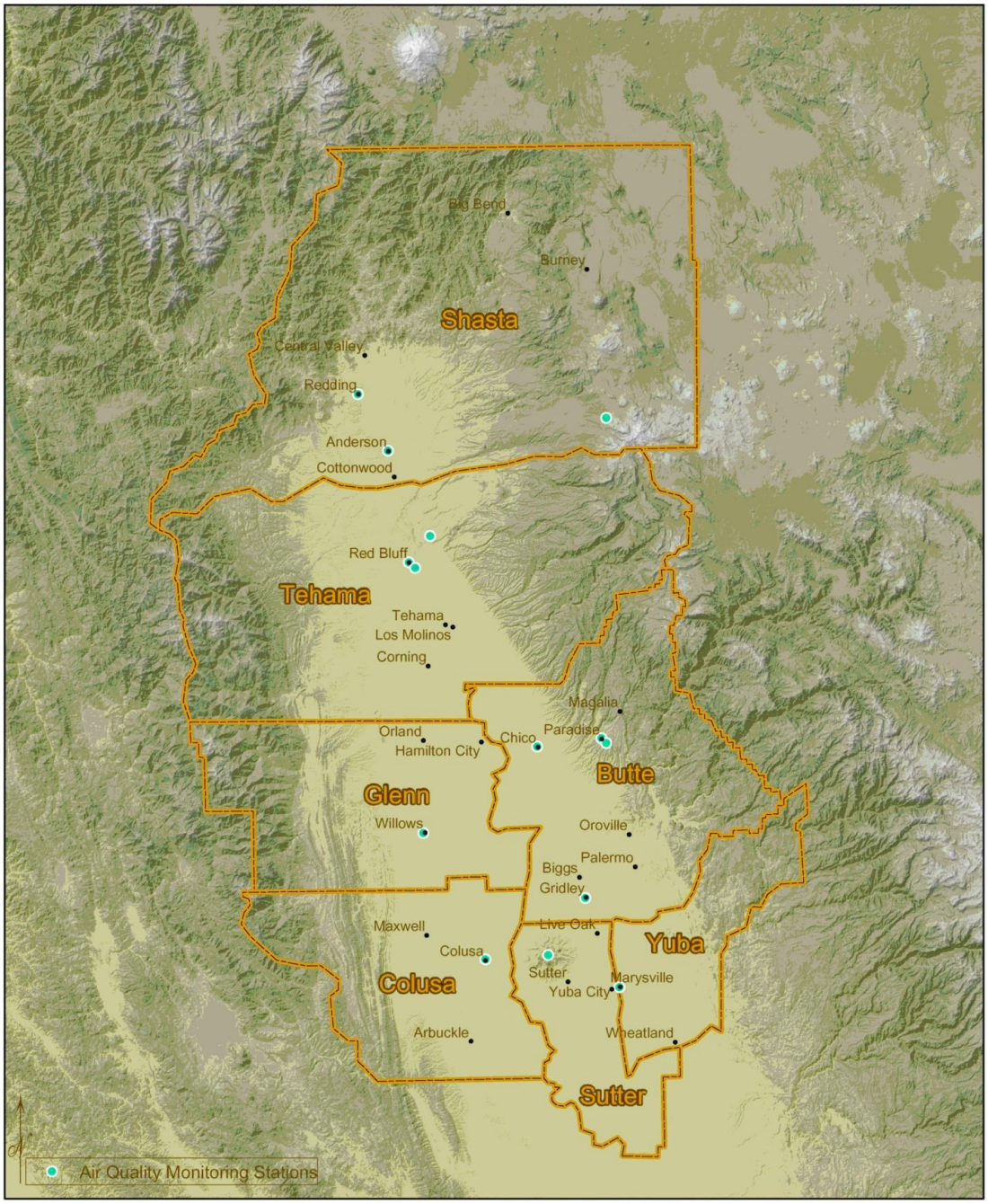
Northern Sacramento Valley Planning Area
2009 Triennial Air Quality Attainment Plan



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CHAPTER I – PLAN OVERVIEW

I. 1 INTRODUCTION

The Air Pollution Control Districts and Air Quality Management Districts' (Districts) for the counties located in the northern portion of the Sacramento Valley (depicted on the cover page) together comprise the Northern Sacramento Valley Planning Area (NSVPA). The NSVPA Districts have committed to jointly prepare and adopt a uniform air quality attainment plan for the purpose of achieving and maintaining healthful air quality throughout the air basin. This triennial update of the NSVPA Air Quality Attainment Plan (Plan) addresses the progress made in implementing the 2006 Plan and proposes modifications to the strategies necessary to attain the California ambient air quality standard for the 1-hour ozone standard at the earliest practicable date. The 2009 Plan identifies those portions of the NSVPA designated as "non-attainment" for the State ambient air quality standards and discusses the health effects related to the various air pollutants. The Plan identifies the air pollution problems which are to be cooperatively addressed on as many fronts as possible in order to make the region a healthier place to live now and in the future. Like the 1994, 1997, 2000, 2003 and 2006 Plans, the 2009 Plan focuses on the adoption and implementation of control measures for stationary sources, area wide sources, and indirect sources, and addresses public education and information programs. The 2009 Plan also addresses the effect that pollutant transport has on the ability of the NSVPA to meet and attain the State standards.

The California Air Resources Board (CARB) outlined in their 1994 State Implementation Plan (SIP) for ozone, control strategies that were to be developed and implemented over the next decade in California. This 2009 Plan contains the suggested control measures included in the 2006 Plan along with the Tier 1 Control Measures (Identification of Achievable Performance Standards and Emerging Technologies for Stationary Sources – March 1998; Identification of Performance Standards for Existing Stationary Sources – Updated May 16, 2002). These control measures will reduce air pollution throughout California and will ensure continued progress towards meeting or maintaining federal standards, and will aid in progression towards California's more stringent health protective State standards.

With the SIP as the State's established control strategy for the future, the CARB found that the NSVPA Districts would have to meet basic requirements as laid out in Health & Safety (H&S) Code sections 40924 and 40925, which include the following:

1. Assessing progress towards achieving control measure commitments in the 2006 Triennial Plan;
2. Summarizing the last three years of ozone data to demonstrate improvement of air quality, utilizing air quality indicators to be provided by CARB staff;
3. Comparing the expected versus actual emission reductions for each measure committed to in the 2006 Triennial Plan; and
4. Updating control measure commitments and grown rates of population, industry, and vehicle related emissions.

The most important element, as always, is the review of all feasible measures and updating Plan control measure commitments to reflect that review.

I. 2 LEGISLATIVE REQUIREMENTS

As specified in the California Clean Air Act of 1988 (CCAA), Chapters 1568-1588 it is the responsibility of each District within the State to attain and maintain California's ambient air quality standards. The CCAA requires that an Attainment Plan be developed by all non-attainment Districts for ozone (O3), carbon monoxide (CO), sulfur oxides (SOx), and nitrogen oxides (NOx) that are either receptors or contributors of transported air pollutants. The purpose of this Plan is to comply with the requirements of the CCAA as implemented through the California Health and Safety Code (H&S Code). Districts in the NSVPA are required to update the Plan every three years. This revision of the Plan satisfies the requirement for the December 31, 2009 update. The Plan is formatted to reflect the 2008 baseline emissions year with a planning horizon of 2020. The H&S Code, Sections 40910 and 40913, require the Districts to achieve State standards by the earliest practicable date to protect the public health, particularly that of children, the elderly, and people with respiratory illness.

