AB 617 Community Self-Nomination

Eastern Coachella Valley Coachella, Thermal, Oasis, Mecca, North Shore



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1. Community Nomination Narratives

The Leadership Counsel for Justice and Accountability (LCJA) and the Comite Civico Del Valle (CCV) nominates the City of Coachella, Thermal, Oasis, Mecca, and North Shore as one community for air monitoring and emissions reduction programs under the following name: the Eastern Coachella Valley.

2. Introduction to the Eastern Coachella Valley

The Eastern Coachella Valley (ECV) is a region distinguished from the Western Coachella Valley (WCV) as a separate geographic subdivision. The ECV includes the City of Coachella, and the four unincorporated communities of Thermal, Oasis, Mecca, and North Shore. These communities are home to underserved, low-income, immigrant communities of color, Native American Tribes, and indigenous populations, reflecting rich, vibrant, and resilient cultures that have allowed cross-cultural interaction between community members. This distinction of East and West coincides with stark differences and inequalities between the regions. While the west side is largely characterized by abundant infrastructure, accessible amenities, golf clubs, and country clubs, the other side lacks access to the most basic of services like potable drinking water, sewer systems, reliable transportation, and other amenities that residents need on a daily basis. Despite the extent of poverty in the ECV, the luxury and exclusivity of more affluent communities like Indian Wells overshadows the unhealthy and unjust living conditions that exist just 30 minutes away.

Here, in the east, residents work primarily in agriculture picking dates, strawberries, grapes, and other fruits and vegetables - contributing to one of the most vital agricultural regions in both the state and country. In addition to their arduous agricultural labor, ECV residents are also the back bone of the hospitality and tourism industries in the WCV. But regardless of their contribution to the success and wealth of the desert allure, their neighborhoods and homes in the ECV receive little benefit. The lack of infrastructure and investment in ECV communities contributes to both the environmental challenges that the region faces, and the vulnerability of residents to those challenges.

Some of conditions that contribute to health and environmental vulnerability in the region include agricultural pesticide use, illegal dumping, hazardous waste facilities, unpaved roads, substandard housing conditions, inadequate public transportation, inadequate water and wastewater services and amenities, goods movement, and the declining Salton Sea. Despite the number and proximity of pollution sources, the ECV risks being overlooked and marginalized yet again due to the lack of air quality data in the region, low population density, and rural characteristics.

3. Analysis of Community Selection Process and Methodology

In response to Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) and the California Air Resources Board (CARB) Community Air Protection Program (CAPP), which focuses on air pollution exposure reduction in communities, South Coast Air Quality Management District (SCAQMD) is required to submit to CARB recommended communities based on documentation addressing 5 elements. The law mandates CARB select the first round of communities for the preparation of emissions reduction and air monitoring programs by October 1st, 2018. These 5 elements include:

- A list of all communities recommended for action that year, including community descriptions, identifying characteristics, geographic boundaries, and applicable census tract(s).
- A description of any air district assessments of communities identified for recommendation.
- A description of each community's capacity to participate, including a summary of the air district's relationships with members of the recommended communities or two community-based organizations located in the recommended communities.
- A description of the process used to refine the list of communities.
- If the communities are recommended for community air monitoring, a description of the known monitoring needs.
- If the communities are recommended for community emissions reduction programs, provide the following information:
 - Description of air quality challenges affecting the community, and potential sources.
 - Confirmation that emissions sources are well-characterized in the community.
 - Confirmation that air monitoring results are available that characterize the high air pollution exposure burden experienced by the community well enough to inform community emissions reduction program development.
 - Confirmation that sufficient data and resources are available to produce source attribution results for use in strategy development within the necessary time frames prescribed by statute.

The South Coast Air Quality Management District (SCAQMD) process and methodology for community identification and prioritization for the first round of AB 617 funding does not appropriately or equitably consider communities outside of industrial and urban areas. Out of 148 nominations submitted to SCAQMD, only four are being recommended - all of which are located within urban areas with dense populations and near industrial sites - with a complete disregard for rural and agricultural communities in the easternmost part of the District's boundaries.

A. Process for Inclusion

SCAQMD held two rounds of public workshops to develop community nominations. The first round sought input on criteria to select communities for future air quality monitoring and emissions reduction programs. These initial meetings were held between February and April 2018 in Commerce, Wilmington, Riverside, San Bernardino and Anaheim and at the IVAN-Coachella EJ Task Force February 21 2018. The second round of workshops were held between May and June 2018 in Jurupa Valley, South Gate, Colton, Santa Ana and San Fernando - all over an hour away from the ECV, making it difficult for both local community-based organizations and community residents to attend, learn about the programs, and contribute relevant criteria for consideration.

