



October 21, 2019 – Originally Submitted
October 23, 2019 - Resubmission

Karen Magliano, Director
Office of Community Air Protection
California Air Resources Board
1001 I Street,
Sacramento, CA 95814

Re: Imperial County Community AB617 Community Nominations

Dear Ms. Magliano:

Attached is a copy of the Imperial County final submittal on "recommended communities" for year 2 of the state's Community Air Protection Program, as required by the California Air Resources Board (CARB). The Community Air Protection Program was established by the state to implement Assembly Bill 617 (AB 617) which directs the state, in conjunction with local air districts, to select communities that have a "high community exposure burden" to air pollution. This document is being submitted in partnership with Comite Civico del Valle, Inc.

Thank you for your attention to this request. Should you have any questions please do not hesitate to call.

Sincerely,

Matt Dessert
Air Pollution Control District

CC: Mr. Luis Olmedo, Director, Comite Civico del Valle, Inc.
Ms. Veronica Eady, Assistant Executive Officer, CA Air Resources Board



AB617 Self Nomination

Imperial County Northern Corridor: City of Brawley, City of Calipatria, City of Westmorland, and the unincorporated communities of Niland, Desert Shores, Salton Sea Beach, Salton City, Bombay Beach, and Seeley.

Submitted by: Comite Civico Del Valle and Imperial County Air Pollution Control District.



AB617 North End Nomination

Preface

The communities of the Imperial County face challenges to both the North and South of its boundaries. Mexicali and the United States Federal, State, and local Government work in conjunction to improve the air quality of the region in the face of various obstacles. For the first year of implementation of AB 617, Imperial County submitted a nomination and was selected for three of its communities to the south end, with this community being termed the Community Corridor of El Centro, Heber, and Calexico. As of the submittal of this second-year nomination, the partnership between Imperial County Air Pollution Control District, Comite Civico del Valle, and the Ab 617 Community Steering Committee has gone from strength to strength, having adopted a Community Air Monitoring Plan and a Community Emissions Reductions Program (pending final approval from the California Air Resources Board).

This second year nomination, for the North End of Imperial County, includes communities impacted by various sources of air pollution, which result in unhealthy air quality. The following nomination describes the demographics of each community, the level of burden each community faces. Therefore, the Imperial County Air Pollution Control District and Comite Civico Del Valle submit as partners this nomination in an effort to have the North End of Imperial County be a designated AB617 community with its own Community Air Monitoring Plan and a Community Emissions Reductions Program.

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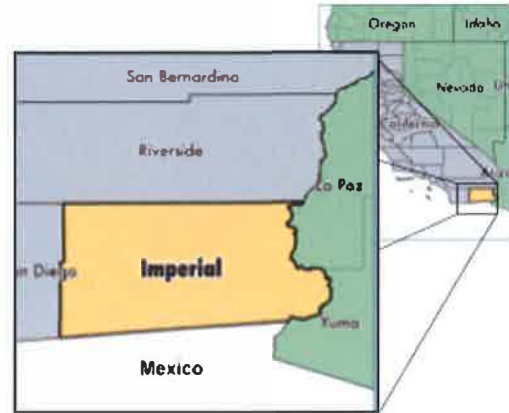
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Imperial County

Imperial County is located in the Southeast section of California (Map 1). It is also part of the Southern California Border Region, the smallest but most economically diverse region in the state. Imperial Valley borders the Mexican state of Baja California, the State of Arizona on the East, San Diego County on the West, and Riverside County on the North. Imperial County is home to approximately 180,000 residents which live within seven cities (Brawley, Calexico, El Centro, Calipatria, Holtville, Imperial, and Westmorland) and nine unincorporated communities (Bombay Beach, Heber, Niland, Desert Shores, Ocotillo, Palo Verde, Seeley, Salton City, and Winterhaven - Quechan Indian Tribe).



Map 1: Location of Imperial County within the State

The region consists of much of a desert landscape, with a transformative environment suited for the agricultural economy, the primary and main economic driver for the county. Water is supplied by the Whitewater River and Colorado River from the North end for residential and industrial use, and the New River and Alamo River from south of the border to the Salton Sea. The city of El Centro houses the county buildings and seats addressing the county's needs.

“Imperial County is unique among California’s major agricultural region because it shares an international border with Mexico, the source of nearly all farm labor in California, and it is largely isolated from California’s dynamic non-agricultural economies. As part of the “borderland,” Imperial is the port of entry to many Mexican migrant workers, is the site of some of the most intense border enforcement in California, and has access to a large legal commuter workforce from Mexico. It is not surprising that Imperial County has the highest percentage of Hispanics of any California County (Martin, 2001)¹. Mexicali, across the border to the south, serves as both a reservoir and refuge of Mexican workers for the Imperial County workforce... Demographically, Imperial County shares a similar experience to other California’s major agricultural regions where agriculture and non-agricultural sectors are inevitably linked and dependent on each other for the region’s economic development and growth. Farmers in Imperial County produce over 100 different products including the raising of cattle and sheep, which include over 30 confined animal feeding operations. In producing over 100 different commodities, it makes agriculture the top economic driver for the region. Producers, custom operators, transport refrigerated units, and processors operate approximately 20,000 pieces of off-road, mobile and stationary agriculture equipment, in addition to on-road vehicles used in agriculture operations which include high NOx emitting diesel trucks to transport products within the transport corridor to the Calexico port of entry and to numerous warehouses facilities and cooling centers. Most of this equipment has been in operation for multiple decades contributing to the poor air quality in the area.”²

Imperial County is currently designated as a nonattainment area for the National Ambient Air Quality Standards (NAAQS) and California Ambient Quality Standards (CAAQS) for 8-hour ozone and particulate matter up to 10 micrometers in size (PM10). A portion of Imperial County is also currently designated a nonattainment area for the NAAQS for particulate matter up to 2.5 micrometers in size (PM2.5).

¹ Martin, P.L. and J.E. Taylor. 1998. “Poverty Amid Prosperity: Farm Employment, Immigration, and Poverty in California.”

² J. Edward Taylor. “Immigration, Employment, Poverty, and Welfare in the Imperial Valley”. American Journal of Agricultural Economics 80 (November), 1008-1014.

In addition, off-highway activities in the desert increase particulate matter in an already polluted community. There is also a direct nexus between land use patterns and transportation-related emissions. Connections between land use and freight transportation (diesel) is a priority for our community and in California. SB375 requires that California be responsible for developing a Sustainable Communities Strategy (SCS) for the region's transportation plan. The SCS objective is to demonstrate how emissions reduction strategies can be implemented in disadvantaged communities which are currently non-attainment for Ozone, PM10, and PM2.5.

Geographical and Air Pollution Concerns

Salton Sea

The Salton Sea, geographically located in the northwestern part of Imperial County, is the largest lake in California. The Salton Sea is receding at a rapid rate due to rapid decrease flows due to the quantification settlement agreement. As the City of Mexicali's population increase, the city resorted to recycle water for use, decreasing the inflow from the New River to the Salton Sea.³ Regional desert winds that can pick up dust from the exposed playa increase the already existing particulate matter problem in the Imperial County. Changing weather patterns, droughts and competing water demands are dramatically altering the landscape and creating conditions conducive to the production of wind-blown dust and dust storms. Studies conducted suggest and anticipate a significant impact on the health and quality of life for nearby residents of this predominantly low-income, Mexican-American community.

On public health, while the current existent situation anticipates a health disaster, we know little about the possible long-term health effects of exposure to mobilized lakebed sediments or the numerous toxic contaminants that may become respirable on entrained particles. Drawing a conclusion on existing epidemiological literature of other known sources of wind-blown dust, such as dust storms, and related health effects is needed in order to begin understanding the potential public health impact of wind-blown dust exposure. The increased production of wind-blown dust and environmental exposure to such non-combustion related sources of particulate matter are growing health threats, due in part to rough couple with increasing pressure on limited water resources.

