

**San Joaquin Valley Communities**  
**Recommended for Additional**  
**Clean Air Resources and Public**  
**Engagement under AB 617**

Final Recommendations – July 31, 2018

## **Executive Summary**

The air quality challenges that the communities in the San Joaquin Valley face are unmatched by any other region in the nation. Despite decades of progress and significant reductions in air pollution, the San Joaquin Valley, due to its unique geography, topography, and meteorology, continues to face daunting challenges in meeting the latest federal health-based air quality standards. AB 617, if implemented properly, is expected to bring additional clean air resources and strategies to Valley communities that are burdened by socioeconomic disadvantages and air pollution despite significant emissions reductions that have already been achieved regionally.

Under state law, CARB in consultation with air districts is required to select communities for action under AB 617 by October 1, 2018. CARB has asked air districts to submit their recommendations for communities to be selected by July 31, 2018.

In developing San Joaquin Valley community recommendations for additional clean air resources and public engagement under AB 617, the Valley Air District conducted an extensive public engagement process to seek input from Valley residents, businesses, agencies, and other stakeholders through a variety of public workshops and meetings throughout the Valley. Based on this extensive public engagement effort and the District's comprehensive identification and prioritization analysis, the Valley Air District recommends the following communities for selection by CARB for the initial year of AB 617 implementation (see maps, Figures 5-7):

- ***South Central Fresno (including Calwa and Malaga)***
- ***North Bakersfield***
- ***City of Shafter***

This document provides a summary of the District's identification and prioritization analysis and detailed descriptions of the communities recommended for first-year action under AB 617. The recommended communities reflect both urban and rural characteristics and provide opportunities for immediate and expedited emissions reductions. In addition, community air monitoring may assist in further characterizing local air quality and sources of emissions that could inform future AB 617 implementation efforts.

## **Public Engagement Process for Community Identification**

In an effort to facilitate a robust public process, the District has been engaging with the public during the community identification process in a number of ways. On March 6, 2018, the District held a public workshop where staff presented information on all of the program components of AB 617, including the community identification process. At this workshop, the public provided their perspectives and ideas on which communities should be selected, and what should be considered when selecting a community.

On April 30, 2018, the District published its list of initial communities for consideration under AB 617 and solicited public comments and suggestions. On May 29, 2018, the District held a public workshop on the topic of community identification for AB 617. At this workshop, the public provided additional feedback and recommendations on community identification, prioritization, and selection methodologies.

At the workshop on May 29, 2018, among the many comments received, the public specifically supported the District's approach that priority should be given to communities that have the largest air quality challenges. The public also recommended that Housing Burden should not be among the criteria used to prioritize the initial list of Valley census tracts. Finally, the public commented that the initial list of census tracts needed to be clearer and more focused, providing more detail on which specific communities are being recommended.

Additionally, the District has been partnering with local non-profit community organizations to help enhance community dialogue, input and feedback. The District provided mini-grants to Central California Environmental Justice Network (CCEJN), Central Valley Air Quality Coalition (CVAQ), and Central Valley Asthma Collaborative (CVAC) to facilitate a series of community meetings in all eight San Joaquin Valley counties. These community meetings have fostered valuable discussion and feedback on how incentive funds should be distributed in the Valley, including ideas on how communities should be prioritized and selected.

The District also engaged Valley businesses at the above workshops and through other meetings to seek input on the District's community selection and related actions under AB 617. Furthermore, the District engaged the Citizens Advisory Committee and the Environmental Justice Advisory Group with updates and solicited their guidance relating to AB 617 implementation.

Based on this extensive public input, District staff developed the prioritization methodology described in this document and presented the analysis and recommended communities to the Governing Board on June 21, 2018, for approval. The communities recommended by District staff for first-year action under AB 617 included South Central Fresno and North Bakersfield. In addition to staff's community recommendations, the Governing Board took action to add the City of Shafter as a recommended community for CARB's consideration after extensive public comment and discussion by Board members to reflect both urban and rural communities in the District's recommendations.

**Community-Level Actions under AB 617 will Supplement Comprehensive Actions by the District to Reduce Air Pollution at the Regional Level**

For decades, the District has been engaged in developing and implementing comprehensive air quality improvement strategies to reduce air pollution in the San Joaquin Valley. As further described below, these efforts have achieved significant reductions in air pollution and have improved public health in communities across the San Joaquin Valley. While significant progress has been made, the District continues with its efforts to further reduce air pollution and meet the latest ambient air quality standards for PM2.5 and ozone. The District believes that community-specific measures to reduce air pollution under AB 617 can also help the San Joaquin Valley in its efforts to reduce air pollution regionally and attain health-based federal standards. The following figures illustrate the enormous progress that the San Joaquin Valley has experienced as a region:

**Figure 1**

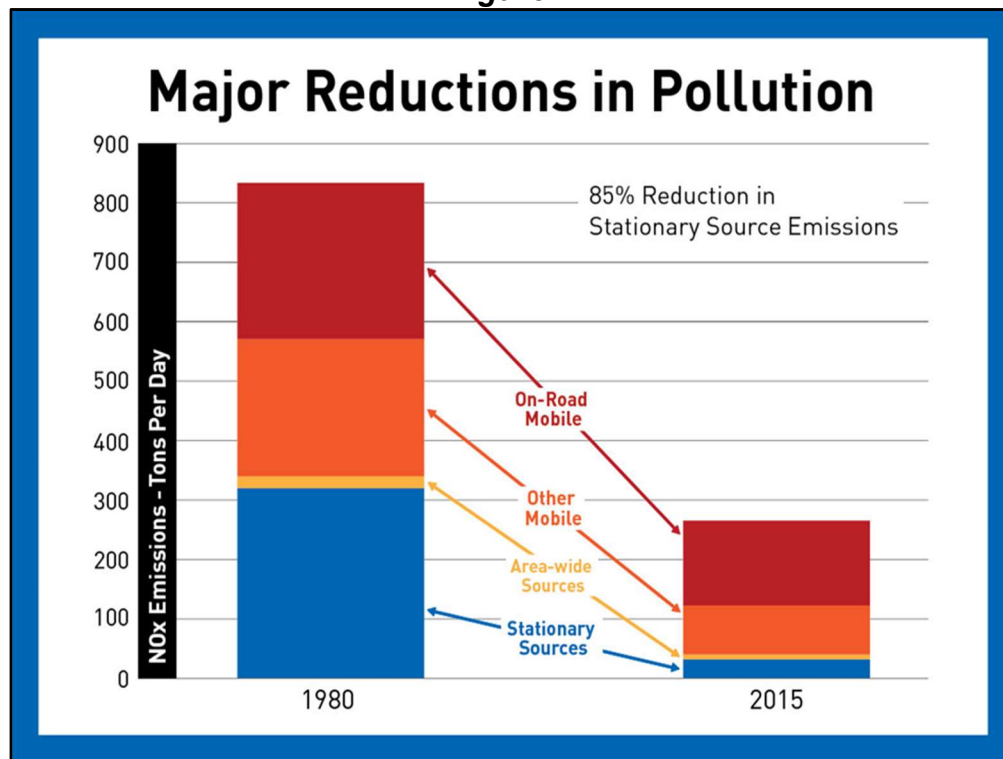


Figure 2

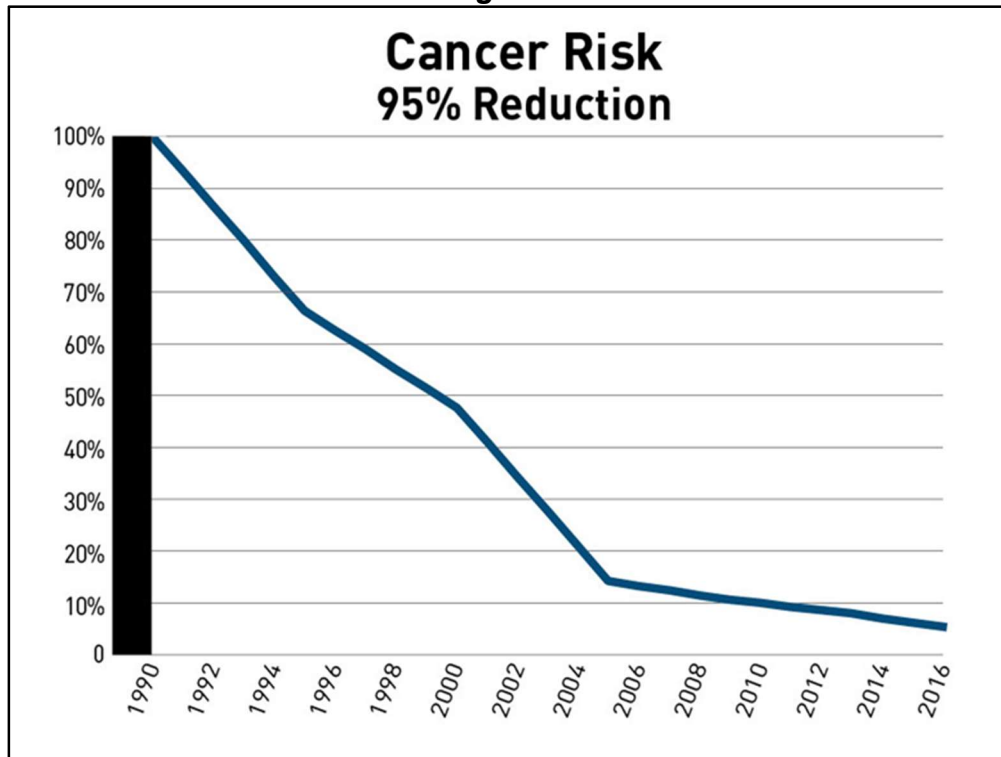


Figure 3

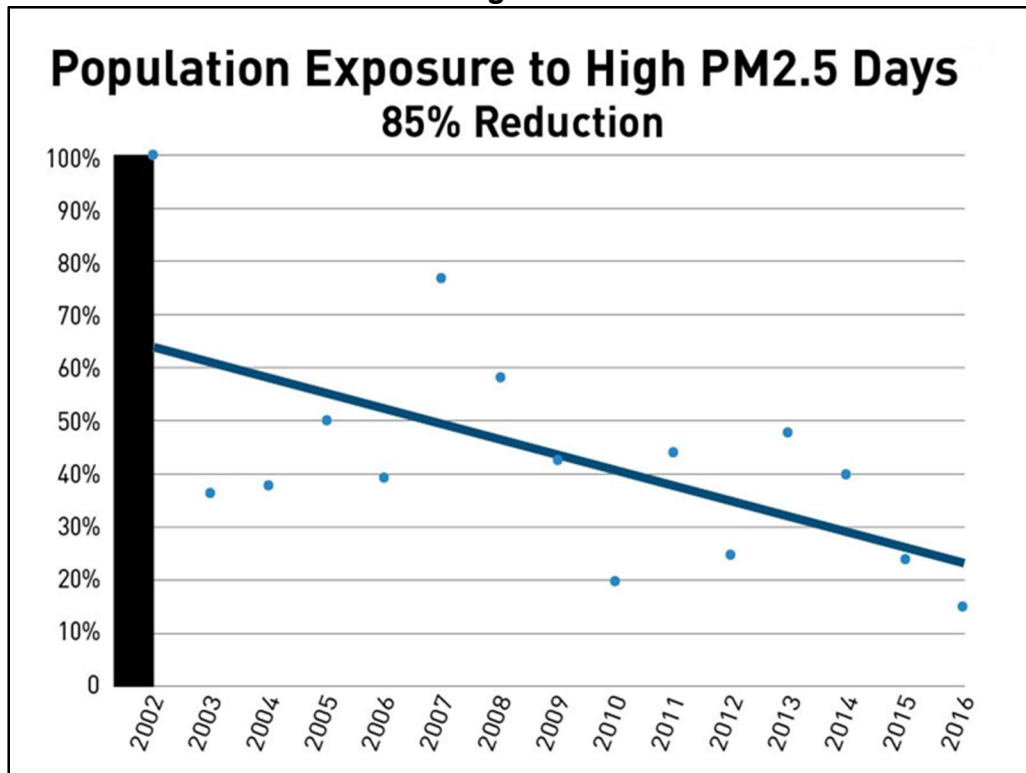
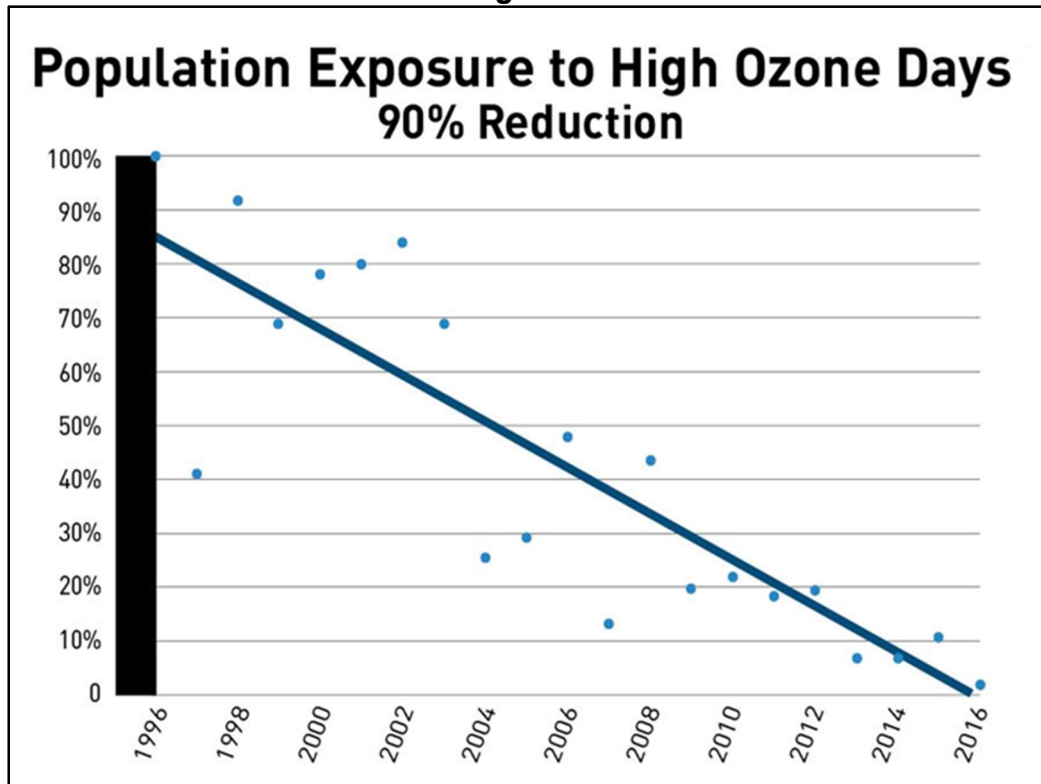


Figure 4



### District Regulatory Measures

The District has implemented a comprehensive regulatory control strategy for decades. Since 1992, the District has adopted over 600 rules to implement this aggressive control strategy. Many current rules are fourth or fifth generation, meaning that they have been revised and emissions limits have been lowered several times, as new emission control technology has become available and cost effective. Building on decades of developing and implementing active and effective air pollution control strategies, District rules implement the most stringent measures, best available control measures, and best available retrofit control technologies feasible to require in the San Joaquin Valley. Regulations implemented by the District have reduced emissions from stationary sources by over 80% to date.

The District's regulatory authority is limited to stationary sources and some area-wide sources, and the District's stringent and innovative rules, such as those for residential fireplaces, glass manufacturing, and agricultural burning, have set benchmarks for other air agencies throughout California and the nation. While California and the federal government have direct authority to regulate tailpipe emissions from mobile sources, the District has also adopted innovative regulations such as the Indirect Source Review and Employer-based Trip Reduction rules to reduce emissions from mobile sources within the District's limited jurisdiction over these sources.

### **District New and Modified Stationary Source Review**

District Rule 2201, *New and Modified Stationary Source Review*, applies to all new stationary sources and all modifications to existing stationary sources that are subject to District permit requirements. Under Rule 2201, new facilities or facilities modifying equipment must obtain an Authority to Construct (ATC) permit prior to construction, and are subject to stringent requirements, including:

- Best Available Control Technology (BACT)
- Risk Management Review (RMR)
- Toxic Best Available Control Technology (T-BACT)
- Ambient Air Quality Analysis (AAQA)

Best Available Control Technology (BACT): For each emissions unit (specific piece of equipment) that has the potential to emit over the 2 lb/day BACT threshold, the District requires the use of the best available air pollution control technology commonly used to control emissions from similar type of equipment. The District is also conducting an analysis to determine if, based on specific criteria, cleaner technologies that are not commonly used for these type of equipment could be used to further reduce emissions from the proposed equipment. This very stringent requirement ensures that the most effective air pollution control technique is utilized resulting in reduced public exposure to air pollutants and toxic air contaminants.

ATC Risk Management Review (RMR): As required under Rule 2201, the District conducts RMRs to ensure that the public exposure to toxic air contaminants is less than significant. Very complex computer models and the most conservative assumptions are used to assess the project's maximum impact on resident's health. Projects resulting in estimated significant health risk for the public are not approved.

Toxic Best Available Control Technology (T-BACT): When T-BACT is triggered under a Risk Management Review (RMR) analysis, the District conducts a T-BACT analysis to ensure the most stringent control technique is utilized resulting in reduced public exposure to toxic air contaminants. T-BACT is required for units emitting air toxic emissions that result in a cancer risk of greater than one-in-a-million, and projects that would pose significant impacts to nearby residences or businesses. Projects resulting in estimated significant health risk for the public are not approved.

Ambient Air Quality Analysis (AAQA): The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), respectively, for numerous pollutants. Under Rule 2201, the District conducts AAQAs to ensure that project related emissions would cause or make worse a violation of the State or National ambient air quality standard. This analysis ensures that the public exposure to certain criteria air pollutants is less than the maximum allowed concentration in outdoor air without harm to public.

### **AB 2588 (Air Toxics Hot Spots Information and Assessment Act)**

The District's implementation of AB 2588, California's Air Toxics "Hot Spots" Information and Assessment Act, has resulted in dramatic reductions in emissions of air toxics from existing sources in the San Joaquin Valley. Under this right-to-know law, the District has worked with 5,700 Valley facilities to quantify emissions of air toxics, determine the health risk caused by those emissions, report emissions and any significant risks through written public reports and neighborhood public meetings, and take steps to reduce such risks. As a result of these efforts, and the subsequent reductions in air toxics, since 2007 there have been no Valley facilities posing a significant risk to any Valley resident under the "Hot Spots" program.

### **Implementation of State Airborne Toxic Control Measures**

The District's integrated air toxics program incorporates Airborne Toxic Control Measure (ATCM) regulations promulgated by the Air Resources Board. State-issued ATCMs are designed to reduce toxic air emissions from various types or categories of equipment by imposing prescribed air pollution control measures. Implementing ATCMs result in reductions of toxics exposure from targeted type or category that could cause significant risks at a regional level. These ATCMs are implemented primarily through the District's permitting process. Examples of emissions sources that have drastically reduced toxic air contaminant emissions in the San Joaquin Valley because of such rules and regulations include dry cleaners, chrome platers, gas stations, and diesel internal combustion engines.

### **Implementation of Federal National Emissions Standards for Hazardous Air Pollutants (NESHAPS) and Maximum Achievable Control Technology (MACT) Standards**

The District's integrated air toxics program fulfills federal mandates under Title III of the federal Clean Air Act, which requires specific types of sources of air toxic emissions to directly reduce emissions through NESHAPS and MACT standards. These standards apply to a variety of source categories, ranging from diesel internal combustion engines to chrome platers, and from refineries to power plants.

### **Implementation of Federal New Source Performance Standards (NSPS)**

The District also fulfills federal mandates under Title I of the federal Clean Air Act, which requires specific types of new, modified, and reconstructed facilities subject to NSPS to directly reduce emissions of criteria air pollutants. These standards apply to a variety of source categories, ranging from hot mix asphalt facilities to sewage treatment plants, and from landfills to boilers.

### **District Air Quality Assistance and Guidance to Public Agencies**

The District provides assistance and guidance to other public agencies, including cities and counties in the San Joaquin Valley, to help them assess, minimize, and mitigate air quality impacts of projects undergoing their land-use approval processes, over which the District has no statutory authority. For instance, the District provides comments under the California Environmental Quality Act (CEQA) to public agencies on hundreds of proposed projects each year, designed to minimize air quality impacts. In addition,



the District maintains and makes available an extensive suite of guidance documents and tools for assessing and mitigating air quality impacts, including criteria and air toxic emissions, from stationary source projects and other development projects.

### **District Indirect Source Requirements**

District Rule 9510 is the only rule of its kind in the State of California and throughout the nation which applies to new residential and commercial development projects. The District's rule is recognized as the benchmark, or best available control, for regulating these indirect sources of emissions, such as from construction equipment and mobile sources associated with new developments. This rule requires mitigation of the growth in emissions from mobile and area sources associated with construction and operation of new development projects in the Valley.

### **District Incentive-Based Emission Reduction Programs**

The District has increasingly relied on its advocacy efforts to secure state and federal funding sources, and locally-generated funding to implement incentive programs that have become a crucial component of the District's overall strategy for achieving the emissions reductions necessary to bring the Valley into attainment and to protect public health. These programs provide an effective way to accelerate emissions reductions and encourage technology advancement, particularly from mobile sources, a sector not directly under the District's regulatory jurisdiction. Given that over 80% of the NOx emissions in the Valley come from mobile sources, these successful voluntary incentive grant programs help the Valley achieve highly cost-effective emissions reductions that are surplus of the regulatory emissions reductions.

The District operates one of the largest and most well-respected voluntary incentive programs in California. Since the District's inception in 1992, considerable funding has been invested into thousands of clean-air projects throughout the Valley. The District's incentive programs offer Valley businesses and residents the opportunity to replace their older, higher polluting equipment with newer, cleaner models. These incentive programs include options for replacing older diesel powered trucks, ag engines, tractors, locomotives, and construction equipment as well as options for replacing wood burning devices, lawn equipment and passenger vehicles. The District typically requires match funding of 30% to 70% from grant recipients. These projects have achieved significant emissions reductions with corresponding air quality and health benefits. To date, District incentive programs have invested over \$2 billion in public and private funding for clean air projects reducing more than 140,000 tons of emissions.

### **District Technology Advancement Efforts**

The District Governing Board approved creation of the Technology Advancement Program in March 2010 to accelerate development of technologies that can help reduce emissions in the Valley. Meeting EPA's increasingly stringent ozone and PM2.5 air quality standards requires significant advancements in low-emissions technologies from mobile and stationary sources. The Technology Advancement Program provides a strategic and comprehensive means to identify, solicit, and support technology advancement opportunities. Ongoing refinement of the program's technology focus

areas targets efforts to achieve the greatest impact on the Valley's attainment and other health-based goals.

### **Public Air Quality Education and Outreach**

Providing accurate and up to date air quality information to Valley residents is a top priority for the District, especially when circumstances such as wildfires overwhelm all clean air measures and lead to high pollution concentrations. Under these circumstances, the best course of action is to provide notifications to Valley residents so that sensitive individuals, in particular, can take precautions to minimize exposure. The District has expended significant resources on public notification and risk prevention measures, such as the Real-Time Air Advisory Network (RAAN) and Real-Time Outdoor Activity Risk (ROAR) Guidelines. The following are some additional examples of District outreach programs designed to help Valley residents understand air quality and what they can do to reduce their own impacts:

- Real-Time Air Quality Display (READ)
- Web-based Archived Air Quality System (WAAQS)
- Healthy Air Living
- Healthy Air Living Schools
- Healthy Air Living Partners
- Check Before You Burn
- Air Alerts

## **AB 617 First-Year Community Identification and Prioritization**

The Valley's air quality challenges and large number of disadvantaged communities warrant greater attention by the state as they identify communities and direct resources for action under AB 617. The District hopes that all disadvantaged communities in the San Joaquin Valley will be addressed by the state through this process in the coming years.

AB 617 mandates a number of program areas, including emissions reporting, community air monitoring, and the development of community emissions reduction plans. Successfully implementing these wide-ranging and extensive AB 617 mandates will require significant initial and ongoing resources. Based on current state funding levels and the proposed funding in the state's 2018-19 budget, the District estimates that up to three communities can be addressed by the District on an annual basis. CARB has indicated that up to ten communities statewide will be selected for first-year action under AB 617.