LCJA requested on multiple occasions and through various means that SCAQMD hold a meeting in the Eastern Coachella Valley. SCAQMD agreed to attend a regular meeting of the IVAN Environmental Justice Task Force in the City of Indio on June 27th. These meetings occur on a monthly basis from 3pm to 5pm. While few community residents were fortunately available to attend this meeting at this time of day, this meeting took place long after SCAQMD developed their recommendations and reasoning for first-year emissions reduction and monitoring programs. In response to community concerns about lack of outreach and inclusion of the region in this process, SCAQMD staff stated that due to unfamiliarity of the region by staff, they did not feel the need to hold a workshop in the ECV or further consider the region for selection under AB 617.

B. Methodology for Selection

Under the SCAQMD guiding principles for community identification and prioritization, the District is relying on particular indicators and communities with a "head start". District staff has prioritized communities with existing air monitoring infrastructure, data, tools, and studies previously conducted in the selected communities. This method of prioritization automatically disqualifies communities without sufficient prior investment that could demonstrate levels and effects of air pollution. For example, while the ECV has a host of air contamination from a variety of sources, it has not received necessary investment in air monitoring infrastructure to catalogue this data, and thus has not been able to develop a stronger research foundation to compete well for programs such as those under AB 617, especially when a lack of investment itself becomes a criterion for exclusion. Additionally, SCAQMD relied heavily on the Multiple Air Toxics Exposure Study (MATES V), a monitoring and evaluation study focused on industrial areas. While it's understandable that SCAQMD would select communities with a strong foundation on air pollution mitigation, it is unfair to exclude those communities that were not part of this study, especially those outside of the South Coast Air Basin, such as the ECV.

The input received at the original four community meetings focused specifically on industrial areas with a highly dense population. We believe that SCAQMD failed to adequately

acknowledge rural and agricultural communities. This reflects their poor effort in outreaching to and meaningfully engaging all areas within their District and lack of knowledge of the diverse region and disadvantages of the ECV. This occurred despite AB 617's intent to identify communities most disproportionately impacted by multiple sources of pollution and CARB's own proposal to select "communities with varying air pollution sources to support development of a range of emissions reductions strategies that can be transferred to other, similar communities including rural sources such as agricultural activities and fugitive dust," both of which are prevalent in the ECV.¹

In addition, SCAQMD separated the regions by air basin: the South Coast Air Basin and the Coachella Valley Air Basin. This further disadvantaged the ECV because of the more extensive consideration given to SC Air Basin over the CV Air Basin, reflecting the historic marginalization of the Eastern Coachella Valley and demonstrates the lack of familiarity with the region by District staff.²

4. Air Pollution Concerns in the ECV

The ECV is located in SCAQMD Coachella Valley Planning Area. The Coachella Valley is classified as a "severe 15" ozone nonattainment area for the 8 hour ozone National Ambient Air Quality Standards (NAAQS).³ It is also classified as serious nonattainment for PM10 from 1992 through 2018.⁴ Additionally, the Coachella Valley is also classified as a nonattainment area for ozone and PM10 under California Ambient Air Quality Standards (CAAQS).⁵ There are four monitors located in the Coachella Valley - in Palm Springs, Indio, Mecca, and near the shore of the Salton Sea. The air monitor in Mecca, which measures PM10, was installed at the request of U.S. EPA Region IX to help evaluate windblown dust in that portion of the Coachella Valley, which is potentially impacted by high wind events, agricultural activities and fugitive dust from exposed shoreline of the Salton Sea.⁶ The monitor near the shore of the Salton Sea is only measuring hydrogen sulfide as a direct result of serious odor complaints.

Ozone and particulate matter can create a host of health effects commonly and consistently referenced by ECV residents. These include serious risks to public health such as pulmonary and lung disease, increased mortality risk, respiratory related hospital admissions and emergency room visits, exacerbation of symptoms in sensitive patients with respiratory or cardiovascular

¹ https://ww2.arb.ca.gov/sites/default/files/2018-06/draft_community_air_protection_blueprint.pdf

² http://www.aqmd.gov/docs/default-source/ab-617-ab-134/updated-prioritization-pres-eng.pdf?sfvrsn=9

³http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

⁴http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-qualitymanagement-plan/final-2016-aqmp/chapter7.pdf

⁵http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

⁶http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

disease, declines in pulmonary function or growth in children, increased risk of lung cancer, asthma related hospital admissions, school absences and lost work days which in turn creates undue financial burdens and stress.

