

Each **one** of us can make a difference.



2009
ANNUAL REPORT
TO THE COMMUNITY
DECEMBER 2009

2009 Governing Board

The District is governed by a 15-member Board that consists of representatives from the boards of supervisors of all eight counties, five councilmembers from Valley cities, and two governor-appointed public members. The San Joaquin Valley Air Pollution Control District Governing Board members as of December 2009 are as follows:



Chris Vierra
Councilmember, City of Ceres
CHAIR



Tony Barba
Supervisor, Kings County
VICE CHAIR



David G. Ayers
Councilmember, City of Hanford



Judith G. Case
Supervisor, Fresno County



Ronn Dominici
Supervisor, Madera County



Henry Jay Forman, Ph.D.
Appointed by Governor



Ann Johnston
Mayor, City of Stockton



Randy Miller
Councilmember, City of Taft



Michael G. Nelson
Supervisor, Merced County



William O'Brien
Supervisor, Stanislaus County



Leroy Ornellas
Supervisor, San Joaquin County



John G. Telles, M.D.
Appointed by Governor



Raymond A. Watson
Supervisor, Kern County



J. Steven Worthley
Supervisor, Tulare County

The large city representative seat assigned to the City of Visalia is currently vacant.

Message from the Air Pollution Control Officer

On behalf of the Air District's Governing Board, it is my pleasure to present to all Valley residents this year's Report to the Community. Our goal is to provide you with a useful resource through which you can get to know us a little better, assess the quality of our work, and hold us accountable. We welcome suggestions for improvement and look for new ideas that help us better fulfill our public health mission. Inside, you will find detail on all the initiatives outlined below, and I encourage you to spend some time with this report.

Looking back, it comes as no surprise to anyone that the unprecedented national and regional economic downturn presented new challenges. If nothing else, it reinforced our belief that a strong economy is essential in our fight to combat air pollution and improve public health. Nonetheless, we made major progress in reducing air pollution and breathing cleaner air. Given the enormous challenges that we face, there are many other key players in our work for cleaner air that must be acknowledged.

Valley businesses have made significant investments in clean air and have played a key role in our advocacy efforts to bring resources to the Valley. Local elected officials and community leaders have championed air-friendly policies, and have helped in educating the state and federal legislatures concerning the unique needs of the Valley. Environmental advocacy groups have asked tough questions and helped raise public awareness.

Getting the public involved in the solution to our air-pollution problems was a key focus for the District last year. Heard a lot about Healthy Air Living? Then we're doing our job! Our aim is to encourage every one of us to contribute to cleaner air, whether at home, at work or at school. "Make One Change" is the Healthy Air Living slogan.

Last year, in addition to adopting several groundbreaking rules, we implemented a tough new rule on the use of wood-burning fireplaces. A big "Thank You!" to all Valley residents who did their part. Because of your efforts, we had one of the cleanest winters in history. Work on climate change is another urgent consideration in the Valley, and the Air District has taken the lead to provide guidance and assistance to Valley agencies and businesses in complying with tough mandates.

The economy has affected all of us this past year. We're all doing more with less, and the Air District is no exception. We recognize the hardship that the current economic climate has imposed on the people of the Valley, and we've moved quickly to put relief measures into place. Funding under the federal "stimulus" program provides great opportunities to offset the poor economy and reduce air pollution. The District worked aggressively to assist Valley agencies and businesses in competing for these funds.

Finally, it all comes down to the people. The Air District is a vibrant agency staffed with professionals of all disciplines who genuinely care about the work they do, and we strive to provide you with the best possible customer service. Give us a call or send us an e-mail. Beyond the graphs, data and studies, there's one important piece of information we don't have: your suggestion!

Toward cleaner air,



Seyed Sadredin

Executive Director/Air Pollution Control Officer



About the District

The San Joaquin Valley Air Pollution Control District is a regional 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.

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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.

District's Vision

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 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 cost-effective air pollution-control measures, provide meaningful incentives for reducing emissions, and develop creative alternatives for achieving emissions reductions.

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 innovation and ingenuity 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 INTEREST 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. •

Valley Working Together for Clean Air

Although the District is legally charged with the responsibility to design and implement the Valley's clean air strategies; achieving cleaner air relies on the work, investment, and sacrifice by many.

CONTINUED INVESTMENT IN CLEAN AIR BY BUSINESSES: The bulk of the credit for the significant improvements in the Valley's air quality goes to Valley businesses. Last year's Report to the Community provided a detailed assessment of the investments in clean air made by Valley businesses over the last two decades. The District estimates that the cost to Valley businesses of compliance with air regulations has been approximately \$40 billion. In 2008 and 2009, Valley businesses responded to a large number of recent rule changes including the following.

- In late 2008 and the first half of 2009, Nitrogen Oxides (NO_x) compliance deadlines were reached for the District's rules for boilers, steam generators, process heaters, and dryers, and 1,277 applications for Authority to Construct were submitted for compliance with these rules.
- In September 2008, the Volatile Organic Compound (VOC) content limit for cleaning solvents dropped to 25 grams per liter, requiring hundreds of industrial facilities and maintenance shops to change out their equipment for detergent-based cleaning solutions.
- Agricultural operators applied for permits and registrations for their spark-ignited engines in late 2008, and demonstrated compliance with the rule's NO_x emission limits by Jan. 1, 2009. In total, 151 applications were submitted to modify internal combustion engines to comply with Rule 4702.
- Interim compliance deadlines were reached for Rule 4204 (Cotton Gins) and Rule 4565 (Biosolids, Animal Manure, and Poultry Litter Operations), and full compliance deadlines were reached for Rule 4401 (Steam-Enhanced Oil Production Wells), Rule 4612 (Motor Vehicle and Mobile Equipment Coating Operations), and Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants).
- The District also received 794 applications for gas station vapor-recovery system upgrades to comply with state requirements, 60 applications for compliance with Rule 4703 (Stationary Gas Turbines), 86 applications to modify confined animal facilities for compliance with Rule 4570, and 24 applications to modify manufacturing facilities for compliance with Rule 4682 (Polystyrene, Polyethylene, and Polypropylene Products Manufacturing).

ADVOCACY FOR RESOURCES: Over the last four years, the Valley has increased its incentive grant funding by more than 1000 percent, the result of an effort by Valley stakeholders to educate the state and federal legislature concerning the Valley's unique challenges and needs. The Governor's California Partnership for the San Joaquin Valley, Nisei Farmers League, Western States Petroleum Association (WSPA), California Cotton Ginners and Growers Association, and the Manufacturing Council of the Central Valley deserve special recognition for partnering with the District in efforts to bring the Valley its fair share of resources to combat air pollution.

**NEW DISTRICT PARTNERSHIP WITH
USDA HELPS VALLEY FARMERS**

REDUCE EMISSIONS: The District has recently developed a partnership with the USDA Natural Resource Conservation Service (NRCS). Under the new partnership, incentive grant funding provided by the District is being used in conjunction with Conservation Incentive Grants from USDA to help Valley farmers replace older, higher emitting farm equipment.

Like the District, the USDA NRCS has a long history of successful efforts that have reduced air pollution here in the Valley. Over the past five years under the Environmental Quality Incentive Program, the NRCS has funded 347 diesel engine replacement projects, reducing more than 1700 tons of emissions. While past efforts by the NRCS were mainly focused on replacing diesel stationary pump engines and emissions from farming practices, under the new joint program, funding has also helped to reduce emissions from mobile farm equipment including tractors.

In May and June 2009, agricultural industry representatives, together with the District, sponsored eight public workshops throughout the Valley to promote this new funding effort. These workshops resulted in more than 1,100 applications for a total of \$86,255,393 in funding. While the federal and District dollars allocated to this program will only fund a small fraction of replacements this year, these efforts are still expected to reduce more than 2,947 tons of smog-forming emissions. The strong demand has also helped document the need for more federal funding to help further reduce farm equipment emissions in the future.

PARTNERSHIP WITH UTILITIES TO ELECTRIFY FARM ENGINES: The District partnered with Pacific Gas and Electric Corporation (PG&E), Southern California Edison (SCE), and the agricultural industry to develop the Agricultural Internal Combustion Engine Conversion Incentive Program (AG-ICE). The program offered incentives to purchase and install electric motors and provided reduced electricity rates in exchange for retiring a stationary on-farm diesel-driven engine. The electric utilities provided a discount of nearly 20 percent from the standard agricultural energy rate for a period of 10 years. Approximately 2,253 diesel engines were replaced, reducing nearly 4,000 tons/year of NOx emissions.



PARTNERS IN PUBLIC EDUCATION AND OUTREACH: The support of the business community has always been a critical component of the District's success in reaching clean-air milestones. This type of support continues to grow and provide the District an enhanced ability to offer the public attractive incentives leading to cleaner air.

Duraflame –

This industry leader in manufactured wood products generously contributed thousands of dollars in coupon incentives for Valley residents, in addition to allocating advertising funds to publicize wood-burning regulations. Public response was resounding.

Central California Chevy Dealers –

This association offered a new Malibu Hybrid for the annual hybrid giveaway contest. This contest is the District's highest-profile contest, and publicizes the Healthy Air Living message in an immediate and personal way. Thousands of entries were received.

American Lung Association of California and regional asthma coalitions –

Throughout the Valley every day, thousands of elementary and secondary students, and their teachers and school staff, are informed of air quality at their school sites through the Flag Program. The Flag Program has become a best practices model for school and community outreach, and is being emulated in other air basins.

School, teachers and students –

The education sector continues to be an enthusiastic and supportive clean-air partner. The District recognizes that the Valley's youth are especially receptive to environmental calls to action and sponsors several outreach programs targeted at various grade levels:

- “Blue Sky, Brown Sky ... It's Up to You!”, K-5 elementary curriculum,
- “Clean Air Challenge”, middle and high school curriculum,
- Healthy Air Living Kids' Calendar, open to kindergarten through high school seniors,
- Healthy Air Living “For REEL” Video Contest,
- “Kids for Clean Air” contest, directed at elementary school students, and
- “Commute Green in the San Joaquin Kids' Edition” contest.

PUBLIC PARTNERSHIP: “Make One Change!” for clean air is the Healthy Air Living message, and across the Valley, public participation in voluntary emissions reductions and compliance with regulations is at an all-time high. Because of heightened awareness and redoubled effort in finding alternatives to pollution-causing activities, the public's role in markedly cleaner air is pivotal. Public adherence and positive response to the new wood-burning restrictions led to one of the cleanest winters on record. •



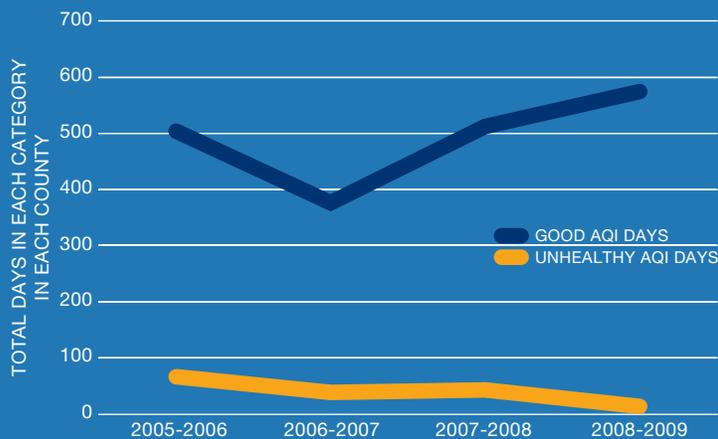
Air Quality Trends

Air quality continues to improve in the Valley. While ozone levels were elevated in 2008 due to wildfires, the 2009 ozone season is looking to be one of the cleanest of recent years, continuing the downward trend of ozone levels in the Valley. Over the 2008–09 PM_{2.5} season, there were more “good” air quality days (based on the Air Quality Index, or AQI) and fewer “bad” air quality days as compared to previous years. In late 2008, Environmental Protection Agency (EPA) finalized its redesignation of the San Joaquin Valley to attainment of the federal PM₁₀ standard.

Air quality continues to improve in the Valley. The 2009 ozone season is looking to be one of the cleanest of recent years. However, despite major improvements in air quality, the Valley still faces significant challenges in meeting the new standards.

PM_{2.5} Season Days in Each AQI Category

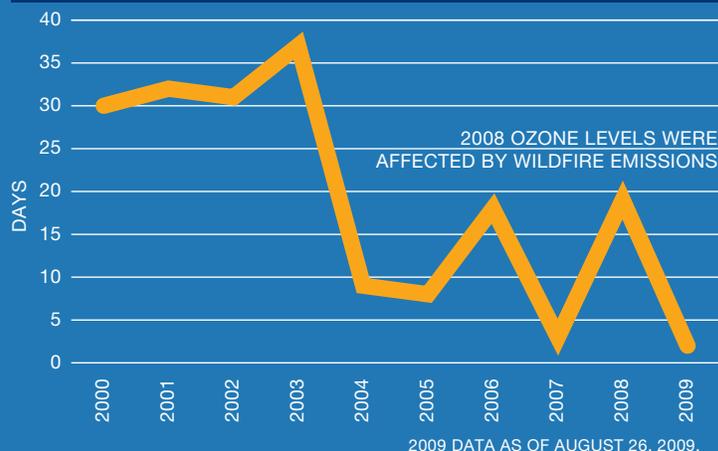
(October to March)



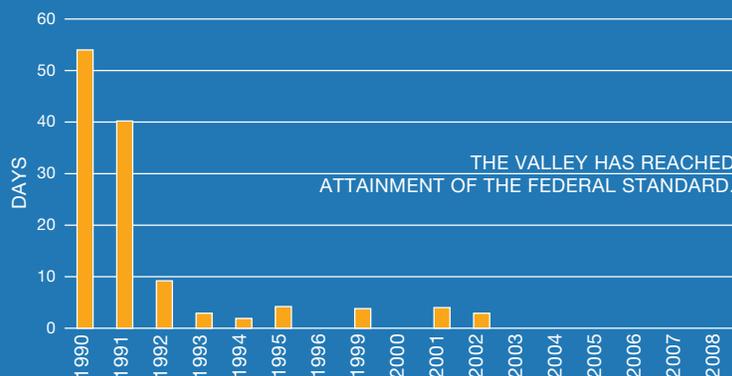
OZONE: This odorless, colorless gas results when chemicals cook in the sunlight and heat. Ozone is primarily a summertime issue and commonly referred to as “smog”.

