in Baja California, Mexico, abutting the U.S. border immediately south of Calexico, in an area some 16 mi (25 km) south of the Imperial U.S. Weather Service site, and approximately 8 to 10 mi (13 to 16 km) east of the Termoeléctrica de Mexicali (TDM) and La Rosita Power Complex (LRPC) power plants. These wind rose figures are based on records of meteorological observations taken in Mexicali through 1997 and 1999 at four monitoring sites at El Centro de Bachillerato Tecnológico Industrial y de Servicios (CBTIS), Colegio de Bachilleres, (COBACH), Instituto Tecnológico de Mexicali (ITM), and Universidad Autonomos de Baja California (UABC) in Mexicali. Their locations are shown in Figure 3.3-13.

Measurements commenced as early as January 1, 1997, at ITM and as late as June 1, 1999, at COBACH, and ceased at all four sites on December 31, 1997. There were other measurement gaps. The four-site data set encompasses the entire period; however, contemporaneous data at all four sites were not always collected (about 10% of possible measurements were not recorded). Of the data collected, DOE and BLM determined that 5% of the data were flawed and were not suitable for use in this EIS analysis.

Measurements for all four sites in Mexicali over the 3-year 1997 through 1999 period were pooled into a combined “twelve site-year” set of data allowing regionally representative wind roses to be constructed. Figure 3.3-7 shows a site-averaged average annual wind rose of speed and direction. Again, as was the case for the Imperial U.S. Weather Service site, a clear dichotomy in annual prevailing wind directions can be seen; northwesterly winds from the United States to Mexico and southeast winds from Mexico to the United States. It is apparent that the northwesterly winds from the United States to Mexico are dominant.

Figures 3.3-8, 3.3-9, and 3.3-10 are site-averaged wind rose plots for the fall months of September, October, and November; the winter months of December, January, and February; and the spring months of March, April, and May. The wind rose distributions for these seasons are very similar, and it is apparent that northwesterly winds from the United States to Mexico are overwhelmingly dominant. Figure 3.3-11 shows a wind rose for the summer months of June, July, and August. This wind rose illustrates a dramatic reversal in the summer to predominately southeasterly winds from Mexico to the United States, with a small northwest component remaining.

Surface winds in the Mexicali area appear to veer (move clockwise) relative to those in the Imperial area to the north. However, the Mexicali wind patterns broadly echo the wind patterns of the Imperial area. In summary, for most of the year, surface winds from the west or northwest strongly dominate (i.e., winds generally blow from the United States to Mexico) in the border region of Imperial County; for three months in the summer, however, southeasterly winds dominate (i.e., winds generally blow from Mexico into the United States).

3.3.2 Air Quality

The Clean Air Act (CAA) established the principal framework for national, state, and local efforts to protect air quality in the United States (42 USC §§ 7401–7642). Under the CAA, the EPA has set standards known as National Ambient Air Quality Standards (NAAQS) for six pollutants considered to be key indicators of air quality, namely, CO, NO₂, O₃, SO₂, lead (Pb), and two categories of particulate matter (PM₁₀ and PM_{2.5}). National primary ambient air quality standards define levels of air quality, with an adequate margin of safety that sets limits to protect the public health, including the health of sensitive populations such as asthmatics, children, and the elderly. National secondary ambient air quality standards define levels of air quality judged necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The EPA is also responsible for ensuring that these air quality standards are met or attained in cooperation with state, tribal, and local governments through national strategies to control pollutant emissions from automobiles, factories, and other sources. As delegated by the EPA, the State of California is responsible for protecting California's air quality. The California Environmental Protection Agency (Cal/EPA) was created in 1991 by a Governor's Executive Order. Six Boards under this "umbrella" are responsible for the protection of human health and the environment and the coordinated deployment of state resources. The California Air Resources Board (ARB) is responsible for interpreting and implementing those statutes pertaining to the control of air pollution. The ARB regulations are contained in Titles 13 (Motor Vehicles) and 17 (Public Health) of the *California Code of Regulations*. The ARB gathers air quality data for the State of California, ensures the quality of these data, designs and implements air models, sets ambient air quality standards for the state, compiles the state's emissions inventory, and performs air quality and emissions inventory special studies. The ARB is responsible for monitoring the regulatory activity of California's 35 local air districts, which are responsible for promulgating rules and regulations for stationary sources. California is divided geographically into 15 air basins for the purpose of managing the air resources of the state on a regional basis, and each air basin generally has similar meteorological and geographic conditions throughout. The Salton Sea Air Basin encompasses all of Imperial County plus the major western portion of Riverside County to the north. The 6 mi (10 km) of double-circuit, 230-kV transmission lines extending south from the IV Substation to the U.S.-Mexico border north of Mexicali, Mexico, that are associated with the proposed action of this project undertaken in the United States, are in the Imperial County Air Pollution Control District and lie within the Salton Sea Air Basin.

