



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



# REPORT to the COMMUNITY

**2014-15 Edition**





A message from the

## AIR POLLUTION CONTROL OFFICER

On behalf of the Valley Air District's Governing Board, it is my pleasure to present to all Valley residents this year's Report to the Community. With public accountability being a top priority for the District, I hope you find this report useful in learning about efforts to improve air quality in this great Valley of ours. With Valley businesses continuing to make major investments and significant sacrifices in our clean air efforts, I hope this report will also inspire Valley residents to seek out and act on opportunities to do their part in meeting the significant challenges that remain.

Looking back, last year was marked by significant achievements with respect to summer ozone and tremendous winter particulate challenges due to unprecedented weather conditions.

In 2014, the Valley continued its significant progress in reducing summertime smog. In fact, the Valley population's exposure to levels above the federal 8-hour ozone standard has now been reduced by more than 90 percent. 2014 was the second consecutive year during which the Valley had zero violations of the 1-hour ozone standard. Achieving this milestone was remarkable given that the Valley experienced strings of triple-digit temperatures, which are ordinarily conducive to high smog levels. The District will now send a second request to EPA to officially designate the Valley as attaining this critical standard that has been the focus of our efforts for more than two decades.

If it weren't for exceptional weather conditions, I could also tell you a similar success story with respect to wintertime particulate matter. As Valley residents, we are all painfully aware of the devastating impacts the drought has already had on our economy and the quality of life in Valley communities. Air quality was another victim of the unprecedented drought conditions we faced. Despite record low levels of particulate pollution emitted by Valley businesses and vehicles, these abnormal weather conditions led to extremely high levels of ambient particulate concentrations not seen in the Valley in over a decade.

As we look back at 2014, the adoption and implementation of the new residential wood burning program was, by far, the most significant legislative action taken by the Board. The amendments achieve huge reductions in dangerous wood smoke emissions by significantly curtailing the use of older, dirty devices, while rewarding Valley residents who have invested in cleaner wood-burning units with more days when they can use their devices. The District also invested more than \$6 million to assist in Valley residents' transition to cleaner devices. This rule and incentive program continue to be one of the least costly and most health-protective measures, reducing pollutants when and where most needed.

As we reflect on this past year, we must remain mindful of the significant challenges that remain in meeting health-protective air quality standards. As we move forward, the District, with the help of Valley stakeholders, will work to affect common-sense changes to the federal Clean Air Act to give us adequate time and resources to develop and implement the transformative measures needed to meet these necessary but ever-tightening standards.

**Seyed Sadredin**  
Executive Director / Air Pollution Control Officer

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## ABOUT THE DISTRICT

The San Joaquin Valley Air Pollution Control District is a regional public health agency responsible for air quality management in the eight counties in the San Joaquin Valley air basin: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the Valley air basin portion of Kern.

The District works with local, state and federal government agencies, the business community and the residents of the Valley to reduce emissions that create harmful air quality conditions.

### The District's Mission

The San Joaquin Valley Air Pollution Control District is a public health agency whose mission is to improve the health and quality of life for all Valley residents through efficient, effective and entrepreneurial air quality management strategies.

### The District's Vision

The District's vision is healthful air that meets or exceeds air quality standards for all Valley residents. The District is a leader in air pollution control. Valley residents take pride in our collective efforts to continuously improve air quality.

## CORE VALUES

### PROTECTION OF PUBLIC HEALTH

The District shall continue to strive to protect the health of all Valley residents through efforts to meet health-based, state and federal ambient air quality standards.

### ACTIVE AND EFFECTIVE AIR POLLUTION CONTROL EFFORTS WITH MINIMAL DISRUPTION TO THE VALLEY'S ECONOMIC PROSPERITY

District staff shall work diligently to adopt and fully implement air pollution control measures, provide meaningful incentives for reducing emissions, and develop creative alternatives for achieving emissions reduction.

### OUTSTANDING CUSTOMER SERVICE

District staff shall work to provide excellent customer service for stakeholders in activities including: rule and plan development; permitting and emissions inventory functions; compliance activities; financial and grant funding transactions; and responses to public complaints and inquiries.

### INGENUITY AND INNOVATION

The District values ingenuity and innovation in meeting the challenges we face. Examples of this spirit of innovation include developing programs that provide new incentives for emissions reductions, and providing alternate compliance strategies that supplement traditional regulatory efforts and generate more emissions reductions than could otherwise be reasonably obtained.

### ACCOUNTABILITY TO THE PUBLIC

The District serves, and is ultimately accountable to, the people of the Valley for the wise and appropriate use of public resources, and for accomplishing the District's mission with integrity and honesty.

### OPEN AND TRANSPARENT PUBLIC PROCESSES

The District shall continue to provide meaningful opportunities for public input and be responsive to all public inquiries.

### RECOGNITION OF THE UNIQUENESS OF THE SAN JOAQUIN VALLEY

The Valley's meteorology, topography and economy differ significantly from those in other jurisdictions. Although it is valuable to review and evaluate efforts of other agencies, we must consistently look for solutions that fully consider the Valley's unique needs.

### CONTINUOUS IMPROVEMENT

The District works to continually improve its internal operations and processes, and strives to streamline District operations through optimally utilizing information technology and human resources.

### EFFECTIVE AND EFFICIENT USE OF PUBLIC FUNDS

The District shall continually strive to efficiently use all resources and to minimize costs associated with District functions.

### RESPECT FOR THE OPINIONS AND INTERESTS OF ALL VALLEY RESIDENTS

The District shall respect the interests and opinions of all Valley residents and fully consider these opinions, working collaboratively, in carrying out the District's mission.

## 2014 CONTINUES HISTORIC OZONE PROGRESS

For more than two decades, the District has developed and implemented numerous air quality plans, adopted more than 500 of the most stringent rules in the nation, and has put in place a strong voluntary incentive program that has invested more than \$1 billion in clean-air projects. The result has been more than 100,000 tons of emission reductions needed to reach attainment of these health-based national ozone standards:

- ▶ 1-hour ozone standard (124 parts per billion)
- ▶ 1997 8-hour ozone standard (84 parts per billion)
- ▶ 2008 8-hour ozone standard (75 parts per billion)

In the summer of 2014, the Valley experienced strings of triple-digit temperatures, wildfires and continued stagnation due to the ongoing drought. Overall, meteorological conditions during summer and early fall were extremely conducive to ozone formation. Despite these conditions, the Valley continued progress and experienced another record-setting smog season:

- ▶ For the second time in recorded history, the Valley completed an ozone season with no violations of the 1-hour ozone standard. By contrast, in 1996, the Valley experienced 281 hourly exceedances of this standard throughout the eight-county region. In 2004, EPA classified the Valley as “Extreme” non-attainment for this standard, meaning that reaching the standard, at that time, was deemed impossible. The Valley is the first and only region in the nation with an “Extreme” classification to subsequently meet the standard.
- ▶ The Valley remains on track to meet the 84 ppb 8-hour ozone standard before the federal deadline
- ▶ Valley residents’ exposure to ozone concentrations above the health-based standards established by EPA, including the toughest 8-hour ozone standard, has been reduced significantly. Using a neighborhood-by-neighborhood accounting for population exposure to ozone concentrations, Valley residents were exposed to ozone concentrations above the standards for the fewest number of days to date from 2012 through 2014. In fact, the average number of days a resident

experienced ozone levels above the 1997 and 2008 8-hour ozone standards has been reduced by 91% and 73% respectively, since 2002.

- ▶ The Valley experienced the longest stretch of consecutive days in July and August on record without violating the 75 ppb 8-hour ozone standard.
- ▶ The cleanest August on record: 17 days without an 8-hour ozone exceedance (75 ppb 8-hour ozone standard).
- ▶ The number of days when the 75 ppb 8-hour ozone standard was exceeded anywhere in the Valley was the lowest to date during the typical peak ozone season of May through September.

This historic ozone progress has only been made possible through the significant investment and sacrifice of Valley businesses and residents to reduce air pollution. Recognition of these efforts lends credibility to the effective strategies that have been used and builds a stronger foundation for additional work that remains in continuing to make progress toward meeting other air quality standards.

### Valley Demonstrates Clean Data

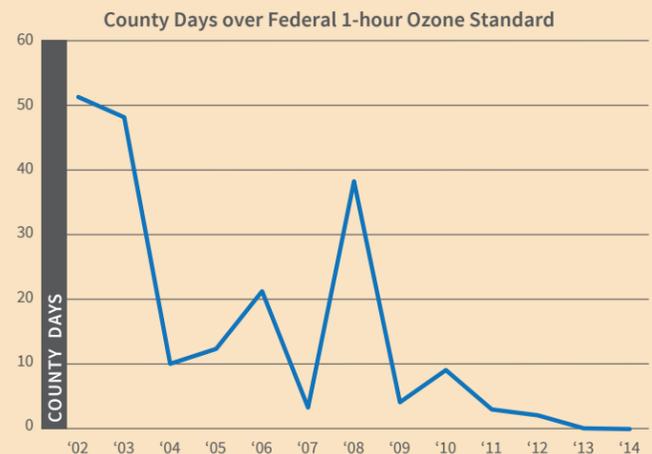
The District submitted a clean-data demonstration to EPA and requested a finding that the Valley had attained the 1-hour ozone standard, based on ambient air quality data from 2011 through 2013. This request included documentation for a 1-hour ozone exceedance that occurred at the Fresno-Drummond air monitoring site in 2012 due to an exceptional event. To date, EPA has not acted on the District’s submitted request, and with zero 1-hour ozone violations during the 2014 ozone season, the District is now poised to resubmit the clean data demonstration based on the 2012 through 2014 period, and again request that EPA find the Valley in attainment of this standard. In addition, due to the clean ozone season of 2014, the ability to show attainment for the 2012 through 2014 period no longer requires an action from EPA regarding the previously submitted exceptional-event documentation for the 2012 exceedance at the Fresno-Drummond.

The District will again request that EPA lift the \$29 million annual Clean Air Act Section 185 penalties currently in place for Valley residents and businesses due to nonattainment of the standard. Lifting the federal mandate for these penalties would return full local control to the Valley for decisions regarding the need, the magnitude and the expenditure of state Department of Motor Vehicle dollars. Additionally, given pending litigation from a Bay Area environmental law firm seeking to increase non-attainment penalties charged to businesses, lifting this mandate would also remove further exposure of these penalties to Valley businesses.

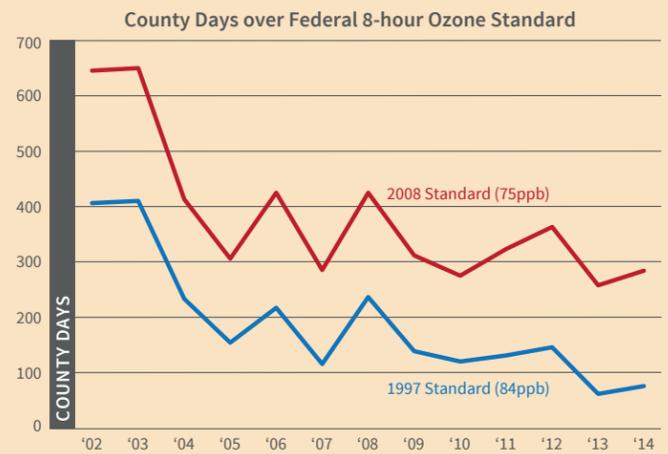


## OZONE TRENDS

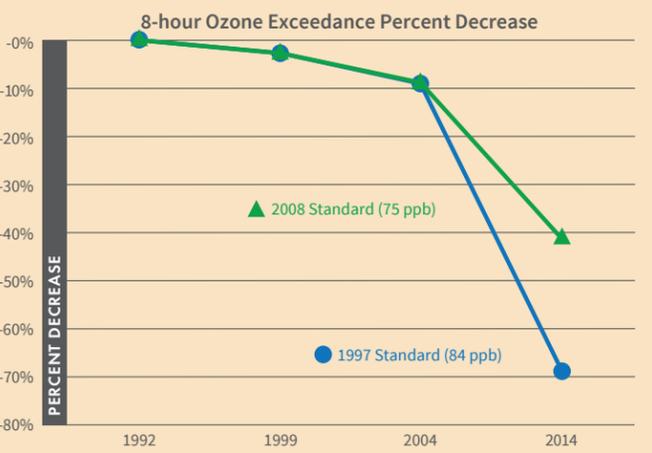
## PM2.5 TRENDS



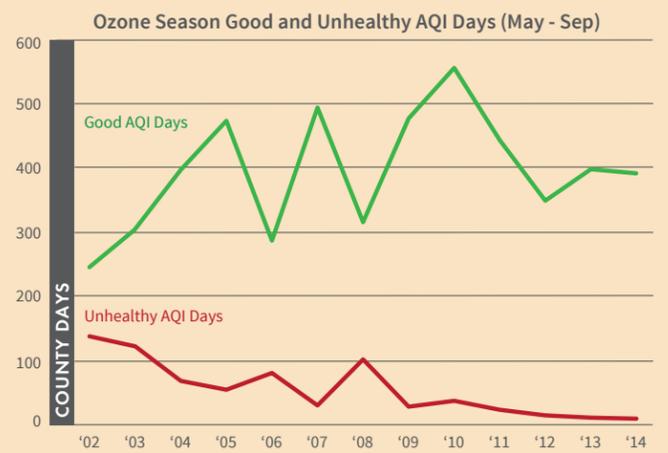
2014 marked the second consecutive year with zero exceedances of the federal 1-hour ozone standard, a historic accomplishment.



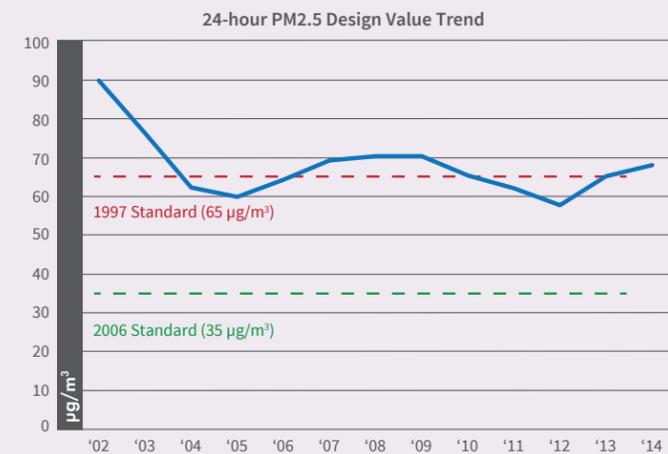
Days over the federal 8-hour ozone standards continued the downward trend thanks to another clean ozone season.



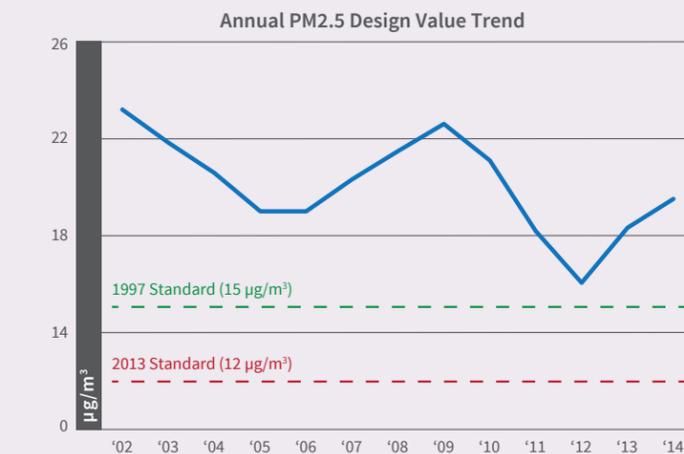
Since 1992, 41% decrease in days over the 2008 8-hour ozone standard and 68% decrease in days over the 1997 standard.



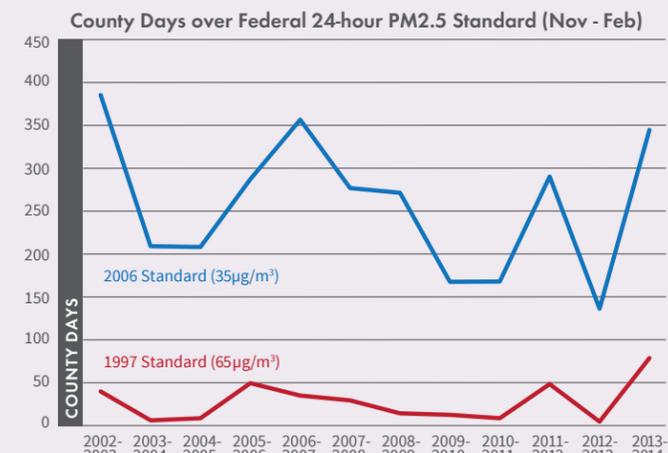
Continued decrease in the number of Unhealthy AQI County-Days during the ozone season of May to September.