Agricultural activities, including pesticide application, is of concern to ECV residents. Notably, all ECV rank at or above the 90th percentile for exposure to pesticide application. In fact, a 2013 cumulative environmental analysis developed by the UC Davis Center for Regional Change in partnership with the California Institute for Rurals Studies found that "the ECV has much higher agricultural pesticide applications than the Western Coachella Valley and the county as a whole."7 Most of the Eastern Coachella Valley households are within one mile of agricultural activity. The use of pesticides has been correlated with pesticide exposure and with acute pesticide-related illness, and there is evidence of association between pesticide use and chronic disease.⁸ Similarly, on and off farm equipment and associated goods movement make this region highly trafficked. The Coachella Valley holds the competitive advantage of having the I-10 Freeway and SR-86. These routes connect to Southern California, Arizona, and Northern Mexico's truck routes.⁹ In addition, there is also UP Railroad's mainland that intersects the ECV. Although these are beneficial routes for trade, they are also cutting through communities, creating dangerous intersections and continuously polluting the air. According to Southern California Association of Governments report on the Transportation Goods Movement System, goods movement equipment including trucks and trains "are among the largest contributors to regional air pollution, which must be reduced to comply with federal law and improve quality of life. Criteria pollutants such as NOx, PM2.5, SOX, and CO can have significant health impacts, including asthma and other respiratory ailments, increased stress and increased cancer risk".¹⁰

Additionally, little to no transportation service in the region forces ECV residents to solely rely on personal occupancy vehicles for travel to their source of employment, basic services and education. Poverty levels and annual household impacts in the region limit access to more efficient or zero emission vehicles thus creating increased reliance on older, less efficient and polluting vehicles which contribute to greenhouse gas emissions and criteria air pollutants.

Extreme heat and reduced precipitation patterns also greatly affect the health of ECV residents. With poor built infrastructure, residents that rely on public transportation are seen standing next to bus stops on unpaved roads in temperatures that often reach nearly 120 degrees. Not only this, but farmworkers also work under these extreme weather conditions for over eight hours a day.

⁷https://humanecology.ucdavis.edu/sites/g/files/dgvnsk161/files/inline-

files/limited_dist_14_revealing_invisible_coachella_valley.pdf

⁸ https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3report.pdf

⁹http://www.freightworks.org/DocumentLibrary/Comprehensive%20Regional%20Goods%20Movement%2 0Plan%20and%20Implementation%20Strategy%20-

^{%20}Reigonal%20Warehousing%20Needs%20Assessment%20Final%20Report.pdf

¹⁰ http://scagrtpscs.net/Documents/2016/draft/d2016RTPSCS_GoodsMovement.pdf

Working in fields next to open desert areas and around the Salton Sea, ECV farmworkers are highly susceptible to the windstorms and sandstorms that regularly occur in the region, increasing exposure to harmful dust from fields, roads, and the receding shores of the Salton Sea.

There are several sources of health data regarding air pollution that are currently available to the SCAQMD. The following paragraphs and maps summarize three of the available data sources collected by community partners. These include (1) a series of community air sensors organized through the CCV IVAN program, (2) a comprehensive environmental health assessment survey of the five ECV communities shown in Map 1 and (3) an indoor air pollution assessment of rural farm worker homes done in the five communities.



Map 1. Stakeholder defined borders of the five areas in the Eastern Coachella Valley nominated for AB 617 funding. The yellow dots represent 1760 individuals (685 households) that were surveyed in the 2015 study coordinated through the comprehensive health study detailed in this report.



Map 2. The communities nominated for the AB 617 and the locations of 7 community science IVAN sensors currently placed in the Eastern Coachella Valley.



Map 3. The Eastern Coachella Valley area plan land use plan showing the proximity to agriculture. Most ECV households are within one mile from active agricultural zones.



Map 4. The CVAG Eastern Coachella Valley Climate Resilience action plan map showing the five ECV areas and the overall socio-economic status.

A. The IVAN Air Model

The CCV recently launched the Coachella Valley Community Air Monitoring Project using the <u>ivanair.org</u> model. This uses laser based particulate sensors that are installed to collect real-time data at key sites important to the community. This organization and sensors are detailed in the "Changing the landscape" section 8 below.