Table 3.3-2 gives the State and Federal ambient air quality standards. California has set additional ambient standards for visibility-reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride, and they are also listed in this table.

Areas that meet the NAAQS are said to be in "attainment." The air quality in attainment areas is managed under the Prevention of Significant Deterioration Program of the CAA. The

New O₃ and PM_{2.5} Standards

On July 18, 1997, the EPA introduced new ambient air quality standards for ground-level ozone and for particulate matter (62 FR 38855 and 62 FR 38562). The EPA planned to phase out and replace the 1-hour 0.12-ppm O₃ standard with a new 8-hour 0.08-ppm standard more protective of public health. The EPA also adopted two new standards for PM_{2.5}. These were set at 15 µg/m³ annual arithmetic mean PM_{2.5} concentrations and 65 µg/m³ 24-hour average. The standard for PM₁₀ was essentially unchanged.

In response to legal challenges, however, the U.S. Court of Appeals for the District of Columbia vacated the new particulate standard and directed the EPA to develop a new standard, meanwhile reverting back to maintaining the previous PM₁₀ standards. The revised O₃ standard was not nullified, but the court ruled that the standard “cannot be enforced.”

In July 2000, the EPA formally rescinded the 8-hour 0.08-ppm O₃ standard and reinstated the 1-hour 0.12-ppm O₃ standard in the approximately 3,000 counties where it had been replaced. In February 2001, the U.S. Supreme Court affirmed the EPA’s authority to establish health-related air quality standards and affirmed that the Clean Air Act prohibits consideration of implementation costs when setting those standards. The Supreme Court, however, overturned the EPA’s procedures for implementing the standards and remanded the case back to the Appeals Court level for resolution of those and certain other issues. On March 26, 2002, the Appeals Court found the new air standards that had been subject to challenge to be neither arbitrary nor capricious and denied petitions for review except to the extent that their earlier decisions and those of the Supreme Court require action by the EPA.

On June 2, 2003, the EPA stated in a Proposed Rule (68 FR 32801) on the implementation of the 8-hour O₃ NAAQS that it intended to issue final attainment and nonattainment area designations for PM_{2.5} by December 2004 and for 8-hour O₃ by April 2004.

On April 15, 2004, a Final Rule designating and classifying areas not meeting the NAAQS for 8-hour O₃ was recently signed by the Administrator of the EPA. At the time of this writing, this Final Rule is not yet published in the *Federal Register* but is scheduled to be published by April 30, 2004. The EPA designated and classified areas under the 8-hour O₃ standard, and in a separate action finalized the first phase of the rule implementing the 8-hour O₃ standard. Designations and classifications are to take effect on June 15, 2004. The EPA will revoke the 1-hour O₃ standard 1 year after the effective date of designating attainment and nonattainment areas for the 8-hour standard. Deadlines for attainment in designated nonattainment areas extend from 2007 to 2021, depending on the severity of nonattainment. Imperial County is designated as marginal nonattainment for the 8-hour O₃ standard, and attainment is to be achieved in 3 years time.