Recent population-based studies have linked dust storms with cardiovascular mortality, asthma, hospitalization and decrease in pulmonary functions in both adults and children. A growing number of studies provide evidence of the acute health effects of wind-blown dust exposures among children, which with repeated insults have potential to influence health over time. The shrinking of the Salton Sea illustrates a public health and environmental justice crisis that requires action and attention to protect the health and well-being of the local communities.⁴

³ California Water Boards Colorado River - R7. Introduction to the New River/Mexicali Sanitation Program. 2019

⁴ Johnston JE, et al. "The disappearing Salton Sea. <https://www.ncbi.nlm.nih.gov/pubmed/30738261>

New River

Currently, the New River's headwaters originated about 15 miles south of the City of Mexicali, in the Mexicali Valley, Mexico. The New River carries urban runoff, treated municipal wastes, untreated and partially treated industrial wastes, and agricultural runoff from the Mexicali Valley into the United States. After it crosses the International Boundary in Calexico, California, the New River travels about 60 miles through Imperial County before it discharges its entire flow into the Salton Sea. By the time the New River reaches the Salton Sea, about $\frac{2}{3}$ of its flow consists of wastewater in the form of agricultural runoff from Imperial County. Flows in the New River at the International Boundary with Mexico have been reduced by as much as 40% during the last 10 years due to a number of factors, including reduction of agricultural runoff and municipal wastewater discharged into the New River and its tributaries in Mexico.⁵ At the state, county, and local level as well through international agreements, projects have been developed and implemented that address pollution at its source. Regionally in Imperial County, nonpoint pollution has been implemented addressing discharges into the new river, this includes agricultural runoff and domestic wastewater treatment from Imperial Valley point sources. Internationally, projects (1) improve upon collection system of wastewater, either by lining or replacing existing sewer pipes and acquiring modern sewer cleaning equipment, (2) rehabilitation and upgrading to pumping facilities that lift and deliver wastewater to treatment facilities, including installation of standby power equipment and (3) improve the existing lagoons at the Ignacio Zaragoza and Gonzalez Ortega wastewater treatment facilities in Mexicali to increase their reliability and capacity, and thereby preventing wastewater to even reach to the New River in the first place.⁶

Agriculture and Cattle

Agriculture is the leading industry in Imperial County encompassing farming, transportation, warehouses and packing companies. Imperial County farmlands surrounds most of its cities and oftentimes a short commute from one town to another is what dominated with the view of agriculture. Agricultural practices and activities involving pesticide application techniques, agricultural burning, farming equipment, tractors, semi-trucks idling, and vehicles driving off-road add to air quality concerns for community residents. Despite regulations and laws being implemented and enforced by local government, the overwhelming economic implication of agriculture drives policies at the local and county level.

Directly south and southeast of the Salton Sea, an area saturated in agricultural farmlands and industry, dry deserts and heavy west winds, some 36,000+ residents spread throughout 4 cities populate what is the northern end of Imperial County. Residents of Brawley, Westmorland, Calipatria, and Niland live in distress due to the many contributing factors including poor air quality. In these rural areas, schools are scattered amongst farmlands, and surrounded by an open desert area. Agricultural activities, off-roading, geothermal, and the Salton Sea expose the 36,000+ residents and students to particulate matter by all sources mentioned.

In 2017, the Annual Crop and Livestock Report, noted that more than 539,000 acres were harvested in 2016 with a gross value of \$2,063,214,000 of agricultural production, ranking it 9th overall in 2016's California Counties with a strong worth in California's agricultural industry. Even during the winter seasons, Imperial Country provides two-thirds of all winter vegetables consumed by Americans. Of the almost half a million acres under cultivation in the Imperial Valley, about 40% to 45% of the total acreage is in alfalfa. While most of the alfalfa is

⁵ California Water Boards Colorado River - R7. Introduction to the New River/Mexicali Sanitation Program. 2019

⁶ California Water Boards Colorado River - R7. Introduction to the New River/Mexicali Sanitation Program. 2019

exported to other states and countries, about 10% of the hay goes to local feedlots.⁷ In 2018, the top five crops in this category included alfalfa (\$148.92 million), sugar beets (\$53.6 Million), Bermuda grass (\$50.6 Million), Sudan grass (\$47.8 Million) and Klein grass (\$20.7 million).⁸

In Imperial Valley, much of the livestock production is specified to “feeder beef” which is the raising of calves to prepare them for market. The production of livestock in the Imperial Valley is estimated at \$452.17 million in 2018. Part of the operation and economic impact with feedlots is generated at the facilities and in support of operations i.e. employment, packing, and transportation.

Agriculture will continue to be the largest economic sector in Imperial Valley. The region has developed over 3,000 miles of canals that distribute water to over 539,000 acres of active production of land. The agricultural and livestock economy brings multiple sectors of the workforce in operation. Not only agriculture has a rich tradition in Imperial Valley dating back more than a century, the region has rich fertile ground perfect for farming. The valley, has optimal climate year-round for growing, publicly owned water and energy delivered at a low cost, access to three international ports, central location to major southwest markets, and the availability of an affordable and youthful workforce.

Transportation

Westmorland, California, a city split down the middle by a 1 mile stretch of CA-Highway 78, is known as the Gateway City, an appropriate moniker. As the city furthest West of Imperial County, Westmorland finds itself directly in the path of all traffic traveling East from Los Angeles County and West from Arizona. Year-round, semi-trucks pass through the city continuously, causing an influx of diesel emissions, and now even more so with the newly developed travel stop. On the 1 mile stretch of CA-Highway 78 that runs through Westmorland, four gas stations and one hotel make Westmorland the ideal rest area for travelers and long-haul truck drivers, alike, which is why there is an idling issue observed in the city.

Aside from emissions of vehicles passing through, long-haul truck drivers park to rest, resulting in emissions from the semi-trucks idling for hours at a time. On any given night, at least 10 semi-trucks can be counted, parked and idling, between these five rest areas. Each of these locations for travelers are found neighboring private residents. The hotel and one of the gas stations are both directly next door to two low-income family apartments and one senior citizen home. Both low-income family apartments have an outdoor playground in close vicinity to those hotspots for idling semi-trucks. This in turn is putting the many children that live in those apartments complexes at risk of breathing harmful amounts of diesel pollution emitted from the continuous semi-truck idling.

The youth, particularly of Westmorland, find themselves extremely vulnerable to vehicle emissions. Aside from the emissions from their neighboring hotspots, Westmorland Union Elementary School is located adjacent to CA-Hwy 78. Separated only by a side-walk, the open-air playground/ physical education field of the junior high section of Westmorland Elementary directly borders this high volume traffic. For their two years of attendance at the middle school, plus all the previous years of attendance on the elementary side, there is logical concern that so much long-term exposure puts these youths in unavoidable health harm.

⁷

Guerrero, Juan & Rufino dos Santos, Alecsandro. *Imperial County Livestock industry 1910 to the Present*. University of California-Imperial County Cooperative Agricultural Extension. 2004.

⁸

Bracken, Michael J. *County Economic Report Imperial. 9th Annual Southern California Economic Summit*. Development Management Group 2018.

As the year-round gateway into Imperial County, the already high volume traffic of Westmorland goes through an additional seasonal increase during the months of November, December, and January, referred to by Imperial Valley residents as Glamis Season.

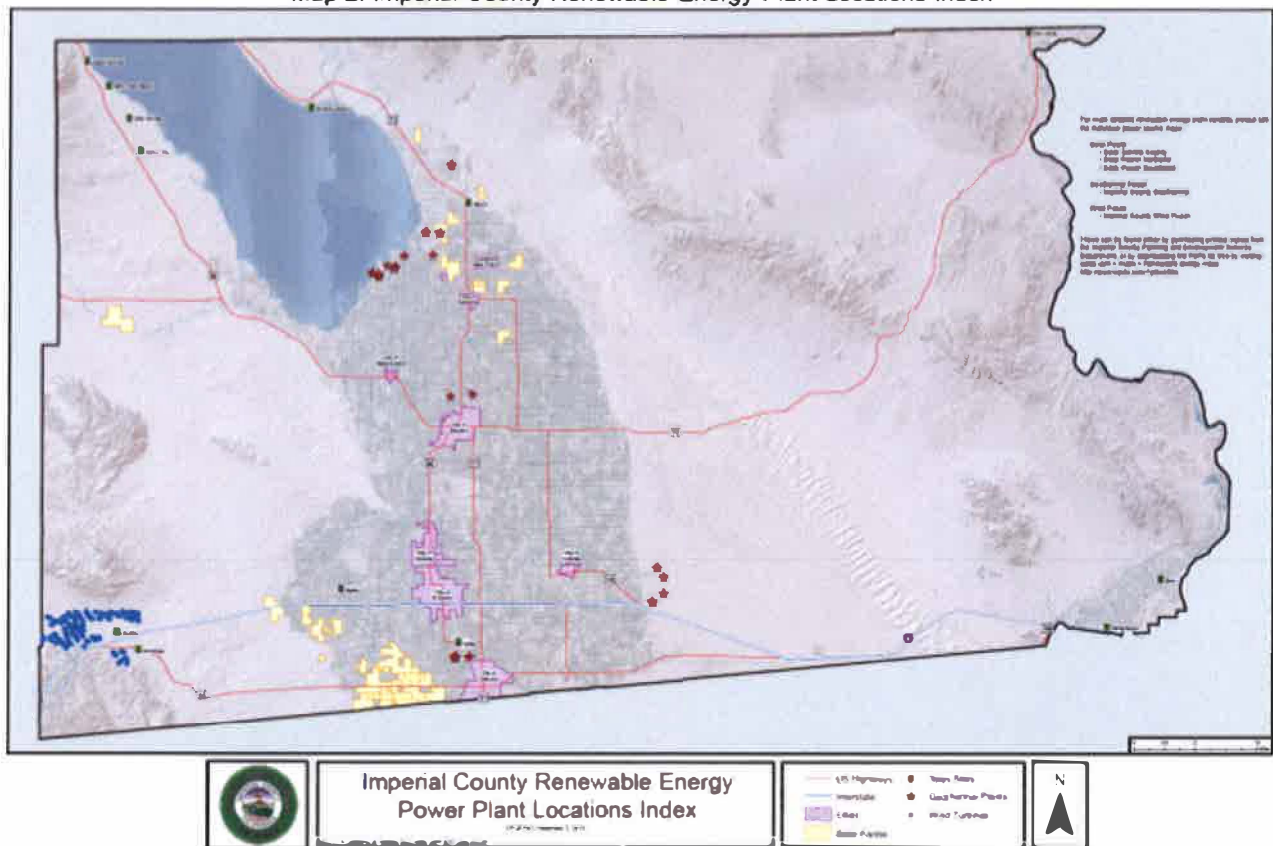
40 miles east of Westmorland, continuing on CA-Highway 78, can be found the vast desert sands dunes of Glamis, California. A particularly famous attraction for sand sport enthusiasts, the Glamis Dunes creates an influx of families traveling in recreational vehicles and heavy duty trucks hauling trailers loaded with off-road vehicles. This seasonal influx of travelers seem to travel in convoys, passing through Westmorland, eastbound around Brawley, California towards Glamis, and vice versa leaving from Glamis to return West.