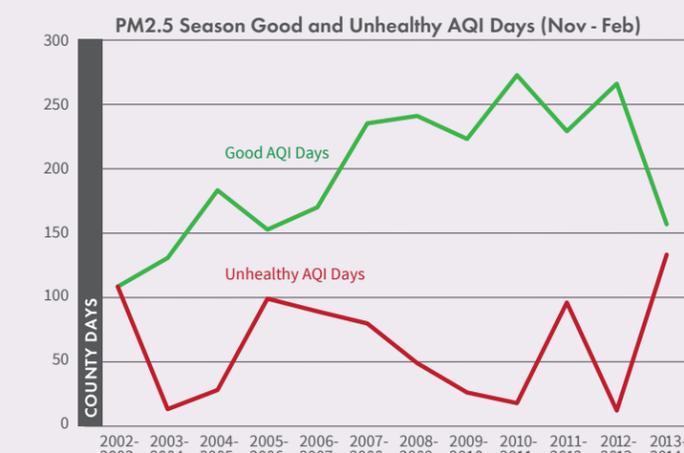
The 24-hour average PM2.5 values increased due to extreme weather conditions which caused abnormally long periods of stagnation.



The annual average PM2.5 values also increased due to extreme weather conditions which caused abnormally long periods of stagnation.



Increase in County-Days over the federal 24-hour average PM2.5 standards due to extreme weather conditions.



Increase in Unhealthy AQI County-Days and decrease in Good AQI County-Days due to extreme weather conditions.

## District Provides DROUGHT RELIEF Measures

As a public health agency whose mission is to improve the health and quality of life for Valley residents, the District has been at the forefront of addressing effects of the worst drought in the Valley's recorded history. In order to assist Valley residents, water districts and farmers with the severe challenges due to the unforeseen and unique water shortage, the District adopted several measures to assist with drought-relief actions.

- ▶ The unprecedented demand for new water wells caused a shortage in the number of available well-drilling rigs, in some cases causing Valley residents, businesses and farmers to wait several months to get new water wells drilled. To address this problem, the District urged the state to use emergency provisions within state law to provide special consideration for out-of-state well-drilling equipment to come into the state for a short period, in order to meet the unprecedented demand for new residential and municipal water wells. The District also put into place an expedited, local, portable equipment-registration program as an option for well-drilling projects that could not find suitable well-drilling equipment under the state Air Resources Board's portable equipment-registration program.
- ▶ To provide relief to Valley residents and farmers who needed to get new water wells operational as soon as possible, the District enacted an expedited permitting program for temporary generators to provide electric power for new well pumps for which the local utilities have not yet been able to provide electric service. This service allows farmers to avoid installing long-term internal combustion engines and use electric motors instead. The District has committed to issuing temporary permits within 10 days of application, and has adopted appropriate streamlining processes to accomplish this very short permitting turnaround.
- ▶ In order to address the growing public health crisis and to facilitate immediate action to address water well issues, the Governing Board sent a letter to Gov. Brown supporting requests by Lead Agencies under the California Environmental Quality Act (CEQA) to expand the Governor's Drought Emergency Executive Order for urgent drought-relief projects. In exchange, project proponents would commit to develop and implement Voluntary Emission Reductions Agreements to mitigate any associated air quality impacts.
- ▶ The severe drought caused considerable difficulties for businesses and farmers in complying with air quality regulations. Recognizing this, the District continues to provide material assistance, education and consultation in finding cost-effective and expeditious options to satisfy air quality requirements relating to their operations; to promote the use of less water-intensive measures to comply with District regulations; and to assist with the development and implementation of additional dust control measures, as well as streamlining existing permit revisions to incorporate these new dust control practices.



## EXCEPTIONAL WEATHER Leads to High Pollution Levels

During the winter of 2013-2014, Gov. Brown declared a state of emergency due to extreme drought conditions throughout California. This declaration was based on record-low precipitation in 2013 and snow pack levels at only 20 percent of normal to provide water for the year. In the San Joaquin Valley, 2013 represented the driest precipitation year in more than a century of record keeping. In addition to the low precipitation levels, the Valley also experienced long periods of atmospheric stagnation caused by strong temperature inversions. The combination of these conditions led to elevated PM2.5 concentrations throughout the Valley during late 2013 and early 2014.

Until these exceptional drought conditions occurred, the District was on track to attain the 1997 annual and 24-hour PM2.5 standards by the federally mandated deadline of December 2014. The District's 2008 PM2.5 Plan satisfied all federal implementation requirements for the 1997 PM2.5 standard at the time of adoption and demonstrated attainment based on projected 2012-2014 PM2.5 levels. All emission-reduction commitments under that plan have been fulfilled. But due to the extreme drought, stagnation, strong inversions and historically dry conditions, it was impossible for the Valley to demonstrate attainment by the deadline.

Under current EPA policy, the weather conditions that the Valley experienced during the 2013-14

winter cannot be declared "exceptional events" since stagnation and lack of precipitation are not considered eligible events. In the spring of 2014, members of the District's Governing Board and staff met with high-level EPA staff to discuss the possibility of declaring the weather conditions experienced by the Valley last winter as an exceptional event. EPA indicated that, while short duration stagnation and lack of precipitation weren't considered exceptional, the prolonged duration of the drought experienced in California may be eligible. The District is continuing to work with EPA to ensure that long-term drought conditions such as the Valley is experiencing will qualify as an exceptional event in the future.

With the inability to demonstrate attainment of the 1997 PM2.5 standards by the end of 2014, and in conjunction with recent litigation against EPA regarding its implementation of the Clean Air Act for PM2.5 standards, the District is now in the process of requesting time extensions for showing attainment of both the 1997 and 2006 PM2.5 standards. These allowable time extensions will give the District the opportunity to update its current PM2.5 plans to show when attainment of the federal standards will be possible. These efforts will continue over the coming years as the District reassesses its control strategy for PM2.5 in the journey to attainment.

## NEW OZONE STANDARD Requires Tough Choices

On Dec. 17, 2014, EPA published in the Federal Register a proposal to lower the existing federal 8-hour ozone standard of 75 parts per billion (ppb) to a more stringent level of 65–70 ppb. As a public health agency, the District supports the use of up-to-date, sound science to set protective health standards. However, the current regiment under the Clean Air Act has led to excessive red tape and administrative burdens without corresponding public health benefit, as well as deadlines that are impossible to meet.

To even consider meeting the new standard, fossil-fuel combustion emissions must be eliminated in the Valley, particularly given that the proposed standard approaches the Valley's natural background ozone concentration. Attaining the new standard will require transformative measures that need sufficient time to be planned and implemented on a large scale. For instance, such measures include turning over existing fleets of personal and commercial vehicles to zero-emissions technology, along with major investments in building new fueling and transportation infrastructures.

The Clean Air Act, however, has a preset deadline for meeting the standard that fails to account for the region's geography, topography and meteorology, the large reductions in emissions that have already been achieved, and the technological and economic feasibility of new measures that would be required to achieve the new standard. It has been demonstrated that the technology does not currently exist to meet the current 8-hour ozone standard of 75 ppb by the 2032 deadline. However, for the new much more difficult standard, the Valley would be given a deadline for meeting the standard of only 2037. Additionally, with the new standards approaching background concentrations, every ounce of emissions count, including emissions transported to the Valley from neighboring regions and Asia.

The District believes that it is possible to continue with the current rigorous regiment for establishing new standards if the implementation mandates are adjusted to avoid redundancy and provide reasonable deadlines that ensure rapid progress toward meeting the standards. The Clean Air Act and related federal regulations must be updated to ensure that the Valley is not penalized for pollution over which the District has no control, particularly as all sectors within the Valley do their best to reduce local emissions.



## Neighborhood by Neighborhood Air Quality Information

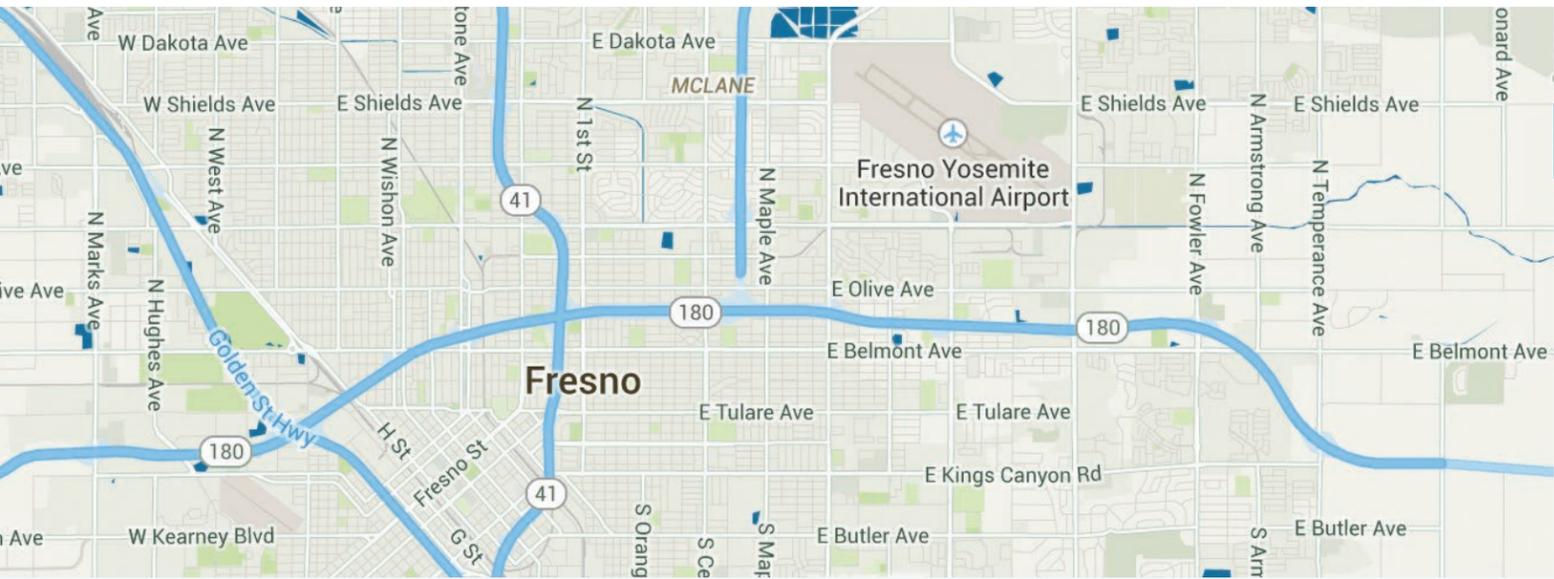
Providing accurate and up-to-date air quality information to Valley residents is a top priority for the District. This is especially important during times when the Valley's unique geography, topography and meteorology overwhelm all clean-air measures and lead to high pollution concentrations that may be unhealthy for Valley residents. High pollution concentrations also occur during exceptional events, such as wildfires. Under these circumstances, the best course of action is to provide notifications to Valley residents so that sensitive individuals, in particular, can take precautions to minimize exposure.

In 2010, the District created the Real-Time Air Advisory Network (RAAN) to provide access to hour-by-hour, local, air quality conditions. With this new risk-management tool, it is possible for schools, parents and others to make informed decisions about when outdoor activities should be limited, and for whom. RAAN revolutionized the way local air quality conditions are communicated on a real-time basis.

However, RAAN relies on data from air quality monitors that are typically sited at locations that measure worst-case concentrations. Currently, data reported through RAAN comes from the air monitoring station that was selected as the one closest to the area of interest by the user. Given the large geographical area that is covered by the District's air monitoring network, this method, although providing worst-case air quality measurements, may not accurately reflect the actual air quality conditions at the neighborhood level.

In response, during the May 2012 Study Session, the Governing Board directed staff to create a new system that calculates and reports neighborhood-by-neighborhood air quality information. The project is broken up into the following phases:

- ▶ **PHASE I** – Establish modeling techniques for quantifying neighborhood-level concentrations (*completed*)
- ▶ **PHASE II** – Provide historical air quality trends for each Valley neighborhood
- ▶ **PHASE III** – Provide real-time air quality data for each Valley neighborhood



## Neighborhood Air Quality (Continued)

### PHASE I

#### ESTABLISH A METHOD FOR MEASURING NEIGHBORHOOD LEVEL POLLUTION

Phase I has been completed by establishing a modeling technique for quantifying neighborhood-level ozone and PM2.5 concentrations.

Since regional air quality modeling has the ability to produce more realistic air quality distributions in neighborhoods (represented by 4 kilometer (km) by 4 km grid cells), the District has determined that using modeled air quality concentrations along with actual air monitoring data will provide the most accurate neighborhood-level information. This technique involves establishing relationships between modeled air quality concentrations for specific meteorological conditions and air quality patterns to air quality concentrations recorded at air monitoring stations. Dating back to 1990, the District has already used this modeling technique to generate neighborhood-level ozone and PM2.5 concentrations for each of the approximately 3,600 neighborhoods that make up the San Joaquin Valley. This data is the foundation for providing historical air quality information under Phase II of this project.

### PHASE II

#### PROVIDE HISTORICAL AIR QUALITY TRENDS FOR EACH NEIGHBORHOOD: WEB-BASED ARCHIVED AIR QUALITY (WAAQ) SYSTEM

In this phase, the District committed to provide an online tool to the public that will allow residents to view historical air quality information for their neighborhood by simply entering an address. With the necessary technical analyses completed under Phase I and neighborhood-level historical air quality datasets established, the District is ready to release a beta version of the online web page. To ensure adequate testing, the District will provide the beta version to a limited number of stakeholders.

The WAAQ System— a new, interactive, online tool— will provide a number of charts that display historical air quality information and allow users to select which statistics they would like to view. The following neighborhood-level statistics will be provided:

- ▶ Number of Good AQI days
- ▶ Number of Unhealthy AQI days
- ▶ Days over federal standards for ozone and PM2.5
- ▶ Neighborhood air quality compared to county and Valley air quality

During this beta launch, and throughout the development of this project, the District will accept and consider comments and recommendations in a continuous effort to improve the information provided on the web page. The beta version of this online tool was made available March 1, 2015.

### PHASE III

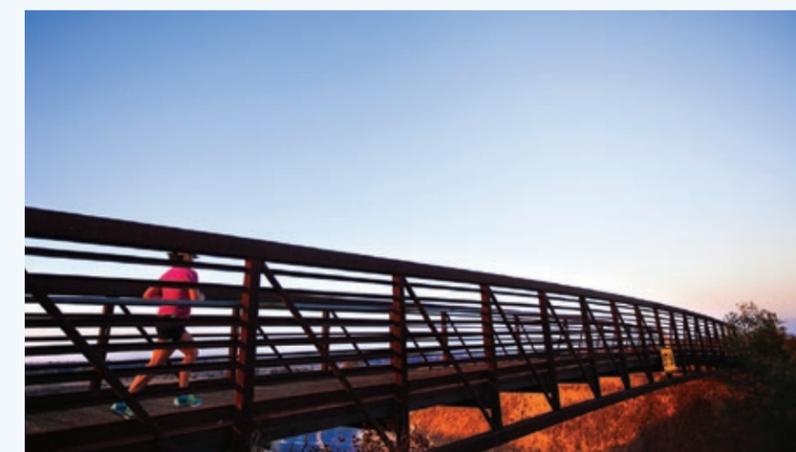
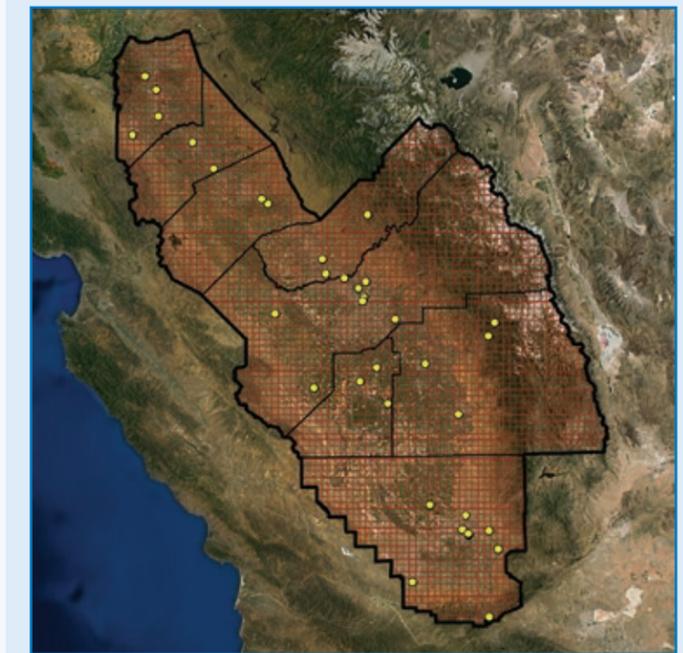
#### REAL-TIME AIR QUALITY DATA AT THE NEIGHBORHOOD LEVEL

Upon completion of Phase III, the RAAN system will provide Valley residents with real-time air quality information on a neighborhood-by-neighborhood level. Instead of being limited to selecting the closest air monitoring site to their location for air quality updates, residents will be able to enter their exact address into the RAAN system to receive location-specific air quality updates throughout the day.