B. The 2015 Comprehensive Health Study

In 2015, the California Institute for Rural Studies (CIRS) and Loma Linda University (LLU), in partnership with the California Endowment, launched a comprehensive regional health survey of the five ECV communities (Map 1). This study focused on indoor environmental health contaminants, asthma, other respiratory issues, income and several other health indicators. This cross sectional survey sampled the five different areas using a rigorous multi-stage randomization methodology that required counting households from satellite maps and then ground-truthing that information to get an accurate population for which to draw a random sample from. The assessment took the team six months to design using a participatory method, two years to administer and involved over thirty different promotoras and community representatives. The end result was a community-vetted survey questionnaire that was administered to 1763 individuals in 645 households. The survey questionnaire was administered in person on paper forms. For that reason, we consider the assessment to be a much more

rigorous and representative sample of the community, than other efforts that use mailed surveys, internet or phone surveys.

The data from this assessment is discussed in the regional summaries section below. The respiratory distress and asthma prevalence estimates were gathered from a series of questions in the survey which included the following:

"Has a doctor told you that you have asthma? Are you being treated for asthma? In the past 24 months have you had an asthma attack serious enough to limit your activity? Do you currently take medication for asthma? Have you had severe coughing episodes between once a month and more than once a day"

The percentages are much greater in rural North Shore which is adjacent to the Salton Sea and in rural Oasis which has a larger percentage of farmworkers and poor housing infrastructure.

C. Indoor air quality—High Mold Contamination

A subset of the Comprehensive Health Study addressed a community concern about inadequate housing infrastructure. The study ¹¹consisted of a questionnaire to assess asthma/respiratory illness and the quantification of mold contamination in house-dust samples using the Environmental Relative Moldiness Index (ERMI) scale. The US EPA National Exposure Research Laboratory collaborated with the study and processed 111 ERMI dust samples for 36 representative mold species. The average ERMI values in Mecca and Coachella City housing (10.3 and 6.0, respectively) are in the top 25% of ERMI values for the United States (US) homes. Overall, the homes surveyed in these ECV communities had an average ERMI value of 9.0. The mold contamination in their homes appear to be greater than the averages for the rest of the county (Riverside County ERMI = 1.9) and the rest of the US (ERMI=5).

The higher levels of mold contamination in older homes and mobile homes appear to be associated with a greater risk of asthma and respiratory illness among foreign born agricultural workers and their families. These residents will often live in homes that are not equipped to handle the limited, but extreme precipitation events and evaporative coolers. A leak during a heavy rainstorm can initiate mold growth by introducing the necessary amount of moisture to aged building materials that will sustain mold indefinitely. Fortunately, this is not an indefinite problem and there are several options for physical mitigation that could protect adults and children from this mold contamination in the ECV. This is a serious issue and several new

¹¹ Sinclair, Ryan, et.al. "Asthma Risk Associated with Indoor Mold Contamination in Hispanic Communities in Eastern Coachella Valley California." Journal of Environmental Public Health. Peer Reviewed and in press for publication in late 2018. <u>https://www.hindawi.com/journals/jeph/aip/9350370/</u>

publications show that a high ERMI can initiate asthma in 0-5 year old children and trigger asthma in everyone else¹².

5. Regional Summaries of Environmental Health

A. Coachella

The City of Coachella is located at the east end of the Coachella Valley approximately 40 miles east of Palm Springs, California—east of Jackson Street, between Avenues 44 and Airport Boulevard with two main highways that intersect: Highway 111 and CA-86. Coachella has a population of about 40,704 with an average annual household income estimated by our health study to be between \$8,000 and \$13,000. Census data reports 17,347 as foreign born, and 97.5% identifying as Latinx/Hispanic, and 47.8% of adults have less than a high school education. Preliminary analysis of our health study estimates the respiratory illness prevalence to be between 9% and 12.5% for the various housing types.

Coachella is the nearest and most populous city in the ECV, serving the entirety of the region with grocery stores, gas stations, and areas for recreational activities, though still at a distance from the unincorporated communities.

B. Thermal

Thermal is an unincorporated community located south of the City of Coachella. Its rough boundaries are Harrison Street and CA-86; Airport Boulevard and Avenue 66, about halfway between the City of Coachella and the Salton Sea. The Census reported MHI is \$28,443 with nearly a third of the population having an income below the federal poverty level. Our recent health survey estimates the average annual household income to be much less and range from \$8,000 to \$14,000 for the various housing types. The population is 2,396 with 99.9% of the population identifying as Latinx. About 45% of the population is foreign born. The census tract of Thermal is at 90% or higher in the state for worst ozone, pesticides, education, linguistic isolation, and solid waste, ranking in the top 30% most disadvantaged in the state. Preliminary analysis of our health study estimates the respiratory illness prevalence to be between 8% and 13% for adults and children across the different housing types.