At some points, an overlapping of Glamis traffic and, additionally elevated, semi-truck traffic occur when the agricultural harvest of Imperial Valley crops are being exported out of the county. During this period, the increase of idling semi-trucks hauling refrigerated trailers, along with the idling recreational vehicles and the continuous “gateway” traffic, air-quality is drastically threatened. This puts the citizens, especially those youth during school hours, at greater risk of lung and cardiac health disease.

Planning and Development of Sustainable Energy

Imperial County is a national leader in the development of its renewable energy resources. The county also supports and encourages the development of renewable energy resources in a manner compatible with the

Map 2: Imperial County Renewable Energy Plant Locations Index



protection of existing communities, agriculture, military operation and sensitive environmental resources. The county, among the benefits of pushing for development of renewable energies, include 1) social and fiscal benefits from increased economic activity and local employment opportunities that do not threaten the economic viability of other industries, 2) reductions in potential greenhouse gases by displacing fossil-fuel-generated electricity with renewable energy power which does not add to the greenhouse effect, 3) support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea, and 4) contribute towards meeting the State of California's Renewable Portfolio Standards (RPS) along with other benefits renewable energy brings at the county level.⁹ Imperial County and Imperial Irrigation District (IID), to meet these standards, established targets higher than the procurement at 50% by 2030. The county contains a wide range of industrial energy resources. According to the records provided by the US Energy Administration, there are 69 different energy structures in the county.¹⁰ Types of energy production found in Imperial County include Geothermal, Wind, Solar, Concentrated Solar, Deep Solar Pond, Hyper-Saline Brine Pond and Biofuels (Map2).¹¹

On land use, the County, through the Planning and Development Services Department, regulates the use of land for renewable energy purposes through zoning and Conditional Use Permits (CUPs). A Renewable Energy (RE) Overlay Zone was added to the County Land Use Ordinance, Division 17, following the recommendation by the County Planning Commission, and approved by Board of Supervisors.¹² The County acts as “lead agency” in the preparations of environmental documents for renewable energy projects within its jurisdiction.

On Air Quality, the climate of Imperial County is characterized as semiarid desert with hot, dry summers and warm winters. The combinations of the flat terrain of the valley and the strong diurnal temperature differentials created by solar heating produce moderate winds and deep thermal convection. The high temperatures combined with low humidity produce hot, dry summers and warm winters. These conditions are attractive for renewable development. Any renewable projects developed in Imperial County would need to meet the requirements of the Imperial County Air Pollution District (ICAPCD) CEQA Handbook. In addition, any projects with the potential to have significant impact on regional and local air quality would be required to develop a Comprehensive Air Quality Analyses Report.¹³ Specifically, the handbook requires analysis and mitigation of construction and operational air emissions.

IVAN Air Monitoring

The IVAN Air Monitoring is a network of 40 air monitors located throughout Imperial County. These monitors measure current levels of particulate matter air pollution (PM2.5 and PM10). The air quality measurements are displayed on the IVAN website. This network was developed in response to the community residents concerns about air quality and their desire for more neighborhood level data. The network was designed with significant input and decision-making from community residents, while incorporating technical priorities to ensure scientific integrity.

⁹ Imperial County Planning and Development Services Department. *Renewables and Transmission Elements County of Imperial General Plan*. October 6, 2015.

¹⁰ US Energy Information Agency (<https://www.eia.gov/electricity/data/cia86/>)

¹¹ Imperial County Planning and Development Services. *CEC Alternative Energy General Plan Update*. 2014.

¹² Imperial County Planning and Development Services Department. *Renewables and Transmission Elements County of Imperial General Plan*. October 6, 2015.

¹³ Imperial County Planning and Development Services Department. *Renewables and Transmission Elements County of Imperial General Plan*. October 6, 2015.

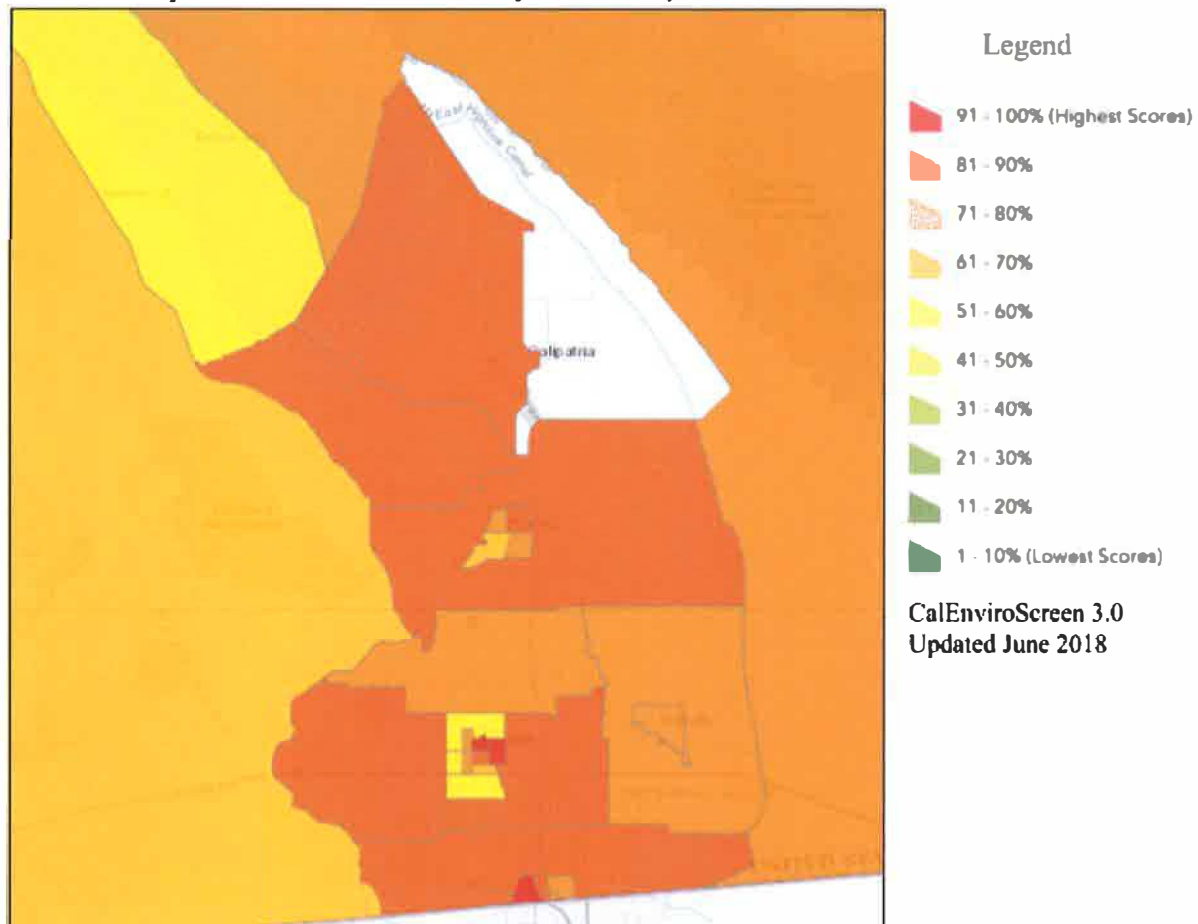
Comite Civico del Valle (CCV), a community-based organization with over 30 years of service in Imperial County, is a leading partner in developing and maintaining the network. To ensure that the network was responsive to community needs, all activities are guided by a Community Steering Committee of community leaders and concerned residents from Imperial County. The networking is possible through the partnership of Comite Civico del Valle (CCV), the California Environmental Health Tracking Program (CEHTP), and University of Washington School of Public Health (UW), along with collaborators at the University of California at Los Angeles and George Washington University.