The H&S Code, Section 41503(b), requires that control measures for the same emission sources are uniform throughout the planning area to the extent that is feasible. To meet this requirement, the NSVPA has coordinated the development of this Attainment Plan and has set up a specific rule adoption protocol. The protocol was established by the Technical Advisory Committee (TAC) of the Sacramento Valley Basin wide Air Pollution Control Council and the Sacramento Valley Air Quality Engineering and Enforcement Professionals, which allow the Districts in the basin to act and work as a united group with the CARB as well as with industry in the rule adoption process.

Section 40912 of the H&S Code states that each District responsible for, or effected by, air pollutant transport shall provide for attainment and maintenance of the State and federal standards in both upwind and downwind Districts. This section also states that each downwind District's Plan shall contain sufficient measures to reduce emissions originating in each District to below the levels which violate State ambient air quality standards, assuming the absence of the transport contribution.

I. 3 AREA DESCRIPTION

The area that this Plan specifically addresses is referred to as the NSVPA, and includes the following counties located in the northern portion of the Sacramento Valley: Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba (see cover page). The NSVPA is bounded on the north and west by the Coastal Mountain Range and on the east by the southern portion of the Cascade Mountain Range and the northern portion of the Sierra Nevada Mountains. These mountain ranges reach heights in excess of 6000 feet above mean sea level (MSL), with individual peaks rising much higher. This provides a substantial physical barrier to both locally created pollution and the pollution that has been transported northward on prevailing winds from the Sacramento Metropolitan area.

Although a significant area of the NSVPA is at elevations higher than 1,000 feet above MSL, the vast majority of its populace lives and works below that elevation. The valley is often subjected to inversion layers that, coupled with geographic barriers and high summer temperatures, create a high potential for air pollution problems.

I. 4 AREA DESIGNATIONS

Figure 1 shows the geographic locations of each District within the NSVPA. All of the Districts have been designated as non-attainment areas for the State standards for PM10. Moreover, all of the Districts, with the exception of Colusa and Glenn counties, have been designated as non-attainment areas for the State standard for ozone. Colusa and Glenn counties have been designated as non-attainment transitional areas for ozone (CARB - Area Designations and Maps – September 2008).

In the NSVPA, ozone violations are caused in part by combustion sources and are occasionally influenced by smoke impacts from wildfires. The primary emission source is the internal combustion engine. The ozone problem is further aggravated by transport from the Broader Sacramento Area (BSA), which is comprised of Sacramento County and portions of El Dorado, Placer, Sutter, and Yolo Counties. Ozone is formed by a photochemical reaction between nitrogen oxides and reactive organic gases. These ozone precursors are emitted as part of the exhaust of internal combustion engines in the NSVPA and BSA and are transported northward via the prevailing winds. Due to the regional nature of the ozone problem and the fact that the NSVPA counties share the same air basin with BSA, the Attainment Plan is prepared in conjunction with the Sacramento Valley Air Quality Engineering and Enforcement Professionals and the Sacramento Valley Air Basin wide Air Pollution Control Council's TAC.

I. 5 OVERVIEW OF AIR POLLUTANT HEALTH EFFECTS

Air pollution affects the health of everyone to some degree.

Ozone
In the NSVPA, ozone is a seasonal problem, typically occurring during the months of May through October. Sources for the pollutants which react to form ozone include motor vehicles, power plants, factories, chemical solvents, combustion products from various fuels, and consumer products.

Ozone acts as a strong irritant that attacks the body's respiratory system. Symptoms include shortness of breath, chest pain when inhaling deeply, wheezing and coughing. When ozone levels are high, people with lung disease (e.g., chronic bronchitis, emphysema, and asthma) are particularly susceptible to adverse health impacts.

Nitrogen Oxides
Nitrogen dioxide (NO2), a toxic reddish-brown gas, and nitric oxide (NO), a colorless gas, comprise NOx (oxides of nitrogen). Because NOx is an ingredient in the formation of ozone, it is referred to as an ozone precursor. NO2 is associated with adverse health effects and is formed in the atmosphere when NO is oxidized to NO2. Both NO2 and NO are produced as a result of fuel combustion.

PM10
Particulate matter is a mixture of solid particles and liquid droplets found in the air. Particulate matter may be produced by natural causes (e.g., pollen, ocean salt spray, and soil erosion) and by human activity (e.g., road dust, agricultural operations, fuel combustion products, wood burning, rock crushing, cement production and motor vehicles). The California Environmental Protection Agency (EPA) and the federal EPA regulate "respirable" particulate at the 10-micron level (PM10) and "fine" particles at the 2.5-micron level (PM2.5). Both coarse and fine particles are of health concern because they can

penetrate into the sensitive regions of the respiratory tract. Fine particles are linked to the most serious effects. They can cause persistent coughs, phlegm, wheezing, and other physical discomfort.

Exposure to particle pollution is linked to increased frequency and severity of asthma attacks and bronchitis, and even premature death in people with existing cardiac or respiratory disease. When particle levels in the air increase, so do reports of adverse health outcomes. Those most sensitive to particle pollution include people with existing respiratory and cardiac problems, children, and the elderly. Prolonged and repeated exposure can also have adverse impacts. Life expectancy is somewhat lower in areas with high particle levels. All inhalable particles are harmful – both "coarse" particles in the 2.5 to 10 micron diameter size and "fine" particles, those smaller than 2.5 microns.

I. 6 PLAN LIMITATIONS

The NSVPA staff has developed this Plan using data from each District's stationary source emission inventory and the State's ambient air quality monitoring database. The data collected and compiled is deemed as best available, and is intended to meet the minimum requirements of H&S Codes Section 90924(b). NSVPA staff believes a more comprehensive network of ambient air quality monitors is needed in the NSVPA to more accurately reflect air quality and to assess the impact of pollutant transport on District.

CHAPTER II - AIR MONITORING

II. 1 INTRODUCTION

This chapter of the California Clean Air Act Attainment Plan Update looks at NSVAB air quality monitoring data and results from the past three years (2006-2008). This 2009 Plan Update is concerned with the pollutant ozone for which the NSVAB has been designated non-attainment.

The Ambient Air Quality Standards establish the concentration at which the pollutant is known to cause adverse health effects to sensitive groups within the population, such as children and the elderly. Both the California and federal governments have adopted health-based standards for the criteria pollutants, which include ozone, particulate matter (PM10 and PM2.5) and carbon monoxide. In general, the air quality standards are expressed as a measure of the amount of pollutant per unit volume of air. The ozone standard is expressed as parts per million (ppm).

II. 2 OZONE MONITORING

Ozone is a colorless gas with a pungent odor. It is the chief component of urban smog. Ozone is not directly emitted as a pollutant, but is formed in the atmosphere when precursor emissions, hydrocarbons and nitrogen oxides, react in the presence of sunlight. Generally, low wind speeds or stagnant air coupled with warm temperatures and cloudless skies provide for the optimum conditions for ozone formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. Therefore, ozone is a regional pollutant that often impacts a widespread area. In addition to adverse health effects,

ozone causes damage to open vegetation, building surfaces, exposed rubber surfaces, and certain exposed plastics.

Meteorology (weather) and topography play major roles in ozone formation. When the weather is warm and the winds are light, a vertical downward motion of air and a natural cooling of the earth's surface act together to form an inversion that traps pollutants. Sunlight then causes a chemical reaction between the hydrocarbons and nitrogen oxides to form ozone.