In identifying the potential list of communities to be addressed under AB 617, the District included communities that met either of the following criteria:

- 1. Top 30% most impacted communities within California, as determined by CalEnviroScreen, that are located within the San Joaquin Valley:** The District believes that the true burden on a community must include cumulative burden from multiple factors including socioeconomic conditions and health impacts from other causes including air pollution. The state has developed and utilizes CalEnviroScreen as the primary tool for identifying disadvantaged communities in California. The ranking methodology in CalEnviroScreen is based on the overall cumulative burdens derived from the following socioeconomic and health risk factors:
  - **Ozone:** Mean of summer months (May-October) of the daily maximum 8-hour ozone concentration (ppm), averaged over three years (2012 to 2014).
  - **PM2.5:** Annual mean concentration of PM2.5 (average of quarterly means,  $\mu\text{g}/\text{m}^3$ ), over three years (2012 to 2014).
  - **Diesel particulate matter:** Spatial distribution of gridded diesel PM emissions from on-road and non-road sources for a 2012 summer day in July (kg/day).
  - **Drinking water contaminants:** Drinking water contaminant index for selected contaminants.
  - **Pesticide use:** Total pounds of selected active pesticide ingredients (filtered for hazard and volatility) used in production-agriculture per square mile, averaged over three years (2012 to 2014).
  - **Toxic releases from facilities:** Toxicity-weighted concentrations of modeled chemical releases to air from facility emissions and off-site incineration (averaged over 2011 to 2013).

- **Traffic density:** Sum of traffic volumes adjusted by road segment length (vehicle-kilometers per hour) divided by total road length (kilometers) within 150 meters of the census tract boundary (2013).
  - **Cleanup sites:** Sum of weighted sites within each census tract, i.e., scored on a weighted scale of 0 to 12 in consideration of both the site type and status.
  - **Groundwater threats:** Sum of weighted scores for sites within each census tract.
  - **Hazardous waste generators and facilities:** Sum of weighted permitted hazardous waste facilities and hazardous waste generators within each census tract (hazardous waste data is from 2012 to 2014).
  - **Impaired water bodies:** Summed number of pollutants across all water bodies designated as impaired within the area (2012).
  - **Solid waste sites and facilities:** Sum of weighted solid waste sites and facilities (as of December 2016).
  - **Asthma:** Spatially modeled, age-adjusted rate of emergency department (ED) visits for asthma per 10,000 (averaged over 2011 to 2013).
  - **Cardiovascular disease:** Spatially modeled, age-adjusted rate of emergency department (ED) visits for AMI per 10,000 (averaged over 2011 to 2013).
  - **Low birth weight infants:** Percent low birth weight (averaged over 2006 to 2012).
  - **Educational attainment:** Percent of the population over age 25 with less than a high school education (5-year estimate, 2011 to 2015).
  - **Housing burdened low income households:** Percent of households in a census tract that are both low income (making less than 80% of the HUD Area Median Family Income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs). (5-year estimates, 2009 to 2013).
  - **Linguistic isolation:** Percent limited English-speaking households (2011 to 2015).
  - **Poverty:** Percent of the population living below two times the federal poverty level (5-year estimate, 2011 to 2015).
  - **Unemployment:** Percent of the population over the age of 16 that is unemployed and eligible for the labor force. Excludes retirees, students, homemakers, institutionalized persons except prisoners, those not looking for work, and military personnel on active duty (5-year estimate, 2011 to 2015).
2. **Communities with spatial distribution of gridded diesel PM emissions that exceed 10 kg/day from on-road and non-road sources, as determined by CalEnviroScreen:** Diesel particulate emissions are the single largest air pollution contributor to cancer health risk in the Valley and state. CARB has estimated that about 70% of total known cancer risk related to air toxics in California is attributable to diesel particulate matter.

Using the above criteria, the District initially identified 645 census tracts across the Valley. The District then agglomerated these census tracts and surrounding localities

into 299 identifiable communities throughout the Valley (see Attachment A for community boundary maps).

In more detail, the District first combined census tracts across the Valley into groups, where appropriate, for each city in the Valley. For the urban areas with larger populations, the census tracts for these cities were grouped into subgroups of census tracts to represent various communities within these cities. In these larger cities, the communities were defined as similar-sized geographic areas to allow for a more equitable assessment of which areas are more densely populated. Natural breaks were used to form these sub-city communities, such as freeways, major roadways, or natural features such as rivers.

The naming convention used to denote the location of each community in the larger urban areas was based on compass directions (e.g. Northwest Fresno, Southeast Fresno, etc.). For consistency, the following schemes were used to name the communities, depending on the size and shape of the larger urban area.

NW	N	NE
W	C	E
SW	S	SE

NW	N	NE
WNW	NC	ENE
WSW	SC	ESE
SW	S	SE

NW	NNW	NNE	NE
W	WC	EC	E
SW	SSW	SSE	SE

### **Prioritizing Communities for Action under AB 617**

To ensure that community prioritization was conducted in a manner that focused on air pollution exposure and socioeconomic vulnerability in accordance with CARB's *Draft Community Air Protection Blueprint*, the following factors were used by the District to prioritize the identified communities for action under AB 617:

- **Population-weighted exposure to high concentrations of ozone and PM2.5:** Although a community as a whole may be designated as non-attainment under the federal Clean Air Act, the frequency by which a community is exposed to high levels of ozone or PM2.5 concentrations varies greatly throughout the San Joaquin Valley. This is also true with respect to the magnitude of peak concentration experienced in each community. The District believes that communities where a greater portion of the population experiences higher frequency and magnitude of ozone and PM2.5 concentrations should be prioritized.
- **Exposure to PM2.5 vs ozone:** Although exposure to high levels of ozone has an impact to public health, numerous studies have indicated that prolonged exposure to high concentrations of PM2.5 has an even greater impact on health, including decreased lung function, hypertension, heart disease, cancer, and heart failure. Due to this, the District recognizes that PM2.5 has a more severe health impact than ozone, and should be prioritized as such.
- **Poverty:** Wealth influences health due to its influence over one's living conditions, nutrition, occupation, and access to health care and other health-promoting resources. For example, studies have shown a stronger effect of air pollution on mortality and childhood asthma among low income communities. Other studies have found that neighborhood-level income modifies the relationship between particulate air pollution and preterm birth as well as between traffic and low birth weight, with mothers living in low income neighborhoods having higher risk of both outcomes.

The following factors were used to assign a prioritization score to each of the 299 defined communities:

**1. Community PM2.5 air quality: based on days when the 24-hour average exceeded concentration levels of 12  $\mu\text{g}/\text{m}^3$ , 35  $\mu\text{g}/\text{m}^3$ , 55  $\mu\text{g}/\text{m}^3$  and 65  $\mu\text{g}/\text{m}^3$**

To analyze the number of days that each community exceeded the defined concentrations levels for PM2.5, the District used gridded air quality data sets prepared for the Web-based Archived Air Quality (WAAQ) System, which is based on correlation analyses between gridded photochemical modeling fields from the Valley's attainment plans and recent air monitoring data.

With the gridded datasets prepared, the number of exceedances per year for each threshold and for each census tract in the Valley could be estimated. This analysis was conducted for the years 2014-2016, and an exceedance average over these 3 years was calculated for each threshold. For the various thresholds defined above, each was assigned a different weight to place more emphasis on exceedances of higher concentrations, since these have a much higher impact on public health. The weights for the 12  $\mu\text{g}/\text{m}^3$ , 35  $\mu\text{g}/\text{m}^3$ , 55  $\mu\text{g}/\text{m}^3$  and 65  $\mu\text{g}/\text{m}^3$  thresholds were defined as 1, 10, 100, and 1,000, respectively. The exceedances in each community were multiplied by their respective weights and summed to provide an overall PM2.5 pollution burden.

## **2. Community ozone air quality: based on days when the 8-hour average exceeded the 70 ppb, 75 ppb, and 84 ppb federal standards**

Using the same dataset constructed for the PM2.5 exceedance analysis, and using the same approach, an estimated number of 8-hour average ozone exceedances was calculated for each census tract in the Valley. Similar to PM2.5, for the various thresholds defined above, each was assigned a different weight to place more emphasis on exceedances of higher concentrations, since these have a much higher impact on public health. The weights for the 70 ppb, 75 ppb, and 84 ppb thresholds were defined as 1, 10, and 100 respectively. The exceedances in each community were multiplied by their respective weights and summed to provide an overall ozone pollution burden.

## **3. PM2.5 has greater health impact than ozone**

Since exposure to high concentrations of PM2.5 has a greater impact on human health compared to exposure to ozone, a higher weight was placed on PM2.5 exceedances for each census tract. Health studies have demonstrated that the health benefit of attaining the PM2.5 standard is 100 times higher than attaining the ozone standard. Based on this, an overall weight of 100 was used for the PM2.5 pollution burden score, while a weight of 1 was used for the ozone pollution burden score, to place this emphasis on the importance of PM2.5 exceedances over ozone.

## **4. Population of the community**

Considering the population of the census tracts within each community is also key in that more populated communities that are exposed to high concentrations of PM2.5 and ozone reflect a larger public health issue. Although some communities may experience larger air quality issues, if the population is low in the area, the overall public health impact may be smaller than other highly populated communities with fewer PM2.5 and ozone exceedances. This concept is key in determining which communities should be prioritized. With an overall air pollution burden score calculated between PM2.5 and ozone exceedances, which was a sum of these two values, this overall value was then multiplied by the community's population to provide a population weighted pollution burden score.

## 5. Poverty levels in the community

Since poverty is an indicator of the potential for many other health issues, it is another key factor to consider in determining the prioritization of the Valley's communities. Based on CalEnviroScreen data, poverty levels were assessed for each census tract and combined to represent a poverty level for each Valley community. The overall population weighted pollution burden score for each community was then multiplied by the poverty level to provide an overall score based on air quality, population, and poverty.

The District's community prioritization methodology utilizes the concepts recommended in CARB's *Draft Community Air Protection Blueprint*, as follows:

- **Exposure to air pollution:** The District conducted analyses focused on population-weighted exposure to ozone and PM2.5 pollutant concentrations exceeding various federal standards based on recent air quality modeling analysis. In addition, the District's initial screening process of the Valley's census tracts placed a large focus on the level of diesel particulate matter (DPM) in each tract, based on information from CalEnviroScreen. Since DPM is an important indicator of exposure to toxic emissions and cancer risk, the overall assessment had a focus on both community air quality conditions and cancer risk.
- **Sensitive populations:** As described earlier, the identification and prioritization analysis included population-weighted metrics, which in many cases resulted in more heavily populated communities being ranked higher than more sparsely populated areas, when both areas had similar air quality conditions. As the District believes that resources available under AB 617 should benefit as many Valley residents as possible, this population-weighted approach was key.
- **Other measures of vulnerability to air pollution:** The prioritization methodology described in this document also relied upon the poverty level of the community, as poverty is a key indicator of a number of health parameters, including nutrition, occupation, and access to health care. In addition, as the District used the overall CalEnviroScreen score in its initial assessment of Valley census tracts, a wealth of other environmental indicators were included, such as asthma rates, heart disease, low birth weights, and much more.

Through the public engagement process, the District also received recommendations from the public for various and specific communities to be selected. Except for forests, the communities recommended were included and considered in this assessment. The suggestion that forested lands of the District should be considered as a community was not included in this assessment, except for populated forest areas, since AB 617 is focused on the health of people.



## **Final Recommendation of Valley Communities for Initial Year of AB 617**

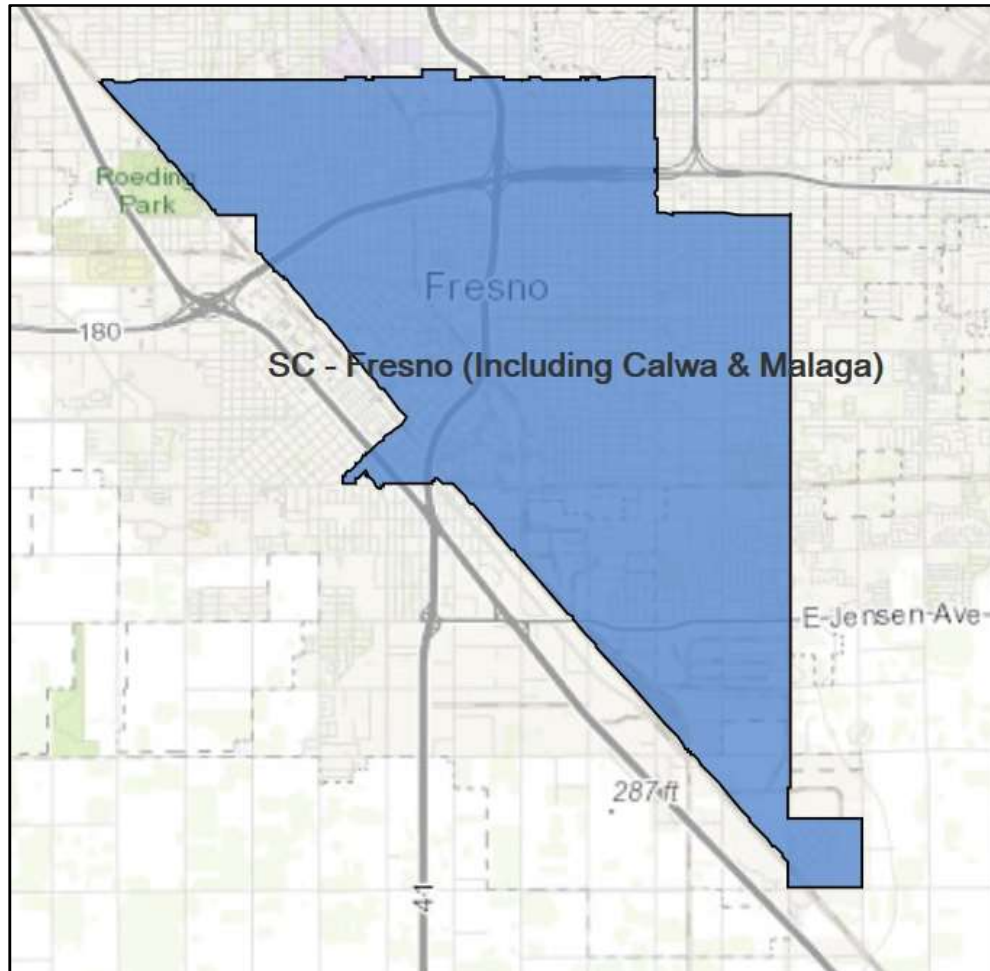
Utilizing the above methodology, identified communities were evaluated to provide a prioritized list for the entire San Joaquin Valley (see Attachment B). Based on the results of the District's analysis and list of prioritized Valley communities, for the initial year of AB 617, the District recommends that the following communities be selected by CARB and which program areas should be implemented in the initial year. In addition, the following provides a brief description of each recommended community. Once selected by CARB, the District will evaluate and develop community air monitoring plans and community emission reduction programs as necessary under AB 617.

### **South Central Fresno (including Calwa and Malaga)**

The community of Fresno is the largest metropolitan area in the San Joaquin Valley, the fifth largest city in California, and is the largest inland city in California. The current estimated population for Fresno is over 530,000. A number of heavily trafficked freeways transverse through the City of Fresno, including highways 99, 41, 180, and 168, contributing a significant amount to the mobile source emissions in the community. In addition to the area-wide sources of pollution, the large population in the area also contributes to emissions from a variety of consumer products. The southwest portion of Fresno also includes a number of industrial sources of emissions. Specifically, South Central Fresno (Figure 5) is a densely populated community within the City of Fresno, and is downwind of emissions from the northern portion of Fresno. This community also includes the major roadways of Highways 180 and 41, and their interchange. In addition, emissions reductions in this southern community of Fresno will improve air quality in other communities and cities downwind from the Fresno urban area. This defined community in Fresno also includes the disadvantaged areas of Calwa and Malaga.

Geographically this community is bounded by Golden State Boulevard to the west, McKinley Avenue to the north, Chestnut Avenue to the east, and includes the small community of Malaga at the southern tip of the boundary. This area encompasses the majority of downtown Fresno and includes a variety of areas, including hospitals, schools, businesses, and densely populated residential areas. The total population in this South Central Fresno community is estimated to be 89,784.

**Figure 5 Community of South Central Fresno**



The South Central Fresno community is impacted across a number of health indicators. The following table summarizes the average and highest percentile scores (based on statewide comparison) from CalEnviroScreen among the census tracts located with the community boundaries for a number of key indicators. As this summary indicates, the South Central Fresno community includes high average percentiles among its census tracts within the majority of indicators, with many averages exceeding the 90th percentile for the state. Specifically, the average Overall CalEnviroScreen Score and Population Characteristics values are both above the 97th percentile. It should be noted that this community includes the census tract with the highest Population Characteristics score in the entire state, which represents a number of health and socioeconomic factors (asthma, cardiovascular disease, low birth weight, educational attainment, housing burdened low-income households, linguistic isolation, poverty, and unemployment). This community includes census tracts with health indicators that exceed the 97th percentile in a majority of the listed categories, clearly indicating that this community includes areas heavily impacted by environmental challenges.

**Table 1 Summary of Health Indicators among Census Tracts in South Central Fresno Community (Source: CalEnviroScreen 3.0)**

<b>Health Indicator</b>	<b>Average Percentile of Census Tracts in Community</b>	<b>Highest Percentile of all Census Tracts in Community</b>
Overall CES Score	97.07	99.88
Asthma	92.93	97.58
Cardiovascular Disease	88.30	99.42
Low Birth Weight	83.84	98.71
Poverty	95.76	99.92
Unemployment	89.53	98.45
Population Characteristics	97.26	100.00
Pollution Burden	86.03	99.77
Diesel Particulate Matter	90.32	97.01
Traffic Density	36.82	72.80
Toxics Releases from Facilities	81.61	99.92

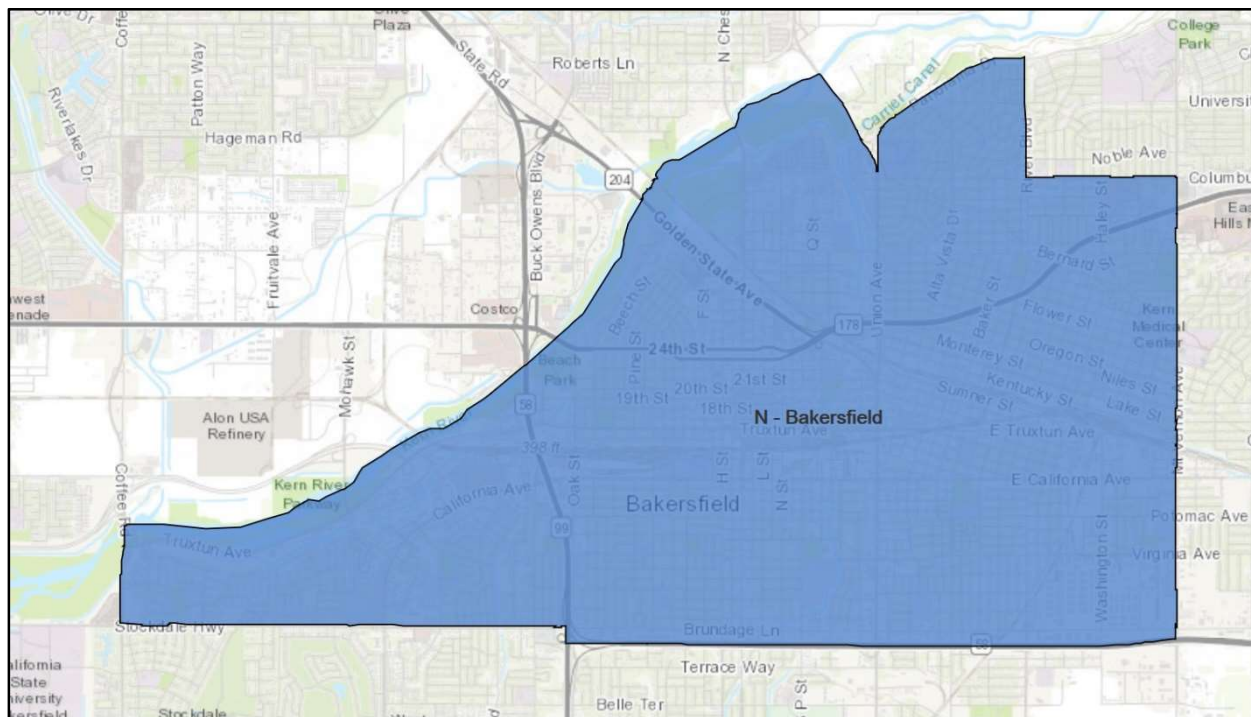
Based on the District’s extensive modeling analysis, the South Central Fresno community was found to have exceeded the 24-hour average PM2.5 concentration prioritization factor levels of 12, 35, 55, and 65  $\mu\text{g}/\text{m}^3$  a total of 136, 23, 7, and 4 days, annually, on average during the 2012-2014 period, respectively. In addition, this community was found to have exceeded the 8-hour average ozone concentration prioritization factor levels of 70, 75, and 84 ppb a total of 41, 22, and 5 days, annually, on average during the 2012-2014 period, respectively. Based on these results, the South Central Fresno community has one of the higher pollutant scores in the Valley, at 0.7 (on a scale of 0 to 1). In addition, this community also includes a number of high poverty areas, resulting in an overall poverty score of 0.8 on a scale of 0 to 1. Based on these scores, combined with its high population, this community ranked the highest in the prioritization assessment.

### **North Bakersfield**

The community of Bakersfield is the largest city in Kern County. The current estimated population for Bakersfield is over 386,000. A number of heavily trafficked freeways transverse through the City of Bakersfield, including Interstate 5, and highways 99 and 58, contributing a significant amount to the mobile source emissions in the community. In addition to the area-wide sources of pollution, the large population in the area also contributes to emissions from a variety of consumer products. The oil and gas production industry is prevalent in Kern County, and the associated businesses operate in and around the City of Bakersfield. Specifically, North Bakersfield (Figure 6) is a densely populated community within the City of Bakersfield and is upwind to other communities in the urban area, and includes major roadways such as Highways 99, 204, and 178. As such, emissions reductions here will benefit other downwind communities as well.

Geographically this community is bounded by the Kern River to the north, Mt. Vernon Avenue to the east, and Stockdale Highway and Highway 58 to the south. This area encompasses the majority of downtown Bakersfield and includes hospitals, schools, businesses, and densely populated residential areas. The total population in this North Bakersfield community is estimated to be 68,748.

**Figure 6 Community of North Bakersfield**



The North Bakersfield community is impacted across a number of health indicators. The following table summarizes the average and highest percentile scores (based on statewide comparison) from CalEnviroScreen among the census tracts located within the community boundaries for a number of key indicators. As this summary indicates, the North Bakersfield community includes high average percentiles among its census tracts within the many indicators, with many averages exceeding the 80th percentile for the state. Specifically, the average Asthma rate for this community exceeds the 92nd percentile for the state. The North Bakersfield community also includes census tracts that rank very high among all tracts across the state, specifically many that rank above the 99th percentile. Notably, this community includes tracts that rank above the 99th percentile for Overall CES Score, Asthma, Poverty, Unemployment, and Population Characteristics. This community includes census tracts with health indicators that exceed the 97th percentile in a majority of the listed categories, clearly indicating that this community includes areas heavily impacted by environmental challenges.

**Table 2 Summary of Health Indicators among Census Tracts in North Bakersfield Community (Source: CalEnviroScreen 3.0)**

<b>Health Indicator</b>	<b>Average Percentile of Census Tracts in Community</b>	<b>Highest Percentile of all Census Tracts in Community</b>
Overall CES Score	83.55	99.24
Asthma	92.46	99.43
Cardiovascular Disease	84.82	97.05
Low Birth Weight	75.25	97.19
Poverty	84.85	99.03
Unemployment	75.71	99.92
Population Characteristics	87.98	99.88
Pollution Burden	64.32	89.49
Diesel Particulate Matter	87.87	97.05
Traffic Density	41.80	83.14
Toxics Releases from Facilities	19.94	39.98

Based on the District’s extensive modeling analysis, the North Bakersfield community was found to have exceeded the 24-hour average PM<sub>2.5</sub> concentration prioritization factor levels of 12, 35, 55, and 65 µg/m<sup>3</sup> a total of 160, 29, 8, and 6 days, annually, on average, during the 2012-2014 period, respectively. In addition, this community was found to have exceeded the 8-hour average ozone concentration prioritization factor levels of 70, 75, and 84 ppb a total of 38, 18, and 2 days, annually, on average during the 2012-2014 period, respectively. Based on these results, the North Bakersfield community has a very high pollutant score in the Valley, at 0.93 (on a scale of 0 to 1). In addition, this community also includes a number of high poverty areas, resulting in an overall poverty score of 0.68 on a scale of 0 to 1. Based on these scores, combined with its high population, this community ranked second highest in the prioritization assessment.