The IVAN network is under current expansion, with an additional 15 monitors approved by the Imperial AB617 Community Steering Committee.

Imperial Valley - Economy, Poverty and Commuters

The economy in Imperial Valley and the region can be affected by various factors, one of them being the agricultural prices (crop and livestock) as a result of general market pricing and strength of the U.S. dollar. Regionally, federal government policies regarding immigration and trade have the ability to dramatically impact the economy. Government regulation, at the state and county level, can also affect the local economy, specifically mobile and stationary source regulations that may impede certain agricultural practices and sustainability¹⁴. This is the balance that needs to be further assessed in regards to land use policy and the County's General Plan.

Map 3: CalEnviroScreen 3.0 Imperial County



As a disadvantaged community, we do not disregard the value of this workforce and the opportunity they seek. In fact, because of the effort and energy spent by the commuter workforce, we see the value of efforts, investment, and improvements to the quality of life in Imperial County. Though the cited federal source regards this commuter workforce as “aliens”¹⁵ due to legal status, we deem our neighboring communities south of the border as an extension of our own community, sharing values, family and resources.

Imperial County unemployment rates are often higher than in any other California County, but they also vary seasonally, by a factor of 2 or higher between summer and winter periods. The percentage of persons living in poverty in the 1990s was 24 percent, today, with the exclusion of Imperial City an anomaly within Imperial County with a poverty rate of 5.8%, has risen to nearly 30 percent. Statistically speaking, 3 out of every 10 residents who are not only living at or below poverty levels, but are likely unemployed as well. Compared to the rest of California which had a 13.2 percent in 2017 and a national average of 12.3 percent the same year. Economic marginalization occurred even as average household income rose, indicating that the benefits of economic growth did not reach Imperial Counties poorest. CalEnviroScreen 3.0, a science-based mapping tool, shows that in Imperial County most of the communities are ranked above a 71% affected by many sources of pollution, indicators that specially highlight vulnerable to pollution effects. The mapping tool uses the environment, health, and socioeconomic information to produce a numerical score for each census tract. The results for Imperial county are depicted in Map 3.

Often low housing costs help to compensate for low-income residents in many rural California communities. However, in Imperial County, despite having the highest poverty levels in California, Imperial County does not have the lowest housing costs for rural communities. The experience of Imperial County highlights the “vicious circle” between nonfarm employment, immigration, and poverty. More farm jobs stimulate immigration while contributing to poverty and welfare dependence. In Imperial County, these adverse effects are mitigated to an important extent by Mexicali’s role as a reservoir and refuge of workers.

The commuter workforce for the agriculture sector presents a very unique predicament., as Imperial County is one of two unique areas in California that has a workforce which travels internationally on a daily basis for employment. The commute is detrimental to their long term personal well-being and psychological health, but crossing the border in search of labor in the Imperial Valley is an exchange worthy of survivability versus the rigorous day-in/day-out commute they face.

¹⁴ Bracken, Michael J. *County Economic Report Imperial. 9th Annual Southern California Economic Summit.* Development Management Group 2018.

¹⁵ U.S. Citizenship and Immigration. *Services Of 211.3 Alien Commuters.* Service Law Books, Immigratis and waivers. <<https://www.uscis.gov/ilink/docView/SLB/HTML/SLB/0-0-0-1/0-0-0-53690/0-0-0-55807/0-0-0-55820.html>>.

Commuters commit up to 8 hours of travel time, and sometimes more, on a daily basis. For many, their commute starts in Mexico. In the process, they idle in their cars for 2 or more hours, increasing vehicles idling along the Mexico/U.S. border. We also need to take into consideration the level of enforcement and regulations on many of these vehicles coming to the U.S. Furthermore, there is a select group of commuters that will drive across Imperial Valley to the Coachella Valley during grape harvest season, following the crops all the way to Central California, while living in their vehicles for long periods of time. To compensate for the cold nights, many of the travelers will keep their cars running at night with the heaters on for warmth until their work begins in the morning. The community thus faces a decision to make in their personal lives in addressing air quality, and these issues may be examined and alleviated in the long run to improve air quality.

Those making the pedestrian cross-border commute will rely on farm labor contractors or other workers for rideshare. Traveling in groups, multiple bus loads at a time, convoys of farmworker buses and private vehicles will travel throughout Imperial County to their predetermined location of work. Unfortunately, the majority of these buses, as well as the vehicles of those crossing from Mexico, are older, lacking inspections and under-regulated with their emissions. The lack of electric vehicle infrastructure makes purchasing electric buses, or creating clean-vehicle rideshare programs for farm labor purposes, a challenge in the Imperial County Farm Labor Workforce. Other disadvantaged communities have already established pilot projects, erecting electric vehicle charging infrastructure as a means to invite the transition from older vehicles to zero-emission vehicles. Industry should seek to invest in this infrastructure for cleaner transportation of the workforce, upgrading their fleets, and providing incentives for their workers to carpool.

Significantly, this practice puts a burden in our local economy, showing employers and ranchers that there is a workforce willing to work for less. This forces local and permanent residents to either work for low wages that don't cover the basic needs, or seek employment in other sectors with higher pay, where the odds of getting a job can be as high as one opening with 50+ applicants. While the economy booms in the Imperial Valley, we continue to see the unemployment rate rise, clearly indicating that the most vulnerable people of the community are not receiving benefits from the economy.¹⁶

Communities

City of Brawley

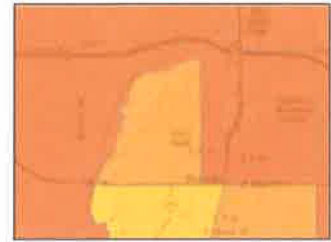
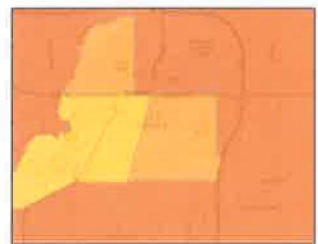
Community Location: The City of Brawley is located in the Colorado Desert and Lower Colorado River Valley Region. The city sits -112ft below sea level. It is 26 miles north from the US-Mexico border and about 15 miles southeast from the Salton Sea.

Community Description: The City of Brawley is the biggest and most developed city located in the northern section of Imperial County. The City of Brawley has an estimated population of 26,226 residents with a median age of 32. The city has a median household income of \$43,469, with a median income for males at \$20,410 and for females at \$15,864. The Census estimated that about 28.1% of residents live in poverty or below poverty level index. The census estimates that 1 in 10 (10%) residents of Brawley live without any type of health insurance or coverage. For education, 71.8% of residents have high school diplomas or equivalent. For housing, the city estimates 8,465 housing units and median housing value of \$158,000. About 70% of the households have a broadband internet subscription. For business and economic development, the city also has approximately 1,481 companies, with the largest industries being the health care and social assistance followed by educational services.