The methods established under Phase I will enable the District to estimate real-time (hourly), neighborhood-by-neighborhood air pollution concentrations by taking into account real-time meteorological conditions in each of the 3,600 grid cells and data from the District's monitoring network. Providing this information on a real-time basis for such a large geographical area poses a number of challenges that must be met before the launch of this phase. Furthermore, such a real-time reporting system must be able to take into account and make adjustments for unforeseen events that may affect air quality in a particular neighborhood.

Given the Valley's size, it will take considerable computing power and internal quality assurance checks to guarantee the information's accuracy for the approximately 3,600 neighborhoods. In order to be effective, the District must:

- ▶ Capture unique events (such as the Fourth of July, smoke from wildfires, dust storms and large industrial accidents and breakdowns) and adjust the calculated neighborhood concentrations or messaging to the public accordingly.
- ▶ Create a public education and outreach strategy to communicate the use and limitations of the new tool.
- ▶ Verify accuracy of the calculated neighborhood air quality data with local field sampling and make any necessary adjustments.





## Real-time Air Advisory Network (RAAN) Continues to Grow

As the District's tools for providing updated air quality information have evolved, so has the emphasis on and approach to the Healthy Air Living Schools program. For many years, the District relied on air quality flags to spread news of the potential for air quality effects on any given day. Now, the District can provide hourly notifications directly to parents and teachers through text, email or smartphone apps, enabling them to make real-time decisions to protect student health. In 2014, CCAC worked through the Healthy Air Living Schools program to sign up hundreds of schools and school districts to the District's Real Time Air Advisory Network (RAAN), which provides hourly updates from monitors near their community. This Valley-wide exposure to RAAN has led to significant growth in families following RAAN and relying on real-time air quality insight to make decisions impacting their children and other family members. Many school

nurses, athletic directors and school administrators closely follow the District's Real-Time Outdoor Activity Risk (ROAR) guidelines as they make decisions regarding student activity and craft policy to guide teacher responses to specific air quality levels. In some cases, school districts have formalized action that requires afternoon and evening sports events to be delayed or canceled based on consistently poor air quality readings from RAAN.

Because RAAN is far more health protective, the District will no longer be providing flags to schools, but will be supporting the Healthy Air Living Schools program through the development of a wide variety of resource materials in English and Spanish. These materials will be used to engage students in the RAAN program and assist them in developing anti-idling efforts that will be appropriate at their school.

## Real-time Outdoor Activity Risk (ROAR) Guidelines

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5
<b>RECESS (15Min)</b>	No restrictions	Ensure that sensitive individuals are medically managing their condition.*	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.*	Exercise indoors or avoid vigorous outdoor activities. Sensitive individuals should remain indoors.*	No outdoor activity. All activities should be moved indoors.
<b>P.E. (1Hr)</b>	No restrictions	Ensure that sensitive individuals are medically managing their condition.	Sensitive individuals should exercise indoors or avoid vigorous outdoor activities.	Exercise indoors or limit vigorous outdoor activities to a maximum of 15 minutes. Sensitive individuals should remain indoors.	No outdoor activity. All activities should be moved indoors.
<b>ATHLETIC PRACTICE &amp; TRAINING (2-4Hrs)</b>	No restrictions	Ensure that sensitive individuals are medically managing their condition.	Reduce vigorous exercise to 30 minutes per hour of practice time with increased rest breaks and substitutions. Ensure that sensitive individuals are medically managing their condition.	Exercise indoors or reduce vigorous exercise to 30 minutes of practice time with increased rest breaks and substitutions. Sensitive individuals should remain indoors.	No outdoor activity. All activities should be moved indoors.
<b>SCHEDULED SPORTING EVENTS</b>	No restrictions	Ensure that sensitive individuals are medically managing their condition.	Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure that sensitive individuals are medically managing their condition.	Increase rest breaks and substitutions per CIF guidelines for extreme heat.** Ensure that sensitive individuals are medically managing their condition.	Event must be rescheduled or relocated.
<b>PM2.5 RANGE</b>	1 – 12 µg/m <sup>3</sup>	13 – 35 µg/m <sup>3</sup>	36 – 55 µg/m <sup>3</sup>	56 – 75 µg/m <sup>3</sup>	>75 µg/m <sup>3</sup>
<b>OZONE RANGE</b>	1 – 59 ppb	60 – 75 ppb	76 – 95 ppb	96 – 115 ppb	>115 ppb

\*Sensitive individuals include all those with asthma or other heart/lung conditions  
 \*\*California Interscholastic Federation

## Healthy Air Living Schools Program EXPANDS and EVOLVES

A key component of the District's overall outreach strategy is air quality education for children, teachers, parents and school administrators. For the last two years, the District has successfully partnered with the Central California Asthma Collaborative (CCAC) to provide a free Healthy Air Living Schools program to public and private schools throughout the Valley. CCAC has trained school administrators, students and parents in understanding the health implications, risks and recommended protective measures associated with air quality notifications the District provides. This allows educators to make informed decisions regarding outdoor activities, reinforce no-idling practices with parents and incorporate the behaviors necessary to provide a healthy learning environment. The program also provides informational brochures and posters as well as permanent signs that ask parents to refrain from vehicle idling while waiting to pick up their children. The program is evolving to phase out the less health-protective Air Quality Flag Program, and encourage schools to rely solely on the more flexible and health protective Real-time Air Advisory Network (RAAN).

In the coming year, Healthy Air Living schools will launch a Clean Air Champions pilot project that will target 60 schools, and offer enhanced support and direct access to CCAC staff. The pilot will engage administrators, teachers and classrooms in an effort to increase the school's interaction and utilization of the RAAN system. This will provide CCAC and the District an avenue to solicit independent ideas from schools regarding their no-idling practices, alternative transportation strategies, visual methods to easily communicate changes in hourly RAAN levels and ways to involve students through no-idling pledge campaigns or campus clubs.



## Strengthening the WOOD BURNING PROGRAM

In September, the District's Governing Board approved amendments to the residential wood burning program which included updates to Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters), enhancements to the Check Before You Burn Program and increased incentive amounts for the Burn Cleaner Program. The regulatory and financial incentives that encourage the purchase of cleaner wood burning units will result in significant emission reductions throughout the season, even on days when residential wood burning is allowed. Overall, the proposed wood burning strategy is expected to reduce more than 5.1 tons per day of PM2.5 throughout the Valley during the winter season.

Considering the significant health effects from residential wood smoke, reducing these emissions is a high priority under the District's Health Risk Reduction Strategy. Scientific studies show that prolonged wood smoke inhalation contributes to lung disease, pulmonary arterial hypertension and pulmonary heart disease, which can lead to heart failure. Wood smoke is also linked to cancer. Children with the highest exposure to wood smoke show significant lung damage.

Check Before You Burn improves public health by reducing toxic wood smoke emissions in Valley neighborhoods during the peak PM2.5 winter season of November through February. This comprehensive program enables Valley residents to play a major role in reducing emissions when and where reductions are most needed.

### Burn Cleaner Incentives

The Burn Cleaner wood stove change-out incentive program is a critical part of the strategy to address the effects of residential wood burning. This voluntary incentive program provides Valley residents with funding to replace their old, high-polluting open-hearth fireplaces or uncertified devices with new, cleaner, certified units. The amendments increased the incentives offered for each new device. In 2014, the District allocated more than \$7.7 million to the Burn Cleaner program. The initial \$2.1 million funding for this program was exhausted shortly after the program re-launched in September. To meet the program's high demand, the Governing Board authorized an additional \$2 million in funding in November, which was again quickly exhausted; however, interest in the program remained extremely strong throughout the 2014-15 wood burning season. Given the high demand for the program as well as health benefits through installing cleaner-burning devices, the Governing Board approved an additional \$3.6 million to the program in December to accommodate the continued high level of interest in the program. To date, the District has received more than 4372 applications and has issued 3867 vouchers.

### Registration Program for Wood Burning Heaters

The tiered curtailment program allowing clean units to burn on days when burning is prohibited for conventional units would be nearly impossible to enforce without a way to readily identify qualifying devices. The District adopted a registration program for these cleaner-burning devices. The registration also streamlines enforcement by allowing staff to better focus resources. Registering a device ensures that the equipment is maintained in proper working condition and provides optimal emission reductions.

Registration is strictly voluntary and only necessary if the owner of a certified unit wishes to take advantage of the additional burn days provided under the rule. Registrations are valid for up to three wood burning seasons, and registered devices are required to be operated with no visible smoke under normal operating conditions, be maintained properly and refrain from burning prohibited materials.

### Free Interim Registration during 2014-15 Winter Season

To provide a smooth transition into the registration program, the District developed a simplified registration process at no charge to the public for the first wood burning season. This interim registration process relies on self-certification by applicants. Interim registrations expire at the end of this first wood burning season.

### Check Before You Burn Campaign Outreach and Education

The District's Check Before You Burn program is the public education program most recognized by Valley residents. Both the District's 2010 and 2014 public opinion surveys found that more than 80 percent of Valley residents were familiar with the program. The PM2.5 air quality improvements that the Valley has achieved since adopting Rule 4901 have been assisted by the District's strong multimedia outreach and the resulting increase in public awareness and participation in winter District programs.

Since the adoption of Check Before You Burn, the District's complementary tools, such as the Real-time Air Advisory Network (RAAN) and the "Valley Air" smart phone app, have continued to gain in popularity. The District's seasonal public outreach advertising campaign is retooled each year to include timely and relevant messaging. Messaging continues to be delivered by the District's Governing Board members, with billboards in English and Spanish strategically placed throughout the Valley in older neighborhoods where open-hearth fireplaces and older devices are most likely to be, targeted radio and TV spots, and additional exposure delivered through Valley media.

The District asks that residents of the Valley call the 1-800 SMOG INFO number, check the website, check their local news outlet, check their smartphone or visit social media to assess their county's wood burning status before using any wood burning device.

## Future of Biomass and Options for

### AGRICULTURAL WASTE DISPOSAL

Open burning of agricultural waste has been reduced by over 80% in the San Joaquin Valley since 2002. Biomass powerplants have been the key alternative to open burning of agricultural waste. In 2014, the biomass industry approached the District and indicated that, given current energy policy, California biomass facilities—which are one of the primary alternatives to burning agricultural waste in the field—may be in jeopardy.

The biomass plants in the Valley are nearing the end of their long-term contracts with utilities and find themselves in a position where the power that they provide is not the type of power that utilities are seeking (base load vs. intermittent). Also, the prices being offered for new contracts are often too low to support their operations.

In May, at its annual Study Session, the District's Governing Board heard presentations from staff, the biomass industry and the agriculture industry concerning the challenges with maintaining a viable biomass industry in the Valley. The Board approved a Biomass Action Plan to address this important air quality issue.

The biomass power industry is the primary alternative to the open burning of agriculture wood waste material. Some of the challenges this industry faces include state energy policy that is hostile to the biomass industry, a lack of communication and long-term planning among interest groups, and a lack of feasible alternative to the open burning of agricultural materials.

In June, the Board adopted positions on two pieces of legislation that impact the biomass industry:

- ▶ Supporting AB 2363 (Dahle), which was sponsored by the biomass industry and was ultimately signed into law. This law will make biomass more competitive by fully accounting for the costs associated with intermittent sources of renewable power such as solar and wind when comparing them to other sources of power.

- ▶ Opposing SB 1139 (Hueso), which failed to pass, but would have given preferential treatment to geothermal power by requiring that utilities purchase specified amounts of geothermal power.

Additionally, the District has been working with agricultural stakeholders and biomass representatives to set up meetings to begin developing a strategic plan for improving communications and coordination among biomass plants, chippers/fuel providers and the agricultural industry. The District is also pursuing other alternative uses for agricultural waste material.

#### Biomass Action Plan

- Define biomass facilities that meet the District's criteria for assistance.
- Determine the need and develop funding sources to maintain the financial viability of biomass plants.
- Develop legislative solutions to create funding streams and correct policies that have put the biomass plants in jeopardy.
- Identify options for banking GHG emissions that are reduced by biomass power plants.
- Develop a strategic plan for improving communication and coordination among biomass plants, chippers/fuel providers and agricultural industry.
- Pursue alternatives to utilize biomass material through the District's Technology Advancement Program, the California Energy Commission, and the Department of Energy.

### STREAMLINING CEQA Implementation

Counties and cities throughout the Valley rely on the District to provide air quality-related input and comments so that the impact of new developments on air quality is minimized, under the California Environmental Quality Act (CEQA) commenting process. The District has invested significant time and resources to streamline these processes, but continues to spend thousands of hours each year to provide CEQA comments. In 2014, the District began to further improve and streamline these commenting processes by developing an innovative alternative for government agencies to obtain comments from the District.

This alternative is a user-friendly District web-based system allowing interested parties to enter project-specific data online and immediately receive a detailed comment letter from the District. The letter will outline applicable requirements, including District rules and regulations, and provide specific mitigation measures that can be incorporated into project design to reduce air quality impacts.

This system will also be made available to project proponents, consultants and the public and will deliver tremendous benefits:

- ▶ **Improved efficiency, project turnaround time, and effectiveness.** The system will provide instantaneous updates and the most up-to-date information regarding design elements, mitigation measures and any other District requirements. The District comment letter will be available immediately upon complete project-specific data entry.

- ▶ **Improved project design for better air quality.** The system will identify applicable District rules and regulations and potential mitigation measures early in the CEQA process. This enables project proponents to better incorporate air-friendly project design elements and mitigation measures into their projects along with other CEQA requirements, leading to overall better projects with minimized air quality impacts.
- ▶ **Improved customer service.** Providing support, information and tools early in the process enables potential issues to be addressed early, providing a better overall experience to the project proponents and the lead agencies.

The District first reached out to lead agencies throughout the Valley to gauge interest in the program, holding three workshops that were each simultaneously broadcast to all three District offices. Based on the comments received during the workshops and the responses to follow-up surveys, there is significant interest among agencies in the Valley to develop such a system. Therefore, the District has begun development of the enhanced CEQA commenting system. The District will continue to work closely with lead agencies to ensure their needs and expectations are fully addressed, resulting in an efficient and effective system. This will lead to better projects and contribute to more sustainable, vibrant, and healthy Valley communities.

## Changes to District's Health Risk Management Policies

The District maintains rigorous programs to identify, minimize and reduce public health risks from toxic air emissions from existing and new sources. These programs have contributed to a reduction of 90 percent in the exposure of Valley residents to air toxics over the past two decades.

In 2015, the state Office of Environmental Health Hazard Assessment (OEHHA) is expected to approve several changes to methods of determining health risks for people, especially children, exposed to toxic air contaminants. Once adopted, these changes will significantly affect risk-modeling procedures for air districts throughout the state. The District anticipates that these changes will more than double the calculated risk for identical projects. It is important to recognize that, although these changes will result in higher calculated risk, the exposure of Valley residents to air toxics continues to decline.

As the development of these new OEHHA guidelines began in 2013, the District took early action to inform the Governing Board and to formulate changes to the District's risk-management policies. In late 2013, the Board directed staff to:

1. Incorporate all portions of OEHHA's revised Risk Assessment Guidelines designed to provide enhanced protection of children.
2. Adjust permitting risk thresholds, as necessary, to prevent unreasonable restrictions on permitting stationary sources and California Environmental Quality Act (CEQA) projects while preventing any relaxations of current health protections.
3. Retain the District's current public notification and health risk reduction thresholds used in implementing the Air Toxics "Hot Spots" Information and Assessment Act, in order to enhance the public's right-to-know and health protection.

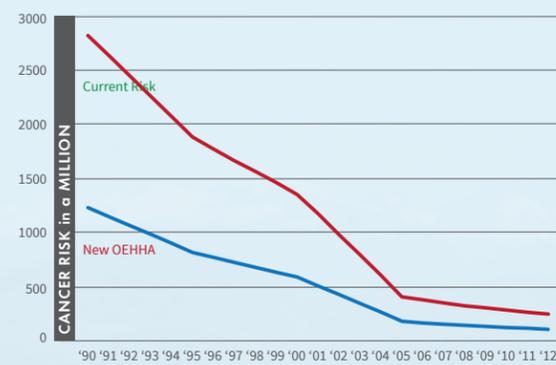
4. Incorporate all possible health risk assessment streamlining to minimize administrative costs and the burden to Valley businesses.
5. Develop effective outreach tools and strategies to communicate revised procedures and risk estimates with communities and businesses.