By December 31, 2004, the EPA will finalize designations for the PM_{2.5} standards based on earlier recommendations in February 2004 from States and Tribes. Currently (as of the time of writing, April 2004), the 1-hour 0.12-ppm O₃ standard, the 150-µg/m³ 24-hour PM₁₀ standard, and the 50-µg/m³ annual PM₁₀ standard are the O₃ or PM NAAQS that are enforced.

TABLE 3.3-2 Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a	Federal Standards (NAAQS) ^c		
		Concentration ^b	Primary ^{b,d}	Secondary ^{b,e}	
Ozone (O ₃)	1-hour	0.09 ppm (180 µg/m ³)	0.12 ppm (235 µg/m ³)	Same as primary standard	
	8-hour	— ^f	0.08 ppm (157 µg/m ³) ^g		
Respirable particulate matter (PM ₁₀)	24-hour	50 µg/m ³	150 µg/m ³	Same as primary standard	
	Annual arithmetic mean	20 µg/m ³	50 µg/m ³		
Fine particulate matter (PM _{2.5})	24-hour	No separate state standard	65 µg/m ³ ^g	Same as primary standard	
	Annual arithmetic mean	12 µg/m ³	15 µg/m ³ ^g		
Carbon monoxide (CO)	8-hour	9.0 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)	None	
	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)		
	8-hour (Lake Tahoe)	6 ppm (7 mg/m ³)	—		
Nitrogen dioxide (NO ₂)	Annual arithmetic mean	—	0.053 ppm (100 µg/m ³)	Same as primary standard	
	1-hour	0.25 ppm (470 µg/m ³)	—		
Sulfur dioxide (SO ₂)	Annual arithmetic mean	—	0.030 ppm (80 µg/m ³)	None	
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (365 µg/m ³)		
	3-hour	—	—		0.5 ppm (1,300 µg/m ³)
	1-hour	0.25 ppm (655 µg/m ³)	—		—
Lead ^h (Pb)	30-day average	1.5 µg/m ³	—	—	
	Calendar quarter	—	1.5 µg/m ³		Same as primary standard
Visibility-reducing particles	8-hour	Extinction coefficient of 0.23/km; visibility of 10 mi or more (0.07–30 mi or more for Lake Tahoe) due to particles when relative humidity is less than 70%	—	—	
Sulfates	24-hour	25 µg/m ³	—	—	
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m ³)	—	—	
Vinyl chloride ^h	24-hour	0.01 ppm (26 µg/m ³)	—	—	

TABLE 3.3-2 (Cont.)

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- ^a California standards for O₃, CO (except Lake Tahoe), SO₂ (1- and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), 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*.
- ^b Concentration expressed first in units in which it was promulgated. For gaseous air pollutants, “ppm” refers to parts per million by volume, or micromoles per mole of gas. Since one mole of all gases at the same temperature and pressure occupies the same volume, a ppm value is unaffected by changes in temperature and pressure. Equivalent mass concentration units for air pollutant gases (shown in parentheses) are based on a reference temperature of (77°F) 25°C and a reference pressure of 760 torr.
- ^c National standards (other than O₃, PM, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 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 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard. (The PM_{2.5} Federal standard is not yet enforced as outlined in the text.) The 8-hour O₃ standard became effective on April 15, 2004. NAAQS are listed in 40 CFR Part 50.
- ^d National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- ^e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^f A dash indicates either no California or no Federal ambient air quality standard exists.
- ^g The PM_{2.5} Federal standard is not yet enforced. The 8-hour O₃ standard was issued by EPA on April 15, 2004.
- ^h The ARB 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.

goal of this program is to maintain a level of air quality that continues to meet the standards. Areas that do not meet one or more of the standards are designated as “nonattainment” areas for criteria pollutant(s). For regulatory purposes, remote or sparsely populated areas that have not been monitored for air quality are listed as “unclassified” and are considered to be in attainment. The CAA requires each state to produce and regularly update a State Implementation Plan (SIP) that includes a description of control strategies or measures to deal with pollution, for areas that fail to achieve NAAQS. A SIP is a plan developed at the state level that explains how the state will comply with air quality standards; a SIP is enforceable by the EPA.