¹⁶ Parvini, Sarah. *This Corner of California is suffering Economic misery despite boom all around.* Los Angeles Times. March 2019

Table 1: CalEnviroScreen 3.0 City of Brawley

	NW	NE	SE	SW
Population	6,593	7,162	4,322	6,998
CalEnviroScreen 3.0 Percentile	75-80%	85-90%	75-80%	60-65%
Pollution Burden Percentile	48	64	40	48
Population Characteristics Percentile	90	94	95	68
Ozone	69	69	69	69
PM 2.5	18	18	18	18
Diesel	23	21	42	28
Pesticides	72	72	82	81
Toxic Releases	11	15	11	11
Traffic	26	19	13	26
Drinking Water	28	28	28	28
Cleanups	89	95	80	93
Groundwater Threats	43	52	43	52
Hazardous Waste	0	61	0	0
Impaired Water	99	99	72	99
Solid Waste	33	50	0	0
Asthma	98	98	98	98
Low Birth Weight	70	44	71	50
Cardiovascular Disease	82	82	82	82
Education	72	80	90	60
Linguistic Isolation	71	87	91	59
Poverty	63	96	91	46
Unemployment	90	100	99	60
Housing Burden	63	73	35	11

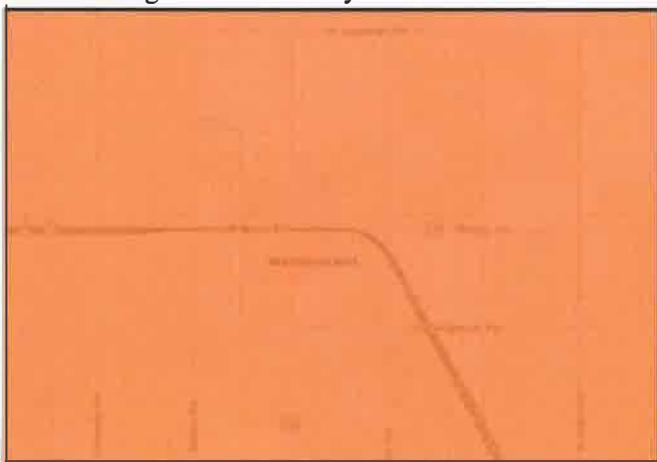
Map 4: NW Brawley**Map 5: NE Brawley****Map 6: SE Brawley****Map 7: SW Brawley**

Regulatory Monitoring: The current Brawley monitoring station, which was installed in 2003 as a new station, replaced the old one that was installed in 1982. It is located below sea level and has an absolute location of latitude 32° 58' 42" and longitude 115° 32' 21". Its relative location is 220 Main Street atop the Imperial County courthouse in the middle of the city of Brawley, surrounded by commercial buildings. Like other cities within Imperial County, Brawley is surrounded by agricultural lands to the east, north, and west. The Brawley station is the third northernmost station within the Imperial County monitoring network. This site records measurements for PM2.5 and PM10.

Air Pollution Concerns and Monitoring: On CalEnviroScreen (Table 1), Brawley falls between 61 to 90 percentile. CalEnviroScreen provides a broad picture of the burdens and vulnerabilities that communities confront from environmental pollutants. One of the companies headquartered in Brawley is Comite Civico del Valle, currently overseeing educational programs on asthma education, Salton Sea education and air quality monitoring as part of the AB617 Program. Brawley, through AB617, has collocated five low-cost air quality monitoring stations. These monitors are found in CCVs headquarters, court house, and local elementary, junior, and high school. Along with the monitors, in an effort to continuously educate and make students aware of the air quality on a daily basis, the local schools participate in the School Flag program. Participating schools of the program raise a flag daily, when school is in session, informing the students of the air quality for the day.

The Community of Brawley has stated concerns about the air quality caused by farming equipment and activities, personal vehicle emissions, agricultural burning, and off-roading. The receding Salton Sea shores and the dust that is picked up as a result of dust storms are also major concerns for the community. This is especially a concern for vulnerable individuals who already have respiratory conditions, such as asthma, or pulmonary issues for the susceptible population of children and the elderly. The community has active participation to improve the quality of life in their city. Members of the original research project that established the IVAN Network remain active in local city issues and also participate in the youth environmental health internship, with the majority hailing from Brawley. Citizens participate in many community projects, such as green area improvements, as described in the "Community Investment" section.

- Improve air and water quality
- Promote Public Health
- Promote equity
- Increase housing affordability
- Promote infill and compact development
- Revitalize urban and community centers
- Protect natural resources and agricultural lands
- Reduce automobile usage and fuel consumption
- Improve infrastructure systems
- Promote water conservation
- Promote energy efficiency and conservation and
- Strengthen the economy



Map 8: CalEnviroScreen 3.0 City of Westmorland

City of Westmorland

Community Location: Westmorland, alike the rest of the imperial county sits on a very fertile agricultural land. Westmorland is connected through HWY 86, a four-lane expressway connecting Coachella Valley and Interstate 10. Westmorland is 31 miles north of the border, 6 miles south of the Salton Sea, 122 miles east of San Diego, and 261 miles west of Phoenix, AZ.

Community Description: Westmorland, "The Gateway City", is split down the middle by HWY 86.

The City of Westmorland has a population estimate of 2,270 based on the Census Bureau's Population Estimates Program (PEP). The City has a median household income of \$33,750 compared to California's \$71,805, with a median income for females at \$11,736 compared to \$23,150 for males counterparts. The census estimated that 35.1% of its residents live in poverty or below poverty means. CalEnviroScreen 3.0 puts it in an 80%-85% disadvantaged community (Table 2). When it comes to health insurance, it is estimated that 14.6% of persons living within the city boundaries don't count on any form of health insurance plans, often paying out of pocket medical needs and emergencies, and if they are fortunate going across the border to Mexicali for medical check-ups and pharmaceutical needs. For education, about 60% of residents have completed high school education or equivalent. For housing, the city counts with 805 household units with a median housing value of \$106,100. Out of the households surveyed, about 44.9% have a broadband internet connection.

Table 2: CalEnviroScreen City of Westmorland

Population	2,640
CalEnviroScreen 3.0 Percentile	80 - 85%
Pollution Burden Percentile	49
Population Characteristics Percentile	98
Ozone	69
PM 2.5	20
Diesel	7
Pesticides	95
Toxic Releases	7
Traffic	9
Drinking Water	38
Cleanups	60
Groundwater Threats	22
Hazardous Waste	89
Impaired Water	100
Solid Waste	0
Asthma	99
Low Birth Weight	78
Cardiovascular Disease	99
Education	88
Linguistic Isolation	93
Poverty	91
Unemployment	76
Housing Burden	66

Regulatory Monitoring: The Westmorland monitoring station was installed in 1994 and commenced measuring ozone in 1998. Located below sea level, its absolute location is latitude 33° 1' 57" and longitude 115° 37' 25". Its relative location is 570 Cook Street in Westmorland. The site is the second northernmost station within the Imperial County monitoring network. It lies west of the Brawley monitor, but southwest of the Niland monitor. Residential and agricultural areas lie within 10 meters and 400 meters of the site, respectively. The site originally monitored both O3 and PM10 concentrations, but in November 2012, the station experienced an electrical fire and the O3 monitor was placed out of commission.

Air Pollution Concerns and Monitoring: Similar to a lot of the communities in Imperial County, the concerns of air quality in the city arise from pollutant and business practices from agricultural activities, which include truck idling and harvest transportation, utilities fleet vehicles and residential vehicles traveling on unpaved roads and everyday transportation. Another major concern of air quality is the vicinity of the receding shores of The Salton Sea. The Salton Sea is less than 10 miles away from the main population of the city, but sharing the city boundaries of The Salton Sea. Although few live near the Salton Sea, the area consisting of rich agricultural farmland brings hundreds of farm workers during planting, harvesting and pruning season. These workers are exposed to agricultural pesticides, dusts, foul odors and other toxics coming from the Salton Sea. Currently, through the Comite Civico del Valle, the City of Westmorland has three Air Monitoring stations. One is located in the middle of the city at the local elementary school, the second located inland halfway between the shores of the Salton Sea and the City population, and the third is placed in the south-west boundary of the city.

Existing Action Plan: Westmorland does not have a current climate action plan at a local level, however, much like other cities, they are actively working with the County to implement and uphold air quality regulations.

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City of Calipatria

Community Location: The City of Calipatria is located 8 miles south-east of The Salton Sea and 30 miles from the US-Mexico Border at an elevation of -180ft below sea level. Calipatria is the lowest elevation city in the western hemisphere.

Community Description: The City of Calipatria has a population of 7,412 residents within its city boundary. The city's median income is \$35,486, with an estimated of 37.9% of its residents living in poverty or below poverty means. An estimated 7.4% of its residents have no health insurance for regular medical check-ups or emergencies. For education, about 58.2% of its residents have completed a high school degree or equivalent. For housing, the city has a count of 1,286 housing units, with a median housing value of \$114,000. It is estimated that 41% of residents don't have broadband internet subscriptions. For economic and business development, the census reports 80 companies being housed within Calipatria's city boundaries.