In 2014, the District presented these changes through a public workshop, and collaborated with communities and businesses to ensure no unreasonable restrictions on businesses while preventing any relaxations of current health protections.

The District is also leading the effort for developing and implementing these modeling procedures throughout the state. With extensive knowledge and experience in risk management and air dispersion modeling, the District has been guiding other air districts on how to implement these changes.

Through these efforts, the District will be prepared to put in place the revised risk management policy upon OEHHA's adoption of its revised guidance document in early 2015.

Ambient Risk



## OPINIONS and HABITS of Valley Residents

An in-depth, qualitative and quantitative market research survey conducted in 2014 examined the public's opinions and practices regarding wood burning, lawn care and driving habits in the Valley. The research built upon the results of four previous surveys over the past decade, and gave the District fresh facts and insight into the best ways to communicate important air quality information.

The District has always crafted policies and strategies based on measurable results, and this recent survey investigated Valley residents' behavior and opinions of residential wood burning, lawn care maintenance, alternative driving behavior and general air quality issues.

A primary goal was to gather information to assist in amending Rule 4901, the District's groundbreaking residential wood burning rule. Additionally, the survey uncovered information to assist in a potential expansion to its lawn mower outreach and grant program to include commercial landscaping companies.

The survey was conducted by telephone with 1,000 renters and homeowners throughout the eight-county air basin in early January 2014. The complete survey is available online.

### SURVEY HIGHLIGHTS

- Of 1,000 respondents, just 32 percent reported their residence having a wood burning device.
- Of those who had a wood burning device, 37 percent lived in the District's northern region (San Joaquin, Stanislaus and Merced counties).
- Nearly 80 percent of respondents were familiar with the Check Before you Burn program.
- Of those, more than 75 percent had reduced their wood-burning activities as a direct result of the program.
- 64 percent of Valley homeowners take care of their own landscaping.
- More than two-thirds of respondents believe that idling their vehicle is a source of air pollution.
- 68 percent of respondents have a favorable opinion of the District.

These insights are being used by the District as it executes outreach for existing programs and develops new programs aimed at reducing emissions in the air basin.

## ▶▶ OZONE POLLUTION from Asia Takes Valley Spotlight

There is mounting scientific evidence that transboundary ozone generated by man-made emissions from Asian sources is elevating 8-hour concentrations of ground-level ozone in the western U.S. The net effect is driving up the number of daily 8-hour violations as well as the design values<sup>1</sup> of affected air districts. As national media coverage of this controversial issue intensified in 2014, the District's research partnership with University of California, Davis has been successful in generating further evidence supporting policy adjustments by EPA that take into consideration transboundary anthropogenic ozone (TAO) impacts, particularly in the West.

The policy significance of Asian TOA is being driven by several trends. First, multi-decade trends in international emission inventories of nitrogen oxides (NOx), the primary precursor to ozone along with volatile organic compounds (VOCs), reveal a striking increase in Asian emissions by 36 percent from 1970 to 2005.

<sup>1</sup>Defined as the fourth-highest daily 8-hour average concentration in parts per billion (ppb) in a given season, averaged over the three most recent years. An air district does not comply with the Clean Air Act if its design value exceeds the national standard, currently 75 ppb for ozone.

In contrast, during the same time period, NOx emissions from Europe and North America did not increase, while total global NOx emissions increased 37 percent. Second, in response to the rapid growth in global anthropogenic precursors, background levels of ozone measured at remote sites in the western U.S. and elsewhere have risen approximately 15 ppb from 1984 until 2008. This growth—a logical response to rising TAO—enlarges the total pool of ozone that air districts must draw down via their control measures. As TAO impacts grow, the relative effectiveness of local and regional control measures are diminished in proportion.

Third, the EPA is poised in 2015 to further lower the national ambient air quality standard (NAAQS) for 8-hour ozone to 65 or 70 ppb from the current level of 75 ppb. As a result, many additional districts will no longer be in attainment and non-compliant districts such as the Valley will find their expected attainment date extended to, at minimum, the late 2030s.

For the District, sustained investments in the scientific measurement of TAO and its ground-level has been an important component of our efforts in responding to the challenge of ozone attainment in the face of a tougher ozone standard and rising TAO. Led by scientists at UC Davis, the District-sponsored research has focused on the following:

- 1 Collecting continuous ozone measurements and related meteorological data since 2012 at an astronomical observatory located at 5,200 feet in the Santa Lucia Mountains southeast of Monterey
- 2 Gathering ozone data via systematic air flights between Fresno, Bakersfield and Monterey, with a focus on measuring the processes which cause ozone transported across the Pacific in the free troposphere to descend into the Valley floor during high-pressure stagnation events.

Under Section 179B, air districts are not to be held accountable for exceedances that result from foreign anthropogenic sources. Empirical data gathered by UC Davis researchers played a critical role in the District being able to make a well-substantiated case under Section 179B of

the Clean Air Act that the 2 ppb exceedance of the 1-hour ozone standard that occurred on Aug. 10, 2012 in Fresno was the result of an estimated 15 to 22 ppb TAO contribution.

As a means of stimulating further scientific agreement on the effects of TAO in the West, as well as a constructive dialogue among the scientific and regulatory community regarding appropriate policy responses within the CAA framework, the District is sponsoring a major conference on transboundary ozone pollution to be held March 31– April 2, 2015 at the Tenaya Lodge near Yosemite National Park.

In a nutshell, there is a large and growing body of scientific evidence that TAO is making significant, episodic or near-continuous contributions to daily exceedances throughout the West. Unfortunately, EPA's policy response to these impacts has lagged even as it prepares to further lower the 8-hour ozone standard.

Ultimately, western air districts such as the Valley must be allowed by EPA to make adjustments in their attainment design values that reflect the daily and seasonal impacts of ozone from foreign emission sources, while continuing to reduce local emissions as rapidly as practicable.

## Leading Nation with ELECTRONIC DATA SUBMISSION to EPA

In 2012, the District was informed by EPA that they would be modernizing their Air Facility Subsystem (AFS), which allows state and local air pollution agencies to submit compliance and permit data for federally regulated stationary sources.

The District worked with the EPA and its contractors to develop a new, efficient mechanism to transfer the required data electronically to the new system. The District leveraged its existing systems for automated AFS reporting and worked out a new mechanism to exchange the data with the ICIS-Air system. The system will save the District thousands of hours of manual data entry, and has been so successful that EPA is using it as a model for other agencies seeking to transfer data electronically into ICIS-Air.

The District was the first agency in the nation to electronically transfer data successfully into the ICIS-Air system and was recognized by EPA for this achievement.



The District replaced 288 **AG PUMPS ENGINES** with \$6,042,769



The District funded 851 **CLEAN AIR VEHICLES** with \$2,346,641

## Bringing Resources to Valley's Disadvantaged Communities

As part of the AB 32 program to reduce greenhouse gas emissions, the State of California adopted the cap and trade program allowing sources to reduce emissions to stay within a declining greenhouse gas "cap" for their facilities or purchase emissions offsets for their emissions. The revenue generated through the purchase of emissions offsets funds programs or projects that are designed to reduce greenhouse gas emissions. The District has long advocated that revenue generated through the cap and trade program should be spent to benefit communities that are already disproportionately affected by air pollution. It is estimated that, in the near term, the cap and trade program will generate approximately \$1 billion annually.

In 2012, SB 535 was signed into law requiring that 10 percent of cap and trade revenues be expended within communities that are designated "disadvantaged communities," and 25 percent be expended to benefit those communities. CalEPA developed a model called CalEnviroScreen to identify communities that face both economic and environmental challenges. Based on the latest CalEnviroScreen model, 23 of the 30 most disadvantaged communities in California are in the San Joaquin Valley. The District has been working with Valley stakeholders to help identify projects that are eligible for funding.

### Appropriations from the Greenhouse Gas Reduction Fund for Investment in Projects

INVESTMENT CATEGORY	AGENCY	PROGRAM	AMOUNT (In Millions)
Sustainable Communities and Clean Transportation	California State Transportation Agency (CalSTA) and Local Transit Agencies	Low Carbon Transit Operations Program	\$25
	California Department of Transportation (Caltrans)/ California Transportation Commission (CTC)	Transit and Intercity Rail Capital Program	\$25
	Strategic Growth Council (SGC)	Affordable Housing and Sustainable Communities Program	\$130
	High-Speed Rail Authority (HSRA)	High-Speed Rail Project	\$250
	Air Resources Board (ARB)	Low Carbon transportation	\$200
Energy Efficiency and Clean Energy	Department of Community Services and Development (CSD)	Energy Efficiency Upgrades/ Weatherization	\$75
	California Energy Commission (CEC)	Energy Efficiency for Public Buildings	\$20
	California Department of Food and Agriculture (CDFA)	Agricultural Energy and Operational Efficiency	\$15
Natural Resources and Waste Diversion	Department of Fish and Wildlife (DFW)	Wetlands and Watershed Restoration	\$25
	Department of Forestry and Fire Protection (CAL FIRE)	Fire Prevention and Urban Forestry Projects	\$42
	Department of Resources Recycling and Recovery (CalRecycle)	Waste Diversion	\$25
<b>Total FY 2014-15</b>			<b>\$832</b>

## INVESTING in Our Valley

In fewer than 10 years, funding for voluntary incentive grants has increased more than tenfold. This reflects the ongoing commitment of the District, business and industry, and Valley residents in making clean air investments that improve the quality of life for all.

During 2014, more than **\$230 MILLION** in District funding and private investment found its way to projects that reduced more than **10,000 TONS** of lifetime emissions in the Valley air basin.

571 **TRACTORS** were replaced for a total of over \$20 MILLION



More than \$46 MILLION was used to replace 1057 **HEAVY DUTY DIESEL TRUCKS**



The District funded 2,619 **NEW CERTIFIED STOVES & INSERTS** with \$4,516,550\*

\*Through 12/31/14



## INVESTING in our Valley (Continued)

### PUBLIC BENEFIT GRANTS PROGRAM

Approved by the Governing Board in 2011, the Public Benefit Grants Program funds a wide variety of clean-air, public benefit projects that directly benefit Valley residents. Eligible applicants are public agencies and public educational institutions within the geographical boundaries of the Valley air basin. The program has three components: New Alternative-Fuel Vehicle Purchase, Enhanced Transportation Strategies (formerly Advanced Transit and Transportation) and Alternative Fuel Infrastructure. To date, the District has received 240 applications for more than \$14 million in requested funds for the New Alternative-Fuel Vehicle Purchase component. The Enhanced Transportation Strategies component was released to competitive bids and 15 proposals were awarded more than \$5 million in funding. In 2014, the District continued its efforts to assist local public agencies with their clean-air transportation projects by releasing a second competitive solicitation under the component and received another 15 proposals seeking almost \$11 million in funding. Under the third component for Alternative Fuel Infrastructure, six proposals were awarded \$5 million in funding.

### PROGRAM REPLACES OLDER SCHOOL BUSES

The Lower-Emission School Bus Program (LESBP) reduces schoolchildren's exposure to cancer-causing and smog-forming pollution. Over the last six years, the District has administered the program for 18 other air districts throughout California and expended more than \$24 million to retrofit 626 school buses and replace 109 high-emitting school buses. Additionally during the same time period in just the San Joaquin Valley, the District expended more than \$39 million to retrofit 975 school buses and replace 217 high-emitting school buses. While administering the LESBP the District also operated its own school bus program for Valley based buses. During the 2013-14 fiscal year this program funded the replacement of 30 school buses and the retrofitting of 144 school buses for an overall grant total of \$4.7 million.

Based upon the success of the District's administration of the LESBP for the 18 other air districts, the state Air Resources Board (ARB) requested the District's assistance in administering the school bus retrofit program for all 34 air districts statewide. As a result, during fiscal year 2013-14, the District retrofitted 21 school buses and contracted an additional 40 school buses to be retrofitted for more than \$1.1 million statewide. The District's implementation of this program has been so successful that ARB has asked the District to continue running this program on their behalf through 2016.

### PROMOTING CLEAN PASSENGER VEHICLES

In May 2014, the District adopted a comprehensive action plan promoting the use of clean passenger-vehicle technology. Central to this effort is to encourage and stimulate the adoption of electric and other advanced vehicle technologies. By providing significant incentives for Valley residents to purchase or lease these clean vehicles, the District is eliminating one of the key barriers toward greater acceptance and adoption of this technology: the up-front cost. The District's Drive Clean! Rebate Program provides Valley residents up to \$3,000 toward the cost of purchasing or leasing plug-in electric vehicles (PEVs), plug-in hybrid vehicles and other alternative fuel vehicles. The District's rebates, coupled with various other state and federal rebates and tax incentives, provide Valley residents with the most beneficial suite of incentives for clean passenger vehicles in the entire state. This program was extremely well-received by the public in 2014 with more than 850 rebates issued in the Valley. In addition to the vehicle rebates, the District is working on expanding the Drive Clean! Rebate Program to include incentives for installing electric vehicle charging infrastructure at Valley businesses and public facilities to further integrate advanced vehicles into the Valley.

### AG TRACTOR REPLACEMENT PROGRAM

In 2014, the District's Agricultural Tractor Replacement Program successfully replaced 571 old, high-polluting Tier 0 and Tier 1 agricultural tractors with new, cleaner models. The goal of the program is to provide an incentive equal to approximately 50 percent of the cost of the new equipment with the remaining cost share contributed by the farmers. As expected, the interest in the program remained extremely strong during 2014, with the District contributing more than \$20 million and the farmers contributing more than \$28 million. The 571 projects resulted in 3,027 tons of emissions being reduced over the lifetime of the projects. During the course of the Ag Tractor Replacement Program, the District recognized that many small Valley farmers have the oldest, highest-polluting agricultural tractors but are financially unable to meet the program's cost-share requirements. To address this issue, the District has continued to move forward with the first Tractor Trade-Up Program in California. Instead of crushing a Tier 1 tractor that was turned into the program, a small farmer is given the opportunity to take possession of the tractor and turn in their old Tier 0 tractor to be recycled. This program has the potential to remove hundreds of old, high-polluting agricultural tractors that would not have otherwise been recycled with zero financial burden to the small farmer.



## Technology Advancement Program SUPPORTS AIR QUALITY INNOVATION

Despite major reductions in emissions and accompanying improvements in air quality, the Valley continues to face difficult challenges in meeting federal air-quality standards. It is virtually impossible for the Valley to attain the new standards for ozone and particulates without significant advancements in low-emission technologies for mobile and stationary sources.

A critical part of the District's Technology Advancement Program (TAP) has been coordinating technology advancement efforts with other federal, state and local agencies. In the past year, the District has worked closely with these groups:

- ▶ Clean Air Technology Initiative, a collaborative workgroup formed with EPA Region 9, the state Air Resources Board, South Coast Air Quality Management District and other agencies
- ▶ California/Federal Dairy Digester Working Group, a partnership of state, federal and local agencies that has the common goal of identifying and removing barriers to the wide adoption of dairy digester systems in California
- ▶ California Department of Food and Agriculture research and development program for dairy digester technologies
- ▶ Assisted the California Energy Commission in the evaluation of technology demonstration proposals for one of its grant opportunities

Since inception, TAP has opened four rounds of funding and received 137 proposals for clean-technology projects. The District has committed to funding 14 of these projects totaling \$4 million. Thirty-five of these proposals are in the process of being reviewed and competing for an additional \$4 million of funding.

In the past year, the funding provided through the TAP has allowed innovative companies to put into operation many new demonstration projects. At the Ikea distribution center in Lebec, Transportation Power Inc. is demonstrating an all-electric yard truck, capable of operating two full shifts each day. Ten commercial-grade, all-electric leaf blower units, produced by The Greenstation, were put into operation throughout the Valley; these leaf blower packs have enough power and endurance to support commercial-scale operations as well as improved ergonomics, storing the heavier battery components on the user's back. These two examples of zero-emissions projects funded through the TAP demonstrate the potential to manufacture zero-emissions equipment that can replace existing polluting units.

Another successful example operated by Engine, Fuels, and Emissions Engineering has demonstrated an advanced engine emissions-control system that greatly reduces emissions from a dairy biogas-powered generator operating at Joseph Gallo Farms in Atwater. The project target was to meet an aggressive, state-distributed generation standard, and the project has operated at lower emissions than the standard for over half a year.

The District will continue to search for opportunities to support projects that build the air-quality technology research and demonstration capacity of colleges and universities in the Valley, improving the ability of local institutions to engage in future clean technology projects that are specifically suited to the Valley's needs.