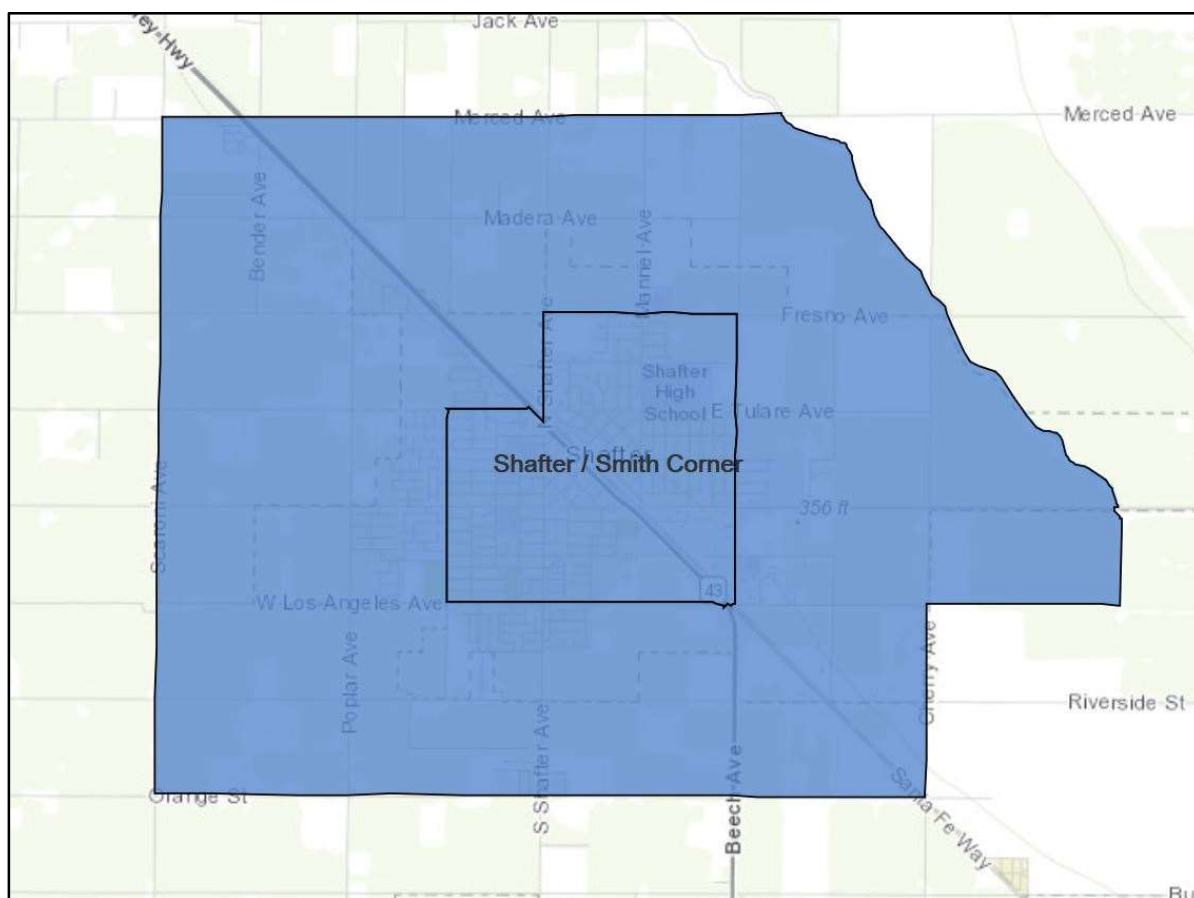
### **City of Shafter**

Based on recommendations from the public and in an effort for the initial year of AB 617 to be inclusive of both urban and rural areas, the City of Shafter was also selected for recommendation by the District Governing Board at the June 21, 2018, public hearing. As a rural area, Shafter will complement the urban area selections of Fresno and Bakersfield to form a more balanced initial year of AB 617 implementation. The rural community of Shafter in Kern County has a current estimated population of over 19,000, and is influenced by rural sources of emissions, including the agricultural and oil and gas production industries. In addition, major roadways in the community include Highway 43 and the Lerdo Highway, both crossing directly through Shafter and contributing to mobile source emissions in the area. Locomotive emissions also influence the community as railroad tracks run parallel to Highway 43. Local area-wide sources such as gas stations, commercial cooking, and consumer products also contribute to the community’s emissions levels. Due to this, the community emissions

reduction plans that will be developed for all of the recommended selected areas in the Valley will include strategies that address both urban sources of emissions as well as rural sources that contribute to Shafter's air quality challenges.

Geographically this community is bounded by Merced Avenue to the north, Dresser Avenue and an irrigation canal to the east, Orange Street to the south, and Scaroni Avenue to the west. This area encompasses the entire boundaries of the City of Shafter, along with the small community of Smith Corner to the south, as well as the nearby rural areas surrounding the area. The City of Shafter includes businesses, schools, and residential areas.

**Figure 7 Community of Shafter**



The Shafter community is impacted across a number of health indicators. The following table summarizes the average and highest percentile scores (based on statewide comparison) from CalEnviroScreen among the census tracts located with the community boundaries for a number of key indicators. As this summary indicates, the Shafter community includes high average percentiles among its census tracts within many indicators, with many averages exceeding the 70th percentile for the state. Specifically, the average Overall CES Score for this community exceeds the 86th percentile for the state, while the average Cardiovascular Disease score exceeds the

85th percentile for the state. The Shafter community also includes census tracts that rank very high among all tracts across the state, specifically some that rank above the 90th percentile. Notably, this community includes tracts that rank above the 90th percentile for Poverty and Unemployment, with Unemployment ranking above the 98th percentile. This community includes census tracts with health indicators that exceed the 80th percentile in a number of the listed categories, indicating that this community includes areas impacted by environmental challenges.

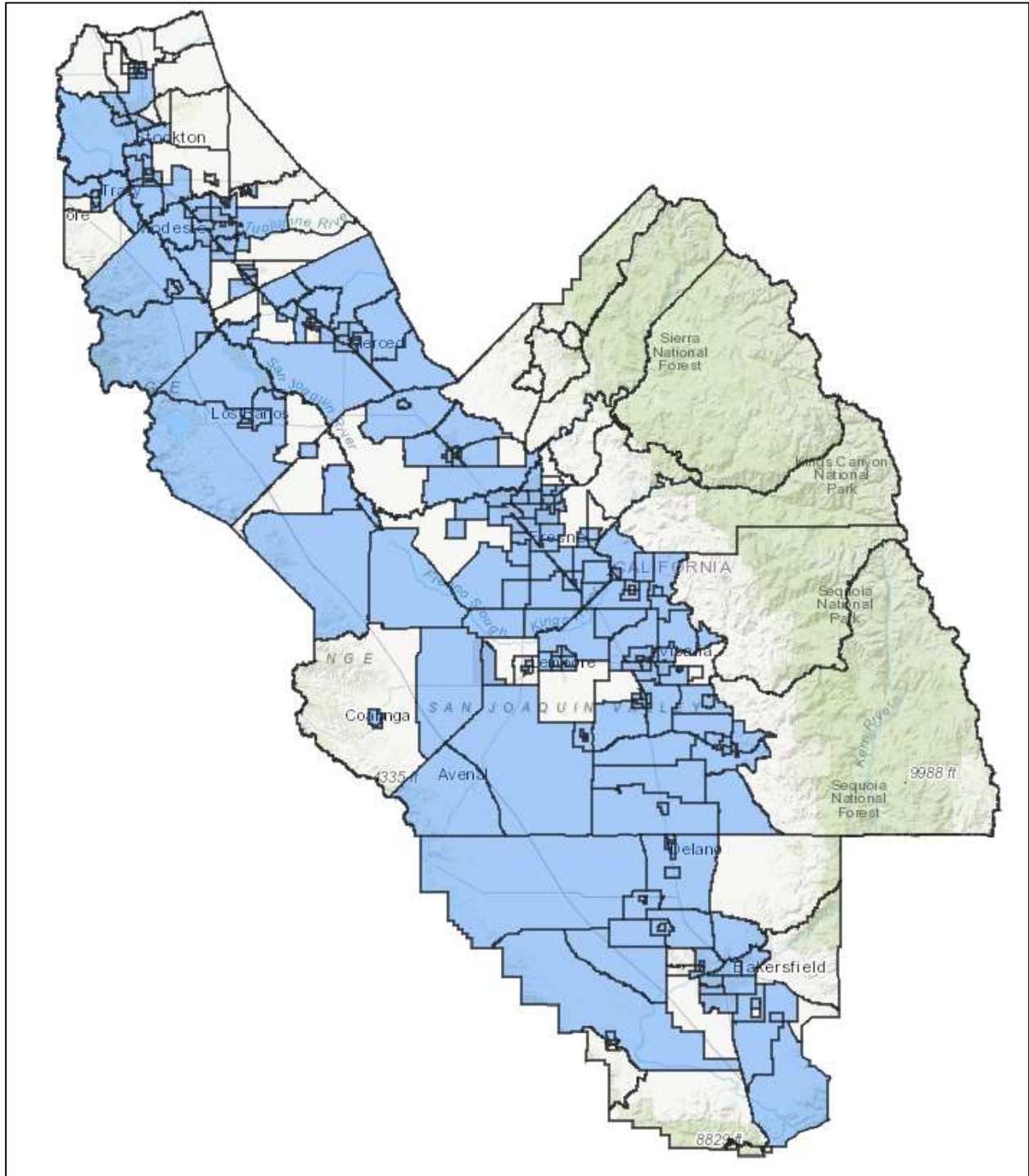
**Table 3 Summary of Health Indicators among Census Tracts in Shafter Community (Source: CalEnviroScreen 3.0)**

Health Indicator	Average Percentile of Census Tracts in Community	Highest Percentile of all Census Tracts in Community
Overall CES Score	86.00	89.72
Asthma	52.00	52.11
Cardiovascular Disease	85.82	85.93
Low Birth Weight	54.26	63.52
Poverty	84.53	97.90
Unemployment	75.45	98.27
Population Characteristics	77.85	86.06
Pollution Burden	82.55	84.36
Diesel Particulate Matter	26.36	30.92
Traffic Density	8.32	9.65
Toxics Releases from Facilities	54.98	55.46

Based on the District’s extensive modeling analysis, the Shafter community was found to have exceeded the 24-hour average PM2.5 concentration prioritization factor levels of 12, 35, 55, and 65 µg/m<sup>3</sup> a total of 94, 12, 4, and 2 days, annually, on average, during the 2012-2014 period, respectively. In addition, this community was found to have exceeded the 8-hour average ozone concentration prioritization factor levels of 70, 75, and 84 ppb a total of 35, 16, and 1 days, annually, on average during the 2012-2014 period, respectively. Based on these results, the Shafter community has a pollutant score of 0.33 (on a scale of 0 to 1). In addition, this community also includes a number of high poverty areas, resulting in an overall poverty score of 0.65 on a scale of 0 to 1. As discussed above, based on recommendations from the public and in an effort for the initial year of AB 617 to be inclusive of both urban and rural areas, the City of Shafter was also selected by the District Governing Board for recommendation to CARB for first-year implementation.