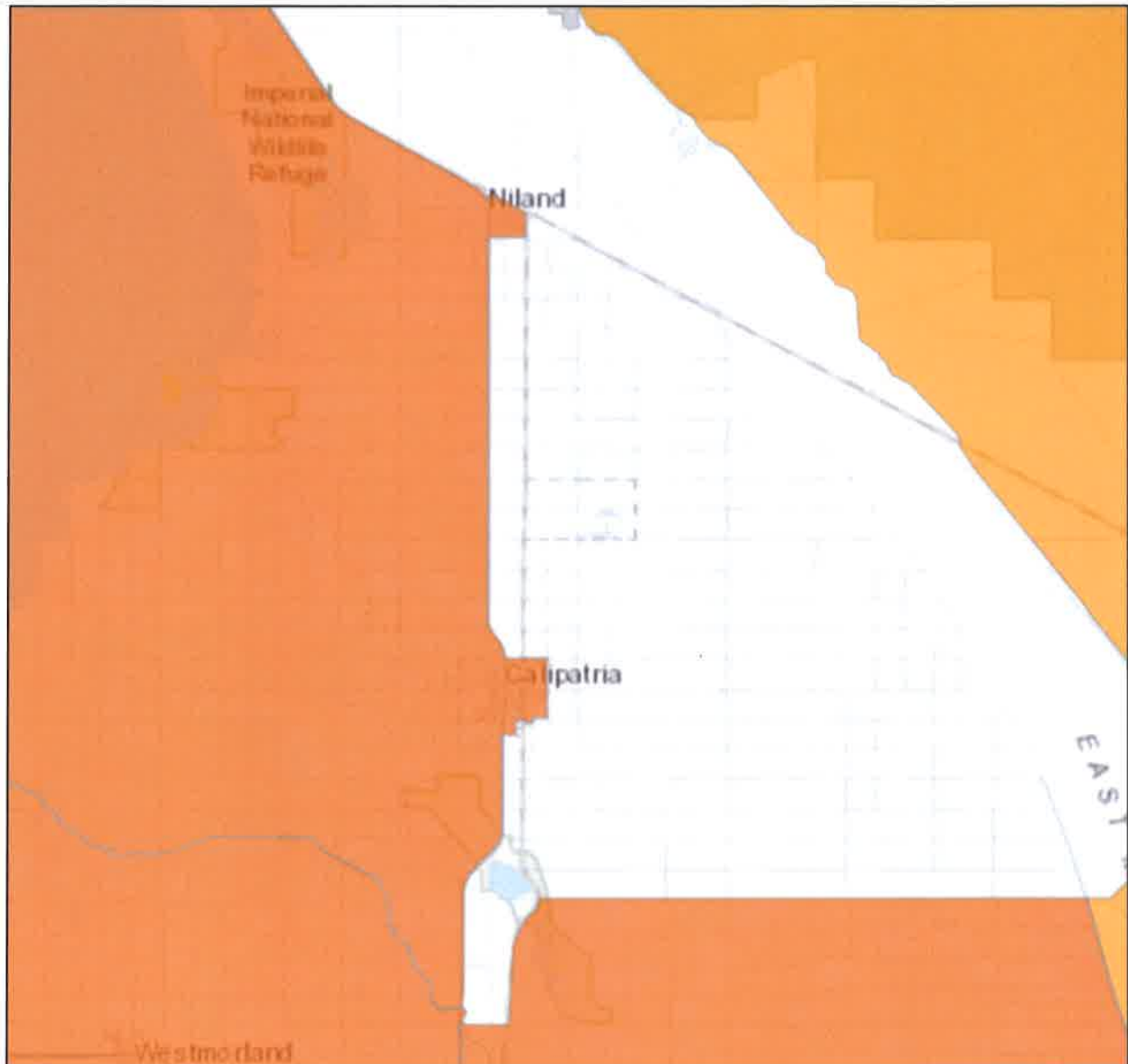
Regulatory Monitoring: The Niland monitoring station was installed in 1996 and commenced measuring ozone in 1997. Located below sea level, its absolute location is latitude 33° 12' 49" and longitude 115° 32' 43". Its relative location is 7711 English Road. It is adjacent to English Road, which is an unpaved and lightly traveled road (approximately 100 vehicles per day). The monitoring site is surrounded by agricultural land to the south, southwest, and southeast. A single residence exists to the west of the station, across English Road. The monitoring station is southeast of Riverside County and the Salton Sea and is the most northerly site within the Imperial County monitoring network. The site records measurements for O3 and PM10.

Air Pollution Concerns and Monitoring: CalEnviroScreen currently shows Calipatria with an 81-90 percentile on vulnerability. CalEnviroScreen provides a broad picture of the burdens and vulnerabilities that communities confront from environmental pollutants. Through Comite Civico del Valle, Calipatria has two air quality monitors collocated in the local high school and the second located in a private residential house. Current air quality concerns for the region include from the personal vehicle use, the highly transited commercial transit corridor through HWY 111, truck idling at the edge of the city and agricultural practices.

Table 3: CalEnviroScreen City of Calipatria and Niland

Population	5,007
CalEnviroScreen 3.0 Percentile	80-85%
Pollution Burden Percentile	70
Population Characteristics Percentile	81
Ozone	61
PM 2.5	20
Diesel	5
Pesticides	87
Toxic Releases	8
Traffic	5
Drinking Water	47
Cleanups	85
Groundwater Threats	72
Hazardous Waste	97
Impaired Water	100
Solid Waste	50
Asthma	70
Low Birth Weight	55
Cardiovascular Disease	54
Education	92
Linguistic Isolation	81
Poverty	83
Unemployment	96
Housing Burden	55

Map 9: CalEnviroScreen City of Calipatria and Niland



Existing Action Plan: The city currently does not have a plan in place addressing emissions at a local level beyond the existing state level regulation on emissions and air pollution.

Other Concerns: The City of Calipatria is also home to city-owned, public-use airport located one nautical mile northwest of the central business district. The Cliff Hatfield Memorial Airport covers an area of 200 acres at an elevation of -182 feet below sea level. The airport had 1,300 general aviation aircraft operations, an average of 108 per month. By category, airports are among the largest sources of carbon monoxide (CO) on air pollution in the United States. In airports, air pollution and contemporaneous health show how runways increase pollution levels in areas surrounding airports. Health effects are larger in areas adjacent to and downwind from airports on a given day. Infants and the elderly are more sensitive to these pollution fluctuations, but even adults are affected.

In a recent study conducted by Dr. Rima Habre et.al. from USC, he found that “ that regular walking exposure and a higher exposure, they were able to see significant elevation in inflammation systemically, not just in the lungs but in the overall blood circulation” (Emissions from an International Airport Increase Particle Number Concentration 4-fold at 10 km downwind). Inflammation is tied to a lot of disease process; cardiovascular, respiratory, and metabolic. While the levels of small airports, such as the one in Calipatria vs LAX, produce less emissions, they still impact the quality of air in areas affecting the general air quality index.

The Community of Niland

Community Location: The Census designated-place is located 8 miles north of Calipatria and 2 miles southeast of the Salton Sea.

Community Description: Niland is an unincorporated community, a census-designated place (CDP) in Imperial County. While the rest of the communities have seen their population increase over the last two decades, Niland as seen their population decreased in the same period. The population was 1,006 at the 2010 census, down from 1,143 from 2000. It's now estimated that the population of Niland is around 700 residents. The median household income is estimated at \$18,685, with an estimated 45% of its residents living below the poverty level. It is also estimated that about 20% of its residents don't have health insurance coverage. For housing, the community has about 411 housing units, with a median housing value of \$78,300. The census also reports that about 60% of its housing units do not have a broadband internet subscription.

Air Pollution Concerns and Monitoring: The community of Niland has currently one monitor at the local elementary school. For air quality concerns, the community is concerned about the potential health effects of the receding shores of the Salton Sea. Similarly, the community, being surrounded by agriculture, is concerned about agricultural practices that contribute to the quality of air in the area. This includes farming equipment, transportation of goods through the corridor and the high volume of vehicles that travel daily through HWY111.