## INVESTING in our Valley *(Continued)*

### TUNE-IN TUNE-UP

The District expanded its award-winning Tune In, Tune Up program in 2014 by providing an additional \$4 million in vehicle repair funding and by establishing a \$600,000 pilot vehicle replacement program. The Tune In, Tune Up program hosted 22 weekend events throughout the Valley designed to identify and repair or replace high-emitting vehicles.

The program is operated in partnership with Valley Clean Air Now, which has a long history of successfully running this program and excels at reaching residents in environmental justice communities who otherwise may not be able to afford costly vehicle repairs. Reaching this key demographic is essential as the emission reductions are most needed in low-income communities, historically home to the greatest percentage of high-emitting vehicles.

At a Tune In, Tune Up event, participating vehicles are tested to determine the likelihood of that vehicle failing the required biennial smog test. Owners of vehicles that fail this initial screening are provided a voucher that is redeemable at participating smog shops for up to \$650 in emissions-related repairs plus the cost of smog checks and diagnostic time. Once the vehicle is repaired, smog test is conducted confirming the repairs and can then be used for the vehicle's re-registration.

In the pilot vehicle replacement program, owners of targeted vehicles that meet the District's eligibility criteria may be offered the opportunity to receive \$5,000 to retire their existing vehicle and replace it with a newer, cleaner model from a participating dealership.

In 2014, more than 5,000 repair vouchers were issued to Valley residents through these weekend events and 108 vehicles were replaced with newer, more efficient models. The successful execution of the pilot vehicle replacement program will allow the District to take advantage of significant state funding available in 2015 for vehicle replacement projects targeted at low-income residents and disadvantaged communities.

### 2014 EVENT SCHEDULE

1/25	Porterville
2/8	Merced
2/22	Lemoore
3/8	Chowchilla
3/22	Fresno
4/5	Stockton
4/26	Turlock
5/10	Bakersfield
5/31	Tulare
6/14	Los Banos
6/28	Lemoore
7/12	Chowchilla
7/26	Stockton
8/9	Fresno
8/23	Turlock
9/6	Bakersfield
9/20	Tulare
10/4	Merced
10/18	Lemoore
11/8	Madera
11/22	Stockton
12/6	Fresno

District Collaborates in

## » PUBLIC TRANSIT from VALLEY to NATIONAL PARKS

In August, the District's Governing Board approved partial funding for the Fresno Council of Governments and the City of Sanger to complete a two-year pilot project for two regional transit operations serving the Valley and the region's three national parks: Yosemite, Sequoia and Kings Canyon. The District is providing up to \$367,040 to the Fresno COG for the Yosemite transit project and up to \$59,873 to the City of Sanger for the Sequoia/Kings Canyon project. These projects will provide public transit service between the greater Fresno metropolitan area and the three national parks where currently none exists. The projects are expected to reduce more than 5.8 tons of emissions per year.



## » FINANCIAL EXCELLENCE Earns National Award

The District was awarded the Government Finance Officers' Association of the United States and Canada (GFOA) Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ending June 30, 2013.

GFOA is an internationally recognized organization that offers guidance and support to local and state government budget and finance professionals throughout the United States and Canada. In June, GFOA presented the "Certificate of Achievement for Excellence in Financial Reporting," the GFOA's highest form of recognition in governmental accounting and financial reporting, to the District for its fiscal year 2012-13 CAFR.

This is the first year that the District has received this award, representing a significant achievement for the District and the Governing Board's commitment to meeting the highest principles of governmental reporting and transparency to the public.

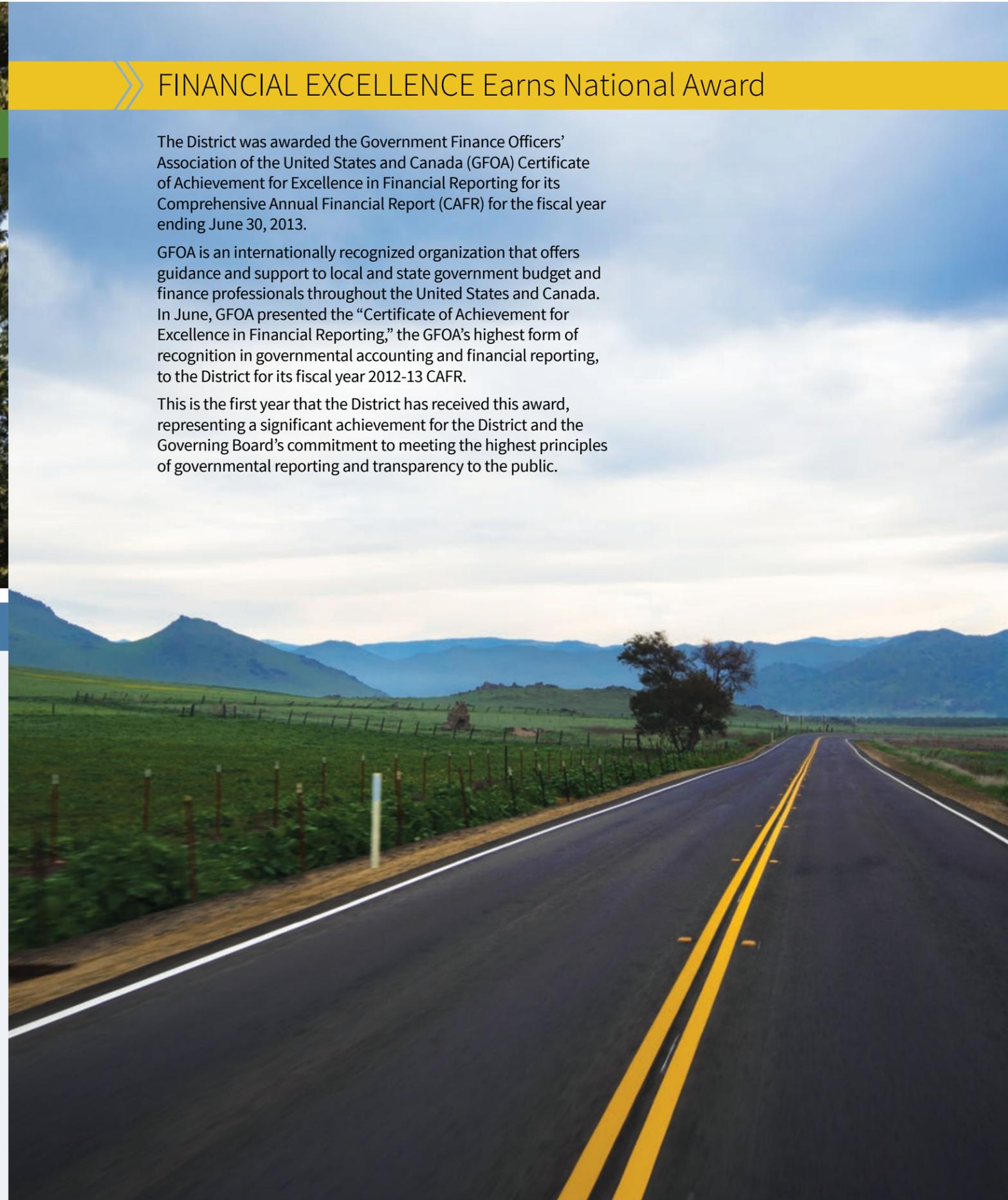
## » District Administers Grant Programs For Other Air Districts



The District is consistently praised throughout the state for administering highly efficient and effective incentive programs. Because of this, the District has been approached by several neighboring air districts and the California Air Resources Board to assist in administering their incentive programs or allocate their incentive funds to the District for expenditure in the Valley. The District has assisted the following air districts with the administration of their Carl Moyer Program funds:

- Great Basin Unified Air Pollution Control District
- Antelope Valley Air Quality Management District
- Eastern Kern Air Pollution Control District
- Mojave Desert Air Quality Management District
- Tuolumne County Air Pollution Control District

Because of the success of the administration of the Lower Emission School Bus Program, the California Air Resources Board (ARB) requested the District administer the statewide school bus retrofit program for 34 air districts throughout the state. During fiscal year 2013-14, the District retrofitted 21 school buses and contracted an additional 40 school buses to be retrofitted for more than \$1.1 million statewide. ARB has asked the District to continue running this program on their behalf through 2016.



## SHARING the STAR CULTURE

The District is committed to establishing and maintaining a staff that not only produces high-quality technical work but also provides exceptional customer service to the public, the regulated community, and others while conducting District business.

For years, the District has implemented STAR (Service, Teamwork, Attitude and Respect), a work culture program aimed at creating an atmosphere in which providing exceptional service, demonstrating effective teamwork, maintaining a positive attitude and showing respect to others are intrinsic parts of each employee's job.

### KEY ELEMENTS OF THE STAR PROGRAM INCLUDE:

- Providing excellent customer service;
- Empowering employees to identify and solve problems;
- Setting and maintaining high standards of employee performance, attitude and behavior;
- Ongoing training; and
- Consistently recognizing and reinforcing positive employee contributions.

The STAR culture has enabled the District to excel in the fields of customer service and continuous improvement while enhancing employee performance, morale and interpersonal skills.

This successful culture is possible because the commitments to these principles are engrained in the organization's DNA from top to bottom. STAR begins with an unshakeable belief at all levels of leadership that employee welfare and well-being is essential to an agency's achievement of excellence. In fact, this culture is fully embedded in the District's daily operations from identifying strong STAR qualities in applicants in recruitment and promotional decisions, to expectations of excellence in on-going interactions between staff members, customers or members of the public, to strong and sincere employee empowerment and recognition components. Finally, STAR requires ongoing attention and invigoration to maintain its successes and momentum.

The success of STAR is visible within and outside of the District. The District regularly receives positive feedback from District stakeholders on the customer service received, and often receives requests from elected officials, other agencies and members of the regulated community for the District to share with them "the secret" of how they can help their own agencies enjoy the success of the District's STAR culture.

During the 2014 Governing Board Study Session staff was directed to develop materials to share the District's STAR culture with other agencies in order to assist in the development of a similar work culture in their own organization.

### Actions necessary to build, strengthen, maintain and monitor STAR:

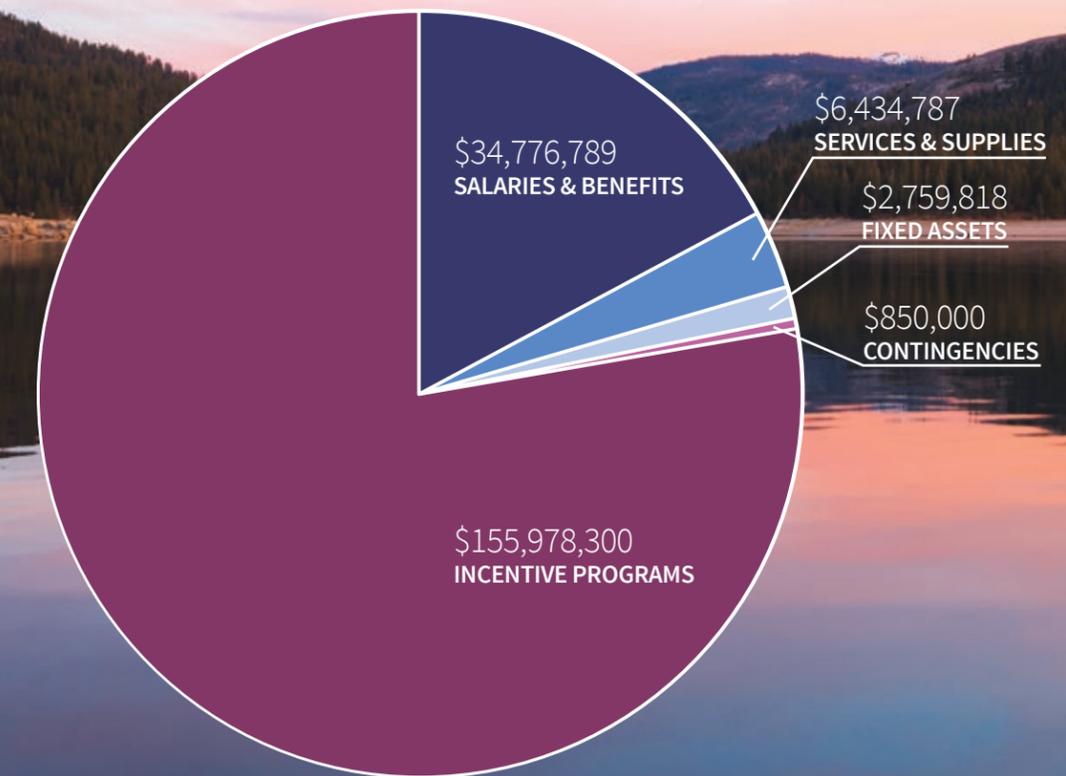
- Work constantly through actions and words to demonstrate to employees that you value their welfare and well-being
- Communicate expectations clearly and routinely
- Use employee recognition to reward good behavior and to communicate expectations
- Build an environment where employees take pride in working for the agency
- Create a safe environment for employees to offer suggestions for change/improvement
- Follow through with addressing the employee suggestions in a timely manner
- Train employees and provide the necessary tools to meet and exceed expectations
- Hold employees accountable
- Infuse constant energy in STAR to keep it fresh
- Make STAR an intrinsic part of each employee's job
- Create an environment where employees are not put in silos and instead see themselves working for the agency as a whole – not for an individual department or division
- Provide freedom and encouragement to constructively critique the work of others
- Serve as a role model

## OVERVIEW of the District's Operations

Codified in the District's Core Values, accountability is one of the most important aspects of all of the District's operations, goals and strategies. The District is accountable to the public for every dollar spent and every regulation adopted. It is accountable for demonstrating quantifiable progress toward clean air, and it is accountable for conducting day-to-day business in the most effective, efficient and innovative ways possible.

The District's track record demonstrates these values. It is given the highest marks by auditors and other agencies. It consistently sets a high bar for air quality improvements that other air management agencies emulate. It also sets the gold standard for customer service.

In that spirit, the District offers you the following operational information about how it is cleaning the air, saving money and implementing continuous improvement in all of its undertakings, continuing the tradition of excellence that the Valley's stakeholders have come to expect.



## STREAMLINING & EFFICIENCY

Effective and efficient use of public funds is a core value of the District and it continually looks for opportunities to increase efficiency and minimize costs. The District implemented the following enhancements and streamlining measures during recent fiscal years:

**COST-CUTTING FOR SERVICES** During 2014, the District renegotiated some of its technology and communication services and was able to take advantage of lower rates available in the market. The changes improved phone and online services at much lower cost to the District.

**COORDINATION OF DEPARTMENTS** The recent District reorganization provided departments with new opportunities to further streamline various programs and internal processes. The overall workload increased due to successful incentive programs such as recent amendments to the District's residential wood burning program (Rule 4901) and the Burn Cleaner wood stove change-out incentive program. Overall, departmental staffing remained level, and the District continues to absorb workload through new efficiencies gained from improved technology, workflow processes, and interdepartment coordination.

**FINANCE AND GRANTS SOFTWARE** The District continues to promote efficiencies through increased usage of its financial software and its grants management program. Significant improvements to the general ledger structure has provided more timely and accurate information, and decreased the time necessary to prepare interim monthly budget reports and annual financial statements.

**AUTOMATED PAYROLL FUNCTIONS** The District continued to further enhance and automate its payroll and accrued leave tracking functions. This automated process has improved internal controls and decreased staff time necessary to process payroll.

**ELECTRONIC PAYMENTS** The District has also put into place electronic payment processing for fees, providing permit holders and others the option to pay fees using a credit or debit card, further streamlining our billing and accounts receivable function.

**HUMAN RESOURCE MANAGEMENT PROGRAM SOFTWARE** The District created a Human Resource management program that surpassed the capabilities of the previous software. By developing the program internally, the District saved more than a quarter of a million dollars. The successful implementation of the new program has maximized efficiency by reducing labor hours, streamlining processes, automating reports and offering multi-user capability. The program also established internal controls to ensure accurate data entry and adherence to applicable District rules.

**ONLINE FACILITY PORTAL** Consistent with the commitment to offer the best possible customer service and to continuously improve its processes and procedures, in late 2013, an online Facility Portal program was unveiled that allows regulated facilities to have immediate access to their permit information and related documents. Through the Facility Portal, authorized users can view and download a facility's permits, applications and related correspondence at any time without the need to contact office staff. Since the initial unveiling, new features have been added to expand the portal's capabilities, such as the ability to submit notifications and reports electronically. Additional features in development will allow authorized users access to financial information related to their facilities, pay invoices online, submit applications electronically and track the status of the permitting process. The industry response to the online Facility Portal has been overwhelmingly positive, with already more than 50 facilities participating and more than 125 authorized users.