C. Oasis

Oasis is an unincorporated community located south of Thermal from Avenues 66 to 82 and between Harrison Street and CA-86. It also edges up to the northwestern part of the Salton Sea.

¹²Vesper, Stephen, and Larry Wymer. "The Relationship between Environmental Relative Moldiness Index Values and Asthma." International Journal of Hygiene and Environmental Health 219, no. 3 (May 2016): 233–38. <u>https://doi.org/10.1016/j.ijheh.2016.01.006</u>.

Oasis has a population of 4,374 with 98.2% of the population identifying as Latinx; 48.4% of the population has an income below the federal poverty level; 2/3 of the employed population is employed by the agriculture industry with an MHI of \$22,210. This low census reported MHI was even lower in our recent health survey; where, the average annual household income ranged from \$3,200 to \$6,700 for the various housing types. The census tract for Oasis—ranking in the top 20% most disadvantaged in the state—has some of the worst pollution by pesticides, impaired water, low educational attainment, severe linguistic isolation, and extremely high poverty and unemployment levels. Preliminary analysis of our health study estimates the respiratory illness prevalence to approach 70%.

D. Mecca

Mecca is an unincorporated community located east of Thermal. Its boundaries are CA-86 and Johnson Street, and Avenues 64 and 66, about halfway between Thermal and the Salton Sea. Mecca has a population of approximately 9,500 (ACS, U.S. Census, 2015). Over 99% of the community identifies as Latino/Hispanic. Over 43% of residents (and 55% of children under the age of 18) live below the federal poverty level. The median household income is \$26,047, significantly lower than the state's median income of \$61,818. Our health survey reported Mecca's average annual household income ranging between \$7,000 to \$10,000 among the various housing types. Over half of the population is foreign born. Preliminary analysis of our health study estimates the respiratory illness prevalence to be between 8% and 15% for adults and children across the different housing types.

Mecca is also the most developed and clustered of the four unincorporated communities in the ECV. Mecca is surrounded by agricultural fields and is located right next to Grapefruit Boulevard (Hwy 111) and about 1 mile from CA-86. This community also houses a factory adjacent to housing projects named GreenLeaf Power Desert View. In addition, locations around the Mecca community have been hotspots for illegal dumping of toxic and hazardous waste that produces continuous odor to neighboring residents and passersby.

E. North Shore

North Shore is an unincorporated community located east of Oasis and southeast of Mecca edging up to the northeastern part of the Salton Sea. This community is about 20 miles from the City of Coachella and comprised of 3 different clusters of homes. North Shore has a population of approximately 3,800 (ACS, U.S. Census, 2015), with over 95% identifying as Latinx. Close to 38% of residents (and 51% of children) live below the poverty line and the median household income is \$26,655, significantly lower than the rest of the state. Our health survey estimated the average annual household income to be between \$6,000 and \$8,000. Preliminary analysis of our health study estimates the self-reported respiratory illness prevalence to approach 70% for adults.

Both North Shore and Mecca lie in a census tract which ranks 81-85% on CalEnviroScreen 3.0 the top 20% of disadvantaged communities in the State. Particularly onerous are socioeconomic factors like education (100th percentile), poverty (96th percentile), linguistic isolation (99th percentile), unemployment (99th percentile) and housing burdens (84th percentile), as well as environmental factors like exposure to pesticides (92nd percentile), ozone (82nd percentile), impaired water (97th percentile), exposure to solid waste (97th percentile) and contaminated drinking water (85th percentile). The Health Disadvantage Index, which provides a detailed snapshot of the social determinants of health across the state, ranks the census tract that both communities are in at a high of 94.2 indicating that residents face greater disadvantages related to health.



Figure 1. The North Shore PM2.5 data from a community air monitor through the IVAN program. Note that many of the values are above the USEPA 2012 breakpoint level of 12.0ug/m3 representative of good air quality.