The project area lies within the Salton Sea Air Basin. At present, the Salton Sea Air Basin is designated by the state as an O₃ nonattainment area and is Federally designated by the EPA as a Section 185A O₃ nonattainment area. (In this case, “Section 185A” was previously termed “transitional.”) The Section 185A transitional status means that the EPA believes the nonattainment status is due partly to transboundary migration of pollutants from Mexico, the extent of which is not accurately defined.

Out of the entire Salton Sea Air Basin, only the City of Calexico near the border crossing is classified by the State of California as a state nonattainment area for CO. This localized nonattainment area does not extend west of the Westside Main Canal and is likely the result of the high level of vehicle traffic crossing the border near this location.

The Salton Sea Air Basin is classified by the state as a nonattainment area for PM_{2.5} and is Federally classified by the EPA as a moderate nonattainment area for PM₁₀. Particulate matter levels in Imperial County come from local and agricultural sources; the EPA considers a significant fraction to be transported from nearby Mexico. These sources include a combination of windblown dust from natural and disturbed land areas, with the primary source being vehicles, including off-road vehicles that use paved and unpaved roads. Construction and agriculture also contribute to particulate levels. Recently, the United States Court of Appeals for the Ninth Circuit stated that the EPA's conclusion that PM₁₀ attainment would be achieved, except for the negative effects of transborder emissions from Mexico, is unsupported, and has mandated that the EPA reclassify Imperial Valley from a moderate to a serious nonattainment area (Opinion No. 01-71902, October 9, 2003).

Ambient air quality data nearest the proposed transmission line routes and the two alternative routes are collected at air quality monitoring stations in El Centro and Calexico operated by the Imperial County Air Pollution Control District. The El Centro monitoring station is at 150 9th Street, about 10 mi (16 km) northeast of the IV Substation; the station in Calexico nearest the project area is at 900 Grant Street, about 12 mi (19 km) east of the proposed transmission lines border crossing.

Ambient air quality data are also collected in Imperial County at monitoring sites that are farther from the projects area. These are Brawley Main Street, Westmorland West 1st Street, and Niland English Road, approximately 19, 20, and 40 mi (31, 32, and 64 km) northeast from the projects area, respectively. Within the Salton Sea Air Basin as a whole, two additional monitoring sites are located in Riverside County at Indo Jackson Street and the Palm Springs Fire Station, approximately 60 and 80 mi (97 and 129 km) northwest from the projects area, respectively. These data are not reported here because the sites are less representative of the projects area due to their distance from the proposed transmission lines.

The Secretaría del Medio Ambiente y Recursos Naturales (SEMARNAT [the Mexican Environmental Agency]) also collects ambient air quality data at 10 monitoring sites in Mexicali immediately south of Calexico across the U.S.-Mexico border. These sites are also designated as ARB sites. They are loosely clustered within an approximate radius of several miles and generally lie approximately 11 mi (18 km) east of the southern end of the proposed transmission lines and approximately 8 mi (13 km) east of the Sempra and Intergen power plants that would supply power to the transmission lines in the projects area. Figures 3.3-12 and 3.3-13 show the locations of monitoring sites that are located in the United States and Mexico border regions, respectively, including those described here.