PARTICULATE MATTER (PM): The Valley monitors for two sizes of particulate matter. PM₁₀ microns and smaller is mainly an issue in the fall. PM_{2.5} microns and smaller is more of a winter problem.

Number of Days Over the 1-hour Ozone Standard



Estimated Days Over PM₁₀ Standard



Healthy Air Living Transitions to a Year-Round Effort



Healthy Air Living billboards can be seen from Kern to San Joaquin counties on city streets, highways, and freeways.



Healthy Air Living is a comprehensive, year-round outreach initiative that aims to improve the health and quality of life of all Valley residents through individual and collective strategies that clean up our air. The goal is to create an environment where air quality becomes a priority in the decision-making process and the day-to-day choices made by individuals and business.

Healthy Air Living has become the District's hallmark program and now encompasses all regulatory and voluntary emission-reduction measures. The slogan, "Make One Change," and the colorful, distinctive Healthy Air Living logo brand all outreach materials and advertising.

Although relatively young, Healthy Air Living has already spawned several high-profile, high-participation campaigns, including the Kids for Clean Air pledge card contest and an annual hybrid vehicle giveaway. Healthy Air Living's strategy is simple: Give people the tools to make clean-air choices that work in their lives, and they'll commit to healthier lifestyles.

Healthy Air Living aims to reduce emissions that pollute our air through a variety of ways on both individual and organizational levels, including reducing the number of vehicle miles traveled each day through the Valley; reducing emissions during peak smog episodes; reducing emissions created by equipment and processes; and encouraging higher energy efficiency and the development of cleaner energy sources.

Healthy Air Living offers tools that every resident and business of the San Joaquin Valley can use to create a cleaner, healthier environment. The program includes air-friendly alternatives for day-to-day needs such as transportation; ways to promote "green" contracting; financial incentives; and partnerships with businesses, faith-based organizations, health organizations and municipalities to promote air-friendly behavior. •

Wood Burning Fireplaces— Measureable Results from Public Education and Outreach

In the winter of 2008–09, the Valley experienced much improved air quality. Comprehensive analysis indicates that District’s public outreach and education campaign, Healthy Air Living, was enormously successful in promoting public participation and adherence with new, more restrictive fireplace-use restrictions that led to measureable improvements in air quality.

Each year, the District expends significant resources on public education and outreach. Measuring benefits using objective and quantifiable metrics plays a key role in the design and the magnitude of these resources. Although public understanding and involvement in air-quality problems has increased in recent years, the 2008 amendments to Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters) were significant and, once again, challenged residents to do their part in our journey to cleaner air. Air quality measurements from the 2008–09 wood burning season indicate that Rule 4901 resulted in significant improvements.

Although the San Joaquin Valley Air Basin’s meteorology in the winter of 2008–09 was more conducive to air pollution build-up than in recent years, air quality has continued to improve. The number of “Unhealthy” air quality days dropped dramatically last winter. Most notably, Fresno County experienced no “Unhealthy” days during the four-month period from November through February, and the Valley as a whole saw a 10% reduction in average PM2.5 concentrations. These improvements indicate broad participation and compliance by the public, which would not have been possible without a comprehensive public education and outreach program. Effective implementation required a robust public outreach program containing these elements:

- Reasons and justifications for more strict control on the use of fireplaces.
- Highlighting changes in the new rule.
- How to burn cleaner when using wood burning devices.
- Financial incentives for the purchase of gas-fired and clean wood burning devices.

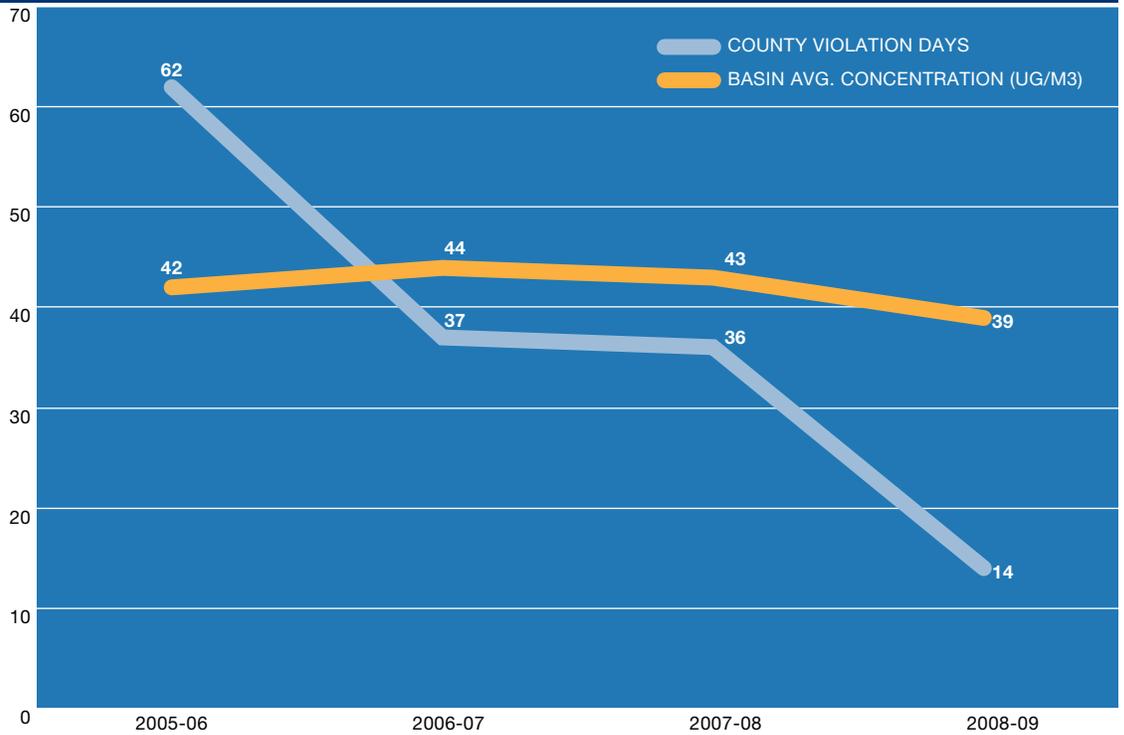
These were incorporated into the District’s winter campaign for Healthy Air Living, which included partnership with fourth- and fifth- grade teachers and students, new “Check Before You Burn” messaging and Community Incentive Grants.



Although the San Joaquin Valley Air Basin’s meteorology in the winter of 2008–09 was more conducive to air pollution build-up than in recent years, air quality has continued to improve.

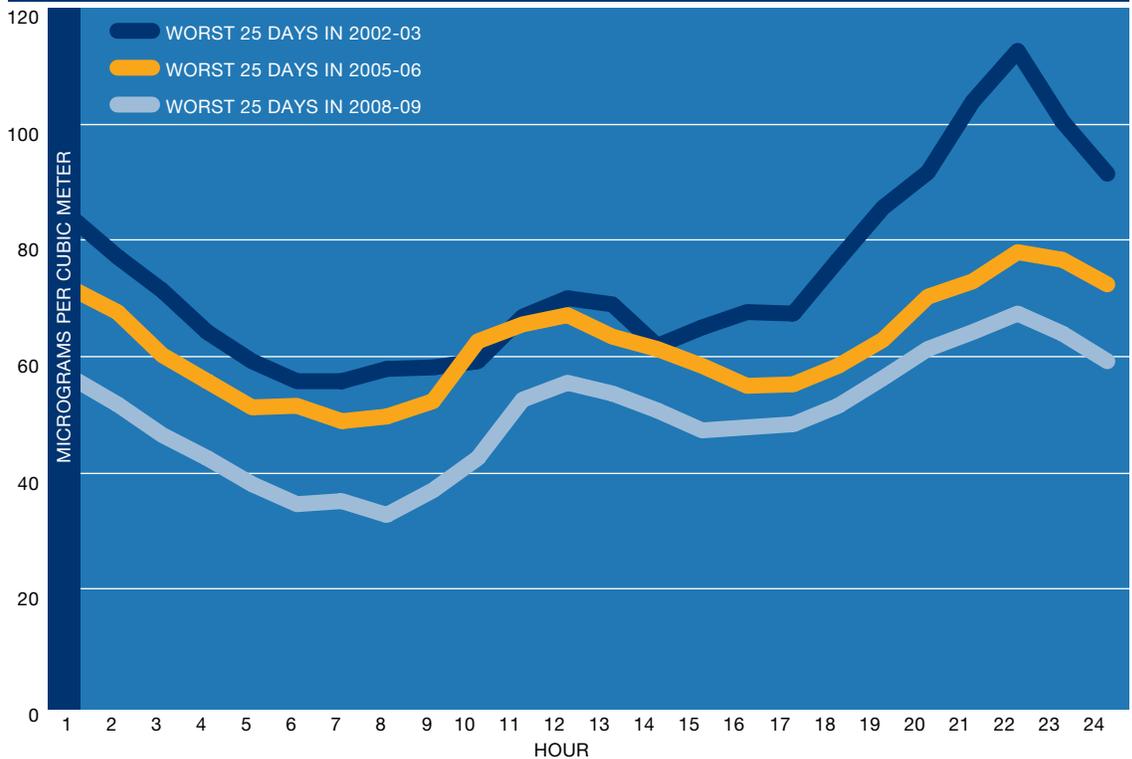
During the 2008–09 wood burning season, the total number of “Unhealthy” days (based on forecast AQI) decreased by 60% as compared to 2007–08, with an even more dramatic improvement from 2005–06.

Number of Annual PM 2.5 Violation (Red) Days by County (Violation = 65 ug/m3 or greater)



Daily and hourly concentrations were averaged for the worst 25 winter days in three periods: Prior to the 2003 amended Rule 4901 (2002–03), following implementation of the 2003 amendments (2005–06), and during the first winter with the 2008 amendment in place (2008–09). Progress in air quality is particularly evident during evening hours, when wood smoke is most prevalent. The linchpin of this success has been a strong public response to the District’s concerted Healthy Air Living program.

Impact of Rule 4901 on Days with Elevated PM2.5: Fresno First Street



Emphasis on Health Science

Health analysis demonstrates the effectiveness of public education and outreach aimed at promoting compliance with Rule 4901. In April 2009, a comprehensive report was presented to the public detailing the outreach campaign and the resulting improvements in air quality. Through a significant investment in health science research funding, the District has been able to demonstrate conclusively that episodic restrictions of household wood burning have led to significant wintertime air quality improvements, with corresponding reductions in both pulmonary and cardiovascular diseases as well as premature death. Aided by a District grant of \$122,000, the Central Valley Health Policy Institute (CVHPI) of California State University, Fresno quantified the air quality improvements in Fresno/Clovis and Bakersfield that were attributable to Rule 4901 as amended in November 2003.

The evidence indicates that the 2008 revision of Rule 4901, in combination with strong public participation, contributed to even better wintertime air quality and corresponding health benefits. •

Public health has been central to District activities for many years. To better coordinate District participation in and funding of health studies, in-house health reviews and public outreach efforts, the District created the position of Health Science Advisor in 2008. Of particular interest over the 2008–09 fiscal year has been a review of air quality effects on asthmatics, as well as health analyses of the benefits of the District's *2007 Ozone Plan* and of District Rule 4901, Wood Burning Fireplaces and Wood Burning Heaters.

District-funded research broke new ground in understanding how PM_{2.5} affects the Valley's large asthmatic population. Researchers at University of California, San Francisco — Fresno School of Medicine and at California State University, Fresno conducted a unique clinical study that compared the impact of elevated winter PM_{2.5} and summer ozone on a group of asthmatics and a control group of non-asthmatics. District staff also conducted a health benefit evaluation of the *2007 Ozone Plan* using the BenMAP program.

This increased focus on Health Science has allowed the District to quantifiably demonstrate the success of regulations and outreach in protecting the health of all Valley residents. •

Proactive Measures Aimed at Wildfires

Wildfires can pose a major risk to public health, human life and property. A single, 1,000-acre wildfire can generate particulate matter and ozone precursors that are up to three times higher than the San Joaquin Valley's total daily emissions inventory. In 2008, California experienced a record number of wildfires, with 5,812 fires burning 1,339,839 acres. The resulting emissions, most from outside the San Joaquin Valley air basin, caused serious public health impacts and unprecedented levels of PM2.5 and ozone in the Valley and throughout the state. From June to July, numerous monitoring sites recorded almost daily elevated PM concentrations. Many of these days were above the National Ambient Air Quality Standard for PM2.5, an unusual occurrence in the summer. Ozone precursor emissions from wildfires also pushed ozone concentrations to record concentrations at many locations.

Analysis by the California Air Resources Board concludes that since these fires influenced a critical period of the ozone season and were natural events, not reasonably preventable or controllable, it is inappropriate to use the 2008 ozone season for evaluating ozone trends. Thus, the Valley-wide air quality improvement trend was interrupted in 2008 due to wildfires, and preliminary 2009 ozone data illustrates that ozone air quality has continued to improve in the San Joaquin Valley beyond the 2008 season.

California's 2008 wildland fire catastrophe emphasized the need for the District to become more proactive in the management of wildland areas, both within the District's boundaries and throughout California. To this end, in February 2009, District staff presented a comprehensive report on wildland fire issues to the Board, and in May 2009, the District Governing Board adopted significant amendments to the legislative platform. The Legislative Platform was amended to offer policy support in the following areas:

- Additional financial and staffing resources for federal land managers to conduct prescribed burning as an effective means for reducing fuel supplies that lead to large and uncontrollable wildfires.
- Additional resources to manage wildfires when they occur.
- Lessening or removing contradictory environmental protection policies that prohibit the use of mechanized methods, or prescribed burning to reduce fuels when those are the only feasible methods available.
- Changes in federal policies to better incorporate air quality concerns by shifting focus to prescribed burning and employing fire management techniques that reduce air quality impact when wildfires occur.

District staff have also worked closely with federal land managers on several aspects of wildland management within the San Joaquin Valley Air Basin. District staff and U.S. Park Service staff made a joint presentation to the California Air Pollution Control Officers' Association

(CAPCOA) board in May 2009. The presentation galvanized the support of the CAPCOA leadership to pursue improvements in policies and local relationships with federal agencies on wildfire issues.

In August 2009, the Governing Board authorized the District to advocate for changes in HR 2454: American Clean Energy and Security Act of 2009. The changes would allow biomass material from the Giant Sequoia National Monument to be considered as Renewable Biomass, and could encourage the removal of excess biomass from the forest floor.