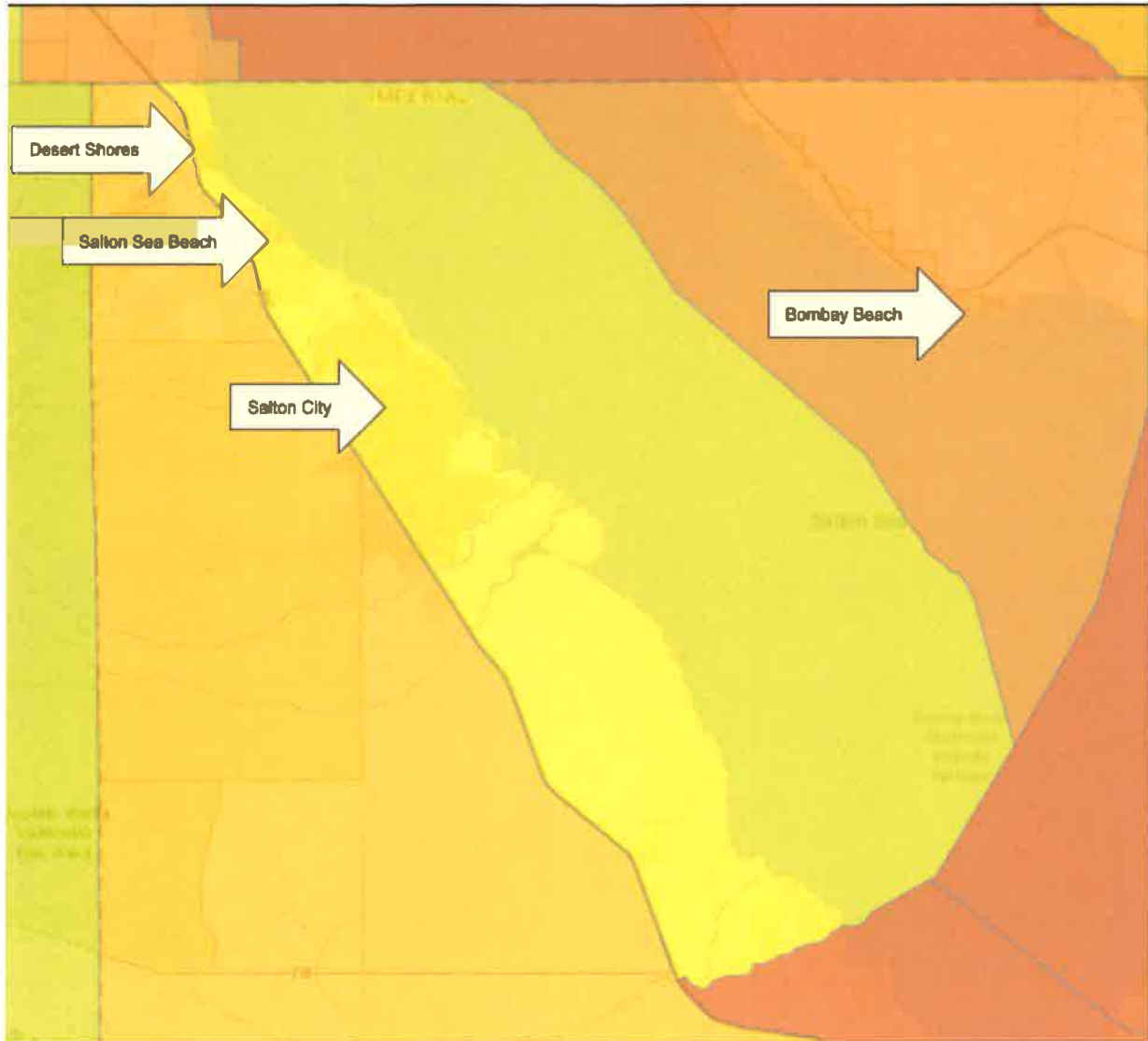
Existing Action Plan: The community currently does not have a climate adaptation action plan.

The Community of Desert Shores

Community Location: The town is located at the western shore of the Salton Sea in the Imperial Valley. The town for the most part is surrounded by desert on one side and the salton sea on the western side. Farm land is about two miles north of the community.

Community Description: Desert Shores is a census-designated-place in Imperial County located at the upper-west of the county lines adjacent to the Salton Sea. The population for Desert Shores is estimated to be 1000. The median household income is \$33,000, with an estimated 36.7 percent living below the poverty level. The community has 469 housing units, with a median home value is \$56,300 with 63 percent homeownership and a median rent price of \$500. For education, about 47.6 percent of residents completed high school education or equivalent. Like many communities in the northern section of Imperial County, there are few if any amenities nearby such as shopping, recreational activity, and grocery outlets.

Map 10: CalEnviroScreen Bombay Beach, Desert Shores, Salton Sea Beach, & Salton City



Air Pollution Concerns and Monitoring: Some of the most common air quality concerns for the community is the foul odors that come out from the Salton Sea, especially during the summer when the elevated levels of hydrogen sulfide are high, with many local residents describing it as the “smell of rotten eggs” in the air. This foul odor at times have covered the Eastern Coachella and Imperial Valley, and more recently have been affecting the area for a longer periods of time. The community has also raised concerns of the dust that cover the community during dust storms. Desert Shores is another community that does not have an Air Quality Monitoring collocation nearby, the closest being in Salton City 10 miles south, or the Torres Martinez Reservation monitor 10 miles north of the community.

Existing Action Plan: The community currently does not have an action plan on air quality monitoring or climate change adaptation in place.

The Community of Salton Sea Beach

Community Location: Salton Sea Beach is located along the western shore of the Salton Sea, to the north of Salton City and to the south of Desert Shores along California State Route 68.

Community Description: Salton Sea Beach is a census-designated place in imperial county, located in the northern section of the Imperial County and adjacent to the Salton Sea. The census estimated that there are about 600 residents living in the community and about 64.5 percent of its residents living below poverty levels. The community has 270 housing units, with a median home value of \$65,400 and 69 percent being property/homeowners. The census indicated that about 62 of its residents have completed high school level education or equivalent.

Air Pollution Concerns and Monitoring: For community members, the smell is all but a small part of the more serious public-health problem that a shrinking sea brings along. The community does not have an air monitoring colocated in the community. The closest is at the Salton City, which is about 4 miles from the Salton Sea Community.

Existing Action Plan: The community currently does not have an action plan to combat the environmental issues concerning the exposed playa beyond the state and county efforts to mitigate the dust.

The Community of Salton City

Community Location: Salton City is one of the three communities located in the Western shores of the Salton Sea in the North end of Imperial County. According to the US Census Bureau, the CDP has a total of 21.1 square miles of land making Salton City the largest city/town in terms of land area in the Imperial Valley. The city is approximately 50 miles from the Imperial County seat of El Centro and 110 miles from the coastal San Diego County.

Community Description: Salton City is a census-designated place in Imperial County, and one of the three communities located on the western shores of the Salton Sea on the Northern of Imperial County. The community has an approximate total population of 5,487, with 67 percent having attained high school graduate or equivalent. The population of Salton City is 66.4 percent Hispanic or Latino, 28.6 percent white alone, and 3.1 black/African American. The community has an approximate 27.8 percent of its residents living under poverty levels. The community has a total of housing units of 2,675 with a median property value of \$106,200, and a homeownership

Table 4: CalEnviroScreen 3.0 Desert Shores, Salton City, & Salton Sea Beach Communities

Population	4,756
CalEnviroScreen 3.0 Percentile	55-60%
Pollution Burden Percentile	27
Population Characteristics Percentile	73
Ozone	74
PM 2.5	11
Diesel	4
Pesticides	85
Toxic Releases	6
Traffic	13
Drinking Water	32
Cleanups	43
Groundwater Threats	14
Hazardous Waste	43
Impaired Water	81
Solid Waste	0
Asthma	39
Low Birth Weight	46
Cardiovascular Disease	55
Education	86
Linguistic Isolation	68
Poverty	97
Unemployment	98
Housing Burden	68

rate of 64.2%. The median household income is \$34,280. Most of the people in the Salton City community drive alone, and the average commute time is 33 minutes, placing most location of employment near Imperial City in Imperial County.

Air Pollution Concerns and Monitoring: As of 2010 census, 81% of the surveyed lots in Salton City remains undeveloped, and 30% of the habitable residences remain unoccupied. As the perception of increased salinity and suspected pollution levels in the Salton Sea increased, the attraction of the Salton Sea as a recreational destination diminished, causing most of the tourist related structure to fall over time. The community is surrounded by desert, increasing the chance of dust particles being picked up during dust storms, especially with the receding shorelines of the Salton Sea, and impacting residents. The community through the IVAN network of air monitoring has an Air Monitor collocated within the community.

Existing Action Plan: There is no existing local climate action plan in place.

The Community of Bombay Beach

Community Location: Bombay Beach is a census designated-place located on the east-north shore of the Salton Sea in the north end of Imperial County. The community is 9 miles from the Riverside-Imperial County Line, through the old HWY 111, and approximately 50 miles from the county seat El Centro. The nearest town is the community of Niland, which is 20 miles south-east from Bombay Beach. Approximately 20 miles north-bound is the community of North Shore.

Community Demographic: Bombay Beach in 2017 had a population of 341 people with a median age of 71.9 and a median household income of \$13,759. The population of Bombay Beach is 88.3% white, 9.68% black or African American, and 2.05 percent Asian. The median property value in Bombay Beach is \$37,200, with a total of 452 household units, and a homeownership rate of 73.4%. Most of the people in Bombay Beach commute by carpool, and the average commute time is 25 minutes. About 96 percent of the residents of Bombay Beach have an educational attainment of a high-school degree or higher. The community has 21 percent of its residents living under poverty levels.

Air Pollution Concerns and Monitoring: Similarly to many communities around the Salton Sea, the concerns are about the receding shores of the salton sea and the exposed playa. The exposed playa potentially emits a variety of different toxins and chemicals, from agricultural run-offs, now exposing the public to harmful health effects. The community, through the IVAN Air Monitoring Network, has one Air Quality monitoring station.