	MECCA & NORTHSHORE (Census Tract 6065045604) CalEnviroScree		THERMAL (Census Tract 6065045609) CalEnviroScree		Oasis (Census Tract 6065045605) CalEnviroScree		Coachella (Census Tract 6065045706) CalEnviroScree		Coachella (Census Tract 6065045707) CalEnviroScree		Coachella (Census Tract 6065940400) CalEnviroScree	
	CalEnviroScreen	n Indicator	CalEnviroScree	n Indicator	CalEnviroScreen	n Indicator	CalEnviroScreen	n Indicator	CalEnviroScree	n Indicator	CalEnviroScree	n Indicator
	Percentile	Score	n Percentile	Score	Percentile	Score	Percentile	Score	n Percentile	Score	n Percentile	Score
	80-85		70-75		70-75		80-85		75-80		85-90	
Ozone		82		91		91		91		91		91
PM2.5		8		18		20		18		20		20
Diesel		14		16		7		31		36		35
Pesticides		92		95		95		85		79		83
Toxic Releases		5		6		4		6		5		4
Traffic		5		7		2		13		14		34
Drinking Water		85		84		60		36		52		51
Cleanups		72		60		42		44		63		75
Groundwater Threats		50		37		9		90		85		75
Hazardous Waste		0		16		43		43		16		43
Impaired Water		97		72		97		72		72		72
Solid Waste		97		94		98		58		0		85
Asthma		24		32		36		58		58		56
Low Birth Weight		54		27		23		54		62		38
Cardiovascular Rate		75		41		51		64		64		59
Education		100		95		98		98		94		89
Linguistic Isolation		99		97		98		99		96		94
Poverty		96		88		97		94		84		81
Unemployment		99		68		96		98		69		81
		84		64		57		47		70		87

Figure 2. The California Enviro Screen indicator scores for the five areas in the ECV.



Map 5. The CalEnviroScreen Map for the entire Coachella Valley.

6. Eastern Coachella Valley: Promise for Opportunity

Despite stark environmental, public health and economic insecurity across the Eastern Coachella Valley, resilience to overcome adversity has long served as a defining characteristic of individuals and families in the region. The ECV has a history of community activism that ranges from securing basic services such as safe drinking water and proper wastewater disposal systems to securing policies and investments for affordable housing, parks, public and active transportation. With support from community-based organizations, community residents have engaged in local and regional land-use and transportation planning efforts and collaborated with local, regional, and state agencies and decision-makers to advance community priorities through various policy levels and investment opportunities.

7. Public Investment to Address Sources of Pollution

With the passage of Proposition 68, the promise of millions of dollars in investment to address lung damaging dust from the Salton Sea is now a reality. Specifically, Proposition 68 allocates \$30 million to the Salton Sea Authority for capital outlay projects that provide air quality and habitat benefits, and that implement the Natural Resources Agency's Salton Sea Management Plan adopted in March 2017 (Public Resources Code Section 80110 (a)). Additionally, \$175 million is allocated to the California Natural Resources Agency for restoration activities identified in the Salton Sea Management Program, Phase I: 10-year plan, the final management plan report and any subsequent revisions to the plan (Public Resource Code Section 80116).

Most recently, the Legislature approved the Greenhouse Gas Reduction Fund Expenditure Plan for fiscal year 2018-2019 which directs millions of dollars towards lower income communities to address climate adaptation and air pollution. The expenditure plan allocates \$645 million to CARB for mobile source, climate change and community air protection funding programs. Of particular relevance are new requirements for projects funded under the community air protection program. Of CARB's allocation, \$245 million is available for financial incentives to reduce mobile and stationary sources of criteria air pollutants or toxic air contaminants consistent with community emission reduction programs. Projects funded under this program must further the rules and regulatory requirement that CARB and air districts have established or are in the process of developing to reduce or mitigate emissions from mobile or stationary sources in affected communities. Funds must be allocated to projects that benefit communities and are consistent with priorities identified by selected AB 617 communities in a transparent meaningful public process.

Cumulatively, funds from Proposition 68, GGRF, TCC planning dollars, SB 1 and local and regional discretionary dollars create significant opportunities for the ECV to establish strong air quality monitoring and emissions reduction programs that target multiple sources of pollution associated with agricultural activities, goods movement, hazardous facilities and declining Salton

Sea levels that create significant health hazards and can contribute to serious respiratory illness in children and adults.

8. Changing the Landscape

As previously stated, the ECV has experienced historic exclusion and marginalization from state and regional environmental and investment efforts. While this phenomenon threatens to take a toll on community morale, residents of the ECV continue to demonstrate their passion and dedication to improving the conditions of their communities. LCJA have built and conserved relationships with community residents for the past five years, leading campaigns alongside residents on issues around transportation access, housing affordability, safe and affordable drinking water, and environmental justice. These campaigns and advocacy efforts have led to several community-led projects in the recent years which serve to demonstrate the community's willingness and capacity to engage in the development of air monitoring and emissions reduction programs.