The Sacramento Valley is shaped like an elongated bowl. Temperature inversion layers can clamp a lid on the bowl, allowing air pollution to rise to unhealthy levels. Weather conditions cause air pollution concentrations to fluctuate widely from day to day and season to season.

Topography alone gives the NSVAB great potential for trapping and accumulating air pollutants. The strong inversions typical of NSVAB summers are caused by subsidence, the slow sinking of air causing compressional warming. The surface inversions typical of winter form primarily at night as air is cooled when it contacts the earth's cold surface; these are called radiation inversions.

Temperature inversions prevent pollutants from rising and vertical dilution of pollutants. Thus, pollutants remain trapped and are able to increase in concentration in the layer of air where people breathe. Summer subsidence inversions occur on more than 90% of summer days; they persist throughout the day and tend to intensify during the afternoon. Winter radiation inversions occur on more than 70% of winter nights, but are usually destroyed by daytime heating, bringing a rapid improvement in air quality by afternoon. Both types of inversion mechanisms may exist at any time of the year, and in the fall both may occur together to produce the heaviest pollution potential.

Recognizing the adverse health impacts of daylong exposure, the United States Environmental Protection Agency revised the 8-hour ozone standard in 2008. The State of California promulgated an 8-hour ozone standard that became effective May 17, 2006.

AMBIENT AIR QUALITY STANDARDS FOR OZONE	
State Ozone Standard: 0.07 ppm for 8 hour -- not to be exceeded. Effective May 17, 2006.	National Ozone Standards: 0.075 ppm for 8 hours – expressed to three decimal places. Effective May 27, 2008

Ozone Summary

Figure 1 shows the placement of the air monitoring stations operating from 2006 through 2008 in the NSVAB. The placement of the ozone monitors appears evenly distributed throughout the NSVAB. Shasta County has two ozone monitors, one located in Redding, and one in Anderson; Butte County has two monitors, one located in Chico, and one located in Paradise; Sutter County has two monitors, one located in Yuba City, and one special use monitor on the Sutter Buttes; Tehama County has two monitors, one in downtown Red Bluff, and one on the Tuscan Buttes; Glenn County has one monitor in Willows; and Colusa County has one monitor in the town of Colusa. Currently there are ten ozone monitors operating in the NSVAB.

The State standard allows only one exceedance per year on average at any site within the Air District in the preceding three-year period. This takes into account year-to-year weather fluctuation and any exceptional exceedances. The California Air Resources Board has established three categories of exceptional exceedances: (1) "exceptional events" (i.e. forest fires); (2) "extreme concentration events"; and (3) "unusual concentration events".

Ozone trends are variable and unique for each district within the NSVAB. During the past three-year period, the Anderson-Shasta County and Paradise-Butte County monitors experienced the highest number of ozone violations in the basin. The Sutter Buttes-Sutter County monitor has exceeded the ozone standards on several occasions, but is indicative of ozone transport in the valley and is not used for state attainment purposes. Ozone concentrations in the NSVAB have remained relatively constant over the past three years; while population and vehicle miles traveled (VMT) have increased during the same period.

The air quality zone data contained in this Plan was provided by the CARB website at www.arb.ca.gov/adam/welcome.html.

II. 3 EMISSION INVENTORY

The California Air Pollution Control and Air Quality Management Districts and the California Air Resources Board (ARB) develop the emission inventory and associated emissions projections. The California Emission Forecasting System (CEFS) is the computer tool used to develop the projections and the emission estimates are based on the most currently available growth and control data. For mobile sources, CEFS integrates the emission estimates from the EMFAC model. The emission projections are based on the 2008 inventory.

In the following tables are forecast emissions for the Sacramento Valley Air Basin for Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx) for several source categories. The annual average emissions are reported in tons per day for the years 2008, 2010, 2015 and 2020. The projected emissions show a downtrend for both ROG and NOx, which are the precursor emissions for ozone.

REACTIVE ORGANIC GASES PROJECTED EMISSION INVENTORY
2008 Base Year - Annual Average – Grown and Controlled
SACRAMENTO VALLEY AIR BASIN

All emissions are represented in Tons per Day and reflect the most current data provided to ARB.				
STATIONARY SOURCES				
SUMMARY CATEGORY NAME	2008	2010	2015	2020
FUEL COMBUSTION				
ELECTRIC UTILITIES	0.228	0.238	0.316	0.318
COGENERATION	0.137	0.174	0.174	0.174
OIL AND GAS PRODUCTION (COMBUSTION)	1.083	1.135	1.135	1.134
MANUFACTURING AND INDUSTRIAL	0.490	0.498	0.543	0.569

FOOD AND AGRICULTURAL PROCESSING	0.544	0.490	0.280	0.154
SERVICE AND COMMERCIAL	0.607	0.614	0.636	0.644
OTHER (FUEL COMBUSTION)	0.234	0.220	0.193	0.176
* TOTAL FUEL COMBUSTION	3.322	3.369	3.277	3.169
WASTE DISPOSAL				
SEWAGE TREATMENT	0.039	0.041	0.045	0.048
LANDFILLS	0.446	0.445	0.488	0.526
INCINERATORS	0.003	0.003	0.004	0.004
SOIL REMEDIATION	0.075	0.078	0.086	0.094
OTHER (WASTE DISPOSAL)	0.036	0.038	0.042	0.044
* TOTAL WASTE DISPOSAL	0.600	0.606	0.665	0.715
CLEANING AND SURFACE COATINGS				
LAUNDERING	0.070	0.072	0.078	0.084
DEGREASING	3.036	3.092	3.230	3.349
COATINGS AND RELATED PROCESS SOLVENTS	4.472	4.648	5.082	5.461
PRINTING	1.207	1.255	1.376	1.491
ADHESIVES AND SEALANTS	0.979	0.955	0.912	0.880
OTHER (CLEANING AND SURFACE COATINGS)	0.137	0.142	0.154	0.166
* TOTAL CLEANING AND SURFACE COATINGS	9.901	10.164	10.832	11.432
PETROLEUM PRODUCTION AND MARKETING				
OIL AND GAS PRODUCTION	6.296	6.565	7.297	8.046
PETROLEUM REFINING	0.012	0.015	0.015	0.015
PETROLEUM MARKETING	6.165	6.307	6.801	7.382
OTHER (PETROLEUM PRODUCTION AND MARKETING)	0.056	0.058	0.064	0.069
* TOTAL PETROLEUM PRODUCTION AND MARKETING	12.529	12.945	14.177	15.512
INDUSTRIAL PROCESSES				
CHEMICAL	2.301	2.397	2.651	2.872
FOOD AND AGRICULTURE	0.818	0.864	0.986	1.116
MINERAL PROCESSES	1.315	1.356	1.487	1.588
METAL PROCESSES	0.003	0.003	0.003	0.003
WOOD AND PAPER	0.961	0.997	1.095	1.185
ELECTRONICS	0.018	0.019	0.021	0.025
OTHER (INDUSTRIAL PROCESSES)	0.224	0.225	0.228	0.231
* TOTAL INDUSTRIAL PROCESSES	5.640	5.861	6.471	7.020
** TOTAL STATIONARY SOURCES	31.991	32.944	35.421	37.848
AREA-WIDE SOURCES				
SUMMARY CATEGORY NAME	2008	2010	2015	2020
SOLVENT EVAPORATION				
CONSUMER PRODUCTS	17.115	17.538	18.721	20.009
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	7.322	7.471	8.033	8.606
PESTICIDES/FERTILIZERS	4.467	4.345	4.215	4.096