**ISR DATABASE ENHANCEMENTS** In 2014, the District continued to improve efficiency by redesigning the Indirect Source Review (ISR) database program to streamline data entry and improve ease of review. These changes will result in substantial time savings on a daily basis in entering and processing data, while improving data entry accuracy, saving 400 hours annually.

**CEQA DATABASE ENHANCEMENTS** As a response to multiple requests from the public, in 2014, the CEQA database program was enhanced with an automatic notification function that allows members of the public to receive project-specific information upon request.

**MODELING POLICIES** The District has developed various streamlining tools to implement its Prevention of Significant Deterioration (PSD) permit processing role at a much quicker pace than previously experienced by applicants under EPA's program. PSD is a preconstruction permitting program for new and modifying major sources of attainment pollutants, and is required by the federal Clean Air Act (CAA). Historically, PSD permitting projects within the Valley were evaluated by EPA, in a process that often took more than two years to complete, drastically affecting the ability of Valley businesses to expand. The District has been able to use these permit streamlining tools to reduce the PSD permitting timeline to four to six months. In 2014, the District intensified this effort with the development of five PSD emissions-dispersion modeling policies to guide applicants through the PSD modeling process; and provided the regulated community new to PSD modeling a walkthrough of the process and a starting point for learning about navigating the modeling labyrinth of this federal program. Due to the complexities of PSD emissions-dispersion modeling, these policies helped clarify major topics of concern, provided better customer service to applicants, and reduced the amount of time needed to conduct PSD modeling.

During 2014, the District also continued its modeling leadership role at the state level. The District assisted the California Air Resources Board (CARB) to develop modeling training for other air districts, the public and consultants throughout California. The District presented modeling topics at several conferences and meetings such as EPA's Regional, State and Local Modelers Conference and CAPCOA Engineering training classes. In addition, the District produced material used by EPA Region 9 during modeling training for federal New Source Review.



## STREAMLINING & EFFICIENCY *(Continued)*

To ensure that stakeholders, consultants and the public are kept up-to-date on modeling issues, the District maintains a modeler list serve, the members of which receive regular updates on District modeling techniques. Subscribers to the District's modeler list serve range from local, state, national and even worldwide subscribers that look to the District for cutting-edge techniques and guidance to address regulatory issues.

**FIELD INSPECTION STAFF MIGRATION TO SMART PHONES** New smart phones will increase staff efficiency by replacing several pieces of existing equipment, including cell phones, digital cameras, turn-by-turn navigation units, cameras and tablet wireless air-cards. By consolidating these functions into one smartphone device, the District will be able to reduce the costs of essential field functions. The transition to smart phones will also increase the already high level of customer service staff provides by being able to quickly receive, read and respond to emails. Another advantage will be the ability to develop streamlining applications that staff will be able to use to complete job assignments faster and more proficiently.

**REDUCING FIELD STAFF TRAVEL TIME WITH INCREASED ACCOUNTABILITY** Global Positioning System (GPS) units have been installed in all field staff vehicles to increase inspector safety, efficiency and accountability, allowing staff to be deployed quickly and efficiently to respond to unforeseen events such as public complaints and equipment breakdowns at facilities.

**NEW TECHNOLOGIES IN INSPECTION PROGRAMS** Compliance inspection staff has been equipped with tablet computers, which allow them to complete inspection report forms while in the field; reduce time associated with paperwork; increase field time; and allow additional inspections to accommodate workload increases.



## Valley Advocacy at the STATE and FEDERAL LEVEL

The District continues to partner with Valley stakeholders and elected officials to advocate for state and federal policies and resources that will assist the Valley in meeting its air quality objectives.

This past year at the state level, the District advocated for cap and trade dollars to fund policies that are beneficial to the Valley. This allocation would come from the 25 percent of cap and trade funding that is available to disadvantaged communities.

At the federal level, the District continued to advocate, through Congress and EPA, for legislative and policy changes to address outdated provisions of the Clean Air Act. Through the District's efforts, legislation was introduced that enables air quality exceedances resulting from drought conditions this past year be treated as exceptional events. The District also successfully advocated for the continuation of agricultural equipment replacement funding in the Farm Bill.

Some of the priority issues for the coming year include:

FEDERAL	Seek common-sense improvements to the federal Clean Air Act
STATE	Advocate for an increase in state subvention funding to help offset the impacts of inflation and increased responsibilities
STATE	Seek policies/guidelines for the Carl Moyer program that continue to focus the program on public health and maintain funding formulas based upon severity of air quality challenges.
STATE	Seek revenue from the cap and trade program
STATE/FEDERAL	Ensure that greenhouse gas emissions reduction programs are not at the expense of criteria pollutant programs
STATE/FEDERAL	Ensure that disadvantaged communities are not "redlined" and that local control over resources to assist these communities is maintained
STATE/FEDERAL	Seek adequate funding from state and federal governments for the installation and operation of air quality monitoring instruments
STATE/FEDERAL	Support efforts that provide cost-effective alternatives to agricultural burning
STATE/FEDERAL	Seek state and federal funding for technology advancement projects
STATE/FEDERAL	Support adequate resources and policies to reduce the air quality impact of wildfires



## PERMITTING

### AIR QUALITY PLANS, RULES & REGULATIONS

The U.S. Environmental Protection Agency (EPA) periodically reviews and establishes health-based national air quality standards for ozone, particulate matter (PM<sub>2.5</sub>), and other criteria air pollutants guided by the Clean Air Act. The District has adopted several air quality attainment plans over the years that identify measures needed in the Valley to attain EPA's increasingly stringent standards. Leaving no stone unturned, the District has implemented these plans and adopted over 500 rules and rule amendments that have resulted in significant reductions of emissions.

Due to overlapping federal requirements, the District is in the process of writing multiple plans to address multiple PM<sub>2.5</sub> and ozone standards. The District will present a new plan to the Governing Board for their consideration for the 1997 PM<sub>2.5</sub> standards in spring 2015. In 2016 the District will likely present new attainment plans to address the 2006 24-hour PM<sub>2.5</sub> standard, the 2012 annual PM<sub>2.5</sub> standard, and the 2008 8-hour ozone standard. The District is continuously reviewing reasonably available control technologies, best available control technologies, and taking steps to ensure the most stringent measures feasible to implement in the Valley are in place as they become feasible. These reviews build on experience and knowledge gained during the extensive analyses conducted for several recently adopted air quality attainment plans.

### Rules & Regulations

The District continues its leadership in developing groundbreaking regulatory strategies to reduce emissions through innovative rules that set benchmarks for California and the nation.

#### NATURAL GAS-FIRED, FAN-TYPE CENTRAL FURNACES (RULE 4905)

Amended in January 2015, Rule 4905 is the District's point of sale rule for natural gas-fired, fan-type, central furnaces lowers the NO<sub>x</sub> emission limit for units sold in the Valley.

#### WOOD BURNING FIREPLACES AND WOOD BURNING HEATERS (RULE 4901)

Rule 4901, and new complementary rule, Rule 3901 (Fees for Registration of Wood Burning Heaters), reduce emissions when and where those reductions are most needed, in urbanized areas when local weather conditions are forecast to hinder PM dispersion.

#### EXEMPTIONS (RULE 2020)

Amended in December 2014, the District's permit exemption rule is now in line with the California Statewide Portable Equipment Registration Program.

#### 2014 EMISSION REDUCTIONS

	Plan Commitments	Reductions Achieved	Goal
NO <sub>x</sub>	9.48 tons per day	16.36 tons per day	72.6% above target
VOC	40.46 tons per day	47.32 tons per day	17.0% above target
SO <sub>x</sub>	0.83 tons per day	4.79 tons per day	477% above target
PM <sub>2.5</sub>	6.70 tons per day	12.15 tons per day of PM equivalent	Exceeding reductions by 81.3% through PM precursors

#### WORKING WITH BUSINESS

The District works cooperatively with Valley businesses and assists them in complying with the Valley's very stringent air pollution regulations. The District issues permits, registrations and plans for more than 30,000 non-mobile sources of air contaminants in the Valley, and assesses the impacts of the emissions from Valley businesses on local population.

#### AUTHORITIES TO CONSTRUCT & PERMITS TO OPERATE

Stationary sources of air pollution, from gas stations and print shops to power plants and wineries, must obtain air permits from the District before constructing or operating. The permitting process involves two major steps:

1. The applicant must first apply for an Authority to Construct (ATC) permit. The application review process is an important opportunity for all interested parties – the project proponent, the District, and the interested public – to assess a project's compliance with federal, state, and local air pollution regulations prior to beginning construction. The requirements that must be met to obtain an air permit in the Valley are among the strictest in the nation, requiring the best available air pollution control equipment as well as mitigation of emission increases.
2. Once the source has properly installed the equipment authorized under the ATC permit and successfully completed an initial compliance inspection as well as any required emissions testing, when applicable, a Permit to Operate is issued.

#### FEDERALLY MANDATED OPERATING PERMITS (TITLE V)

In 2014, the District has issued Title V permits to about 250 facilities considered "major sources" of air pollution. Federal law requires major sources to obtain Title V permits, which are designed to expand public and EPA participation in the permitting process for the largest emitters of air contaminants.

#### CONSERVATION MANAGEMENT PRACTICES (CMP) PLANS

The District is responsible for enforcing and updating more than 6,000 CMP plans designed to reduce air pollution emissions from agricultural operations.



**AIR TOXICS PROGRAM**

The District performs a number of tasks aimed at reducing the risks of toxic air contaminants. The District implements state and federal air toxic control regulations, maintains an inventory of air toxics emissions from Valley sources, and assures that those emissions, and any proposed air toxics emissions increases from new or modifying sources, do not cause a significant risk to the residents of the Valley. An annual report of the air toxics program is published by the District each year and is available to the public on the District website.

**EMISSIONS INVENTORY**

Each year, the District gathers emissions and process data from as many as 5,000 facilities and other information sources, calculates each facility's annual emissions and reports the emissions to the ARB. This inventory then acts as a cornerstone of our efforts to reduce emissions through attainment plans and emissions controls.

**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

District staff carefully reviews land developers' project proposals, as well as new District permits, plans and rules, for compliance with CEQA. CEQA is the state law that requires projects' environmental impacts be assessed and publicly disclosed, and that any significant impacts be mitigated to the extent feasible.

**GREENHOUSE GAS EMISSIONS INVENTORY SERVICES**

District staff has developed protocols and processes for preparing inventories of greenhouse gases from local government operations and communities throughout the Valley's counties. These inventories are needed by cities and counties as they develop planning documents and climate change action plans, and the District is offering a consistent, high quality and low-cost emissions inventory preparation service to agencies in need.

**INDIRECT SOURCE REVIEW (ISR)**

Indirect sources are buildings or facilities, such as new residential housing or shopping center developments, that attract mobile sources of emissions but may not directly emit pollution. The District's ISR group analyzes applications to assess the potential indirect emissions created by

a development project, quantifies the mitigation proposed by the applicant, and may assess a development mitigation fee if insufficient mitigation is proposed by the applicant. An annual report of ISR activity, and the emission reductions generated by the program, is published by the District each year and is available to the public on the District website.

**EMPLOYER-BASED TRIP REDUCTION (ETRIP)**

Rule 9410, Employer-based Trip Reduction, requires employers with more than 100 eligible employees at a single location to submit and implement plans designed to encourage carpooling and other trip-reduction efforts by their employees. The District has developed a user-friendly online eTRIP plan submittal and reporting program, saving significant time for both eligible employers and the District, available at [www.valleyair.org/eTRIP](http://www.valleyair.org/eTRIP). The District has also developed easy ways for facilities to collect employees' commute data via an annual Commute Verification Survey and to report those data to the District.

Affected facilities have been very receptive and supportive of the District's efforts to reduce vehicle miles traveled (VMTs) through the eTRIP rule. To date, nearly 300 employers have submitted and implemented eTRIP plans at their worksites. Valley employers have also developed, with the help of District staff, four new innovative eTRIP measures designed to encourage their employees to further reduce VMTs.

As an employer subject to the eTRIP rule, the District has been a role model for other facilities subject to the eTRIP rule. In fact, the District has implemented significantly more measures than required by the rule, significantly reducing VMTs. This experience has been critical in giving District staff valuable insight to provide the best possible customer service to help other employers implementing the rule requirements

**SMALL BUSINESS ASSISTANCE (SBA)**

The District operates an effective SBA program to provide assistance to Valley businesses who lack the resources or expertise needed to efficiently obtain air permits or otherwise comply with District requirements. The District SBA staff provides expert advice on technology options, application

processes, cost efficient methods to comply with District requirements, and any other air quality issues. Interested parties can contact the District SBA staff through hotline telephone numbers in the Northern, Central, or Southern regions of the Valley.

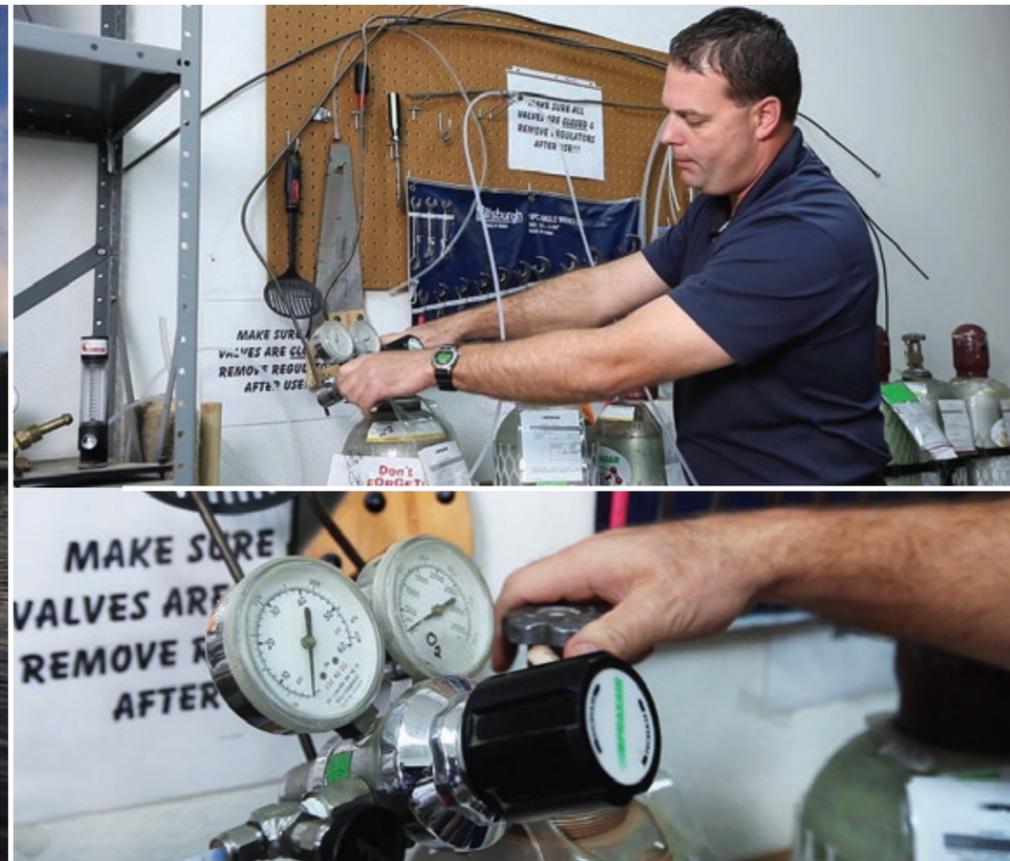
**ASSISTING OTHER AIR DISTRICTS**

Due to the District's extensive experience and expertise in evaluating applications for power plants, the Ventura County Air Pollution Control District solicited the District's assistance in evaluating an application for power plants to be located in Ventura County. Such applications may be subject to the requirements of Prevention of Significant Deterioration (PSD), for which the District is recognized as California's leading expert. The District has developed extensive and nation-leading guidance and policies to perform PSD evaluations. Ventura County APCD believed that they did not have the resources to adequately evaluate such applications, and requested the District enter into a Memorandum of Understanding (MOU) with the Ventura County APCD to evaluate them. Under the MOU, the District will be reimbursed by Ventura for expenses incurred. This is another example of the District's leadership and STAR culture assisting other air districts in California.



**PERMITS by the NUMBERS 2014**

3326	Authority to Construct permits issued
82	New Permits to Operate issued
285	Permit-Exempt Equipment Registrations issued
259	New Title V permits issued to 16 facilities
1184	Title V permit renewals issued to 18 facilities
692	Title V permit modifications
304	Conservation Management Practices plans issued
528	Emission Reduction Credit certificates issued or transferred
852	Toxic air contaminant risk-management reviews performed
5759	Annual Emissions Inventory statements and surveys processed
42	Facilities evaluated under District toxics program (AB 2588)
1742	California Environmental Quality Act review requests processed
828	EQA comment letters and 96 CEQA documents prepared
209	Indirect Source Review applications processed
274	eTRIP plans



## ENFORCEMENT

Compliance with federal, state and local air quality rules and regulations is ensured by operating a robust inspection program along with a full range of educational and compliance assistance activities.