As mobile and stationary sources are cleaned up throughout the state, and as federal clean air standards are ratcheted downward, wildland fires are coming to the forefront of remaining problematic sources. Land Management Agencies have been receptive to Valley Air District suggestions, as prescribed burning is not only beneficial to air quality compared to wildfires, but it is safer for firefighting personnel and is less costly. •



In this NASA satellite image from June 27, 2008, smoke is clearly visible drifting from Northern California into the San Joaquin Valley. Red areas indicate fires detected by satellite infrared analysis.



Climate Change Action Plan

California has taken leadership in addressing climate change through two significant efforts: Assembly Bill (AB) 32 and the California Environmental Quality Act (CEQA). AB 32, “California Global Warming Solutions Act of 2006,” was designed to significantly reduce existing green house gas (GHG) emissions in California. Under CEQA, environmental impacts analyses of various projects are starting to consider GHG emissions, although there has been very little CEQA guidance on how to properly address GHG emissions impacts.

To assist Valley stakeholders in both of these efforts, District’s Governing Board adopted the Climate Change Action Plan (CCAP) in August 2008. The CCAP directed the District to:

- Develop CEQA guidance documents to assist Valley stakeholders in addressing GHG emissions through the CEQA process.
- Investigate and develop a GHG emissions reduction banking program.
- Administer voluntary GHG emission reduction agreements with developers.
- Enhance the existing emissions inventory process to include GHG emissions reporting consistent with new state requirements to minimize duplicative reporting burden on affected businesses.

The District held a series of stakeholder meetings in late 2008 and early 2009. The District developed a proposed methodology, largely requiring all projects that increase GHG emissions to control or mitigate those emissions using best performance standards. This proposal, which includes a Valley-specific carbon banking system, is scheduled to go before the District Governing Board for their consideration in December 2009. •

State Budget Crisis Impact Upon Air Quality



The state budget crisis led to delays in Proposition 1B bond funding disbursements for clean school buses, and truck retrofits and replacements aimed at reducing emissions associated with goods movement. The uncertainty caused by the state's fiscal situation made it difficult for the state to sell bonds to meet the commitments made through the Proposition 1B program. As a result, the state ARB ordered the District to suspend funding of school bus and truck retrofits and replacements. For the first two years, approximately \$80 million of the District's Prop 1B funding is affected. To minimize ultimate delays and to allow rapid funding of the projects upon release of funds by the state, the District did not stop processing grant applications. Having completed this work, the District is ready to fund these projects immediately upon receipt of the state funds. The state has begun to partially release those funds, and the District is hopeful that the full approved amount of funding will be released in the near future.

The state's legislative budget compromise also contained two provisions that potentially affect air emissions. One measure directed ARB to delay air pollution control requirements that were scheduled to take effect in 2011-12 for off-road, diesel-fueled fleets. In July 2009, ARB revised its regulation for in-use, off-road, diesel-fueled fleets. ARB estimates show reduced health benefits and lost reductions in particulate and NO_x emissions between 2010 and 2013. However, more work is needed to estimate reductions in emissions that have occurred due to the significant reduction in construction activity resulting from the massive economic downturn throughout the state.

Another measure changed the statutory requirements pertaining to the Carl Moyer grant program to allow off-road projects that involve farm equipment to easier qualify and receive additional funding. This measure is expected to have a positive effect on air quality by encouraging more cost-effective off-road farm equipment emission reduction projects throughout the Valley. The changes require that the project life for off-road agricultural projects are seeking incentive funds be set at 10 years, as long as the project is funded by the applicable regulatory compliance date. •

2009

Economic Assistance Initiative

In February 2009, the District Governing Board approved an Economic Assistance Initiative in the face of unprecedented national and regional economic downturn. The measures contained in the Economic Assistance Initiative are intended to provide relief to the businesses that the District regulates and to the community as a whole without sacrificing any environmental safeguards. The measures are summarized below (visit www.valleyair.org for specific details on each measure):

- Up to six additional months to pay permit renewal fees,
- Late fees may be waived upon receipt of the full past-due fees,
- Installment payment plans (up to 12 months) for compliance penalties, permit processing fees, and Indirect Source Review mitigation fees,
- Deferred payment of Indirect Source Review mitigation fees,
- Forgive the \$5,000 penalty for certain defaults on Proposition 1B grant contracts due to an inability on the part of the grantee to provide the necessary monetary match,
- Additional time to achieve required emission reductions required under incentive grant contracts,
- Priority fund disbursements given to businesses experiencing financial hardship and request expedited processing, and
- Provide additional time to install Enhanced Vapor Recovery systems for businesses failing to meet deadlines due to economic hardship.

As of August 2009, more than 300 businesses had taken advantage of various relief measures offered by the District. In addition, the District implemented additional measures to provide better customer service and minimize administrative costs for businesses. For example, the District now provides webcasting of all public workshops and held special training for staff on maintaining good customer service in difficult economic situations. •

Streamlining and Efficiency

Effective and efficient use of public funds is a core value of the District. The District continually looks for opportunities to increase efficiency and minimize costs. These ongoing efforts were redoubled this year in the face of increased workload from new mandates and the current regional and national economic recession. Some of the efforts in this area are:

Automation:

INCENTIVE GRANTS PROGRAM –

Automation is improving efficiency and assuring continued accountability in our expanding emissions-reduction incentive grants programs. A new database program is being developed to track grant projects, and an electronic document management system will eliminate much of the paperwork.

TABLET COMPUTERS WITH ELECTRONIC INSPECTION FORMS FOR FIELD STAFF –

New electronic checklists are being developed for hand-held tablet computers to eliminate time-consuming inspection report paperwork. Once these systems are in place, compliance inspectors will prepare and submit routine inspection reports electronically from the field.

AIR MONITORING SYSTEMS — District air monitoring equipment and systems located throughout the Valley are being further automated for more remote operation, reducing travel time and the need for onsite service.

AIR QUALITY FORECASTING – The District has developed automated systems that improve forecasting consistency and accuracy. The process of creating bilingual telephone messages for forecasts has also been automated, eliminating extra work and associated overtime expense.

Field Staff Paperwork Reduction:

COMPLIANCE STAFF PAPERWORK – Forms used by District inspectors have been redesigned, and new procedures are reducing inspection-report paperwork. These checklists and procedures are being used as templates for the new electronic inspection forms.

Reducing Field Staff Travel Time with Increased Accountability:

GPS SYSTEMS IN FIELD STAFF VEHICLES

— At more than 23,000 square miles, an area larger than many states, the Valley Air District is the largest air district in California. Aside from routine inspections, District field staff must also respond to unforeseen events such as public complaints and equipment breakdowns. The District is installing Global Positioning Systems (GPS) in all field staff vehicles to provide supervisors with real-time data on vehicle location, enabling a safer and effective deployment of field staff.

Optimized Use of Existing Staff:

INCORPORATING AIR MONITORING FUNCTIONS INTO COMPLIANCE PROGRAM –

Air monitoring functions, which were previously carried out in the District Planning Department, have been merged into the District Compliance Department, resulting in significant efficiencies. Travel time has been reduced as inspectors assigned to work in areas near air monitoring stations assist with some of the air monitoring duties, and air monitoring technicians make field observations for inspectors.

Permit Streamlining:

CONTINUED WORK WITH STAKEHOLDERS TO STREAMLINE PERMITTING –

District staff continue to meet quarterly with industry stakeholders in an ongoing effort to identify opportunities for further gains in efficiency and productivity. Dozens of new procedures, application forms and evaluation templates have been developed to further streamline the permitting process for both applicants and District staff.

PERMIT EXEMPT EQUIPMENT REGISTRATION –

For several common types of equipment subject to new control requirements, the District is using a streamlined registration process rather than a more labor-intensive permitting process.

Expanded Online Resources and Services:

DISTRICT INTERNET AND INTRANET –

The District's internet site is being expanded to provide quicker and easier public access to District information and forms for those who prefer to communicate and obtain information over the internet. The District Intranet is used to provide important information and electronic tools directly to staff via a secure interface. •

Central Valley Air Quality Advocacy Groups Examine the District's Budget and Spending

In 2009, the Sierra Nevada Air Quality Group (an environmental consulting firm) was hired to review and assess the District's budget and spending. The review was funded by the William and Flora Hewlett Foundation to assist the central Valley's air quality advocates in their work to advance clean air. The basic study approach was to evaluate the District's budget (revenue and expenditures) on its own merits and in the context of benchmarks established by the study's authors. The District's performance was compared with South Coast AQMD, Bay Area AQMD, Sacramento AQMD, and Ventura County APCD. The report's findings are summarized below:

Benchmark	Other 4 Districts Average	Valley District	District Staff Observation
Cost of Control Salaries and benefits costs per ton of reductions from stationary sources	\$23,258	\$5,571	Valley Air District is 76% better than the average.
Inspections per Inspector	268	309	Valley Air District is 15% more productive than the average.
Management and Administrative Cost as a percentage of operating budget includes costs for management, accounting, IT services, personnel, payroll, clerical support	13.1%	10.4%	Valley Air District's "overhead" is 21% less than the average.
Public Outreach Per Capita Funding	\$0.75	\$0.50	Valley Air District spends \$.25 less per capita than the average.
Public Outreach Qualitative Assessment Score for General Outreach Max. possible score=5	4	4	Valley District's performance is in line with others despite lower per capita expenditure.
Public Outreach Qualitative Assessment Score for Website Max. possible score=5	3.9	4.5	Valley District's performance is better than average despite lower per capita expenditure.
Carl Moyer Grant Program Cost Effectiveness Dollars spent per ton of reductions	\$2,900	\$2,100	Valley Air District's program is 26% more cost effective than the average.

Federal Stimulus — District Efforts Help Valley Receive

The Air District has been actively involved in coordinating regional efforts and providing assistance to ensure the Valley receives its fair share of available funds.

LETTERS OF SUPPORT/GRANT WRITING ASSISTANCE/ REGIONAL COORDINATION

- Letters of Support
 - City of Fresno – Liquefier Project
 - Port of Stockton – Rail off-loading and ethanol pipeline
 - Electric Vehicles International – Battery pack manufacturing
 - Kings Canyon Unified School District
 - Coorga International Holdings Ltd
 - ARB DERA locomotive
 - City of Stockton diesel retrofits
- Established resource page and dedicated staff to provide ARRA-related assistance
- Worked as air quality lead in the Partnership for the San Joaquin Valley’s regional coordination effort
- Provided assistance and guidance to multiple project proponents bringing air quality beneficial projects into the Valley
- Provided grant-writing and other assistance to various parties
- Identified and partnered with various organizations interested in working jointly on projects with the Air District

LEAD APPLICANT

The District has taken the lead in preparing a number of regional and large-scale projects that benefit air quality in order to bring these much-needed funds into our region.

Grant
DERA (EPA)
DERA (EPA)
Transportation Electrification (DOE)
Clean Cities (DOE)
Clean Cities (DOE)
Clean Cities (DOE)
Clean Cities (DOE)
Recovery Act: Deployment of Combined Heat and Power (CHP) Systems, District Energy Systems, Waste Energy Recovery Systems, and Efficient Industrial Equipment (DOE)
Recovery Act: Deployment of Combined Heat and Power (CHP) Systems, District Energy Systems, Waste Energy Recovery Systems, and Efficient Industrial Equipment (DOE)
Total

Its Fair Share

Description of Project	Amount Requested	Total Cost of Projects	Status
School bus replacement and retrofit, ag irrigation pump repowers, heavy-duty truck replacement and retrofit, off-road equipment replacement and retrofit, locomotive repower	\$70 million	\$150 million	Awarded \$6 million (\$4 million school bus, \$2 million ag off-road).
On-road heavy duty truck SCR technology demonstration project	\$1.2 million	\$1.2 million	Awarded \$1.2 Million.
SJV Regional Transportation Electrification Program	\$2.7 million (ARRA) \$640,000 (CEC)	\$3.3 million	Received CEC pre-approval for \$640,000. Received decision — not awarded.
SJV Regional Proposal for Alternative Fuel Infrastructure and Vehicles	\$9.9 million (ARRA) \$17.9 million (CEC)	\$27.8 million	Received CEC pre-approval for \$17.9 million. Received decision — not awarded.
Southwest Transportation Liquefier with Fueling Station and Fueling Station Upgrade	\$8 million (ARRA) \$2.5 million (CEC)	\$12.6 million	Received CEC pre-approval for \$2.5 million. Received decision — not awarded.
Central Valley Regional Transportation Center	\$8 million ARRA \$8 million (CEC)	\$45 million	Received CEC pre-approval for \$8 million. Received decision — not awarded.
Clean Energy Alternative Fuel Infrastructure and Vehicles	\$9.9 million (ARRA)	\$19 million	Received decision — not awarded.
California Bioenergy Dairy Waste Energy Recovery Project (5 dairy sites)	\$22.9 million (ARRA)	\$42.8 million	Still pending decision from DOE.
Ingersoll Rand (Trane) Methane Capture Project (2 dairy sites)	\$ 17.4 million (ARRA)	\$ 36.9 million	Still pending decision from DOE.
	\$179 million	\$452 million	



IN

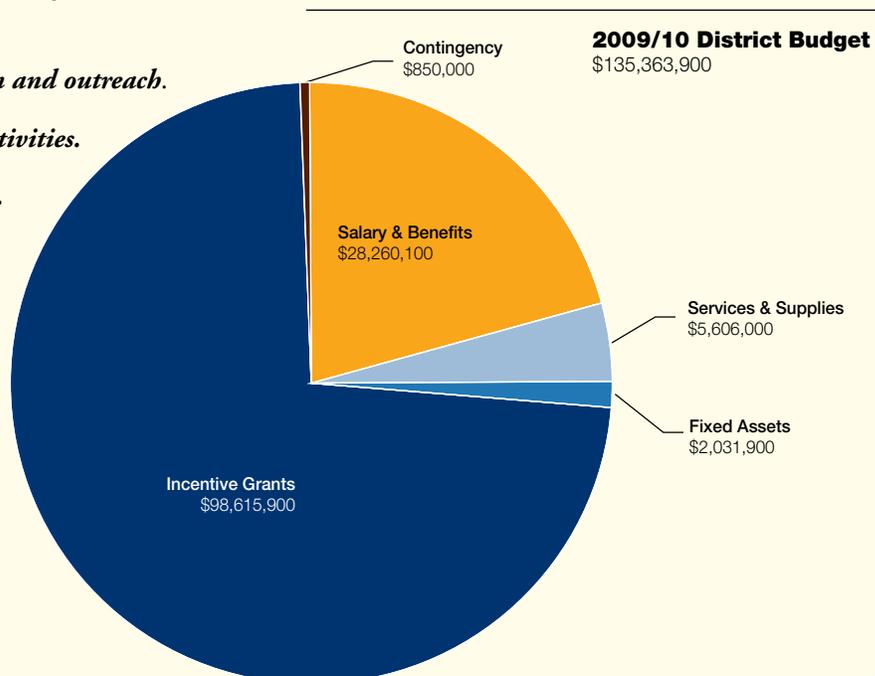
The Year in Review for District Programs

A key purpose of this report is to provide useful information to the public concerning District activities and operations. It is hoped that this information will help the public in holding the District accountable and aid our commitment to continuous improvement. The following sections provide summary information on activities by each department within the District.