ASPHALT PAVING / ROOFING	6.694	6.722	6.780	6.816
* TOTAL SOLVENT EVAPORATION	35.597	36.077	37.749	39.527
MISCELLANEOUS PROCESSES				
RESIDENTIAL FUEL COMBUSTION	9.523	9.554	9.720	9.999
FARMING OPERATIONS	7.717	7.717	7.717	7.717
CONSTRUCTION AND DEMOLITION	0.000	0.000	0.000	0.000
PAVED ROAD DUST	0.000	0.000	0.000	0.000
UNPAVED ROAD DUST	0.000	0.000	0.000	0.000
FUGITIVE WINDBLOWN DUST	0.000	0.000	0.000	0.000
FIRES	0.057	0.058	0.062	0.067
MANAGED BURNING AND DISPOSAL	8.952	8.968	9.012	9.071
COOKING	0.218	0.225	0.242	0.258
* TOTAL MISCELLANEOUS PROCESSES	26.467	26.522	26.753	27.111
** TOTAL AREA-WIDE SOURCES	62.064	62.599	64.502	66.637
MOBILE SOURCES				
SUMMARY CATEGORY NAME	2008	2010	2015	2020
ON-ROAD MOTOR VEHICLES				
LIGHT DUTY PASSENGER (LDA)	17.257	14.431	9.190	6.579
LIGHT DUTY TRUCKS - 1 (LDT1)	7.835	6.822	4.982	3.620
LIGHT DUTY TRUCKS - 2 (LDT2)	8.944	8.267	6.649	5.603
MEDIUM DUTY TRUCKS (MDV)	4.325	4.035	3.438	2.916
LIGHT HEAVY DUTY GAS TRUCKS – 1 (LHDV1)	2.415	2.152	1.856	1.730
LIGHT HEAVY DUTY GAS TRUCKS – 2 (LHDV2)	0.834	0.747	0.561	0.439
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	2.110	1.794	1.062	0.572
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	1.003	0.850	0.450	0.212
LIGHT HEAVY DUTY DIESEL TRUCKS – 1 (LHDV1)	0.135	0.129	0.117	0.103
LIGHT HEAVY DUTY DIESEL TRUCKS – 2 (LHDV2)	0.112	0.109	0.094	0.077
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	0.280	0.274	0.236	0.204
HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	5.371	4.855	3.609	2.675
MOTORCYCLES (MCY)	3.935	3.808	3.686	3.786
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.032	0.032	0.029	0.028
HEAVY DUTY GAS URBAN BUSES (UB)	0.043	0.044	0.043	0.042
SCHOOL BUSES (SB)	0.091	0.090	0.080	0.074
OTHER BUSES (OB)	0.153	0.142	0.109	0.082
MOTOR HOMES (MH)	0.232	0.197	0.117	0.059
* TOTAL ON-ROAD MOTOR VEHICLES	55.106	48.779	36.308	28.800
OTHER MOBILE SOURCES				
AIRCRAFT	2.093	2.083	2.143	2.211
TRAINS	1.165	1.150	1.170	1.197
OCEAN GOING VESSELS	0.002	0.002	0.001	0.001
COMMERCIAL HARBOR CRAFT	0.115	0.109	0.094	0.091
RECREATIONAL BOATS	17.613	16.725	15.583	15.218

OFF-ROAD RECREATIONAL VEHICLES	2.885	2.932	2.990	3.310
OFF-ROAD EQUIPMENT	13.147	11.992	9.734	8.365
FARM EQUIPMENT	3.853	3.529	2.385	1.552
FUEL STORAGE AND HANDLING	1.772	1.536	1.176	1.009
* TOTAL OTHER MOBILE SOURCES	42.645	40.057	35.275	32.954
** TOTAL MOBILE SOURCES	97.751	88.837	71.582	61.755
GRAND TOTAL FOR SACRAMENTO VALLEY	191.806	184.38	171.505	166.24

* Emissions from natural sources are excluded.

OXIDES OF NITROGEN PROJECTED EMISSION INVENTORY

2008 Base Year - Annual Average – Grown and Controlled

SACRAMENTO VALLEY AIR BASIN

All emissions are represented in Tons per Day and reflect the most current data provided to ARB.