Tables D-1 through D-8 in Appendix D show a cross section of annual data of criteria air pollutant measurements in time frames ranging from 1988 to 2001 at monitoring sites in

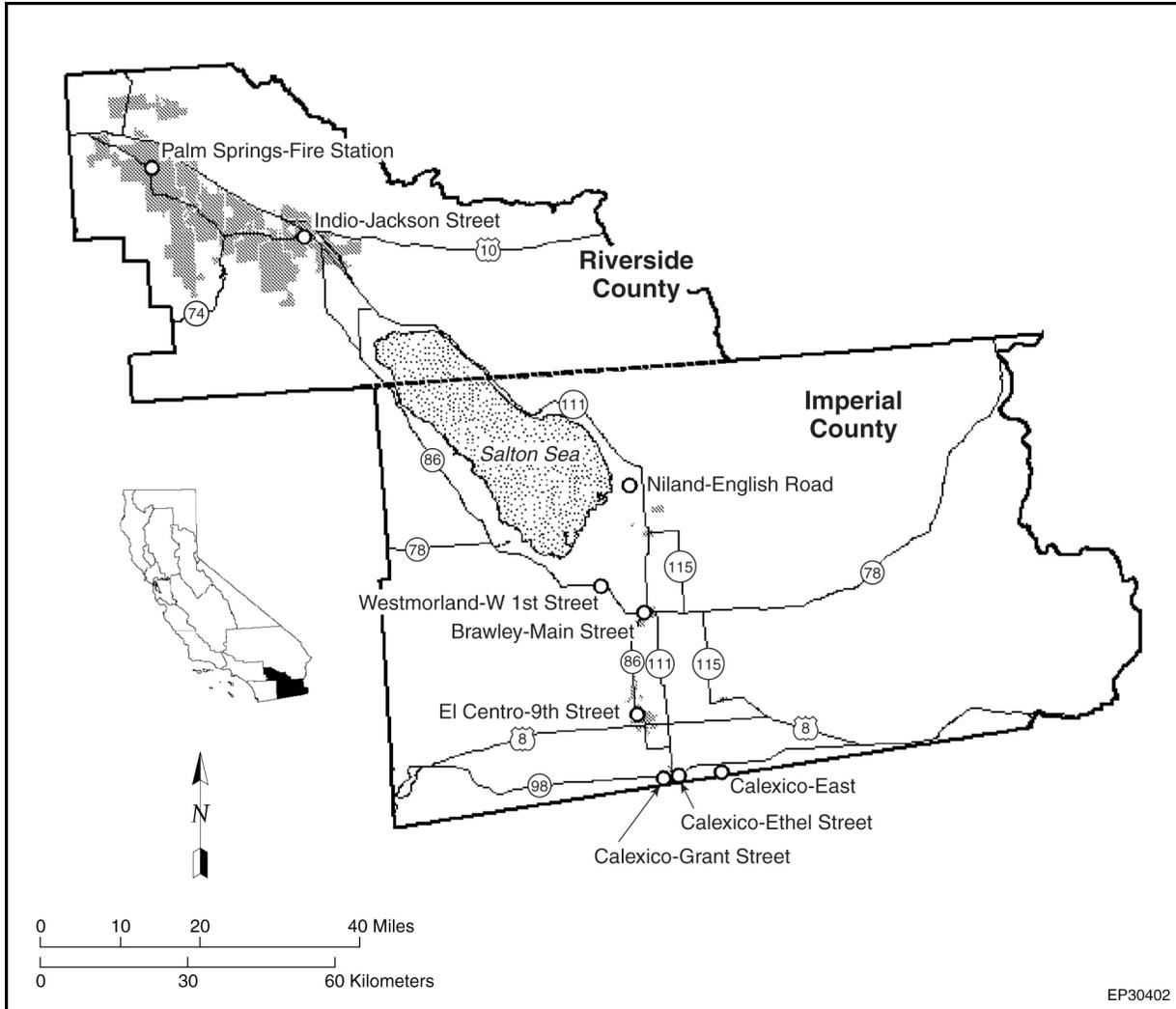


FIGURE 3.3-12 Salton Sea Air Basin Monitoring Stations ARB Map (Source: ARB 2003a)

El Centro and Calexico in Imperial County and the four monitoring sites in Mexicali described previously. Measurements in the United States were made on behalf of the ARB and in Mexico on behalf of SEMARNAT. These tables were abstracted from a larger summary database of border air quality maintained by the EPA, Technology Transfer Network, U.S.-Mexico border Information Center on Air Pollution (CICA: Centro de Información sobre Contaminación de Aire) (U.S.-México Information Center on Air Pollution) (EPA 2003d).⁴

⁴ This database was prepared by CICA from data retrieved from the EPA Aerometric Information Retrieval System (AIRS) on January 1, 2002. The EPA has since changed the AIRS to a database that is solely related to tracking the compliance of stationary sources of air pollution with EPA regulations. The Air Facility Subsystem (AIRS/AFS) information is available at <http://www.epa.gov/Compliance/planning/data/air/aboutafs.html>.