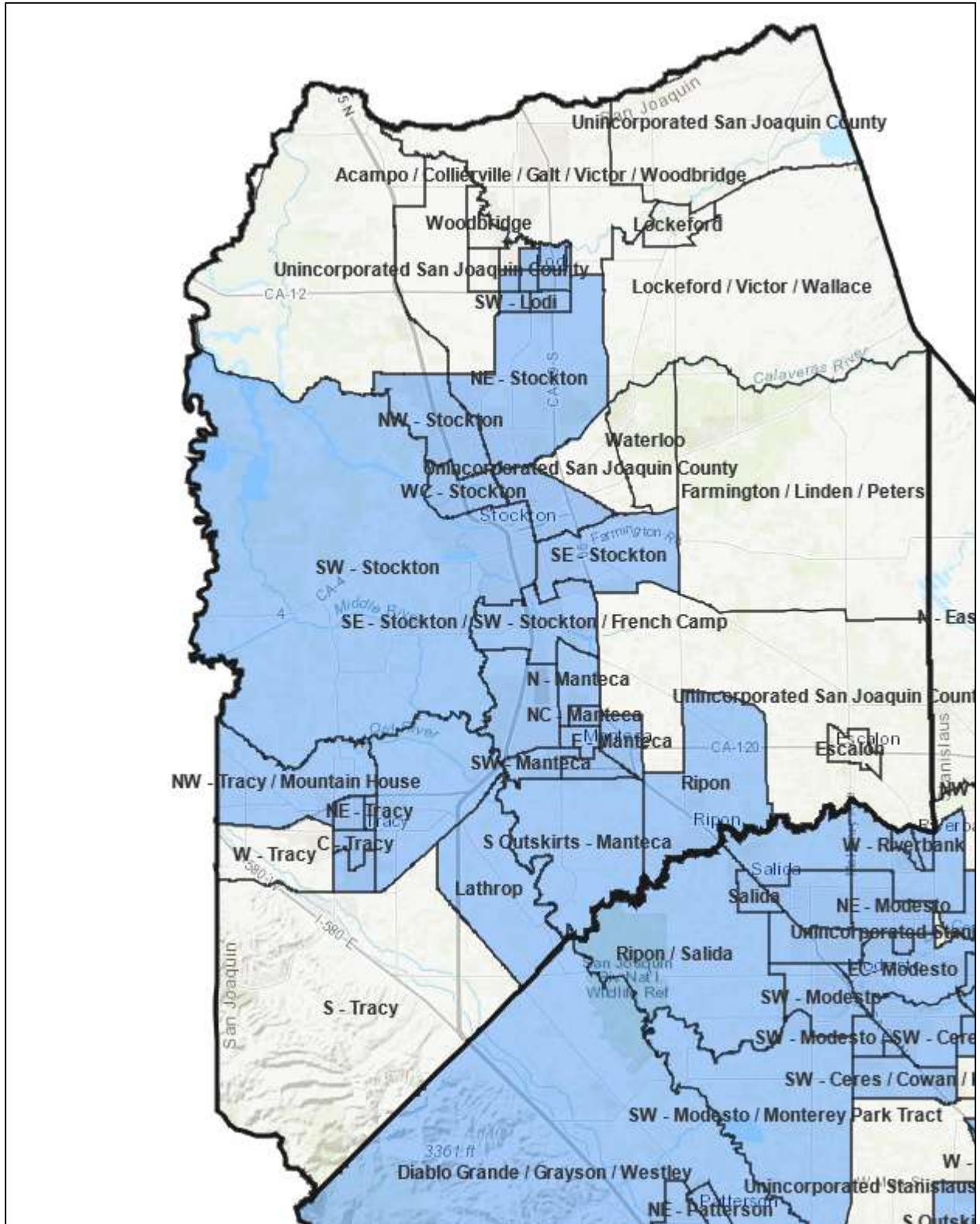
# Maps of Valley Communities for AB 617

## San Joaquin Valley

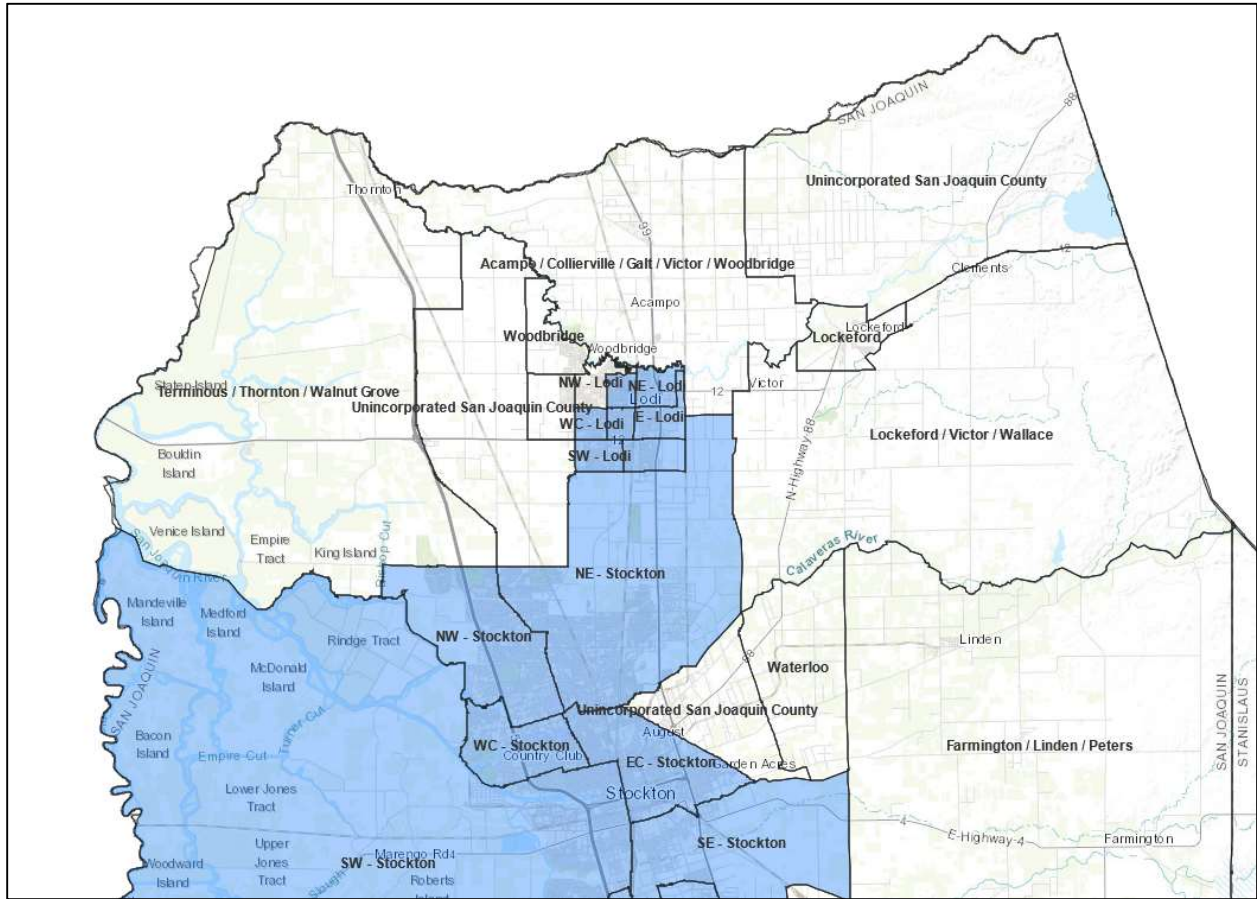




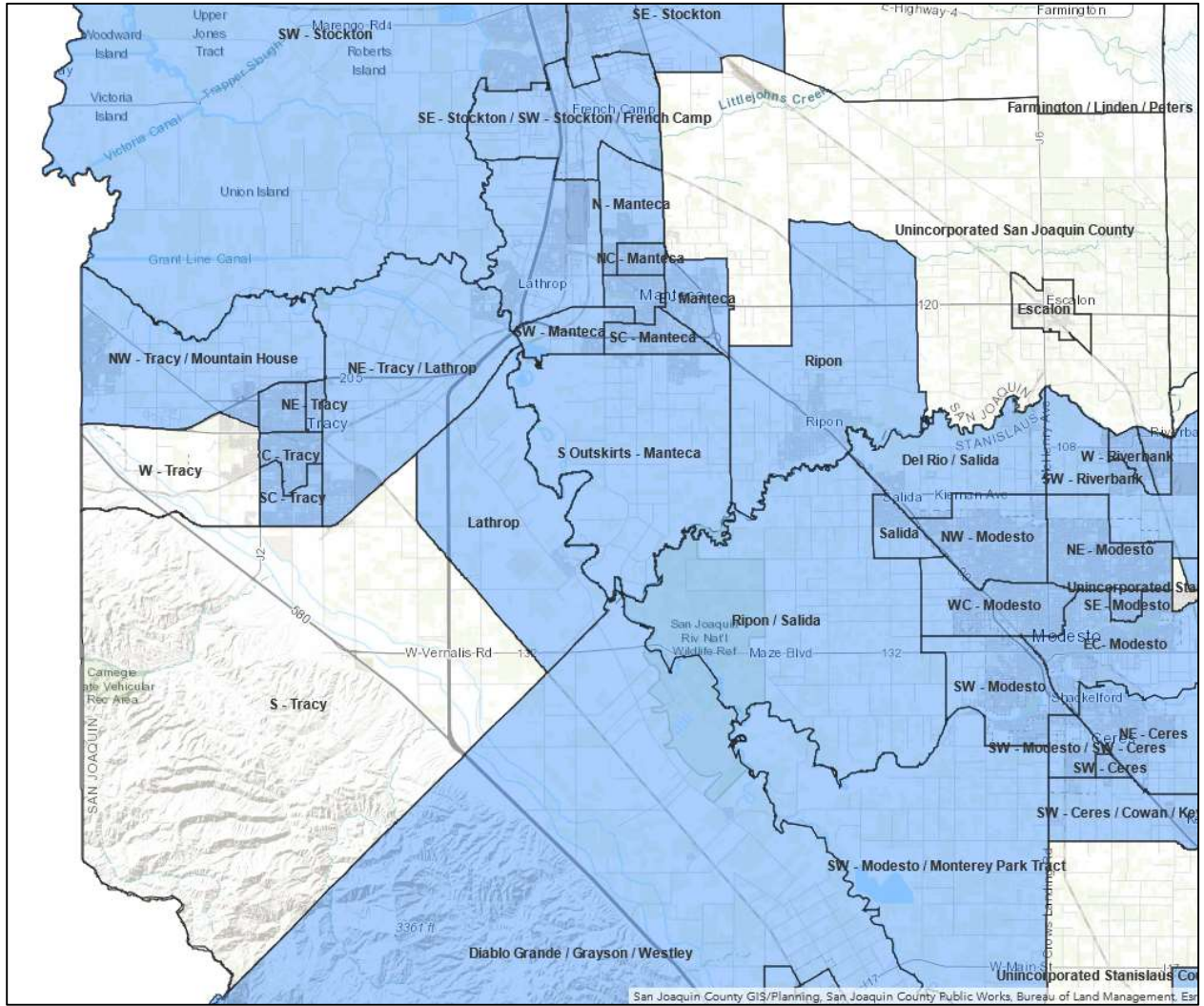
# San Joaquin County



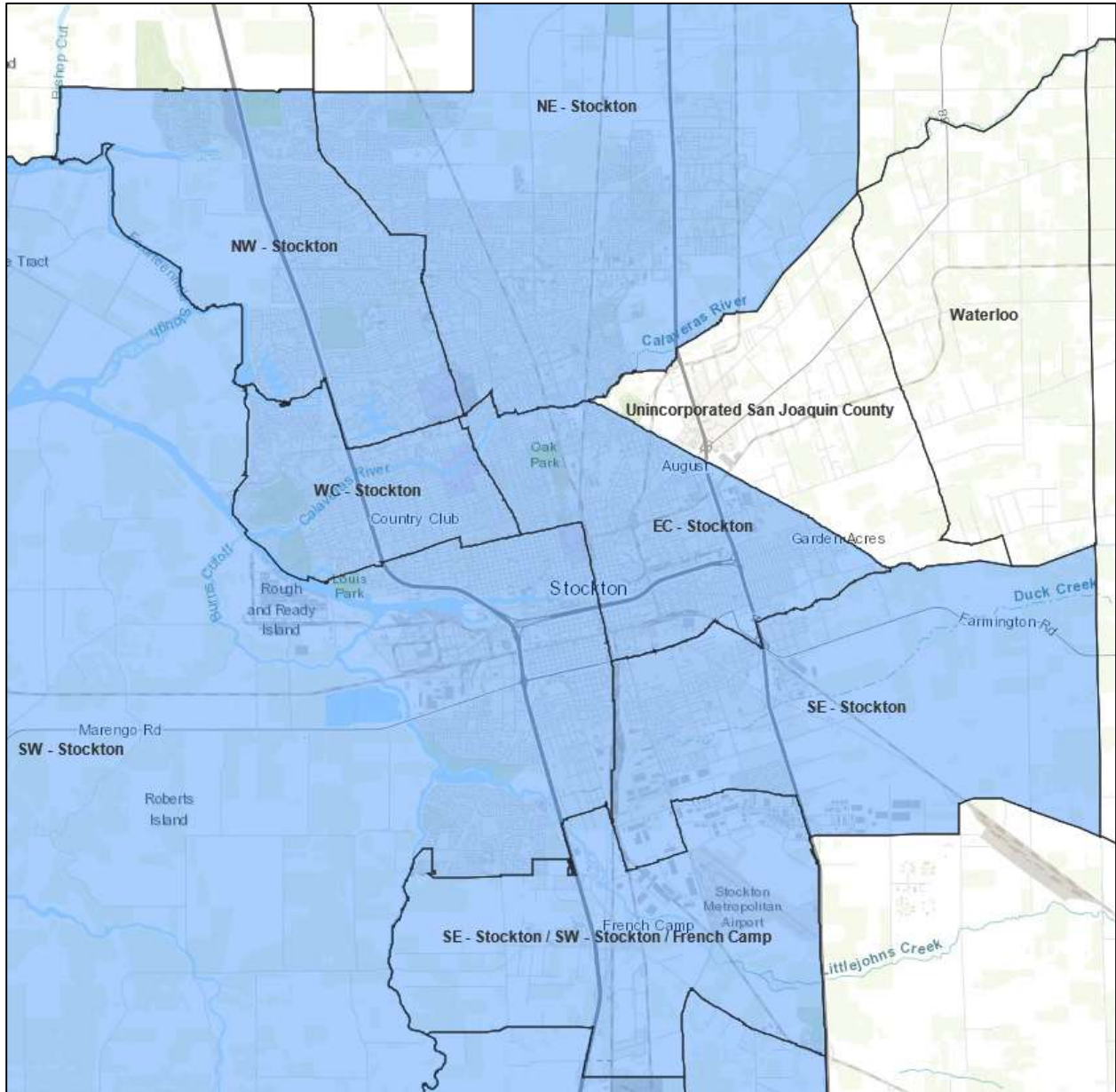
# Northern San Joaquin County



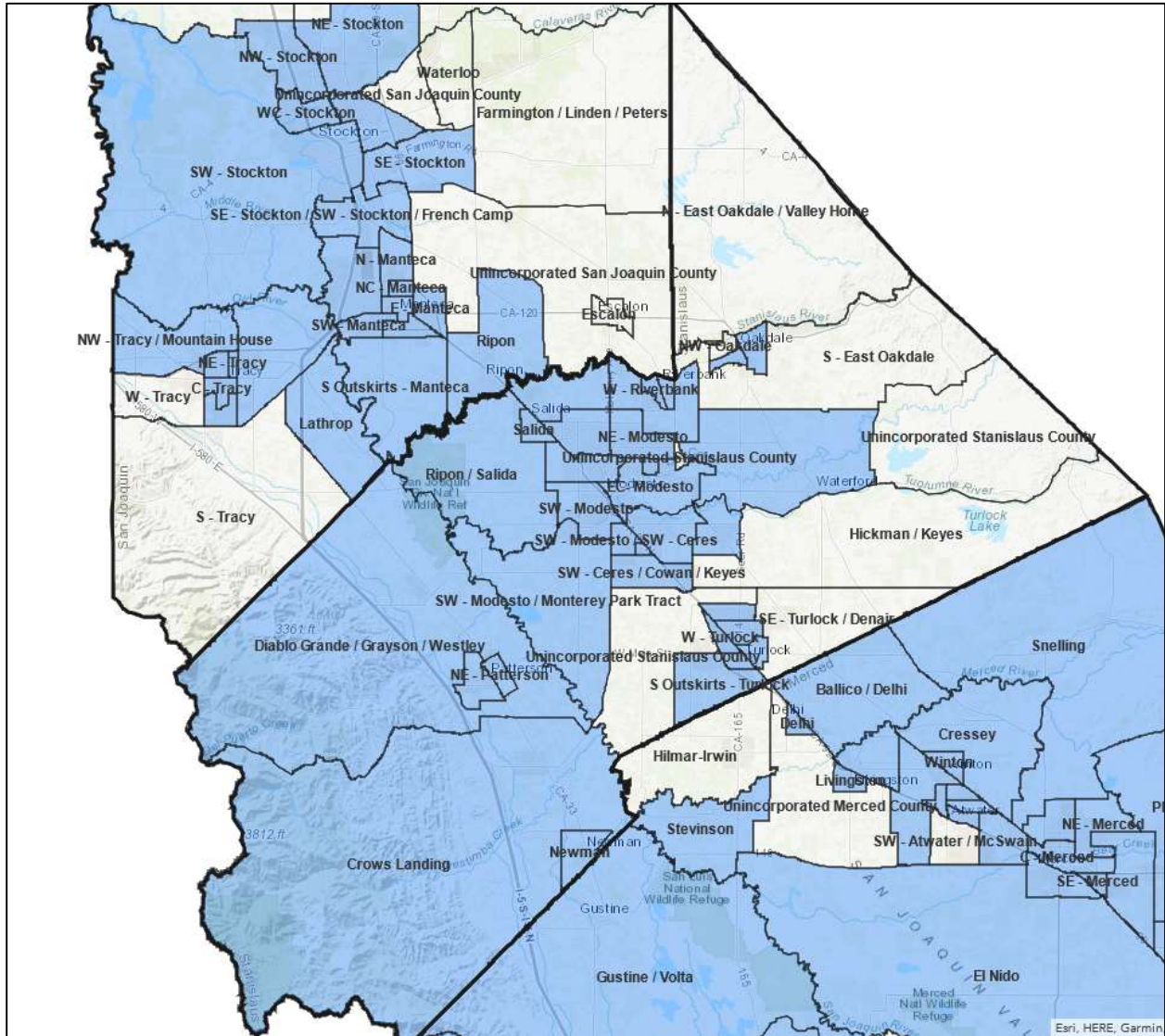
# Southern San Joaquin County



# City of Stockton

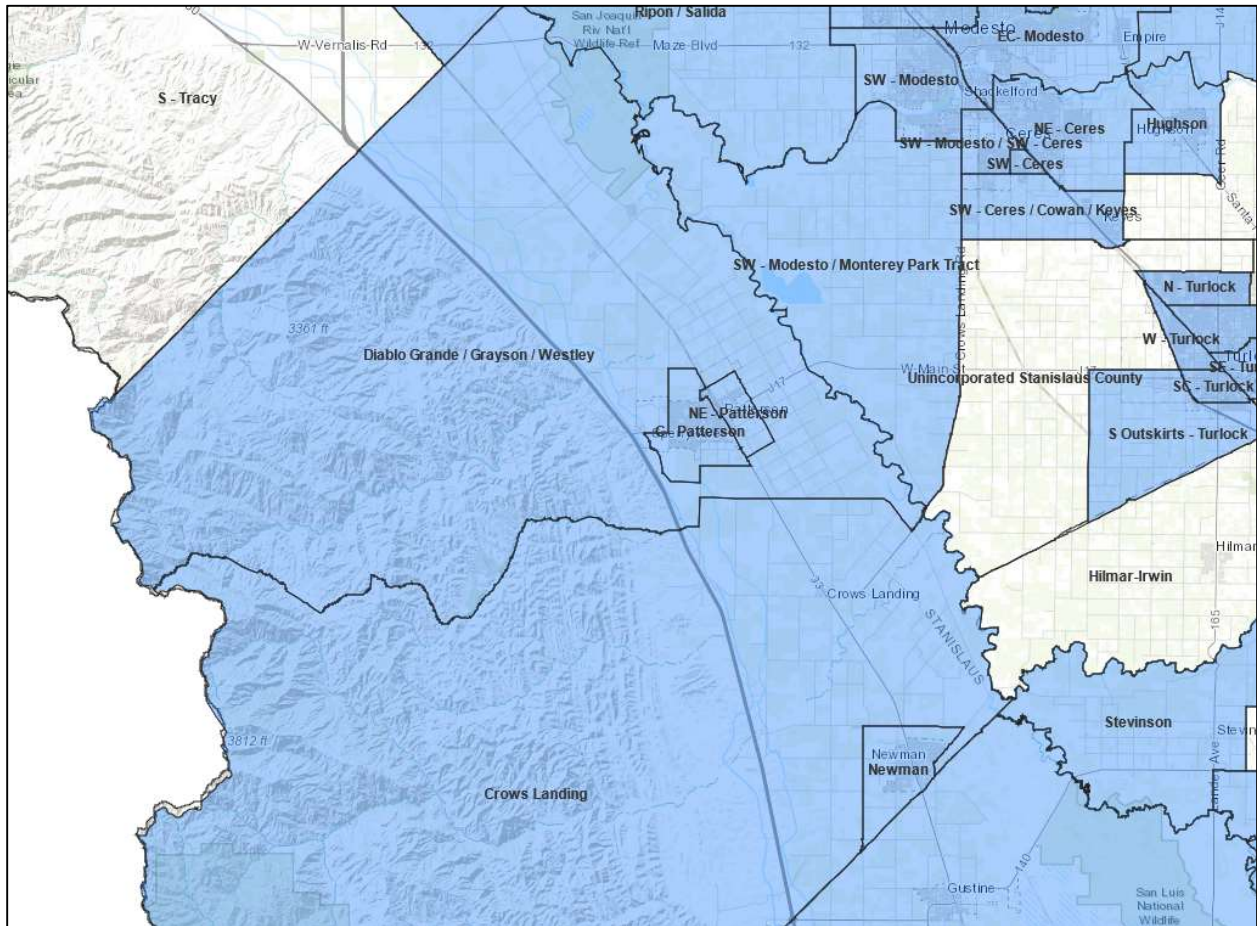


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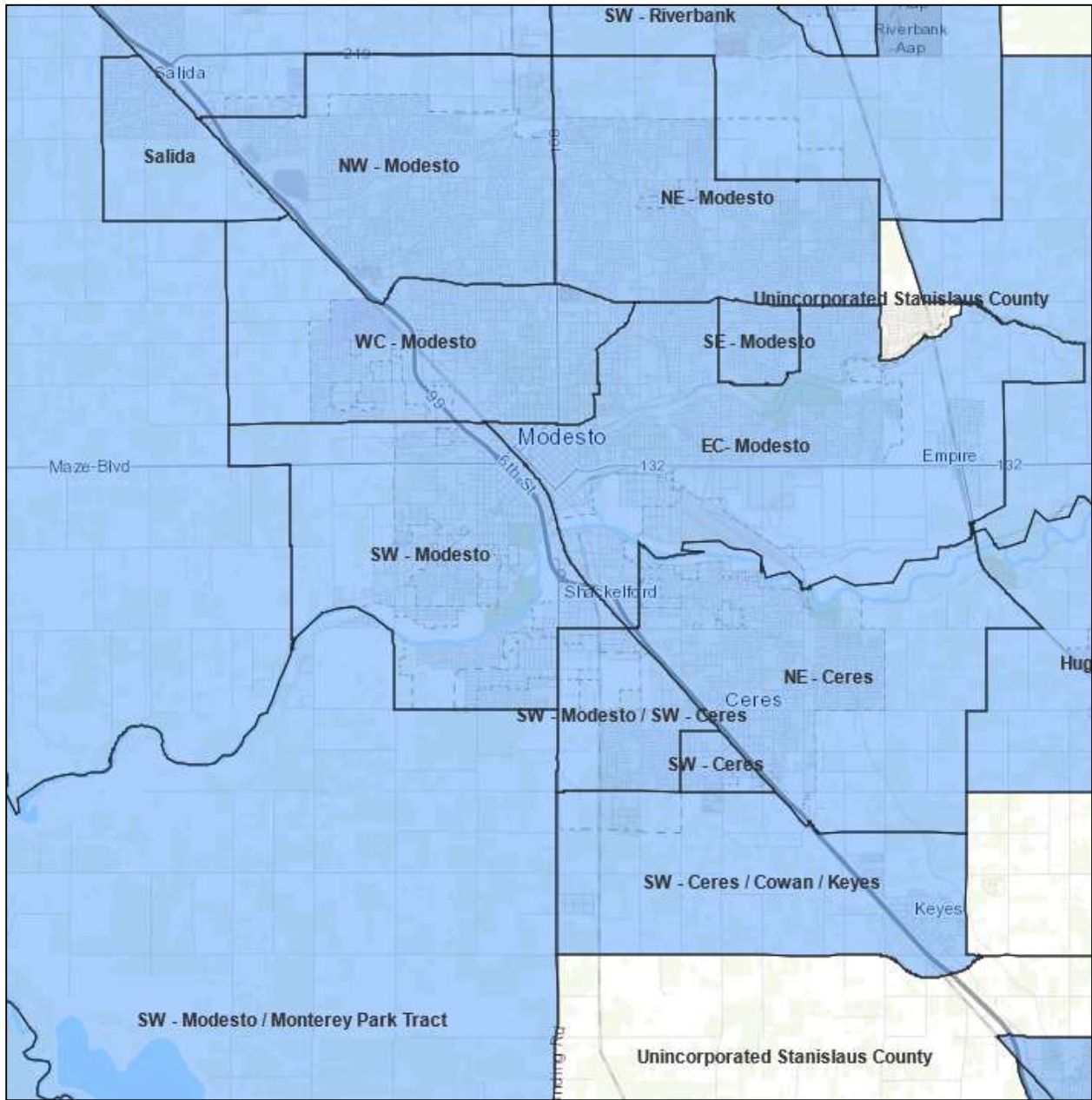