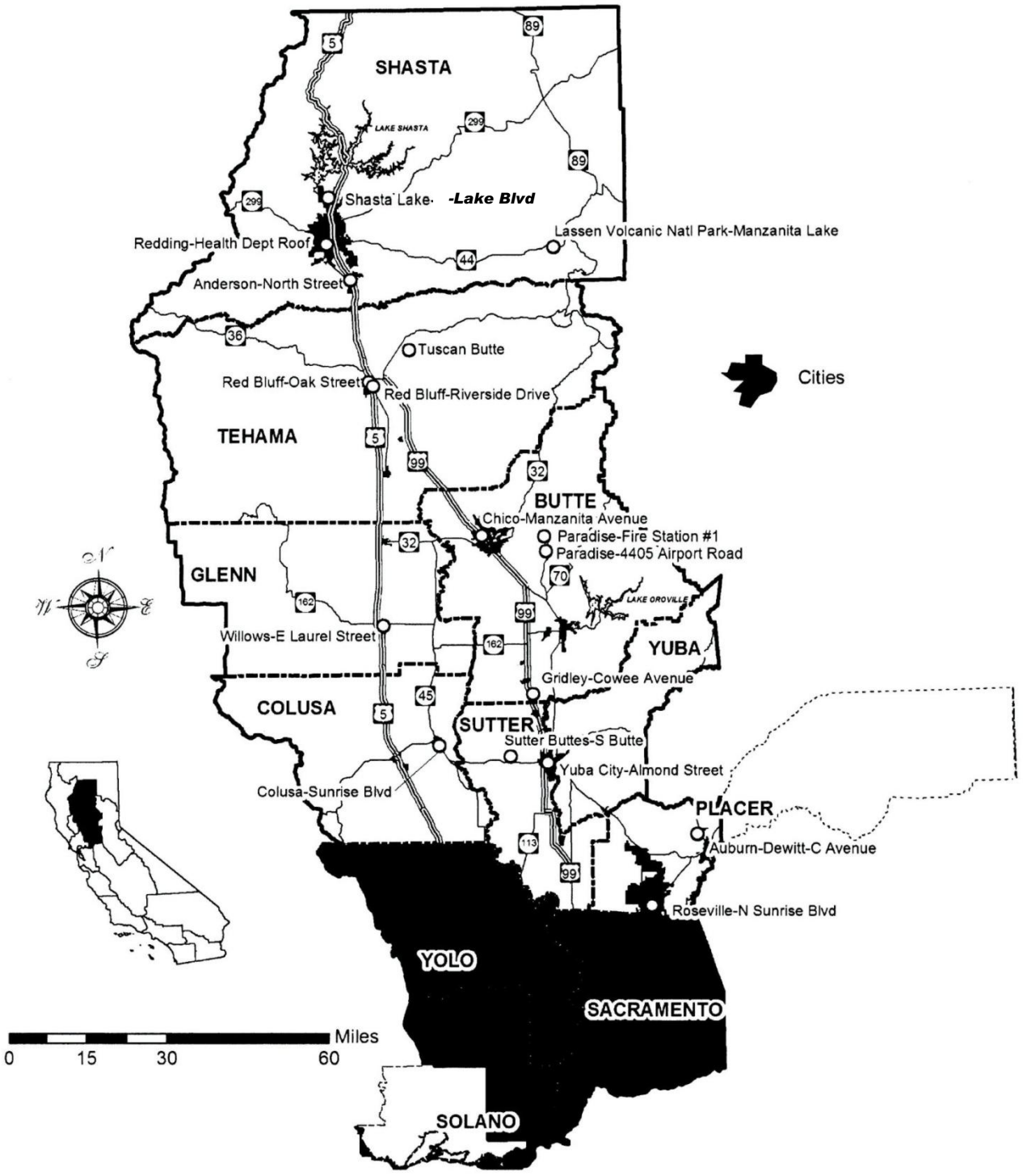
STATIONARY SOURCES

SUMMARY CATEGORY NAME	2008	2010	2015	2020
FUEL COMBUSTION				
ELECTRIC UTILITIES	3.177	3.287	3.682	3.761
COGENERATION	2.077	2.286	2.286	2.287
OIL AND GAS PRODUCTION (COMBUSTION)	4.729	5.091	5.091	5.089
MANUFACTURING AND INDUSTRIAL	6.444	6.605	7.185	7.610
FOOD AND AGRICULTURAL PROCESSING	6.300	5.748	3.280	1.873
SERVICE AND COMMERCIAL	7.312	7.369	7.543	7.522
OTHER (FUEL COMBUSTION)	2.138	2.056	1.877	1.752
* TOTAL FUEL COMBUSTION	32.177	32.443	30.944	29.894
WASTE DISPOSAL				
SEWAGE TREATMENT	0.010	0.011	0.011	0.011
LANDFILLS	0.042	0.042	0.044	0.044
INCINERATORS	0.031	0.031	0.034	0.036
SOIL REMEDIATION	0.038	0.039	0.044	0.044
OTHER (WASTE DISPOSAL)	0.000	0.000	0.000	0.000
* TOTAL WASTE DISPOSAL	0.122	0.122	0.132	0.135
CLEANING AND SURFACE COATINGS				
LAUNDERING	0.000	0.000	0.000	0.000
DEGREASING	0.000	0.000	0.000	0.000
COATINGS AND RELATED PROCESS SOLVENTS	0.032	0.032	0.035	0.037
PRINTING	0.012	0.012	0.014	0.015
ADHESIVES AND SEALANTS	0.000	0.000	0.000	0.000
OTHER (CLEANING AND SURFACE COATINGS)	0.000	0.000	0.000	0.000
* TOTAL CLEANING AND SURFACE COATINGS	0.043	0.045	0.048	0.052
PETROLEUM PRODUCTION AND MARKETING				
OIL AND GAS PRODUCTION	2.235	2.235	2.235	2.235
PETROLEUM REFINING	0.003	0.003	0.003	0.003
PETROLEUM MARKETING	0.104	0.106	0.112	0.117
OTHER (PETROLEUM PRODUCTION AND	0.000	0.000	0.000	0.000

MARKETING)				
* TOTAL PETROLEUM PRODUCTION AND MARKETING	2.341	2.344	2.349	2.355
INDUSTRIAL PROCESSES				
CHEMICAL	0.136	0.137	0.138	0.138
FOOD AND AGRICULTURE	0.043	0.044	0.048	0.051
MINERAL PROCESSES	2.410	2.506	2.738	2.956
METAL PROCESSES	0.009	0.010	0.010	0.011
WOOD AND PAPER	0.111	0.117	0.130	0.143
ELECTRONICS	0.000	0.000	0.000	0.000
OTHER (INDUSTRIAL PROCESSES)	0.068	0.068	0.101	0.101
* TOTAL INDUSTRIAL PROCESSES	2.777	2.881	3.164	3.399
** TOTAL STATIONARY SOURCES	37.459	37.835	36.638	35.834
AREA-WIDE SOURCES				
SUMMARY CATEGORY NAME	2008	2010	2015	2020
SOLVENT EVAPORATION				
CONSUMER PRODUCTS	0.000	0.000	0.000	0.000
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.000	0.000	0.000	0.000
PESTICIDES/FERTILIZERS	0.000	0.000	0.000	0.000
ASPHALT PAVING / ROOFING	0.000	0.000	0.000	0.000
* TOTAL SOLVENT EVAPORATION	0.000	0.000	0.000	0.000
MISCELLANEOUS PROCESSES				
RESIDENTIAL FUEL COMBUSTION	6.632	6.654	6.716	6.795
FARMING OPERATIONS	0.000	0.000	0.000	0.000
CONSTRUCTION AND DEMOLITION	0.000	0.000	0.000	0.000
PAVED ROAD DUST	0.000	0.000	0.000	0.000
UNPAVED ROAD DUST	0.000	0.000	0.000	0.000
FUGITIVE WINDBLOWN DUST	0.000	0.000	0.000	0.000
FIRES	0.018	0.019	0.020	0.021
MANAGED BURNING AND DISPOSAL	2.674	2.664	2.643	2.629
COOKING	0.000	0.000	0.000	0.000
* TOTAL MISCELLANEOUS PROCESSES	9.324	9.337	9.380	9.445
** TOTAL AREA-WIDE SOURCES	9.324	9.337	9.380	9.445
MOBILE SOURCES				
SUMMARY CATEGORY NAME	2008	2010	2015	2020
ON-ROAD MOTOR VEHICLES				
LIGHT DUTY PASSENGER (LDA)	13.950	11.799	7.311	4.714
LIGHT DUTY TRUCKS - 1 (LDT1)	7.362	6.443	4.409	2.846
LIGHT DUTY TRUCKS - 2 (LDT2)	11.776	10.294	7.117	4.989

MEDIUM DUTY TRUCKS (MDV)	6.908	6.171	4.516	3.218
LIGHT HEAVY DUTY GAS TRUCKS – 1 (LHDV1)	2.993	2.941	2.883	2.856
LIGHT HEAVY DUTY GAS TRUCKS – 2 (LHDV2)	0.832	0.822	0.780	0.740
MEDIUM HEAVY DUTY GAS TRUCKS (MHDV)	1.579	1.460	1.082	0.771
HEAVY HEAVY DUTY GAS TRUCKS (HHDV)	1.526	1.328	0.864	0.581
LIGHT HEAVY DUTY DIESEL TRUCKS – 1 (LHDV1)	3.287	2.835	2.093	1.573
LIGHT HEAVY DUTY DIESEL TRUCKS – 2 (LHDV2)	2.314	2.107	1.530	1.087
MEDIUM HEAVY DUTY DIESEL TRUCKS (MHDV)	12.416	11.191	7.445	4.774
HEAVY HEAVY DUTY DIESEL TRUCKS (HHDV)	73.351	65.041	43.906	29.981
MOTORCYCLES (MCY)	1.063	1.085	1.138	1.201
HEAVY DUTY DIESEL URBAN BUSES (UB)	0.805	0.801	0.700	0.675
HEAVY DUTY GAS URBAN BUSES (UB)	0.101	0.103	0.109	0.112
SCHOOL BUSES (SB)	1.052	1.065	1.030	0.981
OTHER BUSES (OB)	0.685	0.643	0.477	0.337
MOTOR HOMES (MH)	0.885	0.840	0.665	0.486
* TOTAL ON-ROAD MOTOR VEHICLES	142.883	126.967	88.053	61.920
OTHER MOBILE SOURCES				
AIRCRAFT	2.717	2.885	3.388	3.682
TRAINS	17.321	16.382	17.367	18.226
OCEAN GOING VESSELS	0.090	0.083	0.070	0.060
COMMERCIAL HARBOR CRAFT	1.658	1.505	0.954	0.782
RECREATIONAL BOATS	4.885	4.829	4.853	4.976
OFF-ROAD RECREATIONAL VEHICLES	0.146	0.149	0.178	0.223
OFF-ROAD EQUIPMENT	34.031	31.407	24.161	17.541
FARM EQUIPMENT	19.223	17.782	12.810	8.455
FUEL STORAGE AND HANDLING	0.000	0.000	0.000	0.000
* TOTAL OTHER MOBILE SOURCES	80.070	75.023	63.781	53.945
** TOTAL MOBILE SOURCES	222.952	201.989	151.834	115.864
GRAND TOTAL FOR SACRAMENTO VALLEY	269.736	249.160	197.852	161.143
* Emissions from natural sources are excluded.				