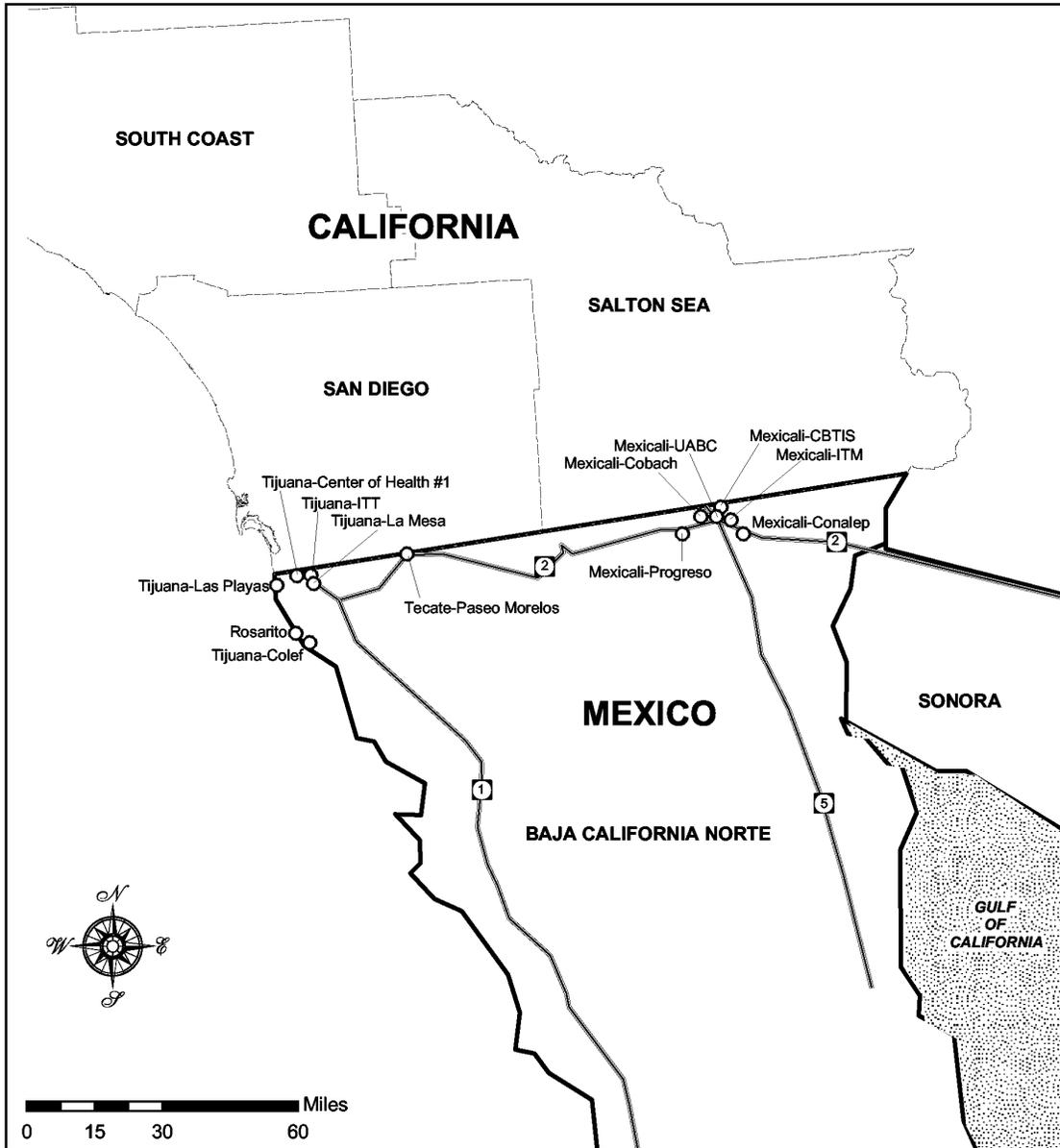


FIGURE 3.3-13 Mexico Monitoring Stations ARB Map (Source: ARB 2003a)