The Air 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. Toward that end, the Air District:

- Develops and adopts *air quality plans* outlining strategies needed to reduce emissions.
- Develops, adopts and implements *rules and regulations* to reduce emissions.
- Administers an efficient and comprehensive *permitting* system for stationary sources and offers meaningful business assistance to the regulated community in meeting applicable regulations.
- Maintains an active and effective *enforcement* program.
- Organizes and promotes efforts to achieve early attainment through the *Fast Track Strategy*.
- Administers *voluntary incentive grants* offering financial assistance to reduce air pollution.
- Conducts comprehensive *public education and outreach*.
- Continues to set high standards in *legal activities*.
- Collaborates with *state and local agencies*.
- Maintains and updates an *inventory of emissions* from various Valley sources on an ongoing basis.
- Operates and maintains an extensive *air monitoring* network to measure actual concentration of various air pollutants throughout the Valley and track the progress. •

Nearly three-quarters of the District's budget goes back into the Valley for clean-air projects.





The District adopted a minor amendment to the *2007 Ozone Plan* on December 18, 2008 to adjust the control measure adoption schedule for new Rule 4566 (Organic Waste Operations). This allows more time for research and changes the adoption date from 2009 to 2010 while retaining 2012 as the emission reductions start date.

Air Quality Plans

The Air District has written several plans over the years that serve as road maps detailing new measures needed to achieve cleaner air for the Valley. The measures outlined in these plans constitute a legally binding commitment the Valley must adhere to in meeting the federal health-based standards for each pollutant. The District's air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control methods have worked, and to show how air pollution will be reduced. The plans also use computer modeling to estimate future levels of pollution and make sure the Valley will meet air quality goals on time. The plans then propose the strategy of control measures and other approaches that will be used to achieve attainment. Here are some notable plan milestones for 2008–09.

The District adopted a revised Reasonably Available Control Technology State Implementation Plan (RACT SIP) for 8-hour ozone on April 16, 2009. This revised RACT SIP includes a more in-depth analysis of District control measures than did the August 2006 RACT SIP.

EPA approved the District's *2007 PM10 Maintenance Plan and Request for Redesignation* on November 12, 2008 (73 FR 66759-66775). **This action formally redesignated the Valley to attainment for PM10.**

EPA proposed to approve the District's 1-hr Ozone Plan on October 16, 2008, repropose approval on July 14, 2009.

Although the District did not adopt any major attainment plans over the 2008–09 fiscal year, District staff laid the groundwork for upcoming plans through work on the emissions inventory and control profiles for adopted control measures. Upcoming plans include a PM2.5 SIP for EPA's 2006 PM2.5 standard, as well as mid-course reviews of existing plans. •

Rules and Regulations

Increasingly, the District has taken a leadership role in developing and implementing groundbreaking air strategies. Tough and innovative rules like the District's rules for Indirect Source Review (ISR), Confined Animal Feeding Operations, residential fireplaces, wine production and storage and Conservation Management Practices (CMP) have set the benchmark for the state.

PERCHLOROETHYLENE FROM DRY CLEANING OPERATIONS (RULE 7070): Amended on May 15, 2008, this measure follows the ARB statewide control measure and phases out the use of hazardous and carcinogenic perchloroethylene.

WOOD-BURNING FIREPLACES AND WOOD-BURNING HEATERS (RULE 4901): Amended on October 16, 2008, nearly one year ahead of schedule, this rule reduces the wood-burning curtailment threshold from 65 $\mu\text{g}/\text{m}^3$ to 30 $\mu\text{g}/\text{m}^3$ of PM2.5. The amended rule surpassed reduction commitments by achieving an average annual PM2.5 emission reduction of 1.1 tons per day (tpd), and an annual average NOx reduction of 0.1 tons per day in 2014. A Valley-wide No Burn Day would prevent 16.9 tons of PM2.5 emissions. The rule made a significant improvement in Valley air quality in its first year of implementation.

GLASS MELTING FURNACES (RULE 4354): Amended on October 16, 2008, this rule controls emissions from industrial glass manufacturing plants that make flat glass (windows and automotive windshields), container glass (bottles and jars) and fiberglass (insulation). The amendments will achieve 4.1 tons per day of NOx reductions, 1.4 tons per day of SOx reductions, and 0.1 tons per day of PM reductions in 2014.

BOILERS, STEAM GENERATORS AND PROCESS HEATERS – PHASE 3 (RULE 4306), BOILERS, STEAM GENERATORS AND PROCESS HEATERS 2.0 MMBTU/HR TO 5.0 MMBTU/HR (RULE 4307) AND ADVANCED EMISSION REDUCTION OPTIONS FOR BOILERS, STEAM GENERATORS AND PROCESS HEATERS GREATER THAN 5.0 MMBTU/HR (RULE 4320): Amended on October 16, 2008, these rules are the most stringent in the country for controlling emissions from fuel combustion-producing heat and energy for manufacturing and processing purposes. While offering affected businesses cost-effective compliance options, these rules generate 1.6 tons per day of NOx reductions and 1.9 tons per day of SOx reductions, and 0.2 tons per day of PM2.5 reductions in 2014.

SURFACE COATING OF METAL PARTS AND PRODUCTS (RULE 4603) AND WOOD COATING OPERATIONS (RULE 4606): Amended on October 16, 2008, these amendments establish VOC content limits and work practice standards for large appliance parts and products, and metal furniture and flat wood-paneling product coating operations.

Commitments and Achievements January 2008 – June 2009

COMMITMENT

Control measures to achieve 3.6 tons per day of NOx reductions

Adopted control measures achieve 6.3 tons per day of NOx reductions (76% above target)

COMMITMENT

Control measures to achieve 0.05 tons per day of SOx reductions

Adopted control measures achieve 3.3 tons per day of SOx reductions (7 times higher than the target)

The District engages in an exhaustive rule development process to identify the most effective control technologies that are technologically and economically feasible. This open process provides multiple opportunities for meaningful input and participation by the public and businesses.

On December 18, 2008, the District amended the *2007 Ozone Plan* to extend the rule adoption date for new Rule 4566 (Organic Waste Operations) to allow more time for research. This formal extension aside, the District met every rule commitment from the *2007 Ozone Plan* and *2008 PM2.5 Plan*. The following is a brief summary of the rules adopted between January 2008 and July 2009.

GRAPHIC ARTS AND PAPER, FILM, FOIL AND FABRIC COATINGS

(RULE 4607), Amended on December 16, 2008, this rule reduces VOC limits in inks and coatings used in commercial printing, reducing 18 tons per year of VOC upon full implementation.

DEFINITIONS (RULE 1020):

Amended on January 15, 2009, this rule amendment addressed two compounds on EPA's list of chemicals determined to not to be VOC: methyl formate and tertiarybutyl acetate. Facility operators may now apply to modify their District permits (pending health risk assessments) to use these compounds in place of more reactive VOC.

RESIDENTIAL WATER HEATERS (RULE 4902):

Amended on March 19, 2009, this rule requires lower NOx emissions from new or replacement water heaters sold in the Valley. This will eliminate 75% of the current NOx emissions from these water heaters. This rule generate 0.5 tons per day of NOx reductions in 2014.

CONFINED ANIMAL FACILITIES

(RULE 4570): Set aside on May 21, 2009 and readopted on June 18, 2009, this rule requires dairies, feedlots and poultry houses to adopt VOC-reducing work practices. These two Board actions were in response to a court order resulting from a lawsuit brought by the Association of Irrigated Residents (AIR) against the District. AIR sued the District on nine issues shortly after the rule was adopted in 2006, and the trial court held in favor of the District on all counts. The appeals court upheld the trial court's position on all counts but one, which stated that the District had not sufficiently analyzed the public health benefits of the proposed rule. When the public health analysis was completed, the Governing Board re-adopted Rule 4570.

FLARES (RULE 4311):

Amended on June 18, 2009, this rule controls emissions from industrial flares used at facilities involved with oil and gas production, sewage treatment, waste incinerators and petroleum refining. The rule requires flare operators to submit flare minimization plans and perform monitoring and record keeping. The rule reduces a facility's SOx emissions by 66% from baseline.*

COMMITMENT

Control measures to achieve 0.9 tons per day of PM2.5 reductions

Adopted control measures achieve 1.4 tons per day of PM2.5 reductions (51% above target)

COMMITMENT

Control measures to achieve 0.1 tons per day of VOC reductions

Adopted control measures achieve 0.1 tons per day of VOC reductions (target met)

Permitting

The District has the responsibility for issuing or denying permits, registrations and plan approvals for more than 30,000 non-mobile sources of air contaminants, and for tracking and assessing impacts of these facilities' annual pollutant emissions.

AUTHORITIES TO CONSTRUCT AND PERMITS TO OPERATE: Air permits are required in the San Joaquin Valley for very small stationary sources of air pollution. In fact, most facilities that emit air contaminants, from gas stations and body shops to refineries and power plants, must obtain permits from the District before constructing or operating. The permitting process involves two steps.

1. The first step requires the applicant to apply for and receive an Authority to Construct (ATC) permit. This process can be fairly lengthy, but it provides an important opportunity for the project proponent, the District, and interested public to provide input and to assess a project's compliance with federal, state, and local air requirements prior to beginning construction. The requirements that must be met to obtain a permit in the Valley are among the strictest in the nation, requiring the best available air pollution control equipment and mitigation of emissions increases.

2. The second step, issuing the Permit to Operate, occurs after the applicant has properly installed the equipment allowed by the Authority to Construct.

FEDERALLY MANDATED OPERATING PERMITS

(TITLE V): The District has issued Title V permits to more than 200 facilities known as "major sources" of air pollution. Title V permits are required of major sources by federal law, and are designed to expand public and EPA participation in the permitting process for the largest emitters of air contaminants in the District.

CONSERVATION MANAGEMENT PRACTICES PLANS

The District is responsible for regulating and updating more than 6,000 Conservation Management Practices (CMP) plans designed to decrease air pollution emissions from agricultural operations.

2008/09 Statistics

- 5,830 Authority to Construct permits issued
- 523 new Permits to Operate issued
- 23 new Title V permits issued to two facilities
- 452 Title V permit modifications
- 662 Conservation Management Practices plans issued
- 475 Emission Reduction Credit certificates issued or transferred
- 919 toxic air contaminant risk management reviews performed
- 3,858 annual emissions inventory statements and surveys processed
- 1,848 California Environmental Quality Act review requests processed
- 1,023 CEQA comment letters and 85 CEQA documents prepared
- 166 Indirect Source Review applications processed

EMISSION REDUCTION BANKING: The purpose of the District's Emission Reduction Credit (ERC) bank is to allow facilities that make voluntary reductions in emissions to store ERCs for later use as mitigation, or "offsets," of emissions increases. Facilities proposing increases in emissions may have to "offset" their emission increases by purchasing ERCs.

AIR TOXICS PROGRAM: The District performs a number of tasks aimed at reducing the quantity and associated risks of hazardous (or toxic) air contaminants. The District implements state and federal air toxic control regulations, maintains an inventory of toxic emissions from Valley sources, and assures that those emissions, and any proposed increase in those emissions, do not cause a significant risk to the residents of the San Joaquin Valley.

EMISSIONS INVENTORY: Each year, the District gathers emissions and process data from facilities and other information sources, calculates each facility's annual emissions, and reports the emissions to the California Air Resources Board.

This inventory then acts as a cornerstone of our efforts to identify sources of air pollution that can be further controlled.

CALIFORNIA ENVIRONMENTAL

QUALITY ACT (CEQA): The District's CEQA group analyzes District actions and project developers' proposals for compliance with CEQA. This is a state law that requires projects' environmental impacts be analyzed and publicly disclosed, and that any significant impacts be mitigated to the extent feasible.

INDIRECT SOURCE REVIEW (ISR): Indirect sources of air pollution are those that cause air emissions or attract sources of air emissions, rather than directly emitting pollution. For instance, new residential housing developments and shopping centers attract many cars, which emit air contaminants. Our ISR group analyzes applications that assess the potential emissions created by a development project, quantifies mitigations 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 in late spring or early summer of each year.

CLIMATE CHANGE ACTIVITIES: The District's Governing Board adopted a *Climate Change Action Plan* on August 21, 2008, directing staff to take steps to assist Valley stakeholders in addressing new and growing concerns and requirements regarding greenhouse gases and their potential effect on global climate change. More detail on the Climate Change Action Plan can be found in the *In Focus* section of this report.

SMALL BUSINESS ASSISTANCE: The District operates an effective Small Business Assistance (SBA) program to provide assistance to businesses that lack the resources or expertise needed to efficiently obtain air permits. District SBA engineers provide expert advice on technology options, application processes, and any other air quality issues. Interested parties can contact the District SBA through hotline telephone numbers in any region of the Valley (559-230-5888 in the Fresno area, 661-392-5665 in the Bakersfield area, and 209-557-6446 in the Modesto area).•



2008/09 Statistics:

- 36,899 permit units inspected
- 2,801 public complaints investigated
- 2,827 open burn sites inspected
- 4,018 incentive funding units (trucks, engines) inspected
- 1,103 asbestos projects reviewed and inspected



Field staff conducts detailed inspections of permitted sources to make sure air pollution is below acceptable levels.



Enforcement

The District inspects sources of air pollution, including all sources permitted by the District. When sources are found in violation, citations and monetary fines are levied.

INSPECTIONS: Field staff conducts many types of activities each year, including detailed inspections of existing and new sources; incentive project inspections; open-burning inspections; and responding to all public complaints. The District trains staff to thoroughly inspect complex sources to make sure air pollution is below acceptable levels. Field staff inspects many facilities, including petroleum refineries, oil production, gas stations, dry cleaners, power plants, manufacturing plants, concrete batch plants, chemical plants, dairies, farms, and asphalt plants. In 2008–09, District staff inspected truck stops to verify drivers complied with state idling requirements and also conducted many inspections of newly regulated facilities.