These efforts include participation in key public workshops, oral testimony in public hearings and development and submission of written comments designed to advance economic opportunity and public health in the region. Through regular community meetings and participation in critical decision-making processes, residents have informed the development of Riverside County's General Plan update, Housing Element Update, the Southern California Association of Governments 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy, and provided input to large scale plan developments such as La Entrada and Paradise Valley.

Most recently, community leaders from these four unincorporated areas partnered with Riverside County, the City of Coachella and the Coachella Valley Association of Governments to apply for a Transformative Climate Communities (TCC) planning grant to develop a Climate Resilience Action Plan for the region. In 2018, the ECV was awarded a planning grant to provide residents the opportunity to be a part of the planning process for their communities to reduce greenhouse gases and local air pollution. Some of the ideas that residents have prioritized are to increase the development of green spaces, reduce criteria air contaminants and toxic criteria pollutants, extend sewer and water services from the local water district, expand access to zero emission transportation services, increase resources for weatherization, create jobs and develop healthier and more affordable housing options. Activities are scheduled to commence in July 2018. This was the only grant awarded to develop climate resilience plans in rural communities. This effort will link together existing plans and gather community input for new programs and projects focused on addressing public health, advancing economic opportunity and reducing greenhouse gas emissions as well as other sources of pollution such as criteria pollutants and toxic air contaminants.

This year, the ECV also received a planning grant to develop a Neighborhood and Regional Mobility Plan for the communities of Mecca and North Shore. This grant came after nearly finalizing the current Thermal and Oasis Neighborhood and Regional Mobility Plan. These two mobility plans, which address active transportation infrastructure, will be used to create a regional mobility plan that will be included in the TCC plan that can be used for future implementation funds that will affect transformative change in one of the most disadvantaged areas in the state. In addition, we convened a Transportation Justice Coalition of local non-profit organizations, residents, and other stakeholders several years ago to assess the transportation and mobility needs of the ECV, which has since been meeting regularly to ensure accessibility to healthy and transformative transportation options.

The ECV is also benefiting from collaborative efforts among community-based organizations and public agencies working on environmental justice. Some of these include the Identifying Violations Affecting Neighborhoods (IVAN), the Environmental Justice Enforcement Task Force (EJETF) IVAN-Coachella, and the Disadvantaged Communities Infrastructure Task Force (DACITF) - the first two of their kind in the state of California. Both of these task forces include stakeholders from different sectors that represent the ECV communities, each with the goal of driving investment to the ECV and improving the quality of life for its residents.

Promotores Comunitarios del Desierto, a community health organization and La Union Hace La Fuerza (La Union), an environmental and farmworker justice organization in the Coachella Valley established the IVAN-Coachella network in September 2010 in partnership with CCV. What prompted the establishment of IVAN-Coachella was the controversy over the Western Environmental Industry (WEI) Hazardous Waste facility located in the community of Mecca. The IVAN-Coachella was an innovative and important forum where community members could collaborate with DTSC, U.S.-EPA, and the South Coast Air Quality Management District SCAQMD officials to improve their investigations and enforcement efforts regarding WEI hazardous waste processing facility that was illegally accepting waste material. Since its inception, the IVAN network has actively supported local residents' efforts to overcome environmental justice issues not only by resolving individual reports and problems but also by improving access to infrastructure and resources. An illustration of the latter, was that the IVAN-Coachella-CCV convened diverse stakeholders including tribes, cities, elected officials, academics, and residents from disadvantaged communities in the Coachella Valley to ensure that projects that were prioritized by these communities were selected for mitigation funding. In 2013, the collaborative was successful in securing 17 million dollars in investments in ten projects benefiting environmental justice communities throughout the Coachella Valley. Among the most notable projects includes advocating for AB 1318 mitigation funding, which stemmed from the sale of air credits. CCV's proactive collaborative strategy resulted in a total of 10 projects, most of which were proposed and funded by the SCAQMD. CCV also collaborated with private enterprises to assure that projects were fully developed. In these instances,

partnerships were forged within the community to ensure investments benefited the Eastern Coachella Valley.

In May 2016, CCV, the Coachella Valley Unified School District ASES Program, La Union, IVAN-Coachella, and SCAQMD hosted a workshop at Desert Mirage High School in Thermal. Its purpose was for SCAQMD to hear from community members about air pollution in the selected communities, which included a mapping activity to identify areas of concerns.



Figure 3. Community Mapping Activity, Desert Mirage High School, May 2016

In May 2017, CCV launched the Coachella Valley Community Air Monitoring Project using the <u>ivanair.org</u> model, and based on community recommendations, formed a Community Steering Committee (CSC) to guide the project and help identify locations to place monitors and collect data on air quality in the Eastern Coachella by installing 5 Air Monitors to measure levels of particulate matter; a follow-up meeting was held on September 8th at the Mecca Boys and Girls Club.