**INSPECTIONS** The District routinely conducts detailed inspections and audits equipment at new and existing facilities to ensure compliance with applicable rules and regulations. Source categories include petroleum and chemical refining, oil production, gasoline dispensing, dry cleaning, power plants, manufacturing and agriculture. Other emission-producing activities are inspected, such as asbestos demolitions and renovations, construction, residential wood burning, agricultural burning, hazard-reduction burning and idling diesel trucks.

**AIR POLLUTION COMPLAINTS** The District responds to more than 3,000 air pollution complaints from the public each year. These complaints are often the initial indicator of air quality issues in a community. As such, the District places the highest priority on responding to complaints and operates an on-call program to ensure timely response to complaints, even during non-business hours.

**SOURCE TESTING AND MONITORING** The District monitors emissions from facilities using a variety of methods including vans outfitted with specialized monitoring equipment, hand-held portable emissions analyzers and leak detectors, and staff certified to read visible emissions. When non-compliance is suspected, an immediate test can often lead to timely corrective action. In addition to compliance and enforcement work, the District also performs testing and monitoring in support of permitting, rule development, planning, emission inventory and technology advancement efforts.

**COMPLIANCE ASSISTANCE AND EDUCATION** The District provides a full range of educational and compliance assistance activities to proactively aid facilities and individuals in complying with air quality rules and regulations. This assistance and education is provided through training classes, certification programs, bulletins, email blasts, workshops and one-on-one meetings.

**ENFORCEMENT ACTIONS** When violations of rules and regulations are discovered, the District delivers an appropriate level of enforcement action to ensure an expeditious return to compliance, and assesses monetary penalties to deter future violations. Disputed cases are generally handled in-house and settled through a mutual settlement process. On the rare occasion that a case cannot be settled, the case may be transferred to District Counsel for more formal action. In 2014, the District processed more than 2,500 issued notices, transferred 110 cases to District Counsel, and collected more than \$3.3 million in settlements.

**HEARING BOARDS** The Hearing Boards are quasi-judicial panels that act independently of the District. They are authorized by state law to provide temporary relief from District rules and regulations if strict conditions prescribed under the California Health and Safety Code are met. Any excess emissions associated with the temporary relief granted by the Hearing Boards represent only a very small fraction of the Valley's total emission inventory and cannot, by law, be likely to interfere with the attainment and maintenance of health-based air quality standards or cause a public nuisance. In 2014, 109 variance petitions were heard at 55 hearings.

**CONSERVATION MANAGEMENT PRACTICES PLANS** The District is responsible for regulating and updating more than 6,000 CMP plans designed to decrease air pollution emissions from agricultural operations.

### COMPLIANCE by the NUMBERS 2014

34,283	Units inspected
3,356	Public complaints investigated
1,526	Open burn sites inspected
4,499	Incentive funding units (i.e. trucks, engines) inspected
863	Asbestos projects reviewed and inspected



## AIR MONITORING

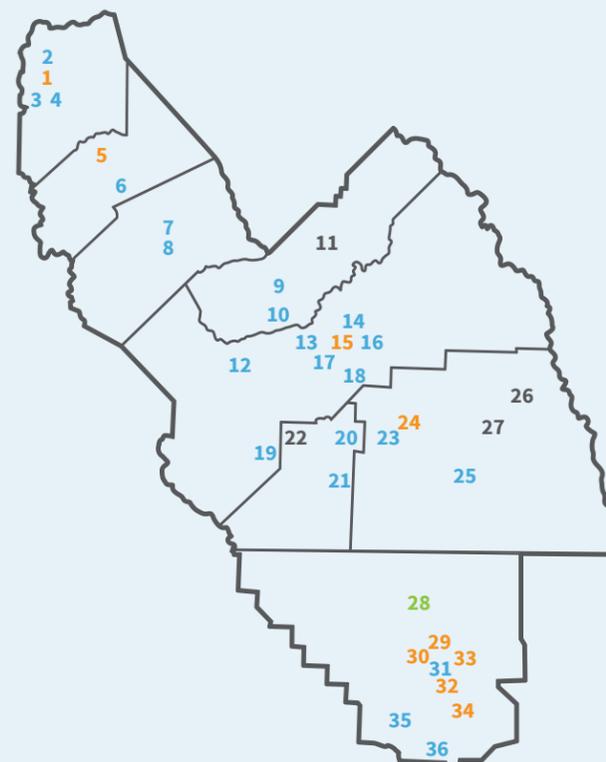
The District operates an extensive network of air quality monitors to support its mission of improving air quality and protecting public health. Using hourly readings from its real-time monitors, the District generates a daily Air Quality Index (AQI) forecast for each Valley county and hourly Real-time Air Advisory Network (RAAN) notices for schools near every monitor. The District also rigorously analyzes collected air quality data to help chart the future path to ozone and PM2.5 attainment.

Leveraging recent advancements in technology, the District will continue to expand the use of automated monitoring equipment and remote connection systems for remote diagnostics and monitoring equipment repairs. These advancements will increase efficiency and reduce travel to distant monitoring stations. The District is updating its air quality data management system to a more sophisticated program, capable of automating a number of data review and validation tasks. This will streamline quality control processes tremendously over the next year.

Monitoring equipment used to measure VOCs during the summer ozone season was recently updated by allowing for remote control and connectivity to the equipment at the office. This has greatly reduced required travel time to prepare the equipment needed for this special monitoring to occur during the summer months.

The District is also in the process of installing four new near-roadway air monitoring stations in response to new federal mandates to measure nitrogen dioxide emissions. These stations will be in Stockton, Modesto, Fresno and Bakersfield. The Fresno site, under construction, is planned to be fully operational by the end of 2015. The other sites should be online by next year.

### AIR MONITORING SITES in OPERATION



#### SAN JOAQUIN COUNTY

- ▶ 1 Stockton-Hazelton: G, M, P, F, T
- ▶ 2 Stockton-Wagner/Holt: P
- ▶ 3 Tracy-Airport: G, M, P, F
- ▶ 4 Manteca: P, F, M

#### STANISLAUS COUNTY

- ▶ 5 Modesto-14th St: G, M, P, F
- ▶ 6 Turlock: G, M, P, F

#### MERCED COUNTY

- ▶ 7 Merced-M St: P, F
- ▶ 8 Merced-Coffee: G, F, M

#### MADERA COUNTY

- ▶ 9 Madera City: G, P, F, M
- ▶ 10 Madera-Pump Yard: G, M
- Other<sup>1</sup>:  
Chukchansi Indians
- ▶ 11 Picayune Rancheria: G, F, P, M

#### FRESNO COUNTY

- ▶ 12 Tranquillity: G, F, M
- ▶ 13 Sierra Sky Park: G, M
- ▶ 14 Clovis: G, M, P, F
- ▶ 15 Fresno-Garland: G, M, P, F, T, N, L
- ▶ 16 Fresno-Pacific: F
- ▶ 17 Drummond: G, P, M
- ▶ 18 Parlier: G, M
- ▶ 19 Huron: F, M

#### MONITORING DESIGNATIONS

- A Acid Deposition
- F Fine Particulate (PM2.5)
- G Gaseous
- M Meteorological
- P Particulate (PM10)
- N National Core
- T Toxins
- L Lead

#### KINGS COUNTY

- ▶ 20 Hanford: G, F, M, P
- ▶ 21 Corcoran: F, M, P
- Other<sup>1</sup>:  
Tachi Yokut Tribe
- ▶ 22 Santa Rosa Rancheria: G, M, P

#### TULARE COUNTY

- ▶ 23 Visalia Airport: M
- ▶ 24 Church Street: G, F, M, P
- ▶ 25 Porterville: G, F, M
- Other<sup>2</sup>:  
▶ 26 Lower Ka weah: A, G, M
- ▶ 27 Ash Mountain: A, G, M, F

#### KERN COUNTY

- ▶ 28 Shafter: G, M
- ▶ 29 Oildale: G, M, P
- ▶ 30 California Avenue: A, G, M, P, F, T
- ▶ 31 Bakersfield-Muni: G, M
- ▶ 32 Bakersfield-Airport (Planz): F
- ▶ 33 Edison: G, M
- ▶ 34 Arvin-Di-Giorgio: G, M
- ▶ 35 Maricopa: G, M
- ▶ 36 Lebec: F, M

#### MONITORING OPERATION

- ▶ Sites operated by the District
- ▶ Sites operated by the District & CARB
- ▶ Sites operated by CARB
- ▶ Sites operated by other agencies
- Other<sup>1</sup> Tribal
- Other<sup>2</sup> National Park Service



## LEGAL ACTIVITIES

Consistent with the STAR work culture, the District has a timely, thoughtful and accurate legal team that supports the District on a variety of legal issues. The District will pursue civil actions against alleged violators of rules and regulations that are not resolved through the Mutual Settlement Program. In addition, the District participates in legal challenges in federal courts where its rules, policies or attainment plans are contested. Currently those include:

### **SUPREME COURT REVIEW OF DISTRICT'S METHOD FOR ANALYZING GREENHOUSE GAS EMISSIONS UNDER CEQA**

In what is shaping up to be one of the most significant California Supreme Court cases involving CEQA, the District has joined with Kern County in filing an amicus brief with the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Game*. This case centers on the District's method of determining when a project's greenhouse gas emissions exceed thresholds of significance for CEQA purposes, which is designed to support the state's greenhouse gas reduction targets.

### **SUPREME COURT CASE REVIEWING CEQA REQUIREMENTS FOR AIR QUALITY ANALYSIS OF CRITERIA POLLUTANTS**

In response to a state Court of Appeal decision that imposed the unprecedented requirement that lead agencies must analyze local health impacts of criteria pollutants such as ozone and PM2.5, the District has filed an amicus brief with the California Supreme Court in *Sierra Club v. County of Fresno (Friant Ranch)* in order to assist the Supreme Court in understanding the absence of an acceptable methodology for such analysis.

### **CHALLENGE TO EPA RULE REGARDING IMPLEMENTATION OF 1997 PM2.5 STANDARD**

Two similar cases brought by environmental groups, one before the District of Columbia Court of Appeal and another before the District Court, Northern District of California, challenge EPA's prospective application of Clean Air Act provisions pertaining to the District's PM2.5 plan for attainment of the 1997 standard. The District has intervened in both cases, along with South Coast Air Quality Management District. Litigation in these matters is ongoing.

### **INCENTIVE PROGRAM EMISSIONS REDUCTIONS FOR SIP CREDIT**

This Petition, filed by environmental groups in July, challenges EPA's approval of District Rule 9610, a first-in-the-nation rule designed to allow emissions reductions achieved through the District's incentive programs to be taken into account in the District's attainment plan for the 1997 PM2.5 standard. Briefs are due in mid-2015.

## ADMINISTRATION

### **HUMAN RESOURCES**

The District performs the full range of human resource support activities including recruitment, classification and pay, records management, legal compliance, labor relations, training and management/supervisory support. The District is responsible for minimizing risk through employee benefits, workers' compensation and wellness programs. In addition, the District administers and interprets human resources-related laws, rules and regulations in order to properly manage and direct its work force.

### **ADMINISTRATIVE SERVICES**

The District is responsible for a full range of fiscal and grant administration functions and general services-related functions. These include preparing the budget; responsibility for accounting and auditing all revenues and expenditures; preparing financial statements and related reports, and management of incentives and other grants, including state and federal reporting.

The District is responsible for the development, implementation and ongoing administration of a variety of incentive grant programs.

General services functions of the District include facilities management, fleet maintenance, purchasing and risk management.

## INFORMATION TECHNOLOGY

The District's continued investment in information technology and automation played a key role in providing excellent customer service to the public in 2014. For example, the District created a user-friendly web application for Rule 4901 Residential Wood Burning, which provided the public the ability to determine their wood burning device status for registration or incentive qualifications. Also, a major enhancement to the District's automated phone Check Before You Burn application was implemented, which simplified the existing system while incorporating additional functionality for the requirements of the revised residential wood burning rule.

### INFRASTRUCTURE SERVERS UPGRADE TO VIRTUAL TECHNOLOGY

The District continued to migrate physical server systems to virtual technology to better align information technology with business demand by accelerating the delivery of infrastructure, applications and other services. The move to virtual technology has substantially reduced cost, improved productivity and enhanced business continuity. These positive results occurred through physical consolidation, producing lower power and cooling costs in the data center, fault tolerance and high availability that provides quick recovery from unplanned outages. This enhancement also ensures that the District is able to serve the public with little or no downtime.

### ONLINE FACILITIES PORTAL

The District's online permitted facilities' portal provides Valley businesses the ability to view information related to their permits. This has given the regulated community unprecedented, real-time information about their facilities. Initially targeted at permitting information, compliance-related

information and functionality is being added to the portal, adding a new level of service and support for the regulated community. The capability has also been added to allow facilities to report and upload breakdown and deviation information online through the portal. The regulated community has been very enthusiastic about the features and benefits provided by this portal, and to the District plans to continue to improve it and expand its functionality.

### WIDE AREA NETWORK (WAN) UPGRADE

In 2014, District staff engineered an advanced inter-office connection using over-the-cloud technology to provide data services between District regional offices. This connection technology serves as a means to eliminate high cost / low bandwidth technology, and provides scalability to better align with the growing data connectivity needs of District systems. This implementation, through its highly redundant, fault-tolerant design and flexible bandwidth control, ensures the availability of public services offered at all District offices.



## OUTREACH & COMMUNICATIONS

The District's team of communications professionals is a full-service, in-house public and media relations department, which conducts outreach in four languages, produces publications, develops marketing programs and supports the District's many grants programs through traditional and social-media outreach.

### NEWS EVENTS

In 2014, the District petitioned the U.S. Environmental Protection Agency for reclassification of the 1-hour ozone standard from "extreme" non-attainment to attainment. The District fielded many calls from the media and public in response to the historic achievement.

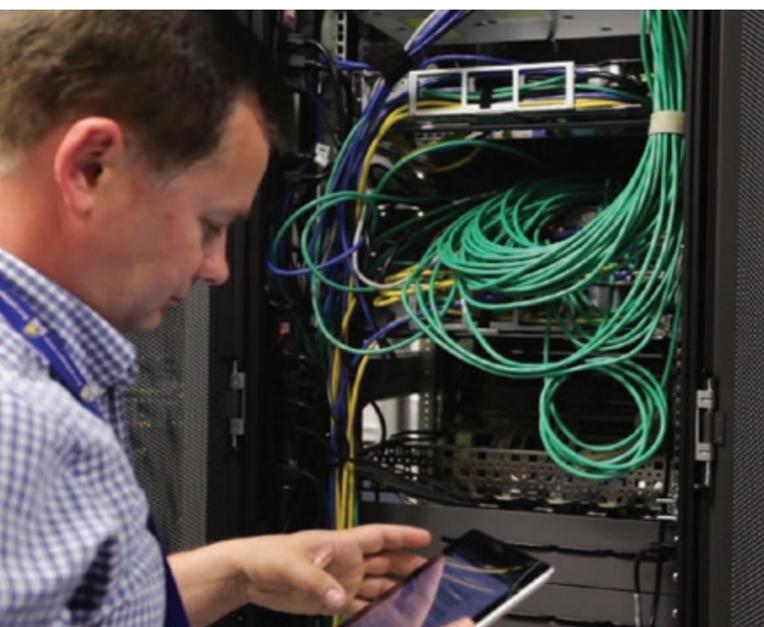
The District established new media partnerships last year, most notably expanding its longtime relationships with public television stations throughout the Valley. The District renewed its strategically important partnership with ValleyPBS in Fresno and established a similar partnership with the Sacramento market's public television station, KVIE, for northern region outreach. This partnership has been critical in distributing materials developed for Valley children.

### "BLUE SKY, BROWN SKY... IT'S UP TO YOU!"

This free air-quality curriculum is available to schools and private households through the two public television stations. The colorful, educational curriculum is available in two grade levels for elementary school students and teaches children what they can do to help clean up the Valley's air.

### OC by the NUMBERS 2014

232	Media Calls
1,625	Public Calls
41	News Releases
69	Presentations/Outreach Events



## OUTREACH & COMMUNICATIONS *(Continued)*

### HEALTHY AIR LIVING KIDS CALENDAR

The District produced its annual kids calendar again in 2014. This evergreen project is the District's most popular outreach product and 20,000 copies are distributed annually throughout the Valley. The calendar continues to set the standard for engaging the Valley's children in an air quality discussion.