Figure 1. Air Quality and Meteorological Stations in the NSVAB
(2006-2008)



CHAPTER III – PUBLIC EDUCATION PROGRAMS

III. 1 INTRODUCTION

The NSVAB continues to develop and implement public education programs in order to fulfill the requirements of the CCAA. Section 40918(a)(6) of the California H&S Code states that, "Each District shall include provisions for public education programs to promote actions to reduce emissions from transportation and area wide sources". Public education and information programs are important components of local and regional efforts to reduce air pollution.

III. 2 EDUCATION PROGRAMS

Many of the public education programs and projects have been funded using Vehicle Registration Surcharge Fees (Vehicle Fees). These include the following:

- Passenger fare transit subsidies
- Transit operations
- Purchase of transit buses
- Bicycle lanes and trails
- Electric "ZAP" bicycles
- Other bicycle facilities (racks, lockers, etc.)
- Carpool and transit subsidies
- Electric vehicle conversions
- Hybrid electric vehicle research and development
- Public Service Announcements
- Air Quality Education Exhibits
- PM10 Reduction Strategies
- Residential green waste recycling project
- On-Road cleaner vehicle repowering
- Greenhouse gases and global warming

The methodology used to provide education and information takes many forms: pamphlets, brochures, public reports and public service announcements; presentations and workshops; multimedia commercials, and; promotions. Public education programs are targeted to a wide audience, including the general public, academia, students from elementary to college level, the medical community, the agricultural community, and the business community.

Information concerning sources of air pollution, health effects, property damage, the fiscal and environmental impacts of air pollution, and what can be done to reduce air pollution continue to be the primary focus of public education efforts.

III. 3 DISTRICT PROGRAMS

Each District conducts its own public education program. Some elements are common and others are unique.

Butte County AQMD Public Education Program includes a variety of activities as part of its clean air strategy. These activities include the following:

- Maintain the District's website at www.bcaqmd.org
- Forecast air quality index (AQI) and provide daily burn day information to the media
- Utilize EnviroFlash for email/text messaging service for real time air quality events and AQI
- Manage the "Check Before You Light" advisory program during November through February for residential wood burning
- Produce and distribute the Air Care News Bulletin through an email distribution list
- Develop and distribute District brochures on various air quality issues
- Conduct a Clean Air Kids Calendar contest annually and distribute 2,500 full-size color calendars to K-8th grade classrooms
- Provide presentations to schools, agricultural and business groups as requested
- Provide Press Releases and Public Service Announcements
- Respond to public inquires and requests for information

Colusa County's District office sponsors a Public Education program which includes the following public outreach activities:

- Distribution of pamphlets and brochures
- Public service announcements/reports
- Presentations on air pollution and health effects to elementary through high school classes
- Presentation to agricultural and business groups
- Response to public inquiries

Shasta County AQMD community education efforts include a broad spectrum of activities intended to increase public awareness of air quality issues and encourage people to reduce motor vehicle emissions. These activities include but are not limited to the following:

- Participation in community events such as District Fair, Boat & RV Show, and Earth Day
- Presentations in school classrooms
- Distribution of air quality pamphlets
- Bike trails brochures printed and distributed
- Press releases
- Response to public inquiries
- Operation of a smoking vehicle reporting program
- Public service announcements via radio and television
- Drive hybrid vehicles during inspections, complaints, meetings etc. during work hours
- The display of hybrid vehicles at community events
- Utilize the Enviro-Flash online program for the public to access the Daily Air Quality Index (AQI)
- Webpage allowing public to access real-time ambient air quality, the visibility camera, and most current Attainment Plan

The Feather River District office serves as a central point for public education and outreach. The office maintains current announcements for news and events, provides residents with opportunities to sign up for District mailing lists and air quality advisory alerts, and provides educational handouts regarding open burning regulations. The District office also has available brochures covering the following subject matter:

- Air Quality Permits
- Air Toxics Program
- Enforcement Procedures
- Agricultural Burning
- Residential Burning

These brochures are available to the public at the front counter of the District offices along with CARB educational "comic books".

The Feather River District periodically speaks at organizational functions regarding air quality programs such as Earth Day events, Rotary lunches, and special events at the local community college. The District also staffs a booth at the annual Yuba-Sutter Fair to promote air quality and disseminate information to the general public. The District maintains a web site at http://www.fraqmd.org/, which provides updates on District events, current ambient air quality readings, and educational materials for public access. Electronic feedback forms are used to encourage air quality questions. The District responds to public and media questions and concerns received by telephone, e-mail, postal mail and in person.

The Tehama County District office also maintains a website: http://www.tehcoapcd.net. The District's public education activities include:

- Distribution of CARB brochures and instructional leaflets
- Presentations to business groups and agricultural groups
- Public service announcements
- Response to public inquiries
- The issuance of press releases
- Sponsorship of and staffing of the *Air Quality* booth at Tehama County Fair
- Presentations in school classrooms
- Provide fliers on agricultural and residential burning and respond to questions and concerns about burning
- Provide air quality information whenever there is need for caution or concern
- Answer questions on diesel engine pollution and global warming

The Glenn County District office sponsors a public education program which includes the following outreach activities:

- Distribute and display pamphlets, brochures, and Fact Sheets in English and Spanish
- Newsletters
- Public Service Announcements/Reports
- Presentations on air pollution and health effects to elementary through high school classes
- Presentations to Agricultural and Business Groups
- Presentations to the Board of Supervisors and other Government groups

- Public workshops
- Response to public inquiries
- Maintain District web site: http://www.countyofglenn.net/govt/departments/air_pollution/
- Attend and judge the Science Fair
- Operate the County booth at the State Fair

CHAPTER IV – TRANSPORT OF POLLUTANTS

IV. 1 INTRODUCTION

This portion of the Attainment Plan addresses air pollution transport, identifies transport couples, and discusses transport mitigation regulations related to the Upper Sacramento Valley (USV). A review of amendments to the transport mitigation regulations and the relevance of the Central California Ozone Study are also discussed.

Synopsis
The CARB has identified that air pollution is transported from the Broader Sacramento Area (BSA) to the Upper Sacramento Valley (USV), thus establishing the BSA/USV Transport Couple. The impacts of transported BSA air pollution to Districts in the USV are variable. Transport pollution impacts are classified using the terms "Inconsequential", "Significant", and "Overwhelming", as defined in Section IV.2 below. The most recent CARB assessment, published in March 2001, indicates that all three of these classifications occur in the BSA/USV transport couple region, with the latest classification of "inconsequential" added to describe the transport couple assessment for Shasta County.

IV. 2 DEFINITIONS AND TERMINOLOGY

Air Basin – an area sharing similar meteorological and geographic conditions; also defined by political boundaries; an area in which the air mass is homogeneous; an area usually bounded by topographical features.