# Western Stanislaus County

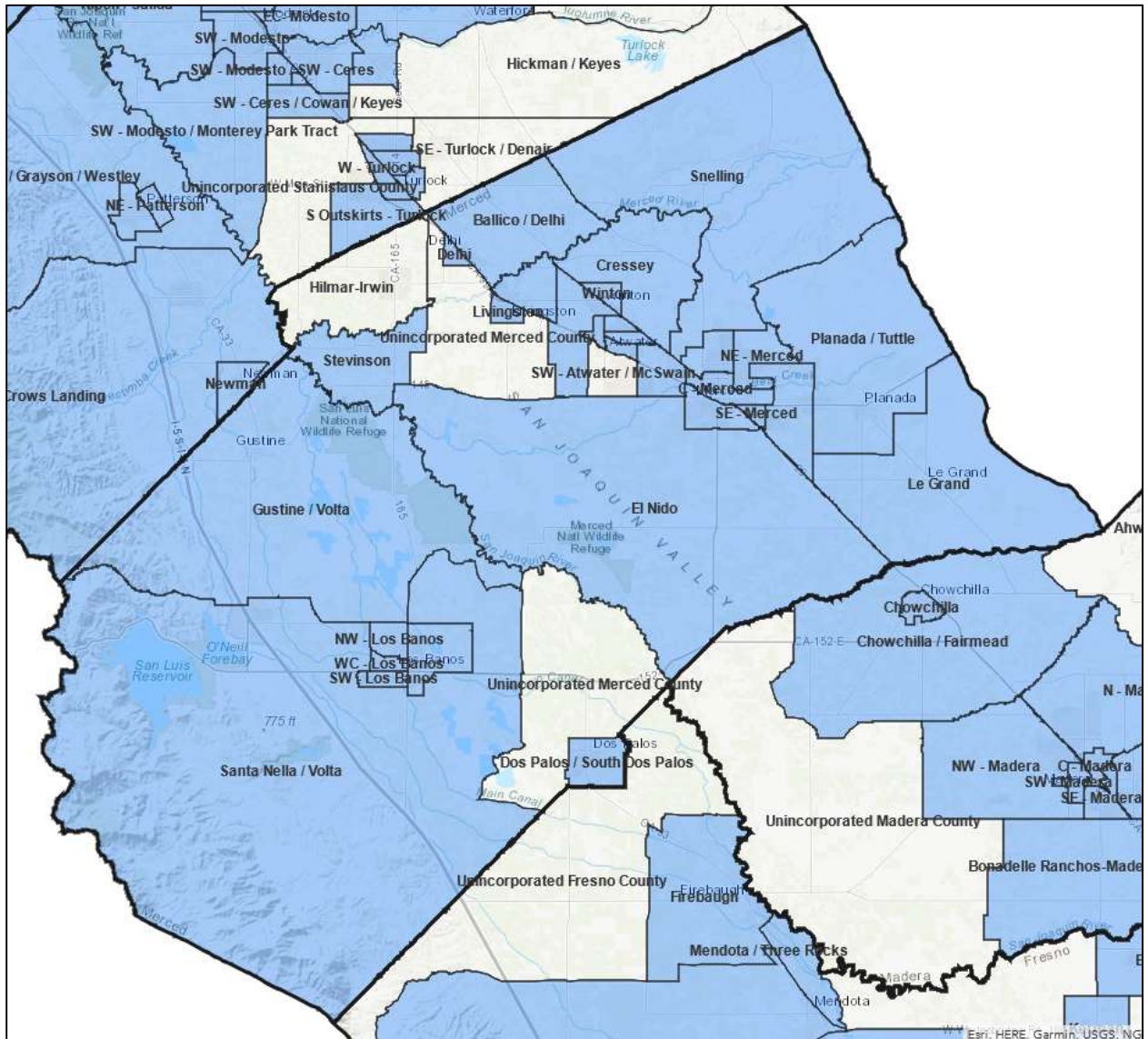


# City of Modesto

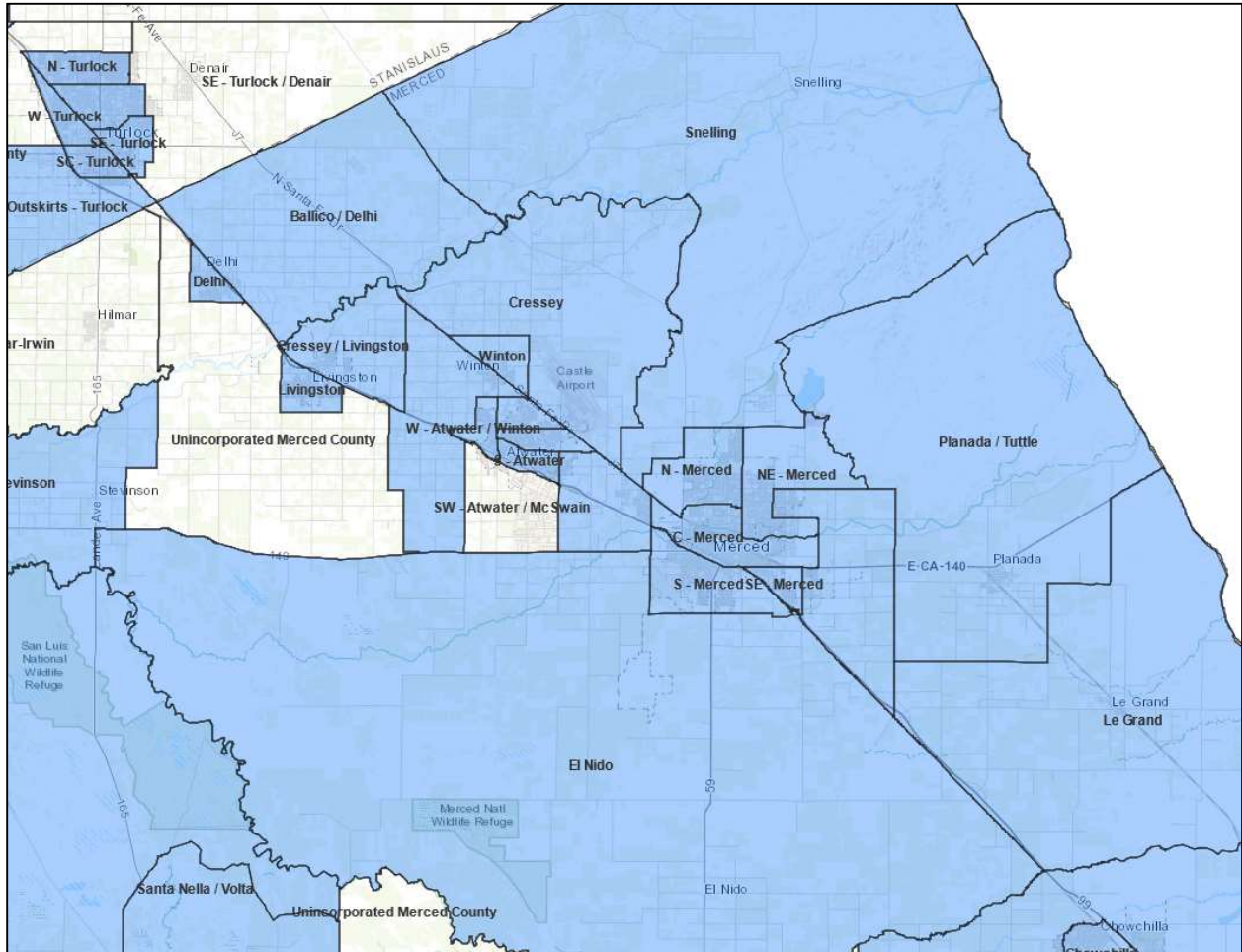




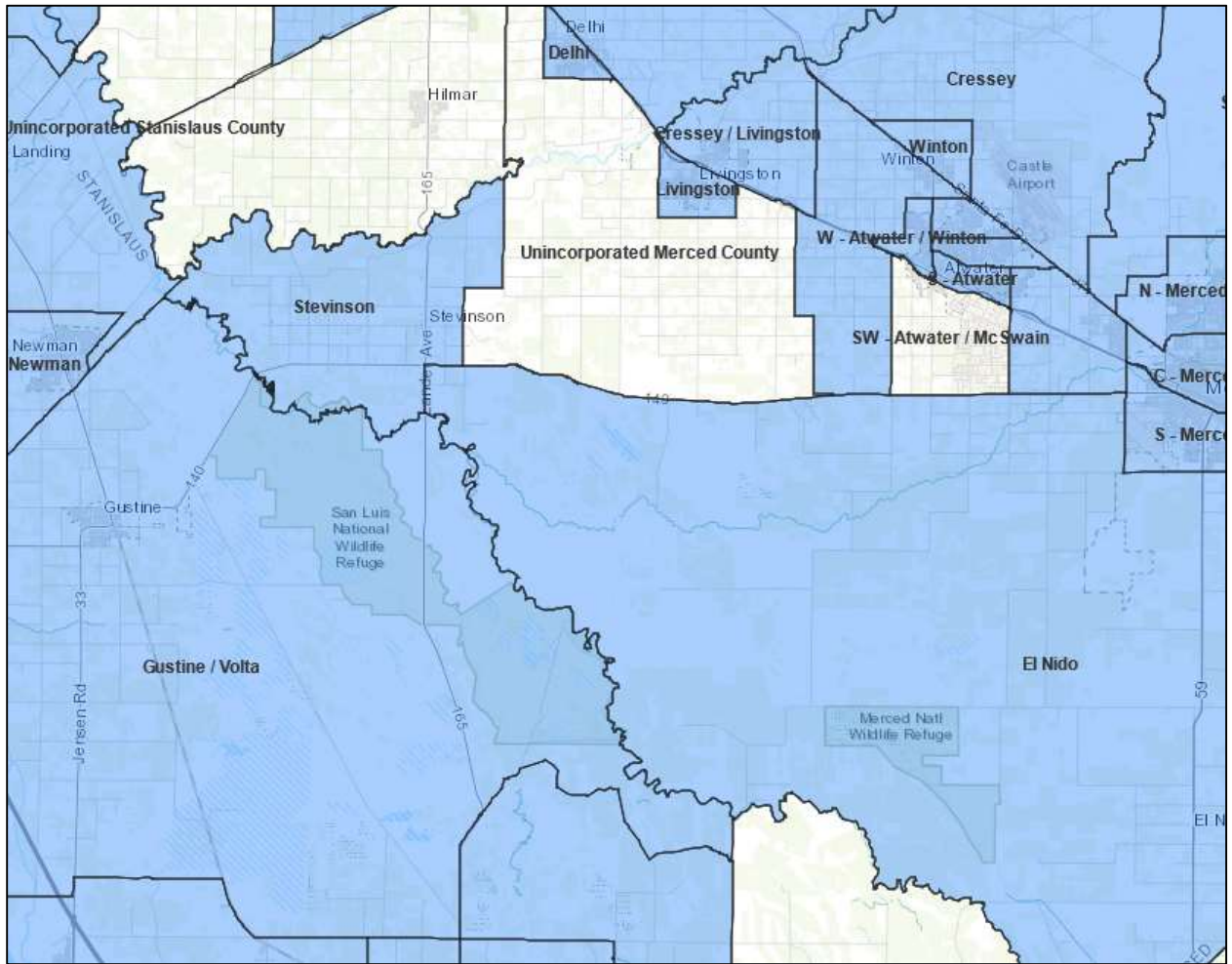
# Merced County



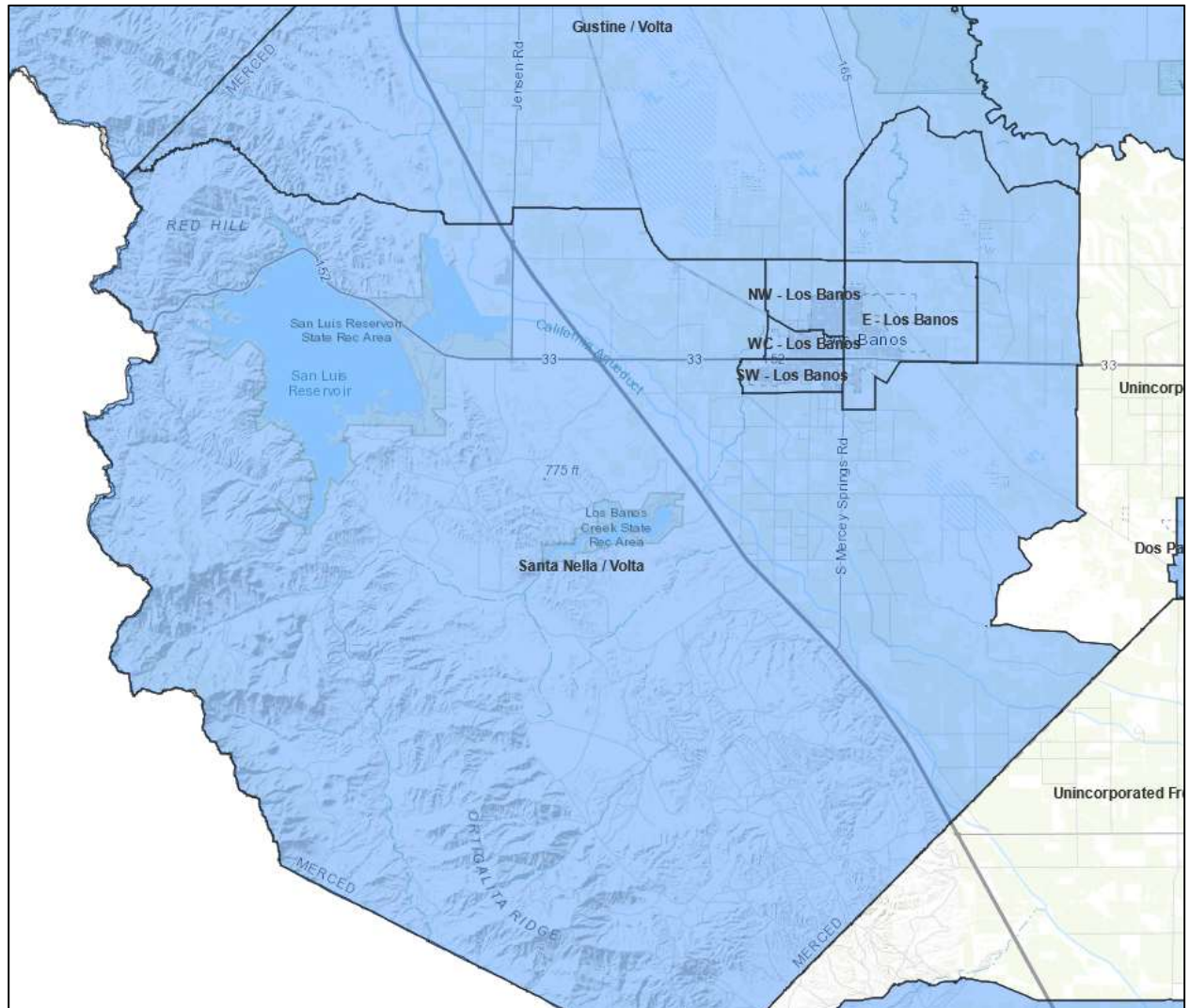
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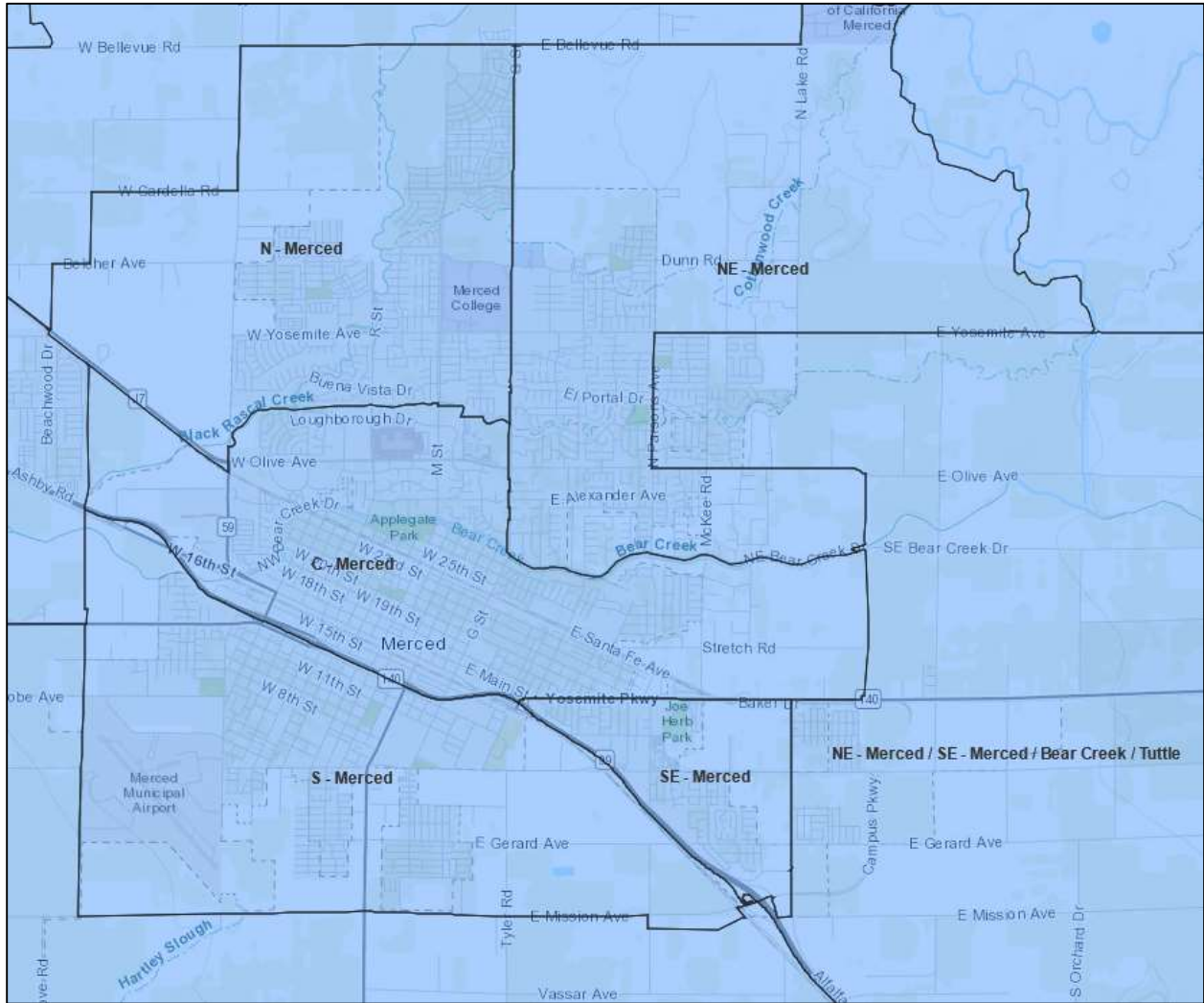
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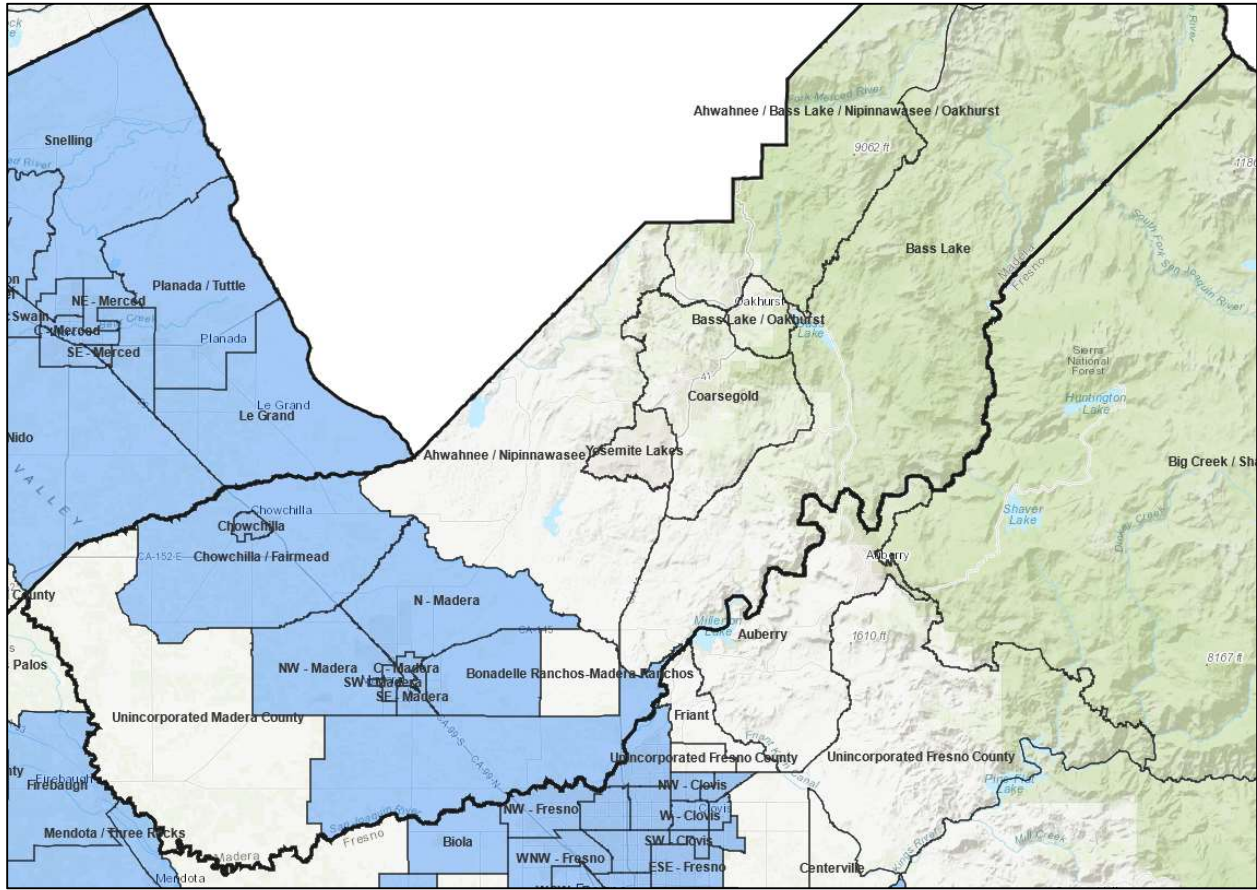
# Western Merced County