AIR MONITORING: The District's air monitoring program was recently placed in the Compliance Department. This re-organization of District programs allows field inspectors to assist with monitoring duties and frees up air monitoring staff to respond to complex repairs and upgrades more promptly. The District will be increasing its use of automated monitoring equipment to allow for remote repairs, which will allow for prompt diagnosis/maintenance and increased efficiency. Air Quality Technicians have repaired inspector analyzers and shared equipment, which has decreased analyzer downtime, reduced repair costs, and increased overall efficiency. The District has added new stations to its network due to federal requirements or to improve modeling and forecasting analysis. New stations have been or will be constructed in Tranquillity, Lebec, Porterville, Madera, and Manteca.

TECHNOLOGY: To conduct effective inspections, inspectors utilize specialized equipment to measure air pollution that would be otherwise invisible. The District is a certified tester for smoke stack emissions. Other devices measure for gas leaks, stack emissions, and toxic compounds in wood scheduled to be burned. Field staff is certified to read concentrations of visible emissions like dust and soot. The District is looking into using tablet PCs in the field to streamline report writing, allowing staff increased time to complete more inspections.

STAFF TRAINING: The District has an effective training program to ensure staff is adequately trained to conduct thorough inspections. New and existing staff attends several ARB classes

that cover a wide range of topics, including how to read smoke, enforcement techniques, and industry-specific courses. In addition, there are monthly in-house training sessions where staff is instructed on upcoming new/modified rules, new forms, and inspection techniques.

COMPLIANCE ASSISTANCE TRAINING: The District's Compliance Assistance Training educates regulated sources and individuals to prevent non-compliance. The District provides compliance assistance through classes, bulletins and one-on-one meetings.

LEGAL ACTION: When there is a violation, tickets are issued and submitted to specialists to review and, if deemed appropriate, assess a monetary fine. When cases can't be settled by specialists, they are referred to District Counsel. In fiscal year 2008–09, these specialists:

- Issued 3,274 tickets
- Transferred 187 cases to legal counsel
- Collected approximately \$3,800,000 in settlements

HEARING BOARD: On rare occasions, a source may emit air pollution in excess of the law for a limited time. If strict conditions are met, an independent hearing board (non-District employees) can grant temporary relief from rules. The excess emissions associated with these situations are a very small fraction of the Valley's total emission inventory. In fiscal year 2008–09, 147 variance petitions were heard at 67 hearings. Compliance staff coordinated these hearings, including handling public noticing, providing hearing board members with petitions/support information, and giving testimony. •

Fast Track Progress Report

Since June 2007, the District Fast Track Strategy's non-regulatory approach has been complementing regulations to accelerate ozone attainment. Fast Track has three principal components:

1. Acquiring additional incentive funding
2. Ensuring that ARB and EPA adopt effective and expedited regulations
3. Developing Fast Track emission-reduction measures, including Healthy Air Living, Green Fleets, Truck Replacement/Retrofit/Repower, Short Sea Shipping, High Speed Rail, Green Contracting, Alternative Energy, Energy Efficiency & Conservation, Heat Island Mitigation, Episodic/Regional Controls, & Inland Ports



The District's Fast Track Task Force meets several times a year to develop and implement emission-reduction measures. Members represent a broad spectrum of business, agricultural, governmental and environmental organizations.

Acquiring Additional Incentive Funding

PROPOSITION 1B: The Proposition 1B Goods Movement Emission Reduction Plan partnership between the ARB and local agencies reduces air pollution emissions and health risks from freight movement. The proposition will distribute \$1 billion to California's four primary highway trade corridors over a four-year timeframe. In February 2008, the ARB Board allocated \$250 million to the Central Valley corridor, which includes Sacramento. District staff and Task Force members have worked to ensure that those funds are properly allocated and utilized. More information on Proposition 1B can be found at www.arb.ca.gov/gmbond.

COMMUNITY CLEAN AIR FUND: On March 20, 2008, the District Governing Board approved the creation of the Community Clean Air Fund to allow for the receipt and expenditure of voluntary donations to fund projects that improve the Valley's air quality. The District partnered with the Fresno Regional Foundation, a non-profit tax exempt entity, to accept donations to the Fund.

LEGISLATIVE ADVOCACY FOR INCREASED INCENTIVE

FUNDING: During 2008–09, the District worked with state and federal legislators and agency staff to secure incentive funding from a variety of sources. The District will continue to investigate other possible ways to generate funds, such as supporting or sponsoring legislation that would provide funding to mitigate emissions associated with trucks passing through the Valley.



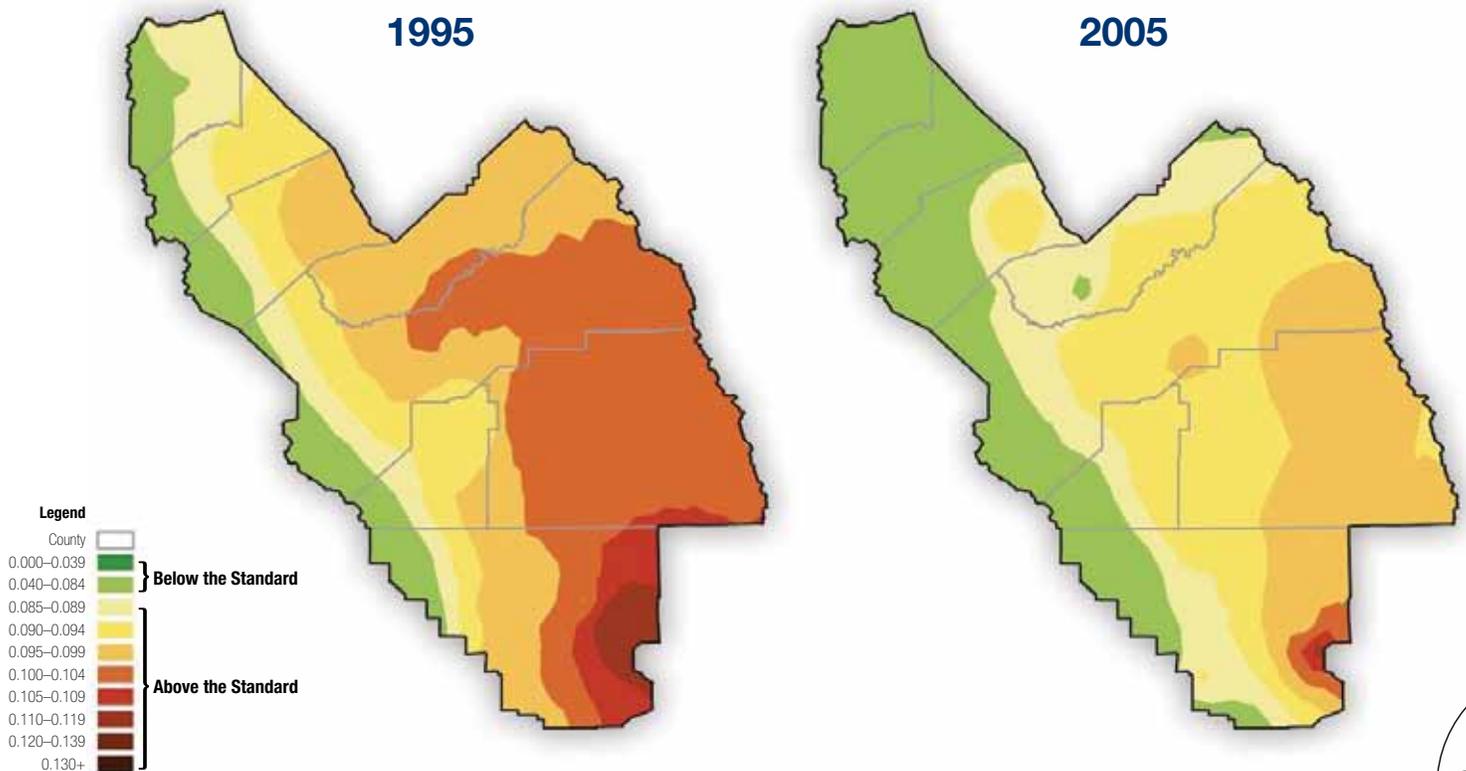
Enhancing Effective and Expedited Regulations by ARB and EPA

ARB IN-USE HEAVY-DUTY DIESEL TRUCK REGULATION: District staff and Fast Track Task Force members worked with ARB to ensure that this regulation was developed responsibly. On December 12, 2008, ARB approved a new regulation to require affected trucks and buses to meet performance requirements between 2011 and 2023. By January 1, 2023, all subject vehicles must have a 2010 model year engine or equivalent. More information on ARB's heavy-duty truck rule can be found at www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

GREENHOUSE GAS EMISSIONS STANDARDS FOR VEHICLES: ARB has been working to establish and enforce greenhouse gas emissions standards for new motor vehicles. These measures will also reduce ozone and particulate matter precursors. The District provided written and verbal comments supporting the ARB's efforts and, on November 11, 2007, filed a lawsuit against the federal government to allow California to enforce stricter tailpipe emission standards. In June 2009, EPA granted California a waiver request to enforce its greenhouse gas emission standards, beginning with the current model year.

ASSEMBLY BILL 32 – THE GLOBAL WARMING SOLUTIONS ACT OF 2006: California's AB32 set 2020 greenhouse gas emission goals into law. In December 2008, ARB approved the scoping plan, which outlines how emission reductions will be achieved from major greenhouse gas sources. In 2009-10, ARB staff will begin drafting regulations, holding public workshops, and implementing early action measures. District staff and Task Force members will continue to work with ARB to represent Valley interests in the development of AB32.

8-hour Ozone Air Quality Trends San Joaquin Valley National 8-Hr Ozone Design Values



Fast Track Emission-Reduction Measures

SHORT SEA SHIPPING: Despite technological advancements, trucking-related goods movement emissions are the largest source of emissions in the Valley. The Secretary of Agriculture estimates that approximately 294,000 containers of agricultural goods are exported from the San Joaquin Valley through the Port of Oakland. Through the Fast Track process, the District has taken a leadership role (partnering with the Bay Area Air Quality Management District and the Ports of Stockton and Oakland) in pursuing a “marine highway” system to reduce truck travel between the Valley and the Port of Oakland.

Each container shipped currently requires two round trips to the Port of Oakland. The first trip is to pick up an empty container from the Port of Oakland, and the second is to drop off a full container for shipping. The proposed Marine Highway project would provide the opportunity to pick up and drop off containers at the Port of Stockton, eliminating the need to travel the full distance to the Port of Oakland. The containers would then be shipped via barge to the Port of Oakland for export. Each barge is capable of carrying the equivalent of 350 truckloads of material. This system is more efficient and will reduce truck travel and the resulting emissions. The ports are currently applying for federal stimulus funding for the necessary dockside improvements.

TRUCK REPLACEMENT/RETROFIT/REPOWER: District staff and Task Force members are working to use Proposition 1B funds to establish the most effective program to reduce emissions from heavy-duty diesel trucks driven in the Valley.

The District is currently processing Year 1 grants for truck replacements, repowers and retrofits funded by the state’s Proposition 1B Goods Movement Emission Reduction Program. Following the close of the Year 1 solicitation period (7/5/08-9/5/08), the District received Year 1 applications for more than 2,800 trucks from more than 600 different applicants. The District ranked qualifying applications based on the anticipated emission reductions that would be achieved by truck replacement. Staff are currently processing the roughly 790 applications that will be funded in this year’s program allocation of nearly \$40 million, about half of which will be disbursed to the District in fall of 2009. The Year 1 projects are following an early grant of which more than \$3.7 million of contracts have been executed, replacing or retrofitting 79 heavy-duty diesel trucks.

HIGH SPEED RAIL: In November 2008, Californians approved Proposition 1A, the *Safe, Reliable, High-Speed Train Bond Act*, to provide \$9.95 billion in bonds (with federal and private matching funds required) to establish a high-speed train service. The project has the potential to dramatically reduce passenger car trips through the Valley, reducing emissions and improving air quality. The planned 700-mile-long route will link Southern California, the Central Valley and the San Francisco Bay Area.

The California High Speed Rail Authority and partners are currently holding public meetings and workshops as they develop Environmental Impact Reports for each major section of the proposed railway. Their annual report can be found at www.cahighspeedrail.ca.gov/news/CHSRAProgramSummaryReportJuly2009.pdf

UPCOMING FAST TRACK MEASURES: Fast Track Measures planned for 2009-10 include:

Energy Efficiency: Encourage government agencies, businesses and residents to employ energy-efficiency measures to reduce energy consumption in the San Joaquin Valley. Efforts will include outreach and education programs, as well as providing tools for residents, businesses and local governments.

Alternative Energy: Utilize lower-emitting sources of energy such as electric, solar and hydrogen fuel cells to slow the growth of NO_x emissions in the Valley.

Green Fleets/Green Contracting: Encourage or require government agencies and private businesses to adopt an overall green-purchasing policy. A green-purchasing policy can include upgrades to existing fleets and giving preference to contractors/vendors who use low-emission processes and equipment.

Heat Island Mitigation: Adopt methods and practices to reduce surface temperatures in urban centers, reducing electricity demand. Approaches like urban landscaping and highly-reflective roofing carry added benefits, including cost savings, reduction of greenhouse gases and aesthetic improvements.*

Voluntary Incentive Grants

Incentive programs generate emission reductions that contribute to improved air quality. The District has limited authority to regulate mobile sources, yet mobile sources generate 80% of the Valley's NOx inventory. Regulations alone will not bring the Valley into attainment of the federal air-quality standards. Voluntary incentive programs play a significant role in reducing the attainment gap and accelerating the Valley's path to attainment.

The District's Emission Reduction Incentive Program (ERIP) currently funds the following types of projects:

Diesel agriculture irrigation pump replacement	Emerging technology demonstration projects
Electric forklift purchases	Bicycle path construction
On-road and off-road vehicle engine replacement, engine retrofit and vehicle replacement	Wood-stove replacements
School bus replacement and retrofit installations	Gross-polluting vehicle car crushing and replacement program
New clean vehicle purchases	Transit pass subsidies
Locomotive replacements	E-mobility equipment
Vanpools	

THE SUCCESS OF THE DISTRICT'S INCENTIVES: Since inception, the District has awarded more than \$212 million in incentives, resulting in more than 68,500 tons of lifetime emission reductions. During the 2008–09 fiscal year, the District executed more than 650 agreements for more than \$35.1 million. These projects are expected to reduce more than 8,700 tons of lifetime emissions.