Ambient Air Quality Standards – specified concentrations and durations of air pollutants which reflect the relationship between the intensity and composition of air pollution to adverse health effects. The standards are established by the CARB or, where applicable, by the federal government.

Broader Sacramento Area (BSA) - includes the Sacramento Metropolitan Air Quality Management District; Yolo-Solano Air Pollution Control District; the portions of the El Dorado County Air Pollution Control District included in 1990 U.S. Census Tracts 306.01, 307, 308.01, 308.02, 308.03, 308.04, 309.01, 309.02, 310, 311, 312, 315.01, and 315.02; and the portions of the Placer County Air Pollution Control District included in 1990 U.S. Census Tracts 203, 204, 205, 206.01, 206.02, 206.03, 207.01, 207.02, 207.03, 208, 209, 210.01, 210.02, 211.01, 211.02, 212, 213.01, 213.02, 214, 215.01, 215.02, 216, 218.01, and 218.02; and that area of the Feather River Air Quality Management District which is south of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County, and continuing along the southern Yuba County border to Placer County.

Couple – a pair of geographic areas, one considered upwind and one considered downwind.

Exceedance – any ozone concentration greater than the ambient air quality standard for ozone.

Extreme Concentration – a concentration that is statistically expected to occur less frequently than once every year

Inconsequential – an ozone transport impact classification describing a condition that exists when upwind emissions are not transported or do not appear to contribute significantly to a violation of the State ozone standard in the downwind area. A violation not impacted by transported emissions is considered local and results when the wind flow patterns and atmospheric conditions do not strongly suggest responsibility from an upwind area. The responsibility of "inconsequential" transport lies with the downwind area.

Mitigation – in air pollution control, mitigation refers to those measures that are taken to prevent or reduce emissions in the atmosphere. Mitigation may include: (1) the adoption and enforcement of local District rules and regulations to regulate emissions from stationary sources; (2) land-use and transportation control measures achieved through the California Environmental Quality Act (CEQA); and (3) the adoption of State and national regulations to reduce emissions through fuel reformulation and new engine technologies.

Model – a computer-based representation of atmospheric processes used to develop emission inventories, determine dispersion of pollutants, and predict downwind concentrations and impacted areas.

Overwhelming – an ozone transport impact classification describing a condition which exists when emissions from an upwind area independently cause a violation of the State ozone standard in a downwind area on any given day. This classification assumes that significant emission sources in the downwind area were not in the pathway of the air parcel being transported from the upwind area. The responsibility for a violation caused by "overwhelming" transport lies with the upwind area.

Particulate Matter – any material, except uncombined water, that exists in finely divided form as a liquid or solid at standard conditions.

Precursor – a directly emitted pollutant that, when released to the atmosphere, forms, or contributes to the formation of a secondary pollutant for which an ambient air quality standard has been adopted

Precursor	Secondary Air
Reactive Organic Compound	Photochemical Oxidants (Ozone) The Organic Fraction of PM10
Nitrogen Oxides	Nitrogen Dioxide The Nitrate Fraction of PM10 Photochemical Oxidants (Ozone)
Sulfur Oxides	Sulfur Dioxide Sulfates The Sulfate Fraction of PM10

Profiler – equipment that provides continuous winds aloft measurements using the Doppler shift principle and radar waves.

Reactive Organic Gases – any compound of carbon, other than the following: methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and halogenated hydrocarbons.

Significant – an ozone transport impact classification describing a condition in which the emissions from the upwind area contributed measurably to a violation of the State ozone standard in the downwind area on any given day, but did not "overwhelm" the area. A violation is considered to be caused by "significant" transport if the emissions from sources within the downwind area combine with the transported air parcel carrying ozone or ozone precursors from the upwind area. A violation classified as "significant" is considered shared, with responsibility lying with both the upwind and downwind areas.

Transport – horizontal movement of air pollution or air pollution precursors at the earth's surface or aloft. Vertical movement of air pollution is referred to as mixing.

Upper Sacramento Valley (USV) - includes the Colusa, Butte, Glenn, Tehama, and Shasta County Air Pollution Control Districts, and that area of the Feather River Air Quality Management District which is north of a line connecting the northern border of Yolo County to the southwestern tip of Yuba County and continuing along the southern Yuba County border to Placer County.

IV. 3 BACKGROUND

The CCAA requires each District in which a State ambient air quality standard for ozone, carbon dioxide, sulfur dioxide, or nitrogen dioxide is exceeded to develop a plan and an emission control program in order to attain the State standard(s). The CCAA recognizes that ozone and ozone precursors can be transported by winds over long distances and thereby contribute to air quality problems outside of the District or air basin of origination. To address this, the CCAA requires upwind Districts to mitigate the impacts to downwind areas by pollutants that are originally emitted in the upwind Districts (see section 39610 of the H&S Code) even though the downwind District may have a shared or sole responsibility for air quality impacts. The CCAA directs the CARB to assess the impacts of such transport and to establish mitigation requirements for upwind Districts.

In terms of identifying transport couples and assessing the downwind impacts, the CCAA directs the CARB to:

1. Identify downwind areas affected by transported air pollutants and the upwind air basins or regions that are the sources of the pollutants;
2. Assess the relative contribution of upwind emissions to downwind ozone concentrations as "overwhelming", "significant", "inconsequential", or some combination thereof, to the extent permitted by available data [H&S Code, section 39610(a) and (b)]; and
3. Update this analysis at least once every three years [H&S Code, section 39610(d)].

In terms of transport mitigation the CCAA requires that:

Districts within the areas of origin of transported air pollutants shall include sufficient emission control measures in their Attainment Plans for ozone in order to mitigate the impacts of pollution sources within their jurisdictions on ozone concentrations in downwind areas. At a minimum, the Attainment Plans for Districts within the BSA shall conform to the following requirements:

1. Require the adoption and implementation of best available retrofit control technology (as defined in H&S Code, section 40406) on all existing stationary sources of ozone precursor emissions as expeditiously as practicable. At a minimum, the Plan shall provide for the adoption of rules that represent best available retrofit control technology for source categories that collectively amount to 75 percent of the 1987 actual reactive hydrocarbon emissions inventory for permitted stationary sources, and 75 percent of the 1987 actual nitrogen oxides emissions inventory for permitted stationary sources, no later than January 1, 1994.

2. Include measures sufficient to attain the State ambient air quality standard for ozone by the earliest practicable date within the USV, except as provided in H&S Code section 41503(d), during air pollution episodes which the State board has determined meet the following conditions:

    a. Are likely to produce a violation of the State ozone standard in the USV or within the portion of the Mountain Counties Air Basin which is north of the Calaveras-Tuolumne County border and south of the Sierra-Plumas County border;
    b. Are dominated by overwhelming pollutant transport from the BSA; and
    c. Are not measurably affected by emissions of ozone precursors from sources located within the USV or the portion of the Mountain Counties Air Basin which is north of the Calaveras-Tuolumne County border and south of the Sierra-Plumas County border.

Implementation of these requirements will be through the BSA Districts' Attainment Plans.

IV. 4 The Central California Ozone Study (CCOS)

As a result of the transport assessments performed over the last decade as required by State and federal transport regulations and more recently by the California Ozone Studies, air quality professionals have developed a basic understanding of the fundamental transport relationships between the various upwind and downwind regions of California.