### MAKE ONE CHANGE

This annual multimedia campaign encourages all Valley residents to voluntarily join the significant efforts by business and industry to clean up the Valley's air. The Make One Change campaign focuses on those small daily changes residents can make such as driving less or checking whether it is a day when they can use their fireplace.

### AIR ALERTS

The Air Alert program is credited with being a critical component in the District's attainment last year of the 1-hour ozone health standard.



Routinely implemented in August and September at back-to-school time in the Valley, Air Alerts notify the public when conditions are expected to materialize that favor ozone creation, giving people ample advance notice to put emission-reducing practices into place. In 2014, for the first time since the program was implemented, there were no Air Alerts declared, reflecting the profound improvement in summer air quality. The District did declare an Air Alert "practice," however, to enable the public to rehearse changes in their activities that an actual Air Alert may have triggered.

### WORLD AG EXPO

Each February, the District has a significant presence at the World Ag Expo in Tulare, the largest agricultural trade show in the world. Attendance includes scheduling staff from all District departments and managing logistical details to ensure that the thousands of global visitors to the show have ample opportunity to meet District staff, have their questions answered and hear the District's messaging.

### BILINGUAL PRESS RELEASES, INTERVIEWS, MEDIA APPEARANCES

As well as being prepared at what is often a moment's notice for a live media appearance, District staff regularly appears on numerous radio, TV and webcasts throughout the Valley, including morning shows, prime time news shows and feature shows in both English and Spanish languages, ensuring that Valley's diverse population hears and understands the District's messaging in the format of their choice.

### PRESENTATIONS

District staff includes seasoned public-speaking professionals, giving dozens of speeches and presentations each year to academic, professional, trade and service organizations. Whether making a technically detailed presentation to a graduate class in environmental studies at a local university or a general presentation on air quality and health to a Rotary club, the outreach staff is consistently in demand for the most recent air quality news and information.

## ENVIRONMENTAL JUSTICE ADVISORY GROUP

In recent years, the Environmental Justice Advisory Group (EJAG) has provided myriad recommendations on District incentive grant programs. The EJAG continued to prioritize low-income funding for Valley residents and, as a result of their suggestions, low-income residents are now able to receive additional funding to cover the cost of trading out old wood stoves and open-hearth fireplaces with cleaner-burning units. Additionally, property owners of rental units which house low-income tenants may also be eligible for that additional low-income incentive amount.

In addition to those recommendations, the EJAG crafted multiple letters of support for the District's position on critical topics such as the ARB's state truck regulation and the Governor's allocation of SB 535 cap and trade revenues to ensure there is consideration for the Valley's disadvantaged communities.

To learn more about the District's environmental justice strategy or find a list of meeting dates, agendas and minutes, [www.valleyair.org/EJAG](http://www.valleyair.org/EJAG).

## Impacts of GROUND LEVEL OZONE



Ground level ozone is not emitted directly into the air, it is created by chemical reactions between NO<sub>x</sub> and VOCs in the presence of heat and sunlight.

**56%**  
On-Road Mobile (Heavy Duty Trucks, Buses, Cars, etc.)

**27%**  
Off-Road Mobile (Farm/Construction/Lawn Equipment, Trains, Airplanes, etc.)

**17%**  
Stationary & Area-wide (Industrial, Oil and Gas, Pesticides, etc.)

Nitrogen Oxides

Volatile Organic Compounds

**46%**  
Industry & Ag (Petroleum Production, Confined Animal Facilities, Waste Disposal, Construction Processes, etc.)

**31%**  
Residential (Fuel Combustion, Paints, Aerosol Sprays, Automotive Products, etc.)

**23%**  
Mobile (On-Road and Off-Road)

\*The Valley has an overabundance of naturally emitted VOCs. VOC sources are more effective air pollution sources in the Valley.

## Harmful to OUR Health



- Chest Pain, Coughing, Throat Irritation, Congestion
- Triggers Asthma Attacks
- Worsens Bronchitis & Emphysema
- Reduces Lung Function

### CHILDREN & TEENS are at GREATER RISK

- Their lungs are still developing
- Take more breaths per minute
- Spend more time outdoors

## YOU can make ONE CHANGE

ON THE ROAD — and — AT HOME



Carpool, Ride the Bus, or Bike to Work/School



Reduce Trips or Trip Link



Avoid Idling at Schools and Drive-Thrus



Switch to Electric Lawn Equipment



Switch to an Electric Vehicle



Avoid using aerosols, lighter fluid, high VOC paint and other chemicals

Take advantage of Air District incentives at [valleyair.org/grants](http://valleyair.org/grants)  
Tune Up your Vehicle • Exchange your Lawnmower • Purchase/Lease an Electric Vehicle

### Check AIR QUALITY in YOUR AREA

- The Real-Time Air Advisory Network offers:
- Online access to current, hourly air-quality data
  - Automated email or texts when air quality worsens
  - Specific health recommendations for outdoor exercise

### TAKE ACTION during an AIR ALERT!

Alerts are issued when the Valley is experiencing conditions that may lead to exceeding a federal health-based ozone standard

Alexander Sherriffs, M.D.  
Board Member

San Joaquin Valley AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING

# Check Before You Burn

1-800 SMOG INFO  
[valleyair.org](http://valleyair.org)



## CALL for ENTRIES!

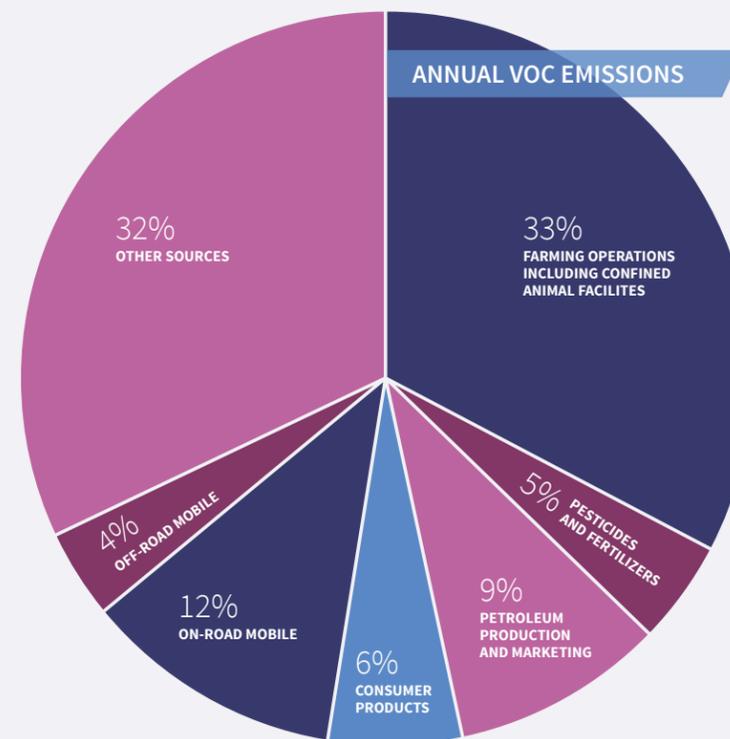
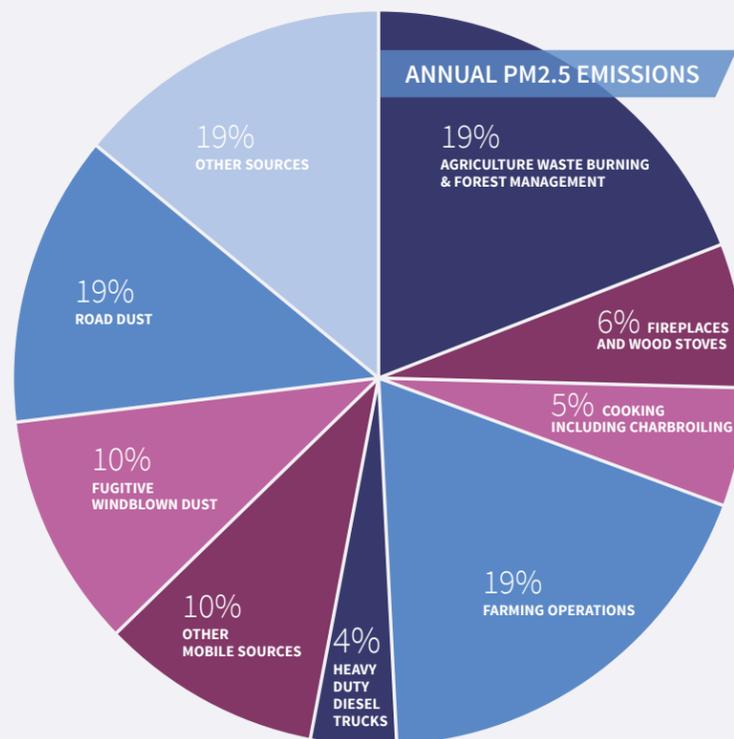
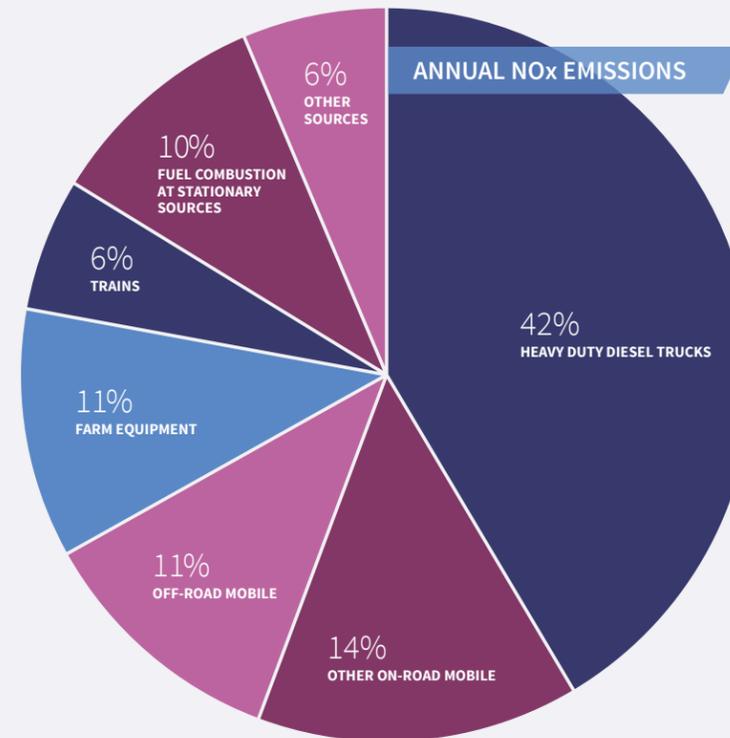
Students must submit artwork by Oct. 5, 2015!  
[www.valleyair.org/kidscalendar](http://www.valleyair.org/kidscalendar)

# SOURCES of POLLUTION

Despite major improvements in air quality, the Valley still faces significant challenges in meeting the federal, health-based, 8-hour ozone and particulate matter standards. These challenges are the result of the Valley's unique geography, topography and climate, which create ideal conditions for forming and trapping air pollution.

Ozone is the major component of the Valley's summertime "smog," and it affects human health and vegetation. Ozone is not emitted directly into the air, but is created by photochemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Particulate matter (PM) consists of tiny particles of solids or liquids (except pure water) that are suspended in the atmosphere. Particulate matter includes PM2.5 (particles less than 2.5 micrometers in diameter) and PM10 (particles less than 10 micrometers in diameter). PM can be emitted directly (primary PM, such as dust or soot), and can form in the atmosphere through photochemical reactions or gaseous precursors (secondary PM). Much of the Valley's ambient PM10 and PM2.5 is secondary PM, formed in atmospheric reactions of NOx.

In the San Joaquin Valley, due to our climate and the chemical composition of air pollutants, NOx is the primary culprit in the formation of both ozone and PM2.5. More detailed information on emissions is provided in the District's air quality plans, available at [www.valleyair.org](http://www.valleyair.org).





## ON THE RADAR

As we look to the future, the pollution from Valley industries, businesses, farms and vehicles are at historic low levels. While we can take pride in and appreciate the sacrifice by Valley businesses and residents that has made this possible, the challenges ahead may prove to be the most difficult ones yet in our journey towards meeting the federal air quality standards. Our key areas of focus for the coming year are summarized below:

**1-HOUR OZONE STANDARD** Now that the Valley has had two years with no violations of the 1-hour standard, the District will be once again asking the EPA to declare the Valley in attainment of this standard. If successful, the federal mandate for the non-attainment penalty will be lifted. This will return local control and empower the Valley to exercise its prerogative over the need for this revenue source and the manner by which it can be expended to meet the Valley's unique challenges.

**NEW ATTAINMENT PLANS** In response to federal mandates, the District will begin the work on developing four new attainment plans for ozone and particulate matter. Meeting these new standards will require a great deal of innovation and transformative measures impacting all sectors. As we pursue this work the District will look for and facilitate full public participation in crafting these plans.

**MODERNIZING THE FEDERAL CLEAN AIR ACT** Since its adoption, the Clean Air Act has led to significant improvements in air quality and public health benefits throughout the nation. However, after more than 20 years since the last amendments to the Clean Air Act in 1990, our experience shows that many well-intentioned provisions are leading to unintended adverse consequences. The antiquated provisions of the Clean Air Act are now leading to confusion, and the lack of updated Congressional directive has rendered courts as policy makers. In the coming year, the District's work with the Congress and the Executive branch to advance legislative or administrative changes that eliminate confusion, and enhance economic and technological feasibility while strengthening the health protective core of the Act.

**RESIDENTIAL WOOD BURNING** Building on last year's success of the Burn Cleaner program, the District will continue to invest in Valley residents' efforts to upgrade their older wood burning devices. This will again be done through cooperative action with the Valley hearth retailers.

**NEIGHBORHOOD BY NEIGHBORHOOD AIR QUALITY DATA** With the successful launch of the Web-based Archived Air Quality (WAAQ) system, the District will launch a ground breaking new tool which will upgrade the existing RAAN system to provide every Valley resident with real-time air quality information for their neighborhood.

**CAP AND TRADE FUNDING** In collaboration with Valley stakeholders, the District will work to ensure that the Valley receives its fair share of funding given the disproportionate number of disadvantaged communities in the San Joaquin Valley.

**OIL AND GAS PRODUCTION** The District will work to accurately quantify air quality impacts associated with oil and gas production activities and hydraulic fracturing. In coordination with Kern County, the District will ensure that adequate measures are in place to mitigate potential air quality impacts.

## District GIVES BACK to the COMMUNITY

What began as a response to employees requesting that the District become involved in charitable events, has blossomed into four consecutive years in which staff members gave their own time, money and even blood during District-organized community service projects.

At work, employees helped the community by improving air quality and protecting public health. In their time off, they provided assistance to nine Valley organizations during District-sanctioned projects.

### Northern Region

Staffers spent a Saturday in the sweltering June sun, hammering nails, sawing wood and clearing debris to build a fence as part of Habitat for Humanity's efforts to provide homes for destitute families. District staff also donated items and assembled 30 "Comfort Kits" for the Emergency Response Team of Stanislaus County Child Protective Services. The kits are provided in drawstring backpacks to children rescued from dangerous circumstances, often with nothing more than the clothes they are wearing at the time. The kits contain items designed to help the children cope with being suddenly moved to unfamiliar surroundings.

And, staff in Modesto gave up their own blood to help save lives in the Delta Blood Bank's Stanislaus County blood drive.

### Central Region

District staff in Fresno supported United Cerebral Palsy of Central California (UCP) by hosting two events where participants donated more than two dozen pieces of sports equipment for UCP to use at its centers, and raised more than \$250 in change for UCP operations and programs.

In August, staff assembled and packed more than 30 backpacks with school supplies to benefit the children of the Greater Fresno Area through the non-profit organization Rescue the Children.

District staff in Fresno also held several blood drives in 2014, contributing more than 68 pints of blood and saving the lives of 204 people.

### Southern Region

District staff participated in two fund-raising walks in 2014. One was for the H.E.A.R.T.S. Connection of Kern County, supporting families of children with special needs, and the other was the "Fight for Air" Walk, by the American Lung Association, fighting air pollution and lung cancer.

In addition to walking, District staff in Bakersfield also donated hundreds of dollars worth of household items to Covenant Community Services, helping former foster youth to become independent adults as they turn 18 and are no longer eligible for foster care.

Participation in all community service projects is voluntary and organizations are selected by employees.



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

1990 E Gettysburg Ave, Fresno CA 93726

559 230 6000      CENTRAL REGION OFFICE  
209 557 6400      NORTHERN REGION OFFICE  
661 392 5500      SOUTHERN REGION OFFICE

[www.valleyair.org](http://www.valleyair.org)  
[www.healthyairliving.com](http://www.healthyairliving.com)



## HEALTHY AIR LIVING™



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Search "Valley Air"