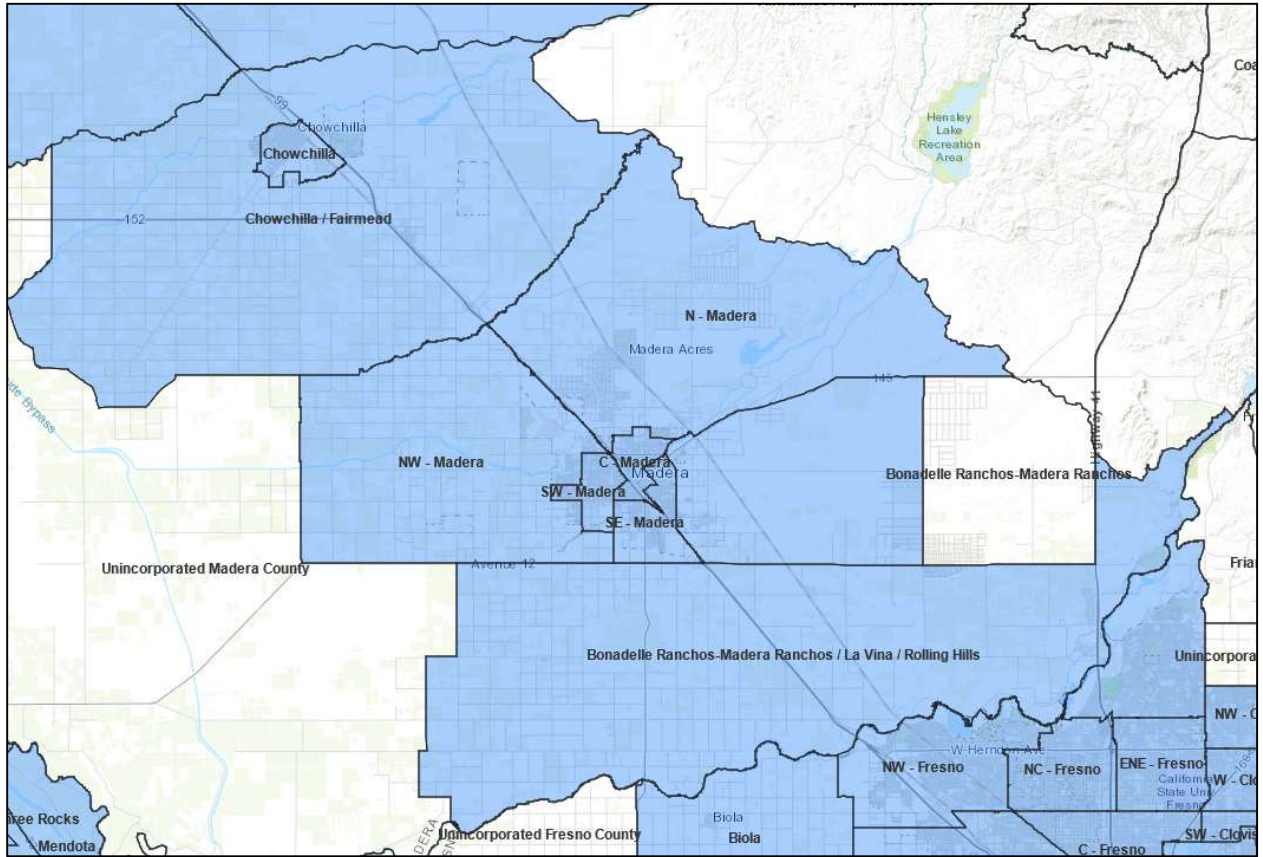
# City of Merced



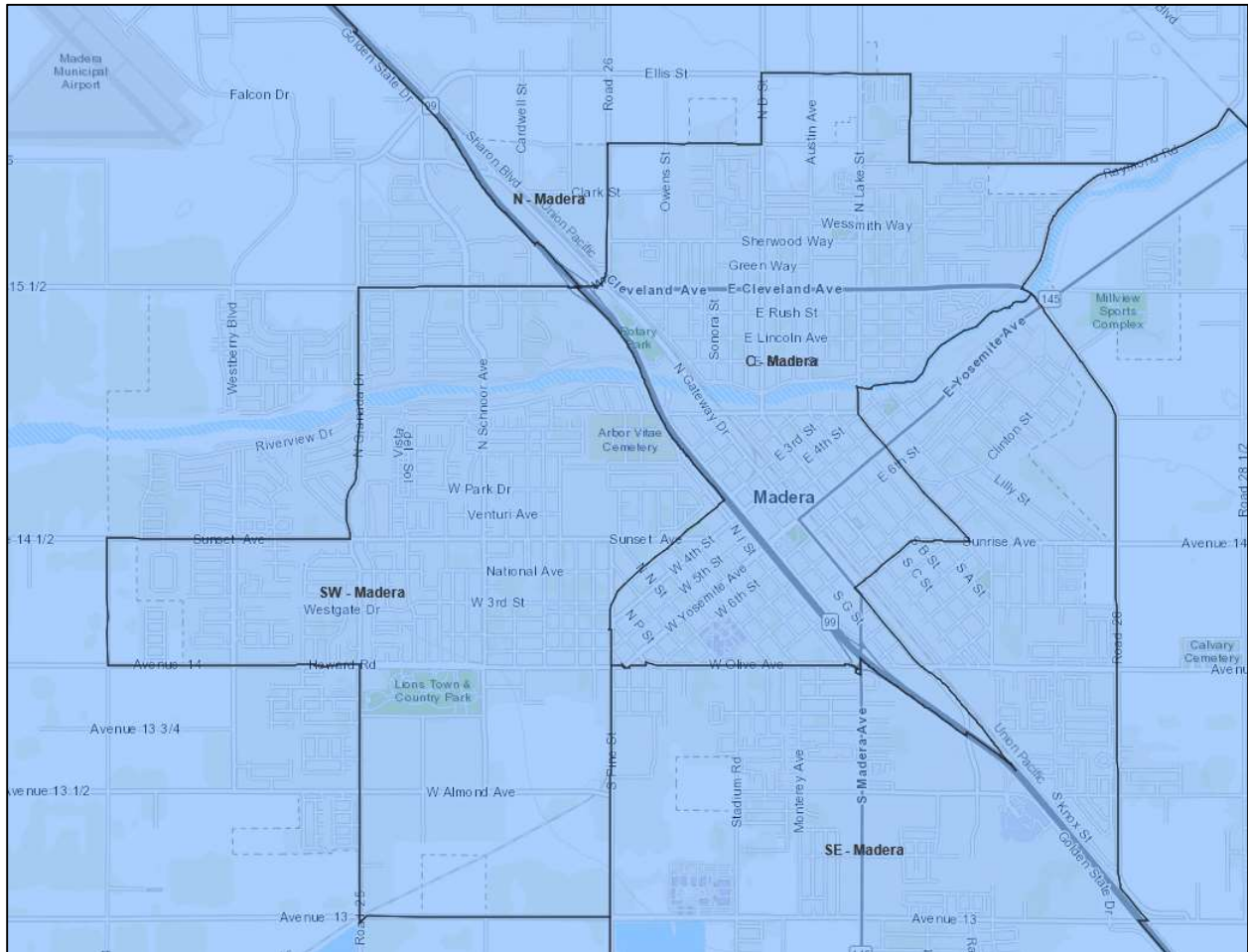
# Madera County



# Central Madera County

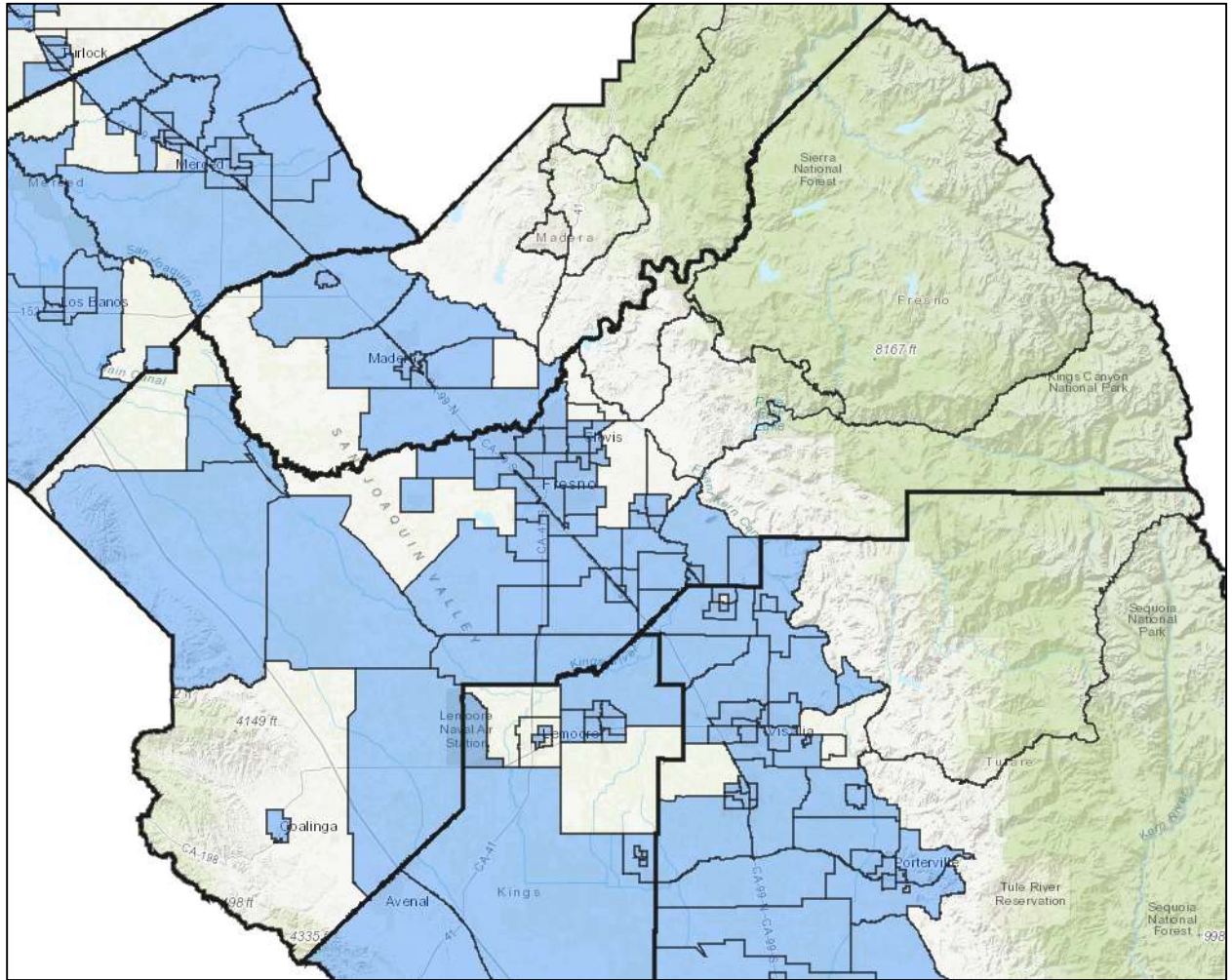


# City of Madera



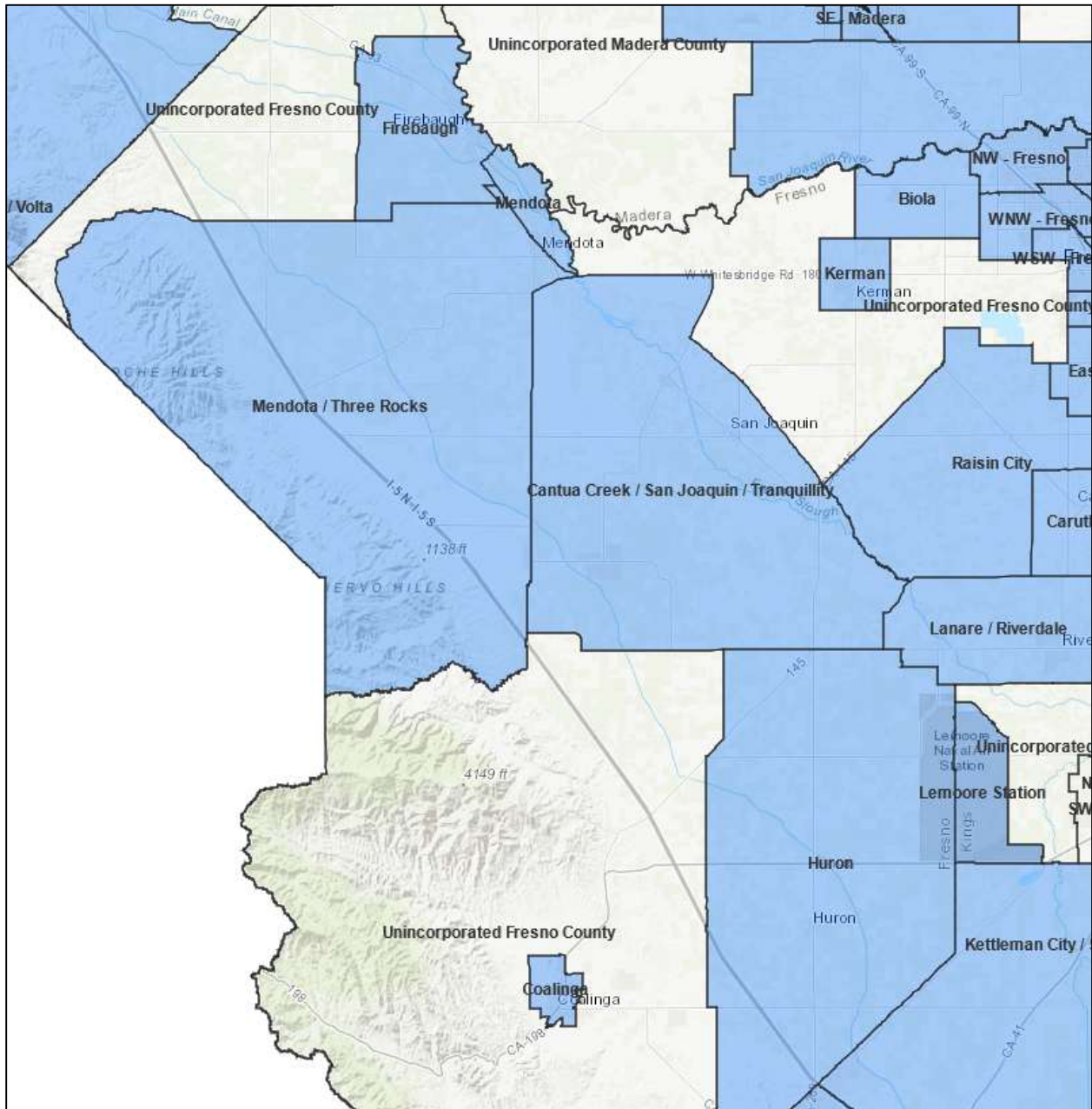


# Fresno County

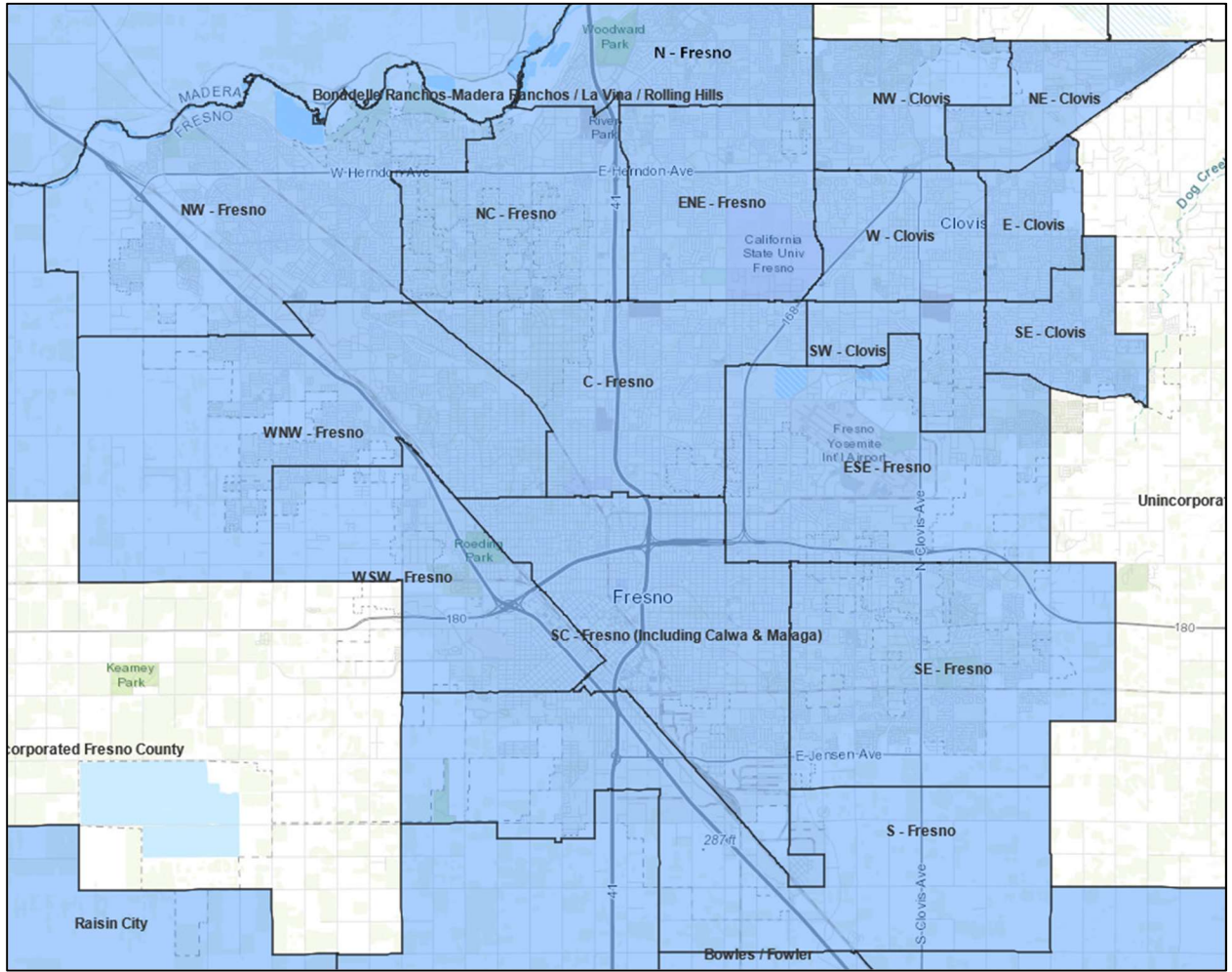




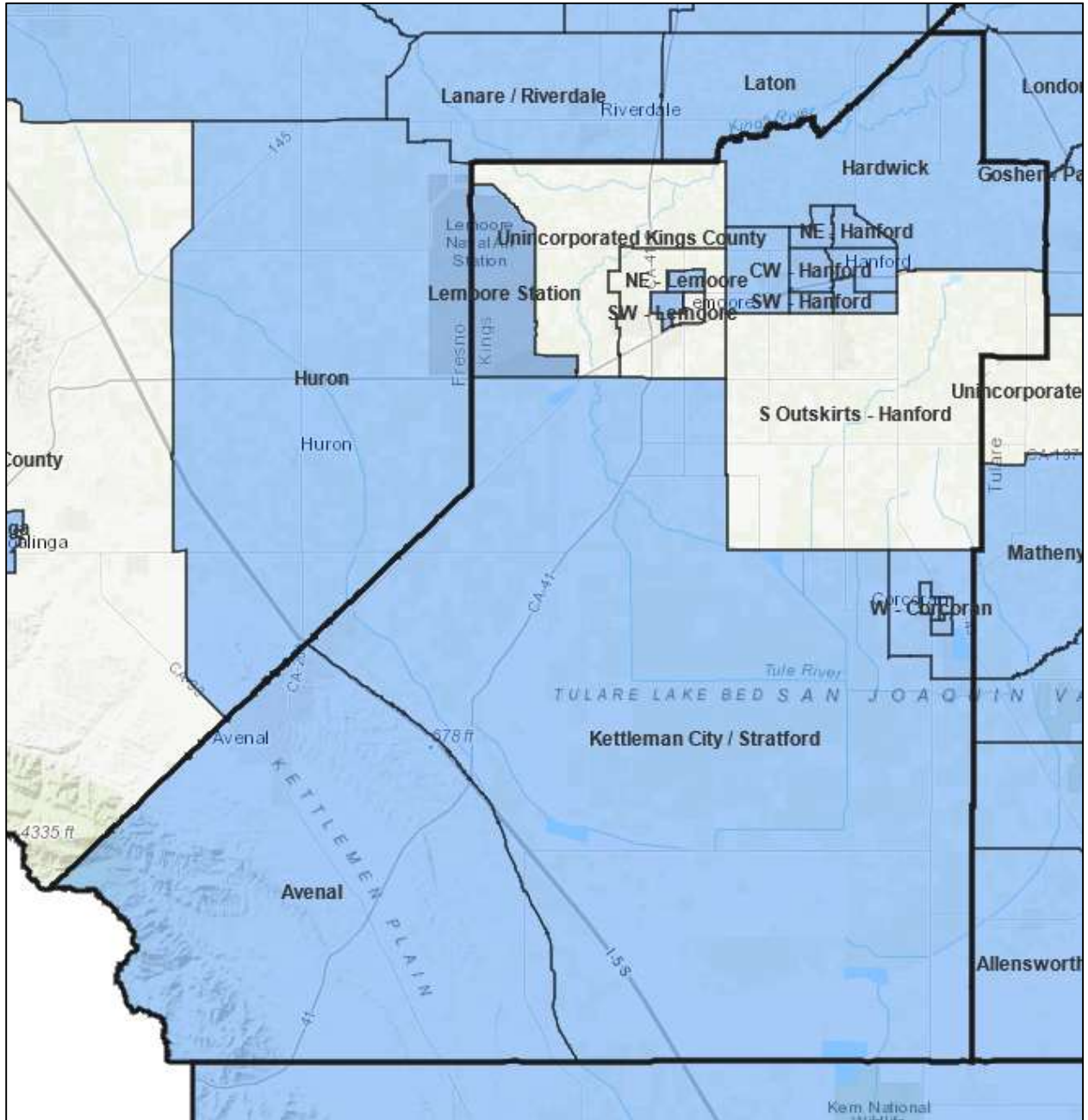
# Western Fresno County



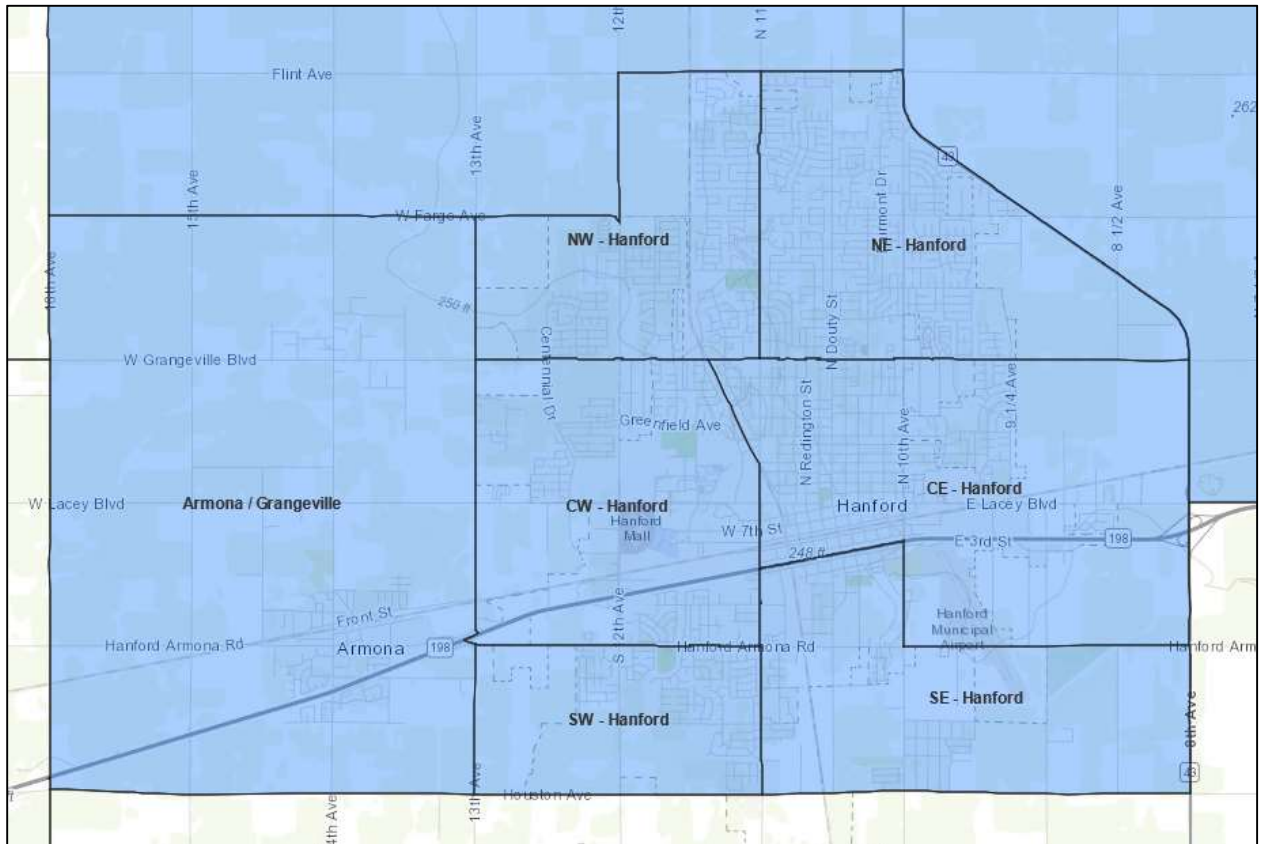
# City of Fresno



# Kings County

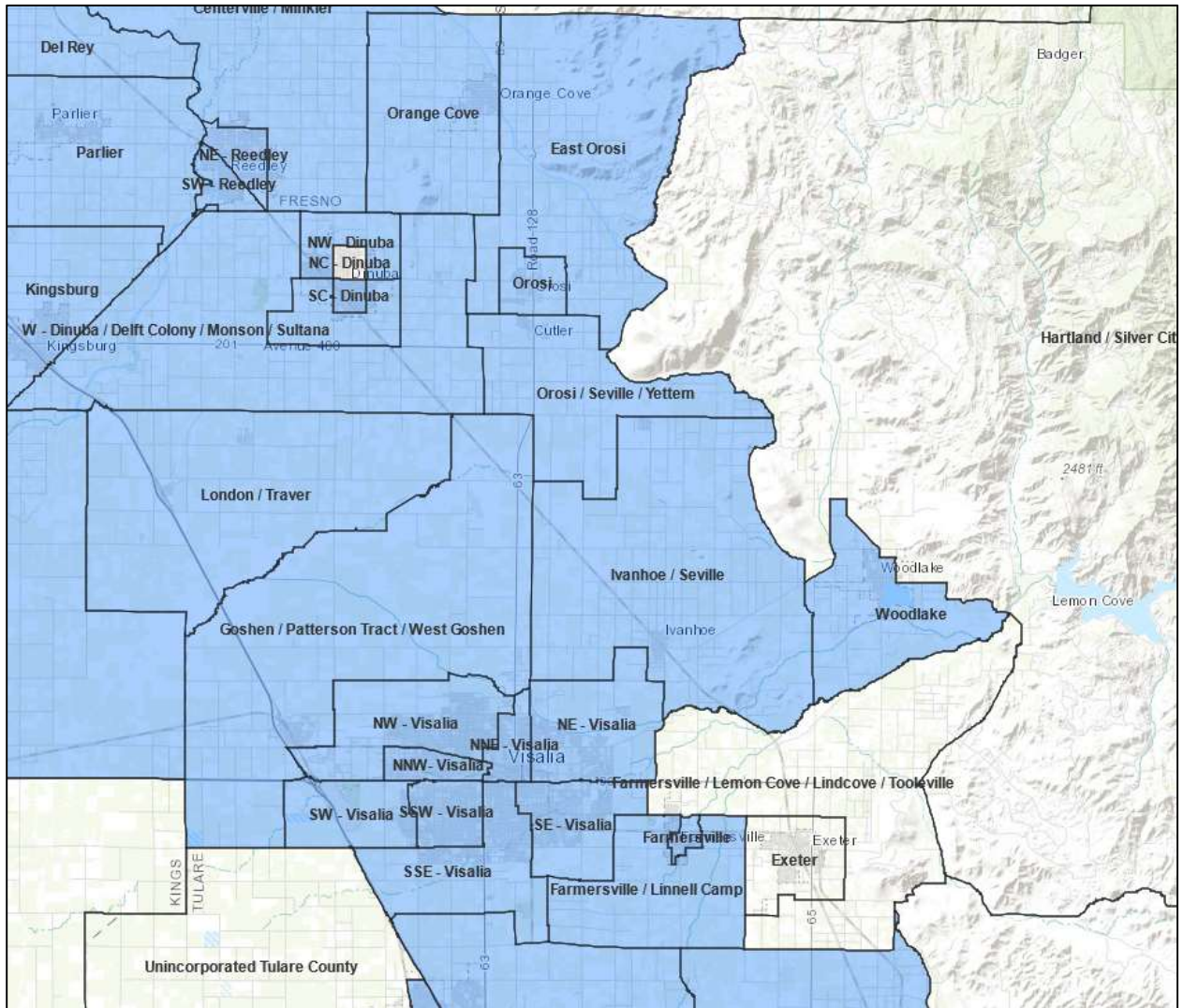


# City of Hanford



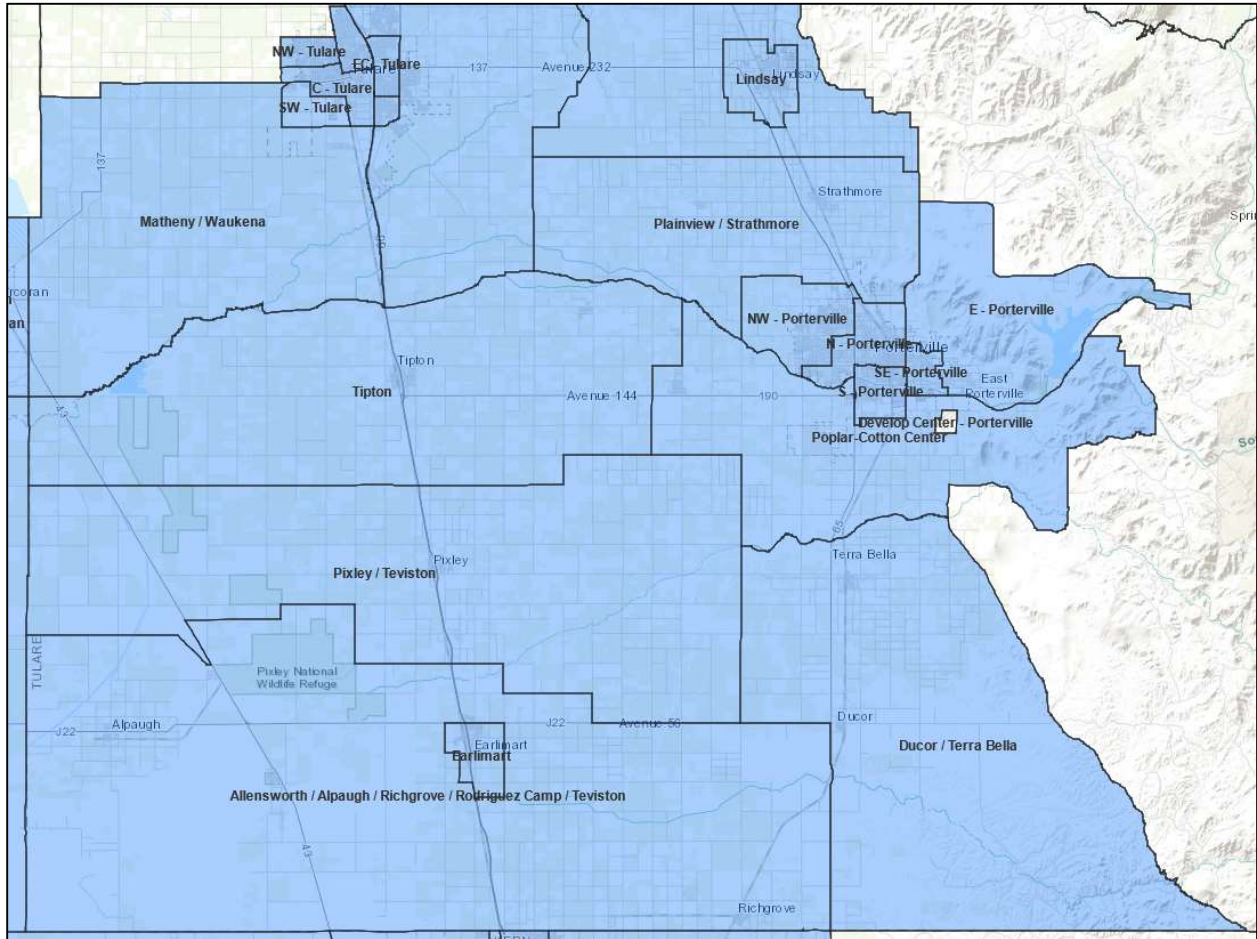


# Northern Tulare County

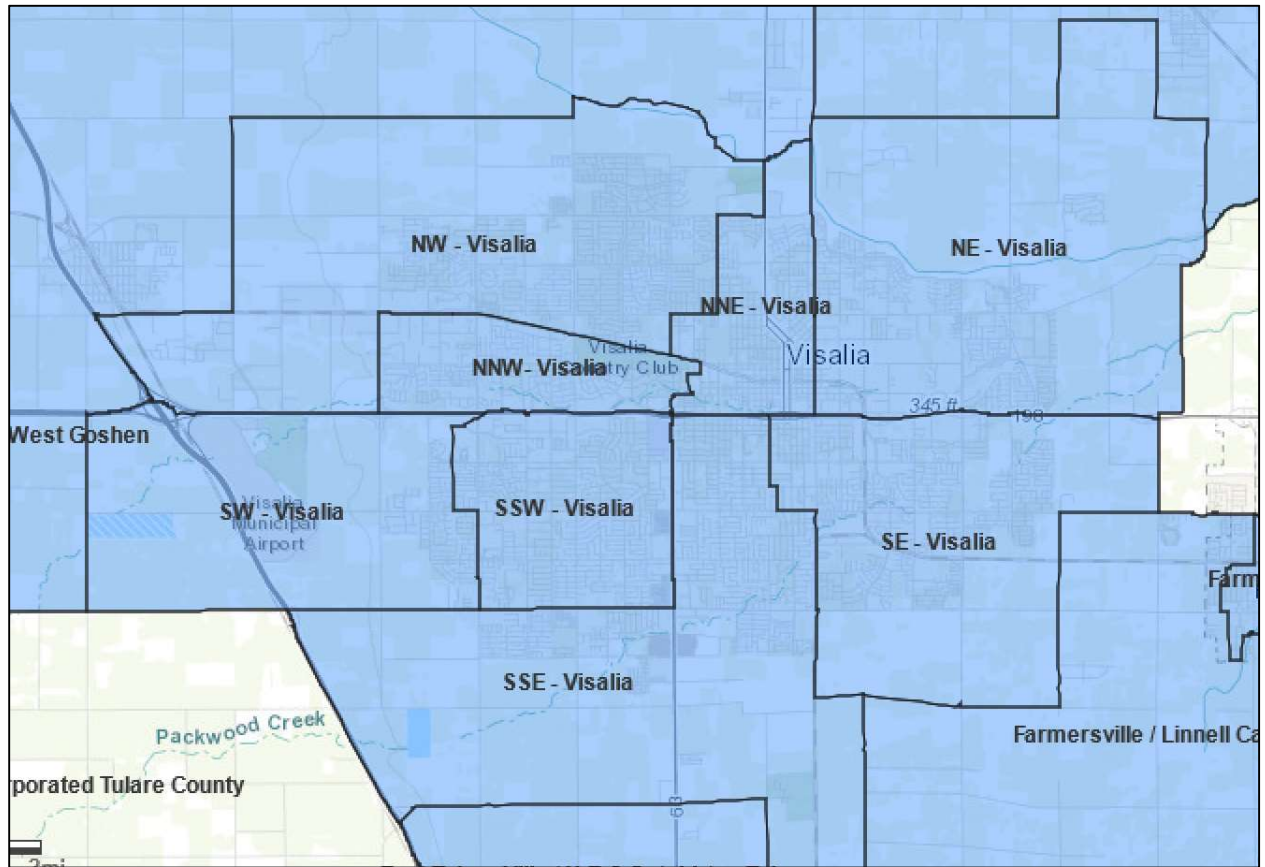




# Southern Tulare County



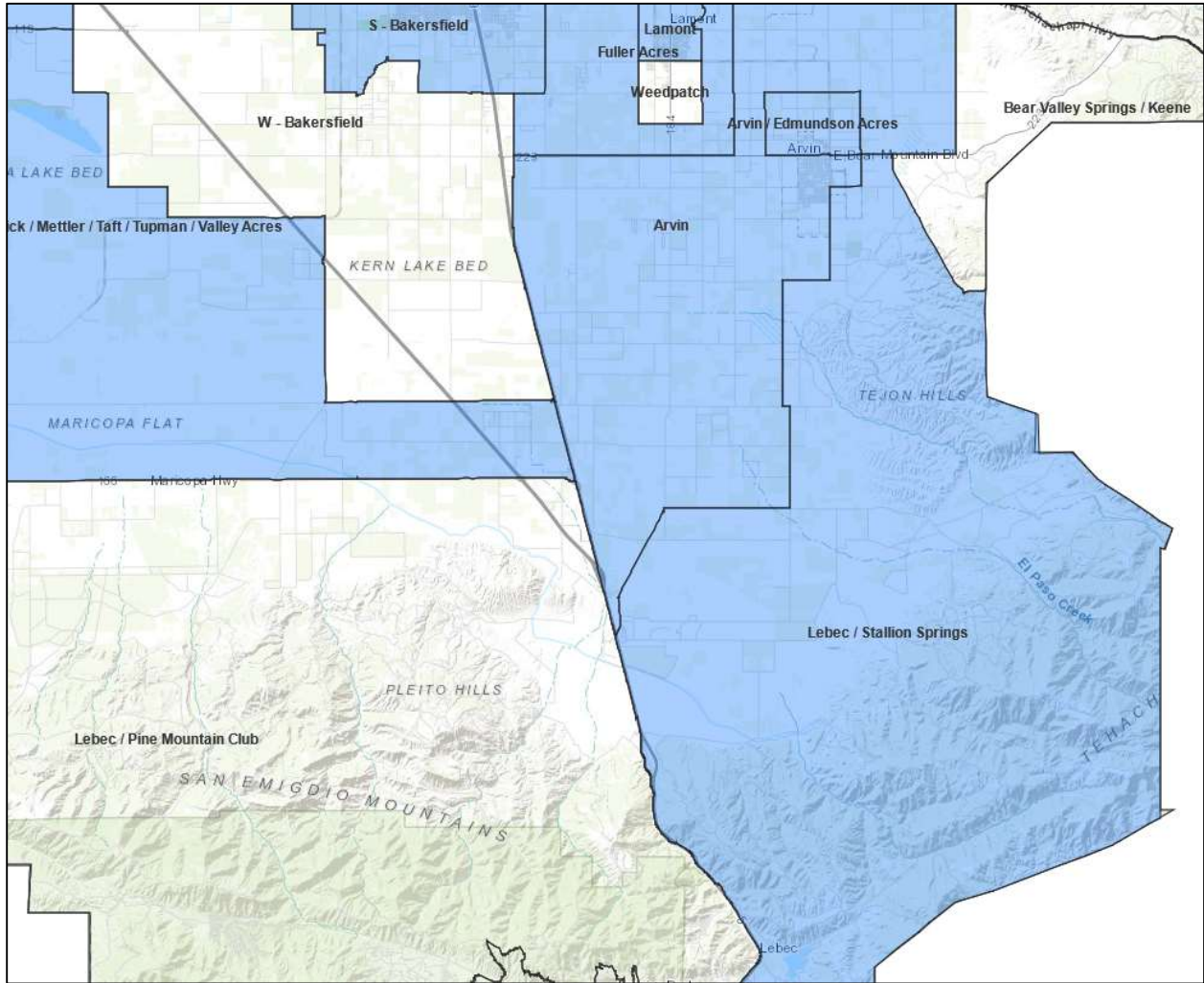
# City of Visalia



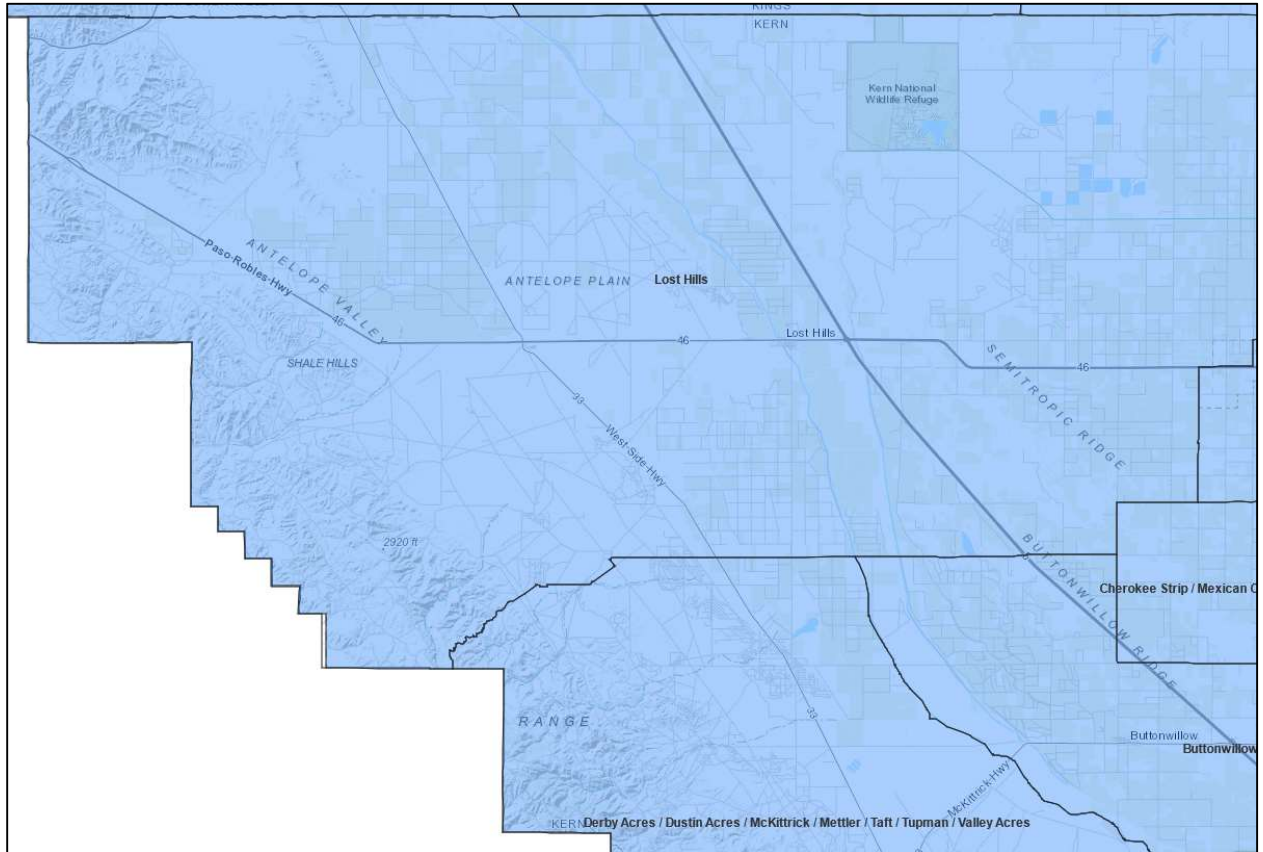




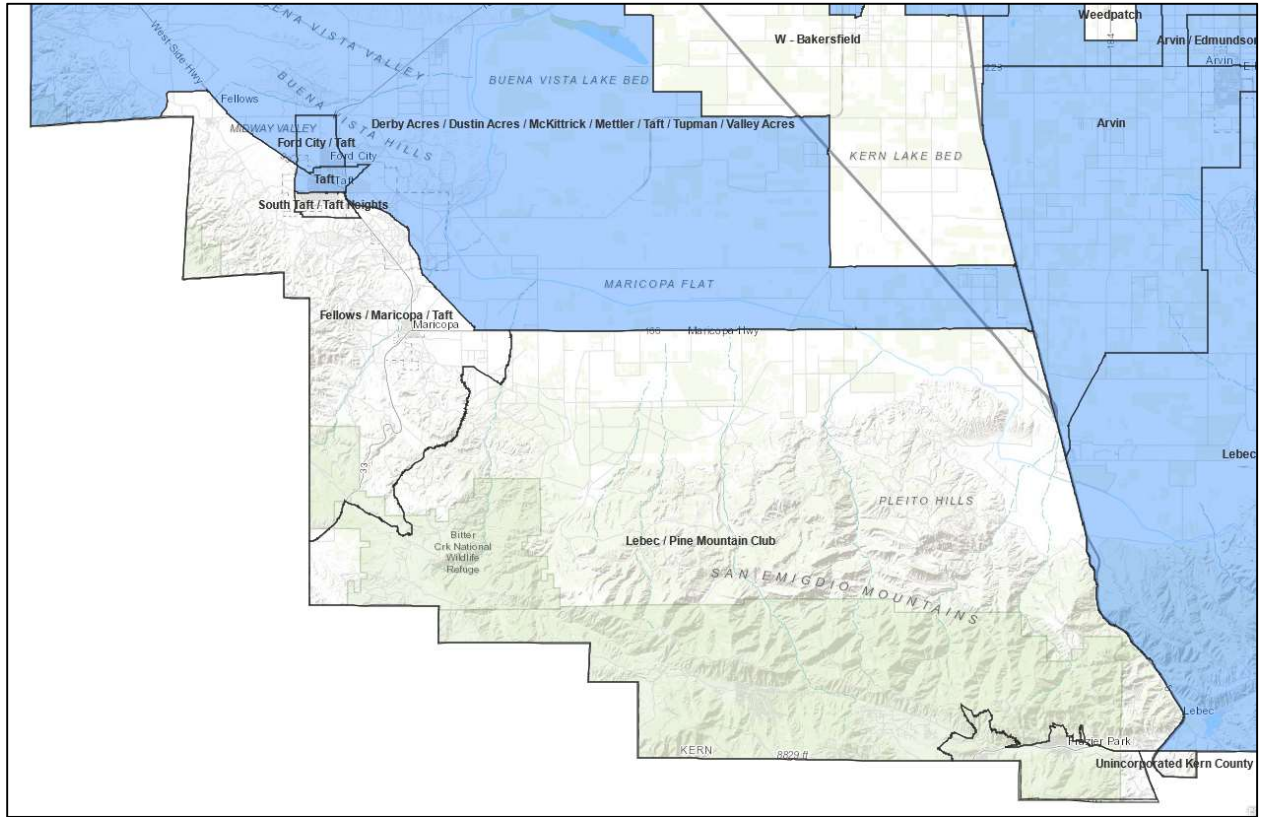
# Southeastern Kern County



# Northwestern Kern County



# Southwestern Kern County







**Prioritized List of Valley Communities for AB 617**

**Pollutant Weight Factor (PM2.5/O3)**

100

Ranking	Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)
		Weighting Factors				1	10	100					
		1	10	100	1000	1	10	100					
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb					
1	SC - Fresno (Including Calwa & Malaga)	136.86	23.24	7.62	4.57	41.29	22.57	5.81	0.70	89,784	0.94	0.80	784.64
2	N - Bakersfield	160.88	29.00	8.82	6.29	38.53	18.65	2.76	0.93	68,748	0.72	0.68	679.83
3	E - Bakersfield	145.64	25.27	8.45	5.09	51.73	28.64	5.09	0.77	57,951	0.61	0.65	459.39
4	C - Fresno	132.25	22.44	7.94	4.25	48.56	28.63	8.63	0.66	62,794	0.66	0.62	401.48
5	WNW - Fresno	118.21	18.21	6.71	3.00	41.64	21.71	4.93	0.49	68,486	0.72	0.63	325.80
6	ESE - Fresno	144.36	23.09	7.82	4.55	50.82	30.18	10.27	0.70	46,663	0.49	0.61	313.29
7	SE - Fresno	152.92	23.17	7.17	4.50	52.50	30.50	9.83	0.69	48,007	0.50	0.53	272.23
8	NE - Bakersfield	152.50	21.43	6.79	3.57	33.64	15.14	2.86	0.56	55,497	0.58	0.52	254.54
9	NC - Bakersfield	122.31	20.69	7.00	4.15	50.31	29.62	4.23	0.63	45,799	0.48	0.42	189.99
10	NNE - Visalia	176.00	23.33	8.00	6.00	29.67	12.67	2.00	0.88	16,220	0.17	0.76	168.67
11	C - Tulare	169.33	24.67	8.00	6.67	23.33	7.00	0.00	0.96	13,479	0.14	0.79	160.23
12	Oildale	124.50	19.83	6.50	3.00	24.00	10.33	1.00	0.48	33,132	0.35	0.58	144.39
13	S - Fresno	132.71	19.71	6.57	3.43	33.71	16.71	2.86	0.54	21,713	0.23	0.73	134.56
14	WSW - Fresno	121.00	18.83	6.33	3.17	35.33	17.50	3.00	0.50	23,602	0.25	0.71	131.59
15	SW - Clovis	149.60	22.60	8.00	4.00	55.60	34.60	11.40	0.63	25,854	0.27	0.50	127.99
16	N - Porterville	179.50	22.75	7.25	4.00	46.25	29.00	5.75	0.63	18,705	0.20	0.70	127.71
17	SSW - Visalia	172.00	23.00	8.00	5.00	18.00	6.00	1.00	0.75	22,092	0.23	0.47	123.82
18	Parlier	157.33	19.00	6.67	4.33	60.33	37.00	10.67	0.66	14,260	0.15	0.79	115.35
19	SE - Visalia	176.00	24.33	8.33	6.00	29.67	12.67	2.00	0.88	19,366	0.20	0.43	114.29
20	CE - Hanford	166.50	25.50	9.00	6.00	34.00	14.00	2.50	0.89	12,754	0.13	0.63	112.43
21	Lindsay	176.00	24.00	8.00	5.00	46.50	23.00	4.00	0.76	12,016	0.13	0.76	108.09
22	NW - Porterville	174.00	24.00	8.00	5.00	43.33	24.33	4.67	0.76	19,168	0.20	0.47	107.47
23	NE - Reedley	160.33	19.67	6.67	3.67	71.67	47.67	16.00	0.58	17,363	0.18	0.65	102.36
24	ENE - Fresno	129.27	17.64	6.00	2.18	56.73	36.00	10.82	0.38	36,864	0.39	0.44	96.39
25	NW - Bakersfield	118.64	20.36	6.45	3.73	39.91	22.00	2.55	0.57	53,464	0.56	0.20	96.17
26	NW - Tulare	163.00	24.00	8.00	6.00	25.00	7.00	0.00	0.88	10,155	0.11	0.66	91.85
27	NE - Visalia	168.00	21.50	8.00	5.00	35.50	15.50	3.00	0.75	15,725	0.16	0.49	90.82
28	SSE - Visalia	175.75	25.25	8.75	5.75	25.50	10.50	1.75	0.86	19,870	0.21	0.33	87.45
29	Orosi	160.00	18.50	6.00	3.00	68.00	43.00	11.00	0.49	13,914	0.15	0.80	84.62
30	N-E-S Outskirts - Tulare	172.00	23.50	8.00	6.00	26.00	9.50	0.50	0.88	15,947	0.17	0.38	82.25
31	Farmersville	172.00	22.67	7.33	5.33	43.67	20.67	3.33	0.79	10,636	0.11	0.63	82.22
32	S - Porterville	181.00	24.00	8.00	4.00	47.00	31.00	7.00	0.64	10,808	0.11	0.74	79.76
33	SC - Bakersfield	114.67	17.50	6.00	3.00	49.67	29.83	3.83	0.48	36,118	0.38	0.29	78.28
34	W - Clovis	146.33	17.17	6.00	2.33	61.67	40.67	13.33	0.40	23,607	0.25	0.50	74.59
35	NC - Fresno	121.38	18.13	6.50	2.25	54.75	33.13	9.00	0.39	31,051	0.33	0.39	74.46
36	Earlimart	136.00	16.00	7.00	4.00	30.00	14.00	1.00	0.61	8,678	0.09	0.89	73.37
37	SE - Hanford	169.00	26.00	9.00	6.00	39.00	17.00	3.00	0.89	6,531	0.07	0.76	69.46
38	S - Bakersfield	102.67	12.67	4.00	1.67	52.67	31.67	6.00	0.28	29,659	0.31	0.48	63.07
39	SW - Selma	151.00	20.00	7.00	5.00	38.00	20.00	4.00	0.74	7,316	0.08	0.74	62.56
40	NW - Visalia	157.00	21.00	8.00	4.00	23.00	8.00	1.00	0.63	19,333	0.20	0.33	61.93
41	EC - Tulare	176.00	25.00	8.00	7.00	22.50	8.00	0.50	1.00	9,359	0.10	0.41	60.50
42	NW - Fresno	119.40	15.20	5.40	1.20	46.30	25.50	4.50	0.25	50,871	0.53	0.30	59.60
43	CW - Hanford	164.00	25.50	9.00	6.50	38.00	15.50	3.00	0.95	8,493	0.09	0.47	58.97
44	McFarland	118.50	13.50	6.00	2.00	27.50	13.50	1.00	0.35	13,212	0.14	0.81	58.27
45	Shafter	94.00	12.67	4.67	2.00	35.67	16.67	1.67	0.33	17,314	0.18	0.65	57.56
46	W - Delano	113.00	14.00	6.00	3.00	25.00	8.00	0.00	0.47	8,935	0.09	0.84	55.22
47	NE - Hanford	162.33	25.00	9.00	6.00	26.00	9.67	1.33	0.89	15,187	0.16	0.25	53.01

Ranking	Weighting Factors Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)
		1	10	100	1000	1	10	100					
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb					
48	Kingsburg	161.00	21.00	8.00	5.00	36.50	17.50	3.00	0.75	11,664	0.12	0.36	49.75
49	SE - Madera	122.67	13.33	2.67	1.00	32.67	15.33	2.00	0.19	23,894	0.25	0.71	49.24
50	SC - Dinuba	171.00	22.00	8.00	5.00	64.00	38.00	9.00	0.76	5,182	0.05	0.79	48.56
51	N - Delano	113.50	13.50	6.00	2.00	26.50	9.50	0.00	0.35	13,534	0.14	0.64	47.27
52	NC - Tulare	176.50	25.00	8.00	7.00	22.00	7.50	0.50	1.00	7,926	0.08	0.37	45.88
53	C - Madera	120.00	13.25	3.00	1.00	30.25	14.50	1.75	0.19	20,595	0.22	0.74	45.50
54	E-W Outskirts - Delano	112.00	12.00	4.00	2.00	29.00	13.00	1.00	0.32	15,229	0.16	0.59	44.86
55	SW - Hanford	165.00	26.00	9.00	6.00	40.00	17.00	3.00	0.89	5,628	0.06	0.54	42.66
56	NW - Hanford	158.00	24.00	9.00	6.00	27.00	10.00	1.00	0.89	9,896	0.10	0.28	39.19
57	Orange Cove	143.50	16.00	4.50	2.00	78.50	52.50	17.50	0.34	9,145	0.10	0.77	37.83
58	SE - Porterville	170.00	20.00	6.00	3.00	49.00	32.00	7.00	0.49	6,637	0.07	0.72	36.48
59	NC - Dinuba	167.00	22.00	7.00	5.00	65.00	41.00	10.00	0.75	5,405	0.06	0.54	34.30
60	C - Selma	154.00	22.00	8.00	5.00	47.00	28.00	5.00	0.75	4,178	0.04	0.68	33.47
61	N - Corcoran	138.00	20.00	7.00	5.00	25.00	7.00	0.00	0.73	4,466	0.05	0.65	33.30
62	Woodlake	155.00	18.00	5.00	3.00	67.00	40.00	8.00	0.47	7,329	0.08	0.59	31.97
63	C - Lemoore	131.00	18.00	6.00	4.00	27.00	9.00	1.00	0.60	9,093	0.10	0.37	31.67
64	Unincorporated - Fresno County	106.25	12.00	3.25	1.75	28.25	15.00	4.00	0.28	14,062	0.15	0.50	30.87
65	Lamont	99.00	10.00	2.00	1.00	60.00	39.00	9.00	0.18	15,401	0.16	0.72	30.57
66	SW - Tulare	161.00	24.00	8.00	6.00	25.00	7.00	0.00	0.88	3,407	0.04	0.65	30.54