The District's Emission Reduction Incentive Program has become a model for grant programs throughout the state. In recent state audits (including the Bureau of State Audits, ARB Carl Moyer Program, and State Department of Finance), the District was noted for its efficient, robust and effective use of incentive grant funds in reducing air pollution. Because of this recognition, the District has been approached by several other California air districts to either assist with incentive fund administration or accept their unused funds as an alternative to returning funds to the state. Most recently, the District has successfully partnered with the Great Basin, Kern County, Antelope Valley, Mojave Desert, Mariposa County, and Calaveras County air districts.

FEDERAL STIMULUS FUNDING: The Air District has been actively involved in regional efforts to ensure that the Valley receives its fair share of available funding. See the *Federal Stimulus Funding – District Efforts to Help Valley Receive its Fair Share* section of this report for details on the activity.

FUNDING DELAYS DUE TO STATE BUDGET CRISIS: The District embarked on an aggressive outreach campaign in the summer of 2008 to generate participation from heavy-duty truck projects to be funded by the Proposition 1B Goods Movement Emission Reduction Program. During the two-month solicitation period, applications were received for 2,800 trucks, representing \$135 million in requested grants, compared to the \$45 million allocated for these projects in the first year. The District also saw significant interest for school bus replacement and retrofit projects to be funded through the Proposition 1B Lower Emission School Bus program. Due to the state budget crisis, in December 2008, the District was notified to suspend all activities related to two of the largest state-funded grants it currently administers: the Proposition 1B Goods Movement Emission Reduction Program and the

EXISTING FUNDING SOURCES:

During the 2008–09 fiscal year, the District's incentive projects were funded through a variety of local, state and federal sources, including:

- Department of Motor Vehicle (DMV) Surcharge Fees
- State Carl Moyer Memorial Air Quality Standards Attainment Program Funds
- State Proposition 1B Goods Movement Emission Reduction Program Bond Funds
- State Lower Emission School Bus Program Funds (Proposition 1B)
- Voluntary Emission Reduction Agreement Funds
- San Joaquin Valley Emergency Clean Air Attainment Program Funds
- Federal Diesel Earmark Funds
- Federal Diesel Emission Reduction Act (DERA) Funds

Lower Emission School Bus Program. In total, more than \$80 million of the Valley's approved funding was suspended. Throughout this period, the District has worked diligently with the state to resume progress on these important programs. In June 2009, the state began the process of proceeding with these programs.

DEALING WITH ECONOMIC DIFFICULTIES FACED BY POTENTIAL GRANT RECIPIENTS: Another consequence of current economic conditions is that some incentives projects funded by the District are not meeting the usage requirements outlined in grant agreements. Contracted usage, verified through annual reports, is one way that the District validates expected emission reductions on a project-by-project basis, and low equipment usage generally necessitates District enforcement actions. However, as the economy has slowed, operators of several types of heavy-duty equipment have not been able to meet the anticipated and agreed-upon usage levels, and in some cases, funded equipment is not being used at all. In response to these severe economic conditions, the District Governing Board approved the Economic Assistance Initiative, giving grant recipients who have been adversely affected by the weakening economy the opportunity for temporary relief from some contract requirements, provided that the overall integrity and effectiveness of the program remains.

FUTURE FUNDING: It will take an estimated \$3 billion (approximately \$200 million per year) in incentive funds to bring the San Joaquin Valley into attainment of the federal 8-hour ozone standard. Currently, the District receives approximately \$40 million per year of funding for grants from DMV surcharge fees and the Carl Moyer Program. However, unless reauthorized by the California Legislature, the DMV fees authorized under AB 923 will cease in January 1, 2015. The District also uses ISR/VERA (Indirect Source Review and Voluntary Emission Reductions Agreements) fees for grants, but these funds are based on development activity in the Valley. Since the construction industry and development fluctuate, these resulting fees also fluctuate. Considering that several of the funding sources sunset in 2015 and the remaining funding sources do not provide sustained funding amounts, the District has begun to aggressively pursue additional funding sources.

In addition to federal stimulus funds, the District is currently seeking state funding under AB 118, both through ARB and the California Energy Commission (CEC). To date, the District has applied for more than \$28 million from the CEC. Additionally, AB 2522 granted the District authority to increase DMV surcharge fees up to an additional \$24 per vehicle to fund voluntary incentive grant programs. District staff is assessing potential strategies to implement these surcharge fees.

REVAMPING THE POLLUTING AUTOMOBILE SCRAP AND SALVAGE PROGRAM: The District's Polluting Automobile Scrap and Salvage (PASS) Program is a first-of-its-kind vehicle-scraping program that has served as a model for other programs in the state. The program provides incentives to crush or replace the worst-polluting vehicles in the Valley. Participants receive either \$1,000 cash for their vehicles to be crushed or \$5,000 toward the purchase of a clean replacement vehicle.

To implement the program, the District used custom software to generate profiles for invitation to the grant program; track virtual vouchers for smog inspections and vehicle replacements; and a secure real-time interface with Pick Your Part Auto, the contractor selected to operate the program through a competitive Request for Proposal process.

The initial participation level in the program was lower than expected. The District revamped the program based on the lessons learned. For example, the District has established a recognizable program brand, addressed the economic limitations of low-income participants, and expanded the current program to include a greater number of potential participants. The revamped PASS Program was launched in July 2009 and has seen a high response from San Joaquin Valley residents interested in replacing older, high-polluting vehicles with cleaner vehicles. •



Public Education and Outreach

The District's Healthy Air Living outreach program was launched in early 2008 to encourage individuals and businesses to make air quality a priority in everyday decisions. Based on the success of the program, the District has expanded Healthy Air Living to encompass more programs. Many of the District's existing programs, including the Healthy Air Living Kids' Calendar and the Clean Green Yard Machines lawn mower trade-in program, have been rebranded to reflect Healthy Air Living. New programs, such as the Clean Air Pledge Contest, were introduced to enthusiastic audiences Valley-wide. Now, many of the District's 2008–09 outreach campaigns described below complement and reflect Healthy Air Living. The District has rapidly moved closer to its long-term objective of pairing Healthy Air Living with the District itself and with a year-round attitudinal change in Valley residents.

CHECK BEFORE YOU BURN (NOVEMBER THROUGH FEBRUARY):

The Outreach and Communications department launched a multimedia, multilingual public outreach campaign including broadcast, print, and billboard communications, and conducted aggressive media outreach, including one-on-one visits to major media outlets. Outreach and Communications also provided guidance to other District departments that deal directly with the public. A well-defined Healthy Air Living messaging strategy built additional success for the “Check Before You Burn” program. The three primary messages for the new campaign were:

- Changes to Rule 4901: Wood-Burning Fireplaces and Wood-Burning Heaters.
- Air quality and health impacts from wood burning.
- Identification and promotion of cleaner wood burning options, such as the use of EPA-certified wood burning devices, pellet stoves, processed logs and seasoned firewood.
- These messages were supported by the “one change” Healthy Air Living concept.

Additionally, the District partnered with Duraflame to both leverage outreach advertising dollars and to educate the public on how to reduce emissions (Burn Cleanly) on days when burning was allowed.



HEALTHY AIR LIVING KIDS' CALENDAR CONTEST (FALL 2008):

This annual contest for children from kindergarten through high school again drew scores of entries from throughout the air basin. The calendar has become completely bilingual, and the published entries reflect the diversity of the Valley's population. The 20,000 copies were distributed throughout the Valley, free of charge.

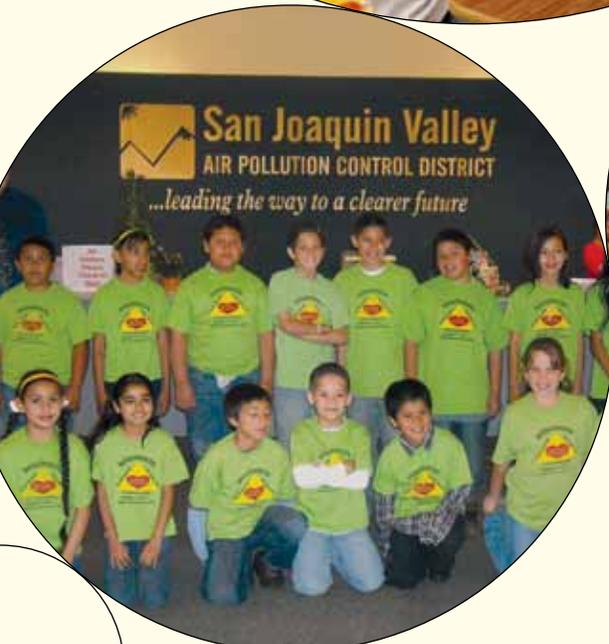
Excited students celebrate their *Kids for Clean Air* contest win. Each winning student received an iPod shuffle, and a \$250 resource grant went to their teacher.

KIDS FOR CLEAN AIR CONTEST (WINTER 2008–09): This new program was greeted with resounding enthusiasm from Valley schools. The District used existing partnerships and developed new school partnerships in order to educate administrators, principals, teachers and students about this exciting program and wood burning in general. Targeted to fourth- and fifth-grade classrooms, this contest encouraged students to ask their friends and families to sign personal pledge cards, indicating one or several changes they were willing to make for clean air, such as carpooling or walking to school, avoiding drive-through restaurants, or saving energy at home. District staff sent out 1,100 school-focused Healthy Air Living school tool kits and held 41 meetings with education stakeholders throughout the Valley. The winning classrooms were those with the highest level of student participation (determined by percentage) in obtaining pledges. Winning classrooms received an iPod shuffle for each student and a \$250 resource grant for their teachers. Sixty-three classrooms participated, and 27 winning classrooms were chosen. In total, 1,776 participating students generated 7,455 pledge cards.

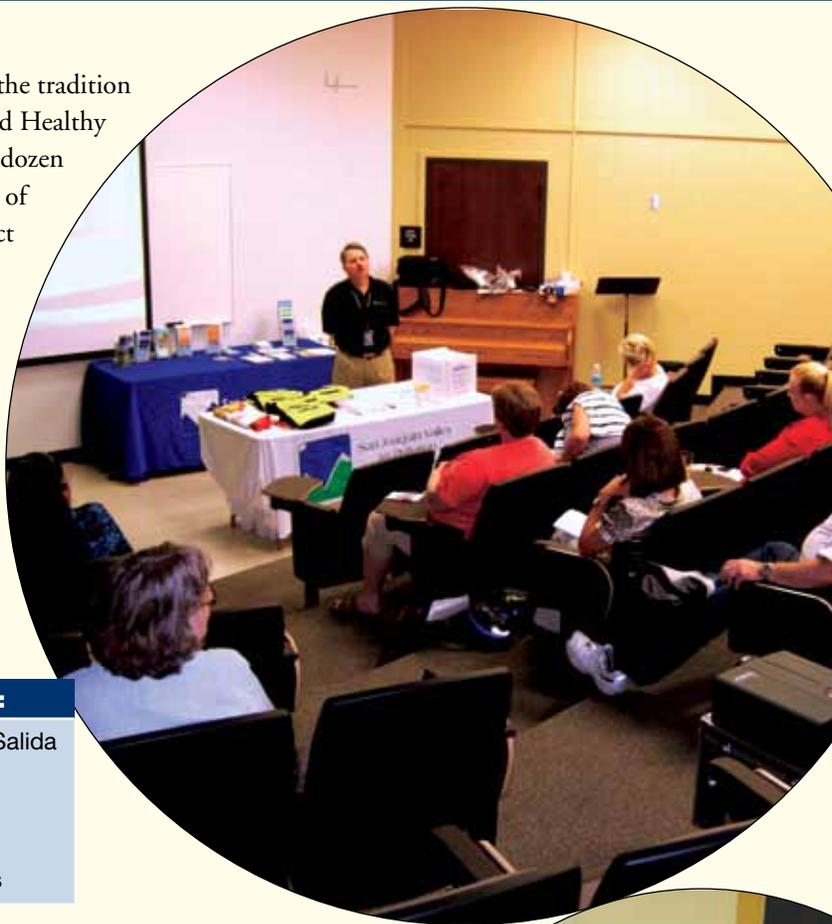


CLEAN GREEN YARD MACHINES

(APRIL, ONGOING): The District's most popular public incentive program, Clean Green Yard Machines lawn mower trade-in, kicked off on Earth Day once again to much public enthusiasm. The program traditionally runs for a specified period of a couple of months. However, because of this year's serious economic recession, the program's duration was extended to give residents maximum opportunity to participate. The District's partner, Vermont-based Neuton Lawn Mower Co., reported similar economic repercussions in other air districts that conduct similar programs. The District has long-term plans to expand this valuable program into a year-round incentive.



HEALTHY AIR LIVING CHATS (MAY-AUGUST 2009): Following in the tradition of the successful Town Hall meetings in 2006, the District convened Healthy Air Living Chats, informal community meetings in more than two dozen locations throughout the Valley over the summer of 2009. The aim of the Chats was to provide a casual, community forum for Air District staff to give a short presentation and elicit questions and comments from community members. These were family-friendly, free events, and light refreshments were provided. As an additional incentive for attending events, the District held a drawing at each location, through which one attendee per meeting won an electric lawn mower, a bike, or a “commuter pack” of an iPod shuffle and other items. Fifteen Chats were held in the eight-county basin at times conducive to community attendance (usually 6-8 p.m.) and in community gathering places such as schools and libraries. Several of the Chats were also bilingual (Spanish), and translators were present at all events.



Healthy Air Living Chats were held in the following cities:

MAY 28	Tracy	JUNE 23	Bakersfield	JULY 21	Modesto/Salida
JUNE 2	Delano	JUNE 25	Merced	JULY 23	Hanford
JUNE 9	Visalia	JUNE 30	Parlier	JULY 28	Arvin
JUNE 11	Fresno	JULY 9	Madera	AUGUST 4	Stockton
JUNE 16	Ceres	JULY 14	Porterville	AUGUST 6	Los Banos

HEALTHY AIR LIVING BUSINESS SUMMITS (JUNE-JULY 2009): The District invited Valley businesses to a series of one-day education and feedback events this summer in each region. The Healthy Air Living Business Summits attracted more than 200 of the most proactive, influential Valley organizations in all three regions. At these summits, businesses received pertinent information about incorporating Healthy Air Living principles into their operations to reduce emissions and, in many cases, to more efficiently use energy and resources. These businesses are eager to become partners with the District on an ongoing basis (see the section on Healthy Air Living Business Partners elsewhere in this report).