Table 5: CalEnviroScreen 3.0 Bombay Beach

Population	1,266
CalEnviroScreen 3.0 Percentile	70-75%
Pollution Burden Percentile	68
Population Characteristics Percentile	69
Ozone	65
PM 2.5	18
Diesel	1
Pesticides	66
Toxic Releases	20
Traffic	4
Drinking Water	65
Cleanups	87
Groundwater Threats	41
Hazardous Waste	77
Impaired Water	99
Solid Waste	83
Asthma	85
Low Birth Weight	NA
Cardiovascular Disease	59
Education	48
Linguistic Isolation	NA
Poverty	66
Unemployment	96
Housing Burden	0

Existing Action Plan: The community does not have a climate action plan or emission reduction plan in place at a local level.

Other Concerns: The community of Bombay Beach is small due to the rising and drying Salton Sea. The sea in the past has drowned parts of the community, which it never recovered from. Community members considered this to be very dangerous because of the rising and falling water levels. A berm protects the west end of what remains of the town, but a large portion of which was flooded, is now abandoned or sitting under water and half-buried in mud.

Map 11: CalEnviroScreen 3.0 Seeley



The Community of Seeley

Community location: Seeley is a census designated-place located 5 miles west of El Centro, CA, 15 Miles north-west of the City of Calexico and about 20 miles south of the lower end of the Salton Sea.

Community Demographic: Seeley has a population of 1,573 people, with a median household income of \$25,536. The population of Seeley is 84% Hispanic/Latino, 9.85% White Alone, and 5.4% two or more races. The median property value in Seeley is \$131,300 and the homeownership rate is 46%. Most people in Seeley have an average daily commute of 17 minutes, and the average ownership of vehicles is 2 cars per household.

Air Pollution Concern and Monitoring: As the other communities in the Imperial County, Seeley is surrounded by farmland. Major concerns on air quality rise from agricultural practices. This includes permissible agricultural burning, farm equipment, tractors, and vehicles traveling on unpaved roads. Another source of air pollution is the highly transited interstate highway 8 that is two miles south of the community. The I-8 is a highly transited highway in the southwest, linking the communities of San Diego County, Imperial Cities such as City of El Centro, and the Cities of Phoenix and Tucson in Arizona. Just like the other communities in Imperial Valley, the Salton Sea is of concern to community residents. Currently, through the IVAN-Network operated by Comite Civico del Valle, the community of Seeley has one air monitor in

Table 6: CalEnviroScreen 3.0 Seeley

Population	3,685
CalEnviroScreen 3.0 Percentile	85-90%
Pollution Burden Percentile	76
Population Characteristics Percentile	85
Ozone	74
PM 2.5	31
Diesel	6
Pesticides	89
Toxic Releases	22
Traffic	19
Drinking Water	48
Cleanups	80
Groundwater Threats	93
Hazardous Waste	0
Impaired Water	99
Solid Waste	86
Asthma	94
Low Birth Weight	42
Cardiovascular Disease	94
Education	80
Linguistic Isolation	84
Poverty	79
Unemployment	84
Housing Burden	24

operation collocated in Seeley Elementary School. The elementary also participated in the school flag program, a daily activity consisting of raising a color-coded flag as indicated by the daily air quality as reported by the air monitor.

Existing Action Plan: The community does not have a climate action plan or emission reduction plan in place at a local level.

The City of Imperial

The City of Imperial, California stands as an anomaly to the rest of Imperial County. Although still in nonattainment status, Imperial is not considered by the state of California as a disadvantaged community due to its high population of non low-income residents. Despite its unique position, the families of Imperial still deal with equally debilitating poor air quality. Affected by sources similar to its neighboring cities, Imperial is affected by the conditions by its central geographic location. The City of Imperial also struggles with its own added sources of harmful pollution with transit because of its central location to the county, the City of El Centro just South of it, and major roadways to the North.

Four miles east of Imperial, California can be found the Naval Air Facility. An active Naval Aviation Training ground, the NAF has active jet fueling station, hangars, and runways. During the months leading up to the annual Air Show (December, January and February), there are daily exercises; a group of jets can be seen rehearsing the aerobatic performance, expelling jet fuel exhaust for hours at a time. These fumes get blown in the direction of Imperial by the west winds.

Additionally, Imperial is directly across from the Imperial County Airport and the California Mid-Winter Fairgrounds. Both are vast grounds with loose dirt that gets easily picked up by the various plan activities and sudden gusts of wind that hits the region regularly. As Imperial County's major airport, planes and helicopters depart and arrive from here hourly, causing dangerous levels of PM for the family homes less than a quarter mile east of the runway, including an elementary and high school less than half a mile north.

East of the airport, the California Mid-Winter Fairgrounds is home to the annual Mid-Winter Fair and Fiesta, the Imperial Valley County Fair. Throughout the year, these grounds host various racing events on their dirt track. Just south of the fairground, resides a major petroleum seller with several large fuel storage tanks. This facility has previously been cited for improper storage.

Needless to say, the Imperial City, California, although not considered as a disadvantaged community, deals with it's own equally dangerous array of sources of air pollution.

Community Investment

Rule 310: The Imperial County Air Pollution Control District Board of Directors adopted Rule 310 Operational development Fee rule to assist the Imperial County Air Pollution Control District (ICAPCD) to mitigate the air impacts from the operation of new Commercial and residential buildings. The local rule applies any Development fees paid to the Air District by developers (i.e. new house tracts, new commercial, etc.) and given back to the community through a Request for Proposal (RPF) process, which occurs every August 1st of each

year. As part of the criteria for funding the projects as requested by the RFPs, the projects must meet a minimum project life of ten years.

The Rule states:

“The purpose of this rule is to provide the Imperial County Air Pollution District (APCD) with a sound method for mitigating the emissions produced from the operation of new commercial and residential development projects throughout the County of Imperial and incorporated cities. This rule will assist the APCD in attaining the State and federal ambient air quality stands for PM10 and Ozone.”

At application and implementation level, an applicant (i.e. City, County, School District etc.) may request up to 100% of the project cost to be reimbursed to them with this program. Some of the programs that have been completed is the Calexico Paving projects, Sunflower School Soccer and Baseball parking lots, Swarthout park parking lot, Volunteer park in Brawley, Magnolia School with new school buses and Holtville School with a new lawn mower.

School Indoor Air Filtration: At the time of this submission, there have been two different schools have been approved to receive indoor air filtration systems: Grace Smith Elementary School (Niland) and Seeley Elementary (Seeley).

New School Buses: The Brawley School District has recently acquired three electric school buses to reduce emissions and replace older vehicles in the fleet. In addition to the buses, there is also the charging infrastructure, an initial investment that is to pay off if the bus fleet can be transitioned. This was done in support by the Rural School Bus Pilot Project grant program.

Salton Sea AIRE Study: Currently, University of Southern California is conducting a 5 year exposure assessment of the ambient air quality Southwind of the Salton Sea. The air monitoring activities of this study will serve to characterize ambient particulate matter air pollution in communities in and around the Salton Sea area to provide chemical speciation of the collected samples. Additionally, a select group of students from 5 schools are participating in health surveys to assess the effects of living in the Salton Sea area on the developing lungs of children.

Work Cited

Bracken, Michael J. *County Economic Report Imperial. 9th Annual Southern California Economic Summit*. Development Management Group 2018.

CalEnviroScreen 3.0 Updated June 2018.

California Water Boards Colorado River - R7. Introduction to the New River/Mexicali Sanitation Program. 2019

Guerrero, Juan & Rufino dos Santos, Alecsandro. *Imperial County Livestock industry 1910 to the Present*. University of California-Imperial County Cooperative Agricultural Extension. 2004.

J. Edward Taylor. "Immigration, Employment, Poverty, and Welfare in the Imperial Valley".

Martin, P.L. and J.E. Taylor. 1998. "Poverty Amid Prosperity: Farm Employment, Immigration, and Poverty in California." *American Journal of Agricultural Economics* 80(November):1008-1014.

U.S. Citizenship and Immigration. *Services OI 211.3 Alien Commuters*. Service Law Books, Immigratis and waivers.

<<https://www.uscis.gov/ilink/docView/SLB/HTML/SLB/0-0-0-1/0-0-0-53690/0-0-0-55807/0-0-0-55820.html>>.

US Energy Information Agency (<https://www.eia.gov/electricity/data/cia860/>)

Parvini, Sarah. *This Corner of California is suffering Economic misery despite boom all around*. Los Angeles Times. March 2019

Johnston JE, et al. "The disappearing Salton Sea. <https://www.ncbi.nlm.nih.gov/pubmed/30738261>