67	Fowler	152.00	20.00	6.50	4.00	39.50	20.50	4.00	0.61	5,822	0.06	0.54	30.25
68	E - Lemoore	134.00	18.00	6.00	4.00	26.00	9.00	1.00	0.60	5,833	0.06	0.55	30.15
69	NW - Selma	153.00	20.00	7.00	4.00	46.00	26.00	5.00	0.62	7,174	0.08	0.43	29.55
70	Arvin	75.67	8.33	1.00	0.67	60.67	36.67	7.33	0.12	19,562	0.20	0.77	27.54
71	NW - Sanger	155.00	16.00	5.00	3.00	69.00	49.00	17.00	0.47	8,320	0.09	0.44	27.37
72	W - Corcoran	135.00	18.00	7.00	4.00	28.00	9.00	0.00	0.61	3,636	0.04	0.77	26.86
73	Armona	145.00	21.00	8.00	5.00	31.00	11.00	1.00	0.75	4,304	0.05	0.53	26.71
74	Ivanhoe	162.00	20.00	6.00	3.00	55.00	29.00	5.00	0.48	4,611	0.05	0.75	26.20
75	SW - Reedley	160.00	19.00	7.00	4.00	66.00	43.00	13.00	0.62	7,015	0.07	0.38	25.87
76	W - Dinuba	164.00	20.00	7.00	4.00	55.00	32.00	7.00	0.62	5,185	0.05	0.51	25.68
77	NW - Dinuba	164.00	21.00	7.00	4.00	66.00	43.00	10.00	0.62	4,009	0.04	0.65	25.47
78	SW - Modesto	97.67	11.67	1.08	0.00	20.42	10.50	1.08	0.04	59,139	0.62	0.67	25.07
79	E - Wasco	100.00	12.00	5.00	2.00	30.00	12.00	1.00	0.33	5,468	0.06	0.88	25.02
80	SW - Sanger	152.00	17.00	5.00	3.00	68.00	46.00	16.00	0.47	7,048	0.07	0.48	24.94
81	Outskirts - Wasco	99.00	12.00	5.00	2.00	30.00	12.00	1.00	0.33	7,458	0.08	0.63	24.38
82	C - Corcoran	138.00	20.00	7.00	5.00	24.00	6.00	0.00	0.73	2,902	0.03	0.70	23.38
83	Pixley	138.00	17.00	6.00	3.00	29.00	12.00	1.00	0.48	3,564	0.04	0.87	23.19
84	N - Fresno	118.67	12.67	3.44	1.00	60.67	39.67	10.89	0.20	41,876	0.44	0.18	23.12
85	Kerman	112.00	13.50	3.50	1.00	18.00	6.50	0.00	0.19	13,607	0.14	0.56	23.10
86	NE - Selma	156.00	20.00	7.00	5.00	47.00	27.00	5.00	0.74	5,110	0.05	0.39	22.93
87	NE - Sanger	158.00	16.00	5.00	2.00	72.00	51.00	18.00	0.35	6,367	0.07	0.65	22.70
88	Goshen	160.00	20.00	7.00	4.00	31.00	13.00	2.00	0.62	3,393	0.04	0.69	22.47
89	W - Wasco	100.00	12.00	5.00	2.00	30.00	12.00	1.00	0.33	7,349	0.08	0.59	22.45
90	NE - Lemoore	132.00	18.00	6.00	4.00	28.00	10.00	1.00	0.60	4,904	0.05	0.48	21.81
91	Lemoore Station	132.00	15.00	4.00	2.00	16.00	4.00	0.00	0.33	7,542	0.08	0.56	21.74
92	E - Corcoran	138.00	20.00	7.00	5.00	24.00	6.00	0.00	0.73	2,305	0.02	0.82	21.68
93	Tipton	147.00	18.00	7.00	4.00	29.00	11.00	1.00	0.61	2,645	0.03	0.82	20.86
94	SE - Dinuba	165.00	22.00	8.00	5.00	62.00	38.00	9.00	0.76	2,629	0.03	0.64	20.08
95	C - Delano	118.00	14.00	6.00	2.00	24.00	8.00	0.00	0.35	6,938	0.07	0.52	19.52
96	EC - Modesto	99.73	13.36	1.36	0.00	22.82	12.36	1.45	0.05	46,878	0.49	0.56	18.79
97	Strathmore	170.00	22.00	7.00	4.00	41.00	22.00	4.00	0.62	2,846	0.03	0.68	18.70

Ranking	Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)		
		Weighting Factors		1	10	100	1000	1						10	100
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb							
98	N - Madera	99.50	9.00	1.00	1.00	36.50	17.50	1.50	0.16	15,051	0.16	0.49	18.34		
99	Unincorporated - Tulare County	164.00	23.00	8.00	6.00	28.00	9.00	0.00	0.87	2,499	0.03	0.52	17.83		
100	Avenal	71.50	6.00	1.50	0.50	15.00	3.50	0.00	0.10	15,702	0.16	0.70	16.44		
101	E - Clovis	152.75	16.75	4.25	2.25	68.25	44.00	15.50	0.37	16,722	0.18	0.16	15.99		
102	SE - Clovis	166.67	20.67	6.00	3.33	67.33	42.67	14.67	0.53	11,253	0.12	0.17	15.56		
103	London	166.00	20.00	7.00	4.00	36.00	17.00	3.00	0.62	1,877	0.02	0.83	15.08		
104	NE - Stockton	93.61	5.50	0.00	0.00	2.00	0.67	0.00	0.02	95,506	1.00	0.55	14.87		
105	SE - Sanger	154.00	16.00	5.00	3.00	71.00	48.00	18.00	0.47	2,439	0.03	0.82	14.86		
106	SW - Stockton	90.50	7.06	0.00	0.00	2.31	1.00	0.00	0.02	71,754	0.75	0.67	14.72		
107	Unincorporated - Kern County	62.00	6.00	1.50	0.50	53.00	28.50	5.00	0.10	15,344	0.16	0.62	14.37		
108	S - Delano	118.00	14.00	6.00	2.00	25.00	9.00	0.00	0.35	3,405	0.04	0.76	14.05		
109	NE - Ceres	113.71	15.43	2.00	0.00	22.00	12.43	1.86	0.06	28,021	0.29	0.53	13.46		
110	EC - Stockton	111.00	9.00	0.00	0.00	2.38	1.00	0.00	0.02	51,404	0.54	0.67	13.28		
111	NNW - Visalia	80.50	11.00	4.00	2.50	11.00	4.00	0.50	0.38	8,326	0.09	0.27	13.27		
112	SW - Visalia	165.00	22.00	8.00	5.00	22.00	8.00	1.00	0.75	4,289	0.04	0.26	13.24		
113	Bonadelle Ranchos-Madera Ranchos	116.50	12.00	2.50	1.00	38.00	18.00	2.50	0.18	8,486	0.09	0.53	12.79		
114	S Outskirts - Hanford	154.00	21.00	7.00	5.00	30.00	10.00	1.00	0.74	2,476	0.03	0.44	12.73		
115	SW - Lemoore	132.00	17.00	6.00	3.00	24.00	8.00	0.00	0.47	4,903	0.05	0.35	12.69		
116	Laton	144.00	21.00	8.00	5.00	25.00	8.00	0.00	0.75	1,847	0.02	0.58	12.51		
117	Patterson Tract	160.00	20.00	7.00	4.00	31.00	13.00	2.00	0.62	1,804	0.02	0.69	11.95		
118	Richgrove	117.00	13.00	5.00	2.00	29.00	12.00	1.00	0.33	2,890	0.03	0.79	11.91		
119	Caruthers	131.00	17.00	6.00	3.00	19.00	6.00	0.00	0.47	2,530	0.03	0.60	11.33		
120	Riverdale	111.00	14.00	4.00	2.00	18.00	5.00	0.00	0.32	3,281	0.03	0.67	11.09		
121	E - Porterville	139.00	13.00	3.00	1.00	57.00	36.00	9.00	0.20	5,402	0.06	0.64	10.62		
122	NE - Modesto	88.38	11.25	0.75	0.00	21.75	11.88	1.00	0.03	48,623	0.51	0.40	10.59		
123	Matheny	152.00	20.00	7.00	5.00	29.00	9.00	0.00	0.74	1,247	0.01	0.69	9.93		
124	S - Merced	112.60	12.40	1.00	0.00	28.80	13.40	2.00	0.04	18,584	0.19	0.81	9.92		
125	Poplar-Cotton Center	153.00	17.00	5.00	2.00	46.00	28.00	6.00	0.35	2,501	0.03	0.71	9.64		
126	Del Rey	158.00	17.00	6.00	3.00	61.00	39.00	12.00	0.48	1,756	0.02	0.71	9.50		
127	NW - Modesto	76.78	9.89	0.78	0.00	21.44	11.22	1.00	0.03	45,602	0.48	0.42	9.42		
128	NW - Clovis	134.75	13.50	3.75	1.50	63.75	42.25	12.75	0.27	14,703	0.15	0.14	8.72		
129	C - Merced	109.29	10.43	0.71	0.00	31.14	17.00	1.29	0.04	21,538	0.23	0.68	8.24		
130	C - Turlock	131.25	18.75	1.50	0.00	30.25	15.50	3.00	0.06	17,980	0.19	0.49	8.16		
131	Linnell Camp	174.00	23.00	8.00	6.00	41.00	18.00	3.00	0.88	849	0.01	0.68	7.93		
132	SW - Ceres	112.25	13.75	1.50	0.00	22.00	12.25	1.50	0.05	17,552	0.18	0.57	7.78		
133	SW - Madera	118.00	14.00	3.00	1.00	29.00	13.00	1.00	0.19	9,550	0.10	0.27	7.66		
134	Terra Bella	130.00	12.00	4.00	1.00	44.00	28.00	6.00	0.20	3,323	0.03	0.68	7.26		
135	WC - Modesto	86.17	12.00	1.17	0.00	21.50	11.67	1.33	0.04	26,003	0.27	0.43	7.01		
136	Easton	128.00	18.00	6.00	3.00	29.00	12.00	1.00	0.48	2,089	0.02	0.45	6.94		
137	Teviston	127.50	15.00	5.50	2.50	29.00	12.00	1.00	0.41	1,229	0.01	0.83	6.47		
138	Chowchilla	102.67	10.00	1.00	0.00	27.00	11.33	0.33	0.04	19,239	0.20	0.57	6.43		
139	SE - Stockton	104.50	8.50	0.00	0.00	3.00	1.00	0.00	0.02	26,830	0.28	0.65	6.32		
140	Plainview	170.00	22.00	7.00	4.00	41.00	22.00	4.00	0.62	933	0.01	0.68	6.13		
141	Unincorporated - Kings County	127.00	16.00	5.00	3.00	21.00	6.00	0.00	0.46	2,271	0.02	0.36	5.87		
142	Traver	166.00	20.00	7.00	4.00	36.00	17.00	3.00	0.62	724	0.01	0.83	5.82		
143	Livingston	123.50	16.50	1.50	0.00	27.50	12.50	2.00	0.05	12,979	0.14	0.50	5.51		
144	NW - Stockton	81.60	3.93	0.00	0.00	2.00	0.40	0.00	0.01	58,176	0.61	0.39	5.22		
145	SC - Turlock	137.00	20.00	2.00	0.00	30.00	15.00	3.00	0.07	7,757	0.08	0.64	5.21		
146	N - Greenacres	106.00	15.00	6.00	3.00	43.00	25.00	3.00	0.47	2,237	0.02	0.31	5.20		