Community outreach included Healthy Air Living Chats held throughout the Valley.

The Central Valley Chevy Dealers Association donated a new Malibu hybrid as the grand prize in a drawing. The vehicle was an attractive incentive for residents who pledged to make one change for cleaner air.



**HEALTHY AIR
LIVING HYBRID
GIVEAWAY**

(AUGUST-OCTOBER 2009):

The District repeated its high-profile, high-participation hybrid giveaway with the new partnership of the Central Valley Chevy Dealers Association. The association donated a new Malibu hybrid as the grand prize in a random drawing that participants entered by submitting a Healthy Air Living personal pledge card. The vehicle, valued at more than \$20,000, was an attractive incentive for residents to pledge to make one change for cleaner air. The partnership also demonstrated the ability of the Air District to enlist the valuable support of the Valley's business community, long a staunch District ally in its mission of cleaner air.

ENVIRONMENTAL JUSTICE ADVISORY GROUP:

The District supplemented its long-standing commitment to environmental justice for all Valley residents by establishing the Environmental Justice Advisory Group (EJAG). EJAG exemplifies the gravity with which the District views air-quality issues as they affect all segments of the Valley's population. The District also expanded and refocused many of its incentive-based public programs to reflect the evolution of need within the air basin. •

**Outreach and
Communication Statistics**

May 2008-May 2009

490 Media calls

2,508 Public calls

46 News releases

129 Presentations/events

Legal Activities

The following highlights provide a summary of major legal cases handled by the District.

COURT REJECTS CHALLENGE TO THE DISTRICT'S INDIRECT SOURCE REVIEW RULE; MARCH 2008

(Building Industry Assn. v. San Joaquin Valley APCD, Fresno County Case No. 06 CECG 02100 DS13)

This case involved a challenge to Rule 9510 on 11 state law grounds, including, among others, that the rule imposed a tax; the District had no authority to adopt the rule; the rule was an unconstitutional “taking” of property; and that the rule violated equal-protection laws. The trial court rejected all 11 claims and upheld Rule 9510. The Court of Appeal affirmed the trial court’s decision.

EPA'S PM10 ATTAINMENT FINDING FOR THE VALLEY SUCCESSFULLY DEFENDED; MARCH 2009

(Latino Issues Forum, et al. v. EPA, et al., 9th Circuit Case Nos. 06-75831 and 08-71238)

Environmental groups challenged EPA’s finding that the Valley had attained the PM10 standard, claiming that several exceedances occurred during the relevant three-year measurement period. The Court agreed with EPA and the District that the exceedances were caused by high winds and should be excluded as “exceptional events.”

COURT UPHOLDS EPA'S APPROVAL OF DISTRICT RULE 4550; MARCH 2009

(Latino Issues Forum, et al. v. EPA, et al., 558 F.3d 936 (9th Cir. 2009))

Environmental groups challenged EPA’s approval of District Rule 4550, which regulates fugitive dust from agricultural operations. The groups claimed that the “menu approach” used in the rule, which allows farmers to choose dust-control measures from a menu of options, did not satisfy federal Clean Air Act requirements. The Court agreed with EPA and the District that the menu approach was consistent with the Act.

COURT DISMISSES CHALLENGE TO DISTRICT'S APPROVAL OF FRESNO COUNTY DAIRY; MARCH 2009

(Center for Biological Diversity v. San Joaquin Valley APCD, Fresno County Case No. 08 CECG 03614)

Environmental groups challenged an environmental impact report (“EIR”) the District had prepared under the California Environmental Quality Act (“CEQA”) for a Fresno County dairy. The District successfully argued that the case should be dismissed because the groups failed to comply with CEQA’s procedural requirements.

COURT UPHOLDS ALL SUBSTANTIVE ASPECTS OF DISTRICT RULE 4570; NOVEMBER 2008

(Association of Irrigated Residents v. San Joaquin Valley APCD (2008) 168 Cal.App.4th 535)

District Rule 4570, which regulates VOC emissions from large dairies and confined animal operations, was challenged by an environmental group on numerous substantive grounds and one procedural aspect. While the Court found that the District should have assessed the public health impacts of the rule prior to rule adoption, it upheld all of the substantive aspects of the rule and no changes were required.

FEDERAL COURT SAYS THE DISTRICT HAS AUTHORITY TO REGULATE DEVELOPMENT; SEPT. 2008

(National Assn. of Home Builders v. San Joaquin Valley APCD; Eastern District of California Case No. 1:07-CV-00820-LJO-DLB)

The National Association of Home Builders claimed that District Rule 9510, which regulates air pollution from new residential and commercial developments, is preempted by the federal Clean Air Act. The federal District Court disagreed and upheld the rule. •

Collaboration with State and Local Agencies

California Air Resources Board (ARB) — State Control Measures¹

Between July 2008 and June 2009, the ARB took significant action to reduce air pollution in California. These actions were driven by the need to dramatically reduce emissions that contribute to the ozone and fine particulate matter air-quality challenges in the Valley. These include emission controls on existing heavy-duty trucks operating in the Valley. Other actions lessen California's contribution to global climate change and reduce greenhouse gas emissions from sources operating in the Valley.

Measure	Link	Date
Spark-Ignition Marine Engine and Boat Regulations	www.arb.ca.gov/regact/2008/marine08/marine08.htm	July 24, 2008
Portable Outboard Marine Tanks and Components	www.arb.ca.gov/regact/2008/omt2008/omt2008.htm	Sept. 25, 2008
Greenhouse Gas Reporting and Project Protocols	www.arb.ca.gov/cc/protocols/protocols.htm	Sept. 25, 2008
Assembly Bill 118 incentive programs	www.arb.ca.gov/regact/2008/aqipfuels08/aqipfuels08.htm www.arb.ca.gov/regact/2009/aqip09/aqip09.htm	Various
Small Off-Road Engines	www.arb.ca.gov/regact/2008/sore2008/sore2008.htm	Nov. 21, 2008
Large Spark-Ignition Engines	www.arb.ca.gov/regact/2008/lsi2008/lsi2008.htm	Nov. 21, 2008
Assembly Bill 32 (AB 32) Scoping Plan to Reduce Greenhouse Gas Emissions in California	www.arb.ca.gov/cc/scopingplan/scopingplan.htm	Dec. 11, 2008
In-Use On-Road Diesel Vehicles	www.arb.ca.gov/regact/2008/truckbus08/truckbus08.htm www.arb.ca.gov/regact/2008/ghghdv08/ghghdv08.htm	Dec. 12, 2008
Regulation for small containers of Automotive Refrigerant	www.arb.ca.gov/regact/2009/hfc09/hfc09.htm	Jan. 22, 2009
Aftermarket Critical Emission Control Parts on Highway Motorcycles	www.arb.ca.gov/regact/2008/amhmc08/amhmc08.htm	Jan. 22, 2009
In-Use Off-Road Diesel Fueled Fleets	www.arb.ca.gov/regact/2009/ordiesl09/ordiesl09.htm	Jan. 22, 2009
California's Regional Haze Plan	www.arb.ca.gov/planning/reghaze/reghaze.htm	Jan. 22, 2009
Plug-In Hybrid Electric Vehicles	www.arb.ca.gov/regact/2008/phev09/phev09.htm	Jan. 23, 2009
Greenhouse Gas Emissions from California Semiconductor Operations	www.arb.ca.gov/regact/2009/semi2009/semi2009.htm	Feb. 26, 2009
Sulfur Hexafluoride Emissions from Non-Semiconductor and Non-Utility Applications	www.arb.ca.gov/regact/2009/nonsemi09/nonsemi09.htm	Feb. 26, 2009
Greenhouse Gas Emissions from Vehicles Operating with Under-Inflated Tires	www.arb.ca.gov/regact/2009/tirepres09/tirepres09.htm	Mar. 26, 2009
Regulation to Implement the Low Carbon Fuel Standard	www.arb.ca.gov/regact/2009/lcfs09/lcfs09.htm	Apr. 23, 2009
On-Board Diagnostic Systems	www.arb.ca.gov/regact/2009/hdobd09/hdobd09.htm	May 28, 2009
Municipal Solid Waste Landfills	www.arb.ca.gov/regact/2009/landfills09/landfills09.htm	Jun 25, 2009
Cool Car Standards for 2012 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium Duty Vehicles	www.arb.ca.gov/regact/2009/coolcars09/coolcars09.htm	Jun. 25, 2009

EPA GRANTS CALIFORNIA GHG WAIVER

Since 1967, federal regulations have given California the authority to adopt state emissions standards for new motor vehicles, provided EPA grants a California waiver request. In the Clean Air Act, California is the only state granted the ability to set stricter-than-federal standards for vehicles, and other states are given the option of using federal standards or California's stricter standards. In the past, several other states have opted to use California standards. ARB made its most recent waiver request in December 2005. While EPA initially denied this request, after reconsideration the EPA granted the waiver on June 30, 2009. This action enables California to enforce its GHG emissions standards for new motor vehicles, beginning with the 2009 model year. ARB estimates that the new regulations will reduce GHG emissions from California passenger vehicles by about 30% in 2016 while improving fuel efficiency and reducing motorists' costs. See also: www.epa.gov/otaq/climate/ca-waiver.htm and www.arb.ca.gov/cc/ccms/ccms.htm

¹ Information in this section was provided by staff of the Air Resources Board.

Local Agencies and Motor Vehicle Control Measures

APPROVED TRANSPORTATION CONTROL MEASURES:

Metropolitan Planning Organizations (MPOs) prepare Air Quality Conformity Determinations to ensure that local transportation plans, projects, and programs do not impede air quality progress. MPOs also prepare Timely Implementation Documentation (TID) to update, list, and track the current status of transportation control measures (TCM) identified in applicable SIPs. The TID tables from the 2009 Air Quality Conformity Determinations are available on the District's website: www.valleyair.org. These TID tables provide the most recent available update to prior transportation Reasonably Available Control Measures (RACM), October 2008 in most cases.



San Joaquin Valley BLUEPRINT

SAN JOAQUIN VALLEY REGIONAL BLUEPRINT PROJECT:

MPOs around the state are developing Blueprints to plan for California's anticipated population growth. These Blueprints are regional in scope and integrate land use, transportation, and resource planning. The planning process considers the "Three Es" of sustainable communities: **prosperous economy, quality environment, and social equity.**

In early 2006, the Valley's eight MPOs came together in an unprecedented effort to develop a coordinated vision: the San Joaquin Valley Regional Blueprint. Caltrans, the Valley Air District, and the Valley MPOs funded this three phase process.

PHASE 1: Values and Vision, gathered from community input

PHASE 2: Goals, Objectives and Performance Measures, based upon Values & Vision

PHASE 3: Evaluation of alternative "what if" growth scenarios in each county

On April 1, 2009, the San Joaquin Valley Regional Policy Council reviewed the Valley MPOs collaborative work on the Blueprint and took the following actions:

- Adopted a list of Smart Growth Principles as the basis of Blueprint planning in the Valley.
- Adopted Scenario B+ as the Preferred Blueprint Growth Scenario for the San Joaquin Valley to the year 2050. This preferred scenario will serve as guidance for the Valley's local jurisdictions with land use authority as they update their general plans.

The eight Valley MPOs are now working with their member agencies to integrate the Valley Blueprint principles into their general plans. For more information, see: www.valleyblueprint.org.

STATUS REPORT FOR THE CONGESTION MITIGATION AND AIR QUALITY (CMAQ) IMPROVEMENT PROGRAM:

In the 2007 Ozone Plan, the Valley MPOs committed to develop a standardized process for distributing 20% of CMAQ funds to projects that meet a minimum cost-effectiveness. This policy focuses on achieving cost-effective emission reductions while maintaining flexibility to meet local needs. All eight of the Valley MPOs adopted the CMAQ policy through Policy Board Resolutions in 2007. The policy is scheduled to be implemented in fiscal year 2011, since there are already regional commitments through fiscal year 2010 in the approved 2009 Federal Transportation Improvement Programs (FTIPs).

Adopted Smart Growth Principles

San Joaquin Valley Regional Blueprint

1. Create a range of housing opportunities & choices
2. Create walkable neighborhoods
3. Encourage community & stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair & cost effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty & critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen & direct development towards existing communities
10. Take advantage of compact building design
11. Enhance the economic vitality of the region
12. Support actions that encourage environmental resource management

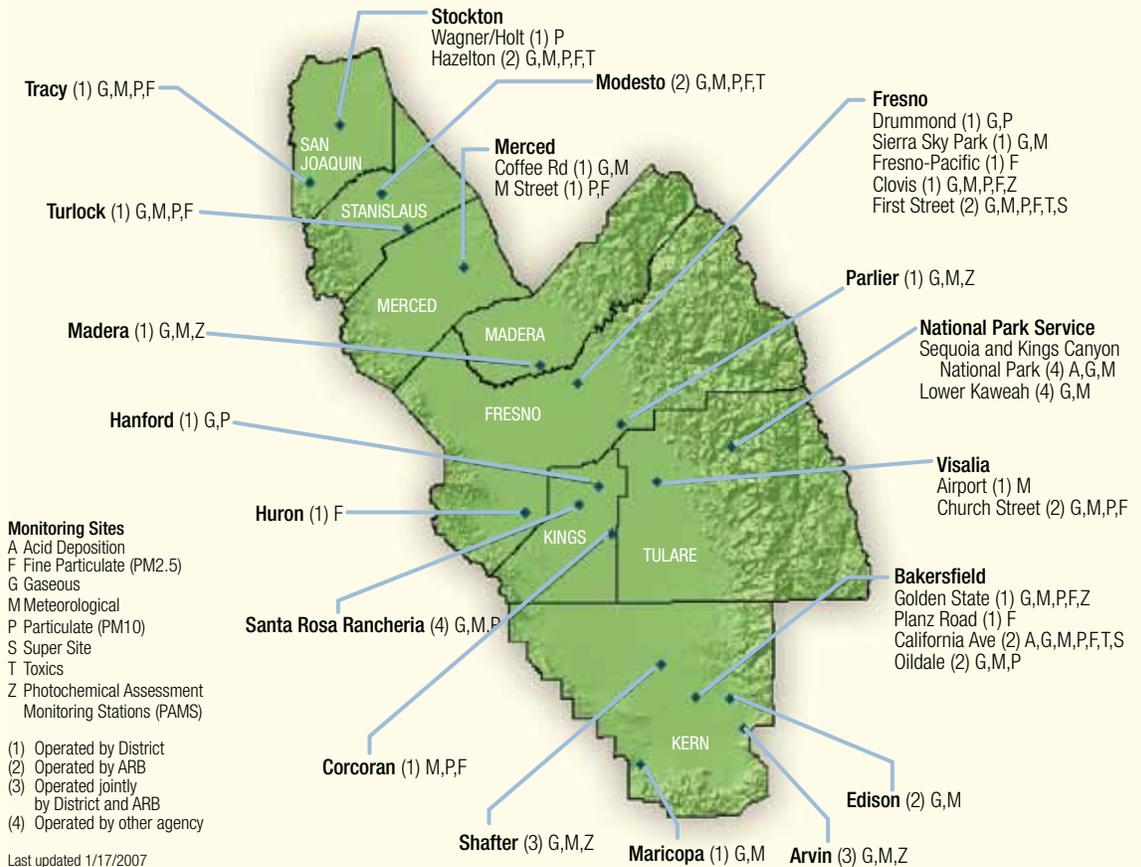
Air Monitoring

The District operates an extensive network of air-quality monitors throughout the Valley to support its mission of improving and protecting public health. On a short-term scale, the District uses hourly readings from real-time monitors to generate a daily air-quality index (AQI) forecast for each Valley county. The AQI communicates the current state of air quality to Valley residents so they can keep air quality in mind as they plan their activities. On a more long-term scale, the District rigorously analyzes air-quality data to help chart the path to attainment of the National Ambient Air Quality Standards (NAAQS) for particulate matter 10 microns or less in diameter (PM10), particulate matter 2.5 microns or less in diameter (PM2.5), 1-hour ozone, and 8-hour ozone.