The California Ozone Studies include the 1997 Southern California Ozone Study (SCOS) and the 2000 Central California Ozone Study (CCOS). The CCOS was conducted on the geographic region extending from Redding in the north to the Mojave Desert in the south, and from the Pacific Ocean in the west to the Sierra Nevada Mountains in the east. These studies will be invaluable in updating transport assessments and preparing future clean air Plans. The CARB and Districts plan to use the results of the CCOS to prepare the demonstration of attainment for the ozone standard for non-attainment areas in central California. The data gathering component of the CCOS was conducted during the summer of 2000. Emission inventory development, data analysis and modeling are on-going projects.

One goal of the CCOS project is to develop modeled attainment demonstrations which are required in federal ozone air quality plans. The modeling will also be useful to further refine the understanding of transport relationships in California during selected ozone episodes. CARB staff is working with stakeholders to identify approaches to better assess transport impacts using the study results. These analyses were included in the 2003-2004 SIP development process for Districts in the CCOS domain – including the San Francisco Bay Area, San Joaquin Valley, and Sacramento region. A number of CCOS projects are being fast-tracked in order to provide results that can be used in developing attainment demonstrations for these Districts. As a part of these analyses, the impact of upwind control strategies on downwind ozone formation will be evaluated.

TABLE V-I DISTRICT STATUS OF FEASIBLE CONTROL MEASURES

INTRODUCTION

Table V lists the status of district adoption and proposed adoption of feasible control measures for the reduction of ambient PM concentrations in the Northern Sacramento Valley Planning Area.

Control Measure		Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Air Quality Element General Plan	Adoption Date	03-97	not adopting	12-94	not adopted	04-94	In Progress
	Proposed Adoption Date	Amended 01-08	--	--	01-08 (01-02 in 2003 Plan)	--	11-07 (12-04 in 2003 Plan
	Emission Reductions Of NOx or ROG (tons)	a	a	a	a	a	a
Architectural Coatings	Adoption Date	04-02	05-91	11-02	Not adopted	05-02	08-02
	Proposed Adoption Date	--	Amended 07-02	Amended 12-10	Amended 07-07	Amended 07-05	--
	Emission Reductions Of NOx or ROG (tons)	ROG (36.5)	ROG (3.65)	ROG (25.5)	ROG (3.65)	ROG (29.2)	ROG (10.9)
Automobile Finish Coatings	Adoption Date	06-97	03-98	08-98	05-99	04-97 Amended 06-97	11-98
	Proposed SCM Amendment Date	2012	--	2016	2012	--	2013
	Emission Reductions Of NOx or ROG (tons)	ROG (6.6)	ROG (0.0)	ROG (8.5)	ROG (0.0)	ROG (15.2)	ROG (2.4)
Cutback Asphalt	Adoption Date	01-95	12-93	not adopting	09-94	06-95	02-94
	Proposed Adoption Date	--	Amended 07-97	--	--	02-94	--
	Emission Reductions Of NOx or ROG (tons)	c	c	b	c	c	c

Control Measure		Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Disposal of Organic Waste	Adoption Date	03-03	01-96	not adopted	07-98	06-95	3-95
	Proposed Adoption Date	--	--	06-10	--	--	--
	Emission Reductions Of NOx or ROG (tons)	a	c	a	ROG (0.5)	c	c
Gas Turbines	Adoption Date	not adopting	03-98	not adopting	not adopting	not adopting	04-98
	Proposed Adoption Date	--	--	--	--	Board denied	--
	Emission Reductions Of NOx or ROG (tons)	d	NOx (0.0)	d	b	b	NOx (0.0)
Industrial Boilers	Adoption Date	03-04	01-96	06-06	07-98	01-95	03-95
	Proposed Adoption Date	--	--	--	--	Amended 12-95	--
	Emission Reductions Of NOx or ROG (tons)	NOx (14)	c	a	NOx (7.5)	c	c
Internal Combustion Engines	Adoption Date	12-04	03-98	06-09	not adopted	04-97	06-97
	Proposed Adoption Date	--	--	--	01-08 (01-04 in 2003 plan)	--	--
	Emission Reductions Of NOx or ROG (tons)	NOx (0.0)	a	a	b	NOx (0.0)	NOx (0.0)
Polyester Resin Operations	Adoption Date	09-05	01-96	not adopted	07-98	06-95	03-95
	Proposed Adoption Date	--	--	2017	--	--	--
	Emission Reductions Of NOx or ROG (tons)	a	c	b	ROG (0.5)	c	c

Control Measure		Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Residential Wood Combustion	Adoption Date	10-01	06-97	10-09	11-94	03-95	03-95
	Proposed Adoption Date	Amended 12-08	--	--	--	--	--
	Emission Reductions Of NOx or ROG (tons)	a	a	a	a	a	a
Smoking Vehicle Program	Adoption Date	10-01	not adopting	No MOU	not adopting	02-97	not adopting
	Proposed Adoption Date	--	ARB (smoking vehicle program)	--	ARB (smoking vehicle program)	ARB (smoking vehicle program)	ARB (smoking vehicle program
	Emission Reductions Of NOx or ROG (tons)	a	a	a	a	f	f
Solvent Degreasing	Adoption Date	09-05	01-96	06-91	07-98	06-95	03-95
	Proposed Adoption Date	--	--	Amending 06-10	--	--	--
	Emission Reductions Of NOx or ROG (tons)	e	c	b	ROG (0.5)	c	c
Transportation Control Measure/ CEQA Guidelines	Adoption Date	03-97	not adopting	12-94	not adopting	01-93	not adopting
	Proposed Adoption Date	Amended 01-08	--	--	--	--	--
	Emission Reductions Of NOx or ROG (tons)	a	a	c	a	a	a
Vapor Recovery Systems for Gasoline Distributors	Adoption Date	06-05	03-98	06-91	11-88	12-88	04-98
	Proposed Adoption Date	--	--	--	--	Amended 06-97	--
	Emission Reductions Of NOx or ROG (tons)	a	ROG (8.40)	a	c	ROG (18.1)	a

Control Measure		Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Adhesives and Sealants	Adoption Date	not adopted	not adopted	not adopted	not adopting	02-03	04-03
	Proposed Adoption Date	--	06-08 (12-03 in 2003 plan)	2017	09-08 (12-03 in 2003 plan)	Amended 07-05	--
	Emission Reductions Of NOx or ROG (tons)	b	b	b	b	ROG (3.65)	b
Graphic Arts	Adoption Date	not adopted	not adopted	not adopted	not adopting	not adopted	not adopted
	Proposed Adoption Date	2013	06-08 (06-04 in 2003 plan)	2014	--	06-11	06-08
	Emission Reductions Of NOx or ROG (tons)	b	b	b	b	b	b
Metal Parts and Product Coatings	Adoption Date	not adopted	07-06	not adopted	not adopting	not adopted	not adopted
	Proposed Adoption Date	2010	--	2014	12-03 in 2003 plan	06-11	12-09
	Emission Reductions Of NOx or ROG (tons)	b	a	b	b	b	b
Wood Products Coating Operations	Adoption Date	not adopted	07-06	12-05	not adopted	03-04	not adopted
	Proposed Adoption Date	2010	--	--	12-03 in 2003 plan	06-11	12-09
	Emission Reductions Of NOx or ROG (tons)	b	b	a	b	ROG (-3.65)	b

Footnotes:
a…..Emissions (and therefore emission reductions) are not calculated for this measure.
b…..Emissions were not calculated the measure was not adopted.
c…..Emission reductions were not presented since the measure was adopted prior to 01-97.
d….. No applicable sources.
e……Pending rule update.
f…...ARB (Smoking Vehicle) program participation.
g….. N/A "Not Applicable" due to attainment status.