In addition to the above efforts with IVAN, our community collaborative installed several PurpleAir sensors in the ECV. There are now three current sensors in the ECV with additional historical data from 2016 and 2017 at four other sites within the ECV. The real-time and historical data is publicly available.

Finally, the CCV and LCJA partnership stems back over a decade working on policies that support rural environmental justice communities, most notably in 2015, LCJA and CCV formed

a coalition named Action for Climate Equity (ACE) workgroup to provide guidance to CARB in the investment of GGRF Funding among California's most vulnerable communities, including the Eastern Coachella Valley.

9. EJ Community Science Committee

In anticipation for selection as a Year 1 community for expanded air monitoring and emissions reduction plans, the ECV community is prepared to launch an Environmental Justice Community Science Committee as currently envisioned in the draft Community Air Protection Blueprint. This will come as a result of the continuous participation of ECV residents and their dedication to advocate for change and environmental justice. The committee will be comprised of representatives within the nominated community who experience cumulative impacts from exposure to multiple toxic air pollutants, including but not limited to, communities with minority or low-income populations. This will allow for meaningful involvement in the development and, implementation of the Community Air Protection Program, which includes air monitoring and an emissions reduction plan.

Any monitoring siting and emissions reduction plan will be done in consultation with the EJCSC, This advisory committee will engage in all stages of the process; the project, including participant recruitment, execution of community hazard/asset mapping (Basara and Yuan 2008)[7], air monitoring site selection and operation, development and implementation of an emissions reduction plan interpretation and dissemination of results, and project evaluation.

The EJCSC members will be involved in the decision on where to site monitors in a network with community participation or input, a continuing innovative idea of our project. We will engage the community in the design and expansion of the air quality monitoring network, collect data, analyze and show progress while developing an emissions reduction plan. We will refine previously developed, scientifically rigorous site-selection methods and include community knowledge of important sources of air pollution, cumulative hazards, and vulnerable populations.

We will facilitate discussions with community members to identify neighborhoods of concern and to conduct community mapping to identify assets if necessary as well as environmental hazards that are either sources of air pollution or may act cumulatively to affect the health of the neighborhoods' residents, including outreach to the community.

10. PM Monitoring Expansion

This project will include maintaining and expanding the IVAN Air PM Monitoring system in the Salton Sea Air Basin and ECV communities, along with the training of community members to conduct PM monitor operations and maintenance in addition to:

- Calibration—Use of gathered co-location data to calibrate monitors against a regulatory PM monitor for ECV region.

- Site Selection—CSC engaged in site selection and recruitment.
- Monitor Deployment—Development of training materials for community members interested in monitoring project, deployment, and maintenance. Local community will be trained to take ownership of community monitor operations in the area.
- Data Dissemination—IVAN Coachella updated to reflect expanded network.
- Communications and community emissions reduction plan—CSC convened to determine emissions reduction plan.

One goal of calibrating the community sensors is to justify additional regulatory sensors in the ECV that help the community respond to adverse air pollution days. Additional regulatory sensors can also and help SCAQMD and other groups facilitate community development through smart industrial activities that do not impair the health of the vulnerable population in the ECV.

Additionally, the Building Healthy Communities Neighborhood Action Team is preparing a parallel community science program that focuses on mapping and deploying community science air and water sensors. That program will also leverage community collected (and calibrated) data to advocate for additional monitoring of the environment as the climate, industries and the Salton Sea change through the coming years. These two networks will work concurrently and collaboratively to develop a robust air monitoring system that will be used to support the development of emissions reduction strategies.

11. Conclusion

Major components of AB 617 include air quality monitoring, emission reduction program, regulatory action, funding incentives and most importantly, meaningful participation by affected communities. In the final analysis, the process and methodology put forth by SCAQMD is continuing to perpetuate the exclusion of rural and agricultural communities in competitive state programs. The ECV, home to multiple sources of pollution characteristic of rural areas, is prime for air quality monitoring and emission reduction plans due in large part to its engaged constituency and their contributions to land use and transportation planning efforts in the region, development of the Salton Sea Management Program and their ability to partner with local, regional and state agencies to leverage resources necessary to advance environmental, public health and economic opportunity in the region. Community leaders are sufficiently prepared to work with their neighbors, community partners, SCAQMD, CARB and other stakeholders to establish a local steering community to ensure compliance with the intent and spirit of AB 617.