Based on preliminary data, the 2009 ozone season is looking to be one of the cleanest of recent years. •

Locations of Valley Air Quality Monitors

The District, ARB, the U.S. National Park Service, and the Santa Rosa Rancheria in Lemoore operate an extensive air monitoring network to measure progress toward attainment of the National Ambient Air Quality Standards (NAAQS).



Sources of Air Pollution in the San Joaquin Valley

Ozone and particulate matter are the two pollutants that are responsible for the bulk of the Valley's air-quality problems.

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 chemical reactions between oxides of nitrogen (NOx) and volatile organic compounds (VOC) in the presence of sunlight.

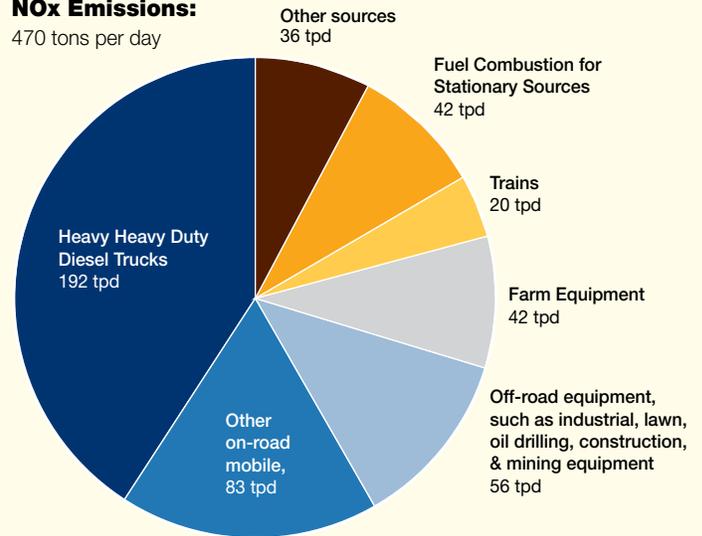
Particulate matter is any material except pure water that exists in solid or liquid state in the atmosphere. Particle pollution includes "inhalable coarse particles" with diameters larger than 2.5 micrometers and smaller than 10 micrometers (PM10), and "fine particles," with diameters that are 2.5 micrometers and smaller (PM2.5).

In the San Joaquin Valley, due to our meteorology, topography and the chemical composition of the 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 *2007 Ozone Plan* and the *2008 PM2.5 Plan*.

Please visit the District website www.valleyair.org for more information. •

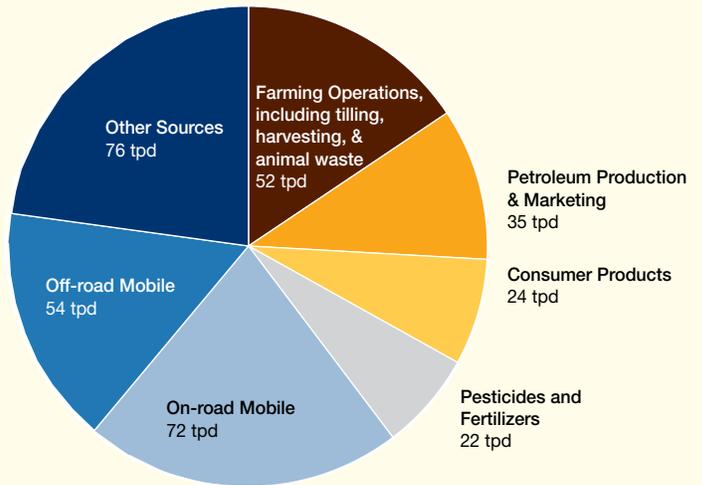
NOx Emissions:

470 tons per day



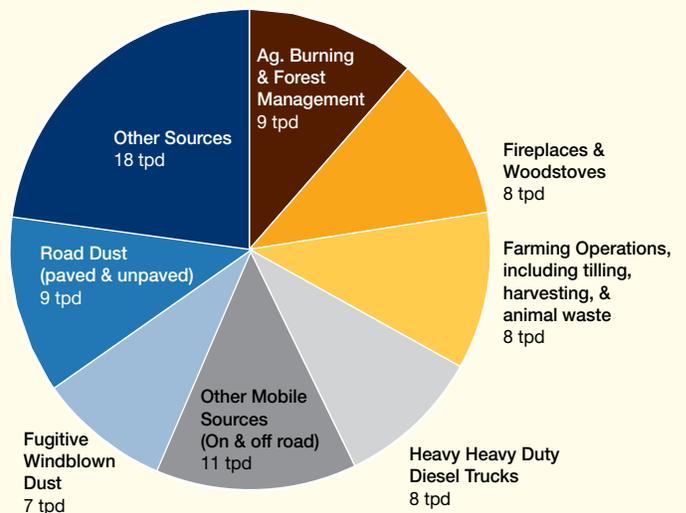
VOC Emissions:

334 tons per day

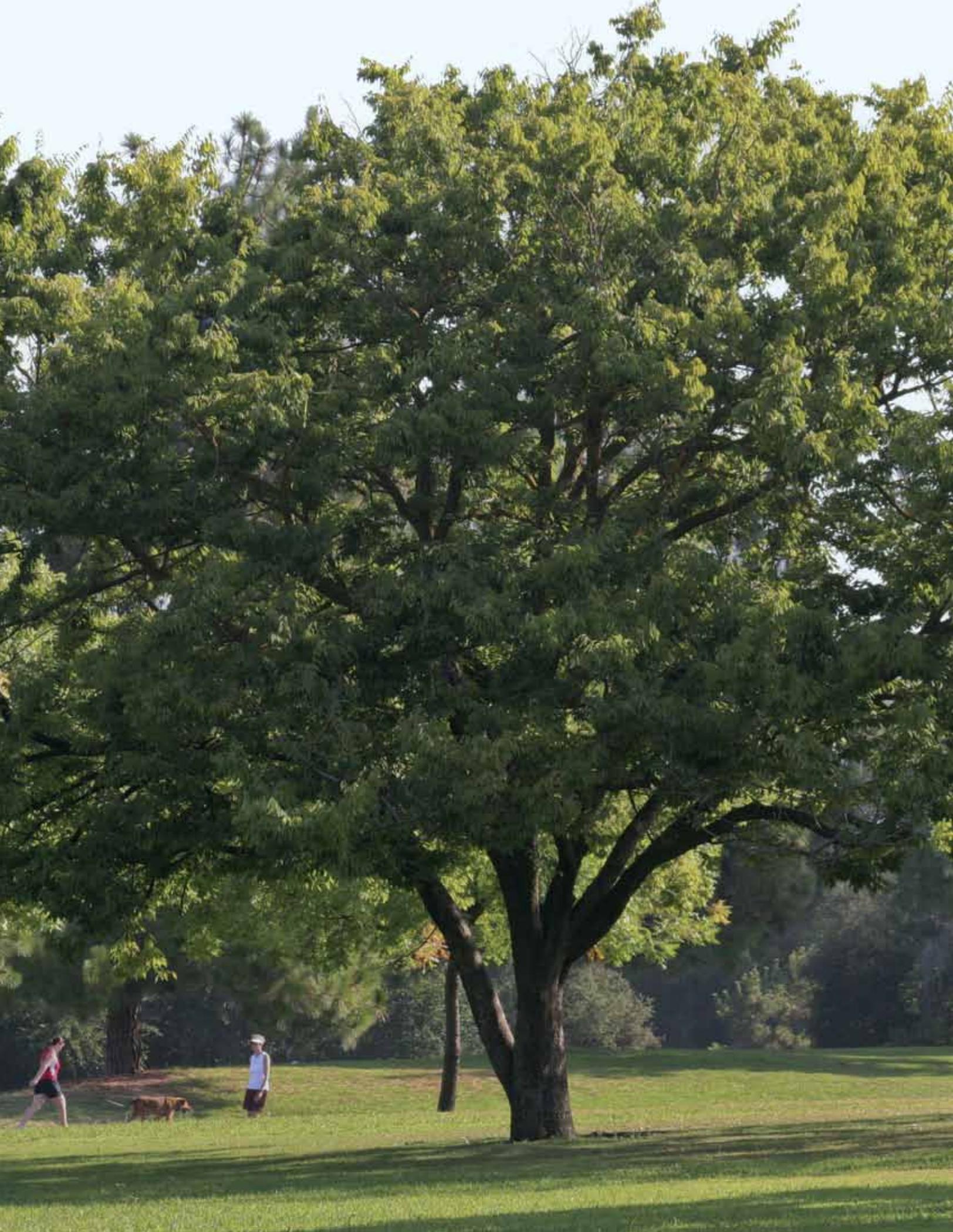


Directly Emitted PM2.5:

79.0 tons per day

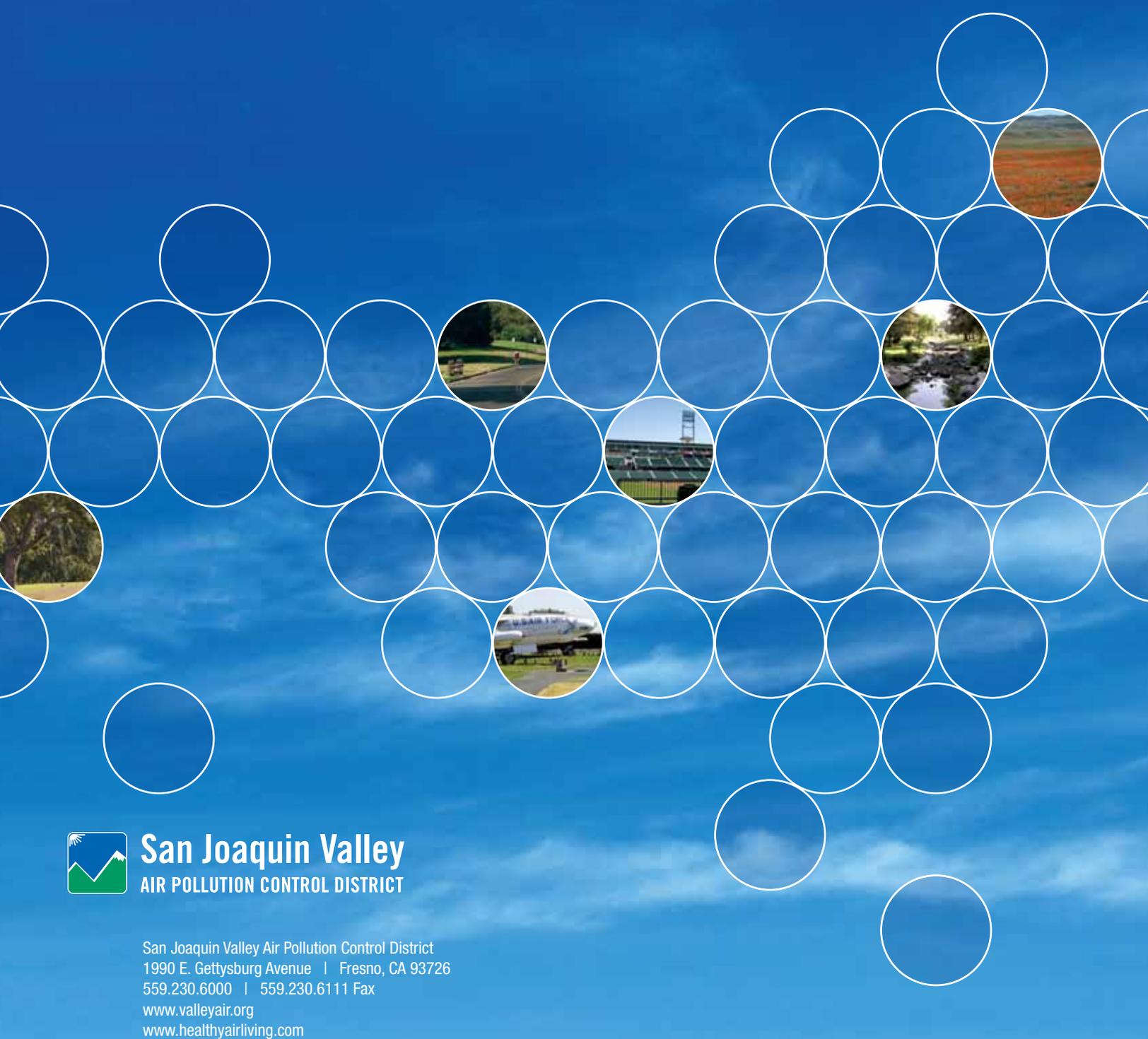


Inventory projections for 2010 from the 2008 PM2.5 Plan, accounting for changes in the Waste Disposal category that are in progress.



Looking Forward

This Annual Report to the Community has highlighted the successes and continuing challenges that face the Valley. Although we have many accomplishments and partnerships to celebrate, there is still much work to be done. The District will continue to be a leader in the air-quality field, and a trusted partner to the businesses and residents of the Valley.



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

San Joaquin Valley Air Pollution Control District
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www.valleyair.org
www.healthyliving.com