Ranking	Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)		
		Weighting Factors		1	10	100	1000	1						10	100
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb							
147	Delhi	125.00	16.00	1.50	0.00	29.50	14.00	2.00	0.05	11,055	0.12	0.54	5.05		
148	SE - Turlock	128.33	16.67	1.67	0.00	31.00	16.33	3.00	0.06	14,297	0.15	0.37	4.76		
149	NE - Clovis	126.67	11.33	2.67	1.33	68.00	44.67	13.67	0.23	9,471	0.10	0.14	4.65		
150	Sultana	164.00	20.00	7.00	4.00	55.00	32.00	7.00	0.62	893	0.01	0.51	4.42		
151	Alpaugh	117.00	13.00	5.00	2.00	29.00	12.00	1.00	0.33	1,045	0.01	0.79	4.31		
152	Winton	110.33	14.33	0.67	0.00	31.67	15.67	2.00	0.04	10,588	0.11	0.62	4.17		
153	WC - Stockton	88.67	6.33	0.00	0.00	2.00	1.00	0.00	0.02	34,124	0.36	0.41	4.10		
154	Develop Center - Porterville	166.00	17.00	5.00	3.00	50.00	32.00	7.00	0.47	517	0.01	1.00	3.81		
155	S - Rosedale	87.00	11.00	3.00	1.00	38.00	20.00	2.00	0.18	10,034	0.11	0.13	3.63		
156	C - Greenacres	104.00	15.00	5.00	3.00	44.00	26.00	3.00	0.46	1,646	0.02	0.30	3.56		
157	N - Turlock	115.50	15.50	1.00	0.00	30.00	16.00	3.00	0.05	16,492	0.17	0.29	3.53		
158	West Goshen	160.00	20.00	7.00	4.00	31.00	13.00	2.00	0.62	519	0.01	0.69	3.44		
159	Fuller Acres	114.00	14.50	4.00	2.00	55.50	33.50	7.00	0.33	979	0.01	0.67	3.39		
160	Keyes	115.00	14.00	2.00	0.00	23.00	13.00	2.00	0.06	6,257	0.07	0.61	3.38		
161	W - Turlock	128.50	18.50	2.00	0.00	28.00	14.50	3.00	0.06	7,978	0.08	0.42	3.34		
162	Grangeville	145.00	21.00	8.00	5.00	31.00	11.00	1.00	0.75	508	0.01	0.53	3.15		
163	Biola	115.00	14.00	4.00	1.00	23.00	8.00	0.00	0.20	1,653	0.02	0.57	2.97		
164	Seville	161.00	19.50	6.00	3.00	59.50	34.00	7.00	0.48	487	0.01	0.78	2.88		
165	N - Rosedale	89.00	12.00	4.00	2.00	39.00	22.00	2.00	0.32	4,357	0.05	0.13	2.80		
166	SE - Merced	107.50	10.00	0.50	0.00	33.50	16.50	2.00	0.03	9,984	0.10	0.54	2.77		
167	Kettleman City	101.00	10.00	3.00	1.00	20.00	5.00	0.00	0.18	1,458	0.02	0.64	2.69		
168	East Tulare Villa	168.00	22.00	8.00	5.00	30.00	11.00	1.00	0.75	737	0.01	0.31	2.68		
169	E - Manteca	89.67	9.00	0.00	0.00	6.00	1.67	0.00	0.02	15,988	0.17	0.46	2.52		
170	C - Manteca	90.50	9.25	0.00	0.00	5.00	1.00	0.00	0.02	15,020	0.16	0.47	2.45		
171	NE - Merced	94.75	7.75	0.25	0.00	33.75	17.75	1.75	0.03	17,570	0.18	0.35	2.43		
172	Stratford	101.00	10.00	3.00	1.00	20.00	5.00	0.00	0.18	1,295	0.01	0.64	2.39		
173	Delft Colony	164.00	20.00	7.00	4.00	55.00	32.00	7.00	0.62	474	0.00	0.51	2.35		
174	Hughson	115.00	16.00	1.00	0.00	27.00	15.00	3.00	0.05	6,763	0.07	0.45	2.28		
175	SE - Atwater	108.00	13.00	1.00	0.00	32.00	16.00	2.00	0.04	5,823	0.06	0.58	2.27		
176	Tonyville	170.00	22.00	7.00	5.00	44.00	22.00	4.00	0.74	339	0.00	0.54	2.14		
177	W - Bakersfield	83.00	10.50	3.00	0.50	42.00	23.00	2.50	0.12	9,514	0.10	0.11	2.06		
178	Lanare	111.00	14.00	4.00	2.00	18.00	5.00	0.00	0.32	592	0.01	0.67	2.00		
179	Allensworth	117.00	13.00	5.00	2.00	29.00	12.00	1.00	0.33	479	0.01	0.79	1.97		
180	C - Atwater	111.00	14.00	0.50	0.00	30.00	15.00	2.00	0.04	5,529	0.06	0.56	1.84		
181	S Outskirts - Turlock	124.00	15.00	2.00	0.00	24.00	11.00	1.00	0.06	4,197	0.04	0.47	1.79		
182	Lindcove	163.00	20.00	6.00	4.00	53.00	28.00	4.00	0.61	402	0.00	0.47	1.78		
183	Lathrop	67.33	6.17	0.00	0.00	6.00	1.50	0.17	0.02	18,601	0.19	0.38	1.75		
184	W - Atwater	114.00	15.00	1.00	0.00	29.00	15.00	2.00	0.05	3,761	0.04	0.64	1.73		
185	N - Atwater	108.00	14.00	1.00	0.00	32.00	16.00	2.00	0.04	4,249	0.04	0.59	1.73		
186	N - Merced	91.00	8.00	0.00	0.00	35.00	18.00	2.00	0.02	11,537	0.12	0.42	1.71		
187	S - Atwater	111.00	14.00	0.50	0.00	30.00	15.00	2.00	0.04	5,178	0.05	0.54	1.66		
188	C - Patterson	72.00	5.00	0.00	0.00	28.00	15.00	3.00	0.02	15,478	0.16	0.41	1.65		
189	Minkler	145.00	16.00	5.00	2.00	78.00	54.00	20.00	0.35	1,041	0.01	0.29	1.64		
190	Waterford	101.00	9.00	0.00	0.00	24.00	12.00	1.00	0.02	8,337	0.09	0.52	1.63		
191	McSwain	108.00	13.00	1.00	0.00	32.00	16.00	2.00	0.04	4,171	0.04	0.58	1.62		
192	Unincorporated - San Joaquin County	94.00	6.67	0.00	0.00	6.67	2.00	0.00	0.02	13,732	0.14	0.37	1.57		
193	E - Lodi	95.00	3.00	0.00	0.00	1.00	0.00	0.00	0.02	7,925	0.08	0.79	1.50		

Ranking	Weighting Factors Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)
		1	10	100	1000	1	10	100					
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb					
194	Tooleville	163.00	20.00	6.00	4.00	53.00	28.00	4.00	0.61	334	0.00	0.47	1.48
195	Huron	74.50	5.50	0.00	0.00	13.00	3.00	0.00	0.02	6,785	0.07	0.85	1.44
196	Mendota	47.00	3.00	0.00	0.00	11.00	4.50	0.00	0.01	11,139	0.12	0.85	1.42
197	E - Riverbank	90.00	8.50	0.00	0.00	19.50	10.00	1.00	0.02	6,323	0.07	0.65	1.42
198	NW - Madera	110.00	13.00	2.00	0.00	24.00	10.00	0.00	0.05	7,567	0.08	0.22	1.39
199	Lemon Cove	163.00	20.00	6.00	4.00	53.00	28.00	4.00	0.61	311	0.00	0.47	1.37
200	Yetttem	160.00	19.00	6.00	3.00	64.00	39.00	9.00	0.49	223	0.00	0.81	1.37
201	Ducor	130.00	12.00	4.00	1.00	44.00	28.00	6.00	0.20	612	0.01	0.68	1.34
202	Unincorporated - Merced County	97.00	10.00	1.00	0.00	16.00	6.50	1.00	0.04	3,597	0.04	0.65	1.34
203	SC - Manteca	93.50	10.00	0.00	0.00	5.50	1.00	0.00	0.02	11,487	0.12	0.31	1.33
204	Smith Corner	89.00	11.00	3.50	1.50	34.00	16.00	1.00	0.25	547	0.01	0.60	1.28
205	Salida	76.67	8.00	0.00	0.00	17.33	7.67	0.33	0.02	14,246	0.15	0.29	1.28
206	Ripon	78.50	8.00	0.00	0.00	14.50	5.50	0.00	0.02	14,005	0.15	0.28	1.22
207	W - Riverbank	90.50	8.50	0.00	0.00	19.50	10.00	1.00	0.02	7,711	0.08	0.44	1.17
208	E - Los Banos	55.00	2.00	0.00	0.00	3.00	0.00	0.00	0.01	13,865	0.15	0.59	1.17
209	NC - Manteca	75.00	7.00	0.00	0.00	3.00	1.00	0.00	0.02	10,300	0.11	0.41	1.16
210	NC - Tracy	59.00	4.50	0.00	0.00	6.00	1.75	0.00	0.01	15,300	0.16	0.38	1.15
211	Newman	74.00	4.00	0.00	0.00	13.00	4.00	0.00	0.01	10,410	0.11	0.47	1.09
212	Monmouth	151.00	21.00	8.00	5.00	26.00	10.00	1.00	0.75	154	0.00	0.60	1.08
213	Unincorporated - Stanislaus County	102.00	11.00	1.00	0.00	23.00	10.00	1.00	0.04	3,952	0.04	0.45	1.07
214	Monson	164.00	20.00	7.00	4.00	55.00	32.00	7.00	0.62	205	0.00	0.51	1.02
215	SE - Modesto	99.00	13.00	1.00	0.00	23.00	12.00	1.00	0.04	5,806	0.06	0.27	1.01
216	Rolling Hills	116.00	13.00	3.00	1.00	34.00	16.00	2.00	0.19	727	0.01	0.43	0.93
217	SW - Oakdale	101.00	8.00	0.00	0.00	15.00	7.00	0.00	0.02	6,379	0.07	0.41	0.92
218	SE - Lodi	92.00	3.00	0.00	0.00	1.00	0.00	0.00	0.01	8,896	0.09	0.44	0.92
219	E - Greenacres	103.00	15.00	5.00	3.00	44.00	26.00	3.00	0.46	1,595	0.02	0.08	0.92
220	Firebaugh	58.00	4.00	0.00	0.00	8.00	3.00	0.00	0.01	7,799	0.08	0.62	0.92
221	NE - Tracy	60.00	5.50	0.00	0.00	6.00	1.00	0.00	0.01	10,922	0.11	0.38	0.91
222	Centerville	151.50	16.00	5.00	2.00	75.00	52.50	19.00	0.35	354	0.00	0.47	0.91
223	Waukena	152.00	20.00	7.00	5.00	29.00	9.00	0.00	0.74	114	0.00	0.69	0.91
224	NE - Lodi	88.50	2.50	0.00	0.00	1.00	0.00	0.00	0.01	6,798	0.07	0.61	0.90
225	Raisin City	115.00	14.00	4.00	1.00	17.00	5.00	0.00	0.20	381	0.00	0.75	0.90
226	SW - Manteca	85.00	10.00	1.00	0.00	4.00	1.00	0.00	0.03	4,634	0.05	0.35	0.88
227	Bowles	148.00	21.00	7.00	4.00	31.00	14.00	2.00	0.62	177	0.00	0.51	0.87
228	E - Oakdale	91.00	5.00	0.00	0.00	16.00	7.00	0.00	0.02	8,472	0.09	0.37	0.87
229	NW - Los Banos	53.00	2.00	0.00	0.00	1.00	0.00	0.00	0.01	10,036	0.11	0.62	0.86
230	C - Tracy	55.25	4.00	0.00	0.00	9.50	3.25	0.25	0.01	15,091	0.16	0.31	0.86
231	Taft	52.00	3.33	0.00	0.00	32.67	14.00	1.00	0.01	9,457	0.10	0.50	0.85
232	NE - Patterson	80.00	6.00	0.00	0.00	26.00	13.00	3.00	0.02	4,888	0.05	0.59	0.84
233	El Rancho	170.00	22.00	7.00	5.00	44.00	22.00	4.00	0.74	132	0.00	0.54	0.83
234	Coalinga	46.00	2.00	0.00	0.00	15.00	4.00	0.00	0.01	13,398	0.14	0.47	0.81
235	San Joaquin	66.00	6.00	0.00	0.00	13.00	4.00	0.00	0.02	4,038	0.04	0.79	0.78
236	Lost Hills	59.00	5.00	1.00	0.00	18.00	5.00	0.00	0.03	2,388	0.03	0.77	0.74
237	N - Lodi	85.50	2.50	0.00	0.00	1.50	0.00	0.00	0.01	6,910	0.07	0.47	0.69
238	WC - Los Banos	54.00	2.00	0.00	0.00	2.00	0.00	0.00	0.01	6,166	0.06	0.78	0.68
239	C - Lodi	90.00	3.00	0.00	0.00	1.00	0.00	0.00	0.01	5,736	0.06	0.51	0.66
240	Rodriguez Camp	117.00	13.00	5.00	2.00	29.00	12.00	1.00	0.33	158	0.00	0.79	0.65

Ranking	Communities	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)		
		Weighting Factors		1	10	100	1000	1						10	100
		Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb							
241	SW - Riverbank	95.00	10.00	0.00	0.00	20.00	10.00	1.00	0.02	9,132	0.10	0.18	0.65		
242	Dos Palos	61.00	3.00	0.00	0.00	6.00	1.00	0.00	0.01	4,977	0.05	0.73	0.64		
243	SW - Lodi	85.50	3.00	0.00	0.00	1.50	0.00	0.00	0.01	9,484	0.10	0.30	0.63		
244	Hardwick	156.00	22.00	8.00	5.00	24.00	8.00	0.00	0.75	136	0.00	0.39	0.63		
245	French Camp	77.00	6.00	0.00	0.00	3.00	1.00	0.00	0.02	3,382	0.04	0.63	0.56		
246	NW - Oakdale	96.00	7.00	0.00	0.00	16.00	7.00	0.00	0.02	5,717	0.06	0.29	0.53		
247	Planada	53.00	2.00	0.00	0.00	34.00	17.00	1.00	0.01	4,544	0.05	0.72	0.51		
248	S Outskirts - Manteca	74.00	7.00	0.00	0.00	8.00	2.00	0.00	0.02	5,774	0.06	0.31	0.49		
249	Mexican Colony	84.00	10.00	3.00	1.00	33.00	16.00	1.00	0.18	284	0.00	0.60	0.49		
250	SC - Tracy	52.00	3.50	0.00	0.00	10.50	4.00	1.00	0.01	15,052	0.16	0.18	0.48		
251	SW - Atwater	120.00	15.00	1.00	0.00	27.00	13.00	2.00	0.05	3,391	0.04	0.19	0.46		
252	Ford City	53.00	3.00	0.00	0.00	33.00	14.00	1.00	0.01	4,185	0.04	0.62	0.45		
253	Gustine	55.00	2.00	0.00	0.00	4.00	1.00	0.00	0.01	5,612	0.06	0.55	0.44		
254	Fairmead	101.00	10.00	1.00	0.00	27.00	12.00	0.50	0.04	1,467	0.02	0.51	0.44		
255	NW - Tracy	48.00	2.00	0.00	0.00	4.00	1.00	0.00	0.01	13,814	0.14	0.22	0.39		
256	Cherokee Strip	87.00	10.50	3.00	1.00	32.50	15.00	1.00	0.18	228	0.00	0.59	0.38		
257	La Vina	116.00	13.00	3.00	1.00	34.00	16.00	2.00	0.19	285	0.00	0.43	0.37		
258	Buttonwillow	75.00	8.00	1.00	0.00	33.00	16.00	1.00	0.03	1,551	0.02	0.45	0.35		
259	N - Manteca	73.00	6.00	0.00	0.00	4.00	1.00	0.00	0.02	4,932	0.05	0.27	0.33		
260	NW - Lodi	79.50	2.00	0.00	0.00	2.00	0.00	0.00	0.01	8,124	0.09	0.21	0.33		
261	SW - Los Banos	54.00	2.00	0.00	0.00	2.00	0.00	0.00	0.01	6,756	0.07	0.34	0.33		
262	Unincorporated - Madera County	83.00	9.00	1.00	0.00	13.00	5.00	0.00	0.03	1,288	0.01	0.46	0.31		
263	East Orosi	106.00	9.00	2.00	0.00	81.00	54.00	17.00	0.06	509	0.01	0.66	0.30		
264	Mountain House	48.00	2.00	0.00	0.00	4.00	1.00	0.00	0.01	10,022	0.10	0.22	0.29		
265	Le Grand	74.00	5.00	0.00	0.00	35.00	17.00	1.00	0.02	1,648	0.02	0.58	0.24		
266	WC - Lodi	83.00	3.00	0.00	0.00	2.00	0.00	0.00	0.01	4,624	0.05	0.24	0.24		
267	W - Tracy	40.00	1.00	0.00	0.00	8.00	3.00	1.00	0.01	11,438	0.12	0.20	0.24		
268	South Dos Palos	61.00	3.00	0.00	0.00	6.00	1.00	0.00	0.01	1,547	0.02	0.73	0.20		
269	Cowan	115.00	14.00	2.00	0.00	23.00	13.00	2.00	0.06	333	0.00	0.61	0.18		
270	Ballico	118.00	15.00	1.00	0.00	33.00	16.00	2.00	0.05	397	0.00	0.56	0.16		
271	Tranquillity	66.00	6.00	0.00	0.00	13.00	4.00	0.00	0.02	807	0.01	0.79	0.15		
272	Cressey	109.67	13.00	0.67	0.00	32.00	15.33	2.00	0.04	422	0.00	0.51	0.13		
273	Cantua Creek	66.00	6.00	0.00	0.00	13.00	4.00	0.00	0.02	471	0.00	0.79	0.09		
274	El Nido	101.00	10.00	1.00	0.00	16.00	6.00	0.00	0.04	333	0.00	0.47	0.09		
275	S - East Oakdale	64.00	3.00	0.00	0.00	24.00	11.00	1.00	0.01	1,213	0.01	0.33	0.08		
276	Del Rio	77.00	8.00	0.00	0.00	19.00	9.00	1.00	0.02	1,308	0.01	0.19	0.08		
277	Grayson	35.00	2.00	0.00	0.00	28.00	16.00	3.00	0.01	951	0.01	0.52	0.07		
278	W - Lodi	74.00	2.00	0.00	0.00	2.00	0.00	0.00	0.01	3,275	0.03	0.11	0.07		
279	Stevinson	93.00	8.00	0.00	0.00	17.00	6.00	0.00	0.02	312	0.00	0.62	0.06		
280	Diablo Grande	35.00	2.00	0.00	0.00	28.00	16.00	3.00	0.01	833	0.01	0.52	0.06		
281	N - East Oakdale	47.00	1.00	0.00	0.00	17.00	7.00	0.00	0.01	1,545	0.02	0.28	0.05		
282	Dustin Acres	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	653	0.01	0.37	0.05		
283	Stallion Springs	18.00	1.00	0.00	0.00	50.00	25.00	2.00	0.01	2,532	0.03	0.21	0.04		
284	Westley	35.00	2.00	0.00	0.00	28.00	16.00	3.00	0.01	608	0.01	0.52	0.04		
285	Bear Creek	98.00	8.00	0.00	0.00	35.00	17.00	2.00	0.02	288	0.00	0.37	0.04		
286	Valley Acres	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	527	0.01	0.37	0.04		
287	Santa Nella	20.00	0.00	0.00	0.00	3.00	1.00	0.00	0.00	1,366	0.01	0.59	0.03		

Ranking	Weighting Factors	PM2.5				Ozone			Pollutant Score	Population Values	Population Score	Poverty Score	Overall Score (Pollution, Population, Poverty)
		1	10	100	1000	1	10	100					
	Communities	Number of Days Greater 12 µg/m <sup>3</sup>	Number of Days Greater 35 µg/m <sup>3</sup>	Number of Days Greater 55 µg/m <sup>3</sup>	Number of Days Greater 65 µg/m <sup>3</sup>	Number of Days Greater 70 ppb	Number of Days Greater 75 ppb	Number of Days Greater 84 ppb					
288	Lebec	18.00	1.00	0.00	0.00	50.00	25.00	2.00	0.01	1,477	0.02	0.21	0.03
289	Monterey Park Tract	85.00	8.00	0.00	0.00	20.00	9.00	1.00	0.02	135	0.00	0.55	0.02
290	S - Tracy	23.00	1.00	0.00	0.00	23.00	13.00	2.00	0.01	1,486	0.02	0.19	0.02
291	Derby Acres	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	312	0.00	0.37	0.02
292	Three Rocks	28.00	1.00	0.00	0.00	11.00	4.00	0.00	0.00	243	0.00	0.90	0.02
293	Crows Landing	22.00	1.00	0.00	0.00	13.00	5.00	0.00	0.00	358	0.00	0.64	0.01
294	Snelling	56.00	2.00	0.00	0.00	31.00	16.00	1.00	0.01	232	0.00	0.39	0.01
295	Tuttle	75.50	5.00	0.00	0.00	34.50	17.00	1.50	0.02	102	0.00	0.54	0.01
296	Volta	37.50	1.00	0.00	0.00	3.50	1.00	0.00	0.01	240	0.00	0.57	0.01
297	Tupman	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	156	0.00	0.37	0.01
298	Mettler	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	136	0.00	0.37	0.01
299	McKittrick	51.00	4.00	0.00	0.00	31.00	13.00	1.00	0.01	111	0.00	0.37	0.01