These tables show the annual means of 1-hour measurements of CO, NO₂, O₃, and SO₂ recorded in each year at each site. Also shown are annual means of 24-hour measurements of PM₁₀. Measurements of criteria pollutants were not made in every year at all of the sites listed or are not yet available in summary form in the CICA database. Annual arithmetic means, annual geometric means, highest annual values, and the number of observations for each air pollutant made in any year are listed.

Appendix D can be consulted for detailed information. Figures 3.3-14 through 3.3-23 plot arithmetic mean data for criteria pollutants CO, NO₂, O₃, SO₂, and PM₁₀.

Figures 3.3-14 through 3.3-18 show that the annual mean of criteria pollutants in the border region has remained fairly constant from 1992 through 2001. The only pronounced exception is a recent peaking of PM₁₀ levels in 2000 through 2001 at the Calexico East border crossing, possibly due to increased traffic activity. Figures 3.3-19 through 3.3-23 display the same data as Figures 3.3-14 through 3.3-18, but by monitoring station. As these figures indicate, the annual means of O₃, SO₂, and PM₁₀ remain much the same across the border region. However, there also appears to be a regional gradient of annual means of CO (Figure 3.3-19) and NO₂ (Figure 3.3-20); the highest levels are in Mexicali. This gradient may be associated with the large amount of vehicular activity in Mexicali, compared with the more rural Imperial County to the north. The annual means of CO and NO₂ are also highly correlated regionally, as can be observed from a side-by-side comparison of Figures 3.3-19 and 3.3-20.

The nearest Class I area to the proposed action is the Agua Tibia Wilderness located in the Cleveland National Forest, about 85 mi (137 km) to the northwest. The next nearest Class I area is the Joshua Tree National Park, nestled in the foothills of southeastern California's Mojave Desert, about 100 mi (177 km) to the north.

Ambient air concentration measurements of VOC or hydrocarbons are not recorded in Imperial County at the seven air quality monitoring sites operated either by ARB or the Imperial County Air Pollution Control District. In addition, no VOC measurement data were available for the Mexicali area as such. Thus, no VOC air concentration data are presented here. In Section 4.3, where the impacts of VOC in local O₃ formation data are discussed, emission inventory information for organic gases for Imperial County and hydrocarbons for Mexicali are used.

Ambient air concentration measurements of NH₃ are not recorded in Imperial County at the seven air quality monitoring sites operated either by ARB or the Imperial County Air Pollution Control District. In addition, no NH₃ measurement data were found for the Mexicali area. Thus, no NH₃ air concentration data are presented here. In Section 4.3, where NH₃ impacts are discussed, NH₃ emission inventory information for the San Joaquin Valley is described. No local NH₃ emission inventory data were found.

Class I Areas

Class I areas are areas of special national or regional natural, scenic, recreational, or historic value for which EPA Prevention of Significant Deterioration regulations provide special protection. For each proposed major new source or major modification that may affect a Class I area, the applicant is responsible for identifying all Class I areas within 62 mi (100 km) of the proposed source and any other Class I areas potentially affected. The proposed action does not comprise a major modification, nor is it located within 62 mi (100 km) of a Class I area.

3.4 BIOLOGICAL RESOURCES

This section describes the biological resources within the United States that could be affected by the proposed action and alternatives. These resources include habitats and organisms that occur in the vicinity of the proposed transmission line routes and the IV Substation, aquatic