SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

Dutte	Vice Chair	Ea-41 D'	Chair		<u> </u>	Ch 4	T-1	V-1- C 1				
Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano				
			<u>**N</u>	IEETING N	NOTICE**							
Date:	October	4, 2024										
Time:	10:00 AN	M										
Location:	Sunrise I	Colusa County APCD 100 Sunrise Blvd, Suite F Colusa, CA 95932 and ZOOM										
Alternate Location:	Butte County AQMD 629 Entler Avenue, Suite 15 Chico, CA 95928											
	541 Wasł	River AQMD hington y, CA 95991										
	720 N C	ounty APCD olusa Street CA 95988										
	New City 915 I St		Guerra									
	Placer County APCD 110 Maple Street Auburn, CA 95602											
	777 12 th	nto-Metropolitan Street, 3 rd Floor nto, CA 95814										
	1855 Plac	ounty AQMD cer Street, Suite 1 CA 96001	101									
	1834 Wal	County APCD Inut Street f, CA 96080										
		ano AQMD lileo Court, Suite A 95618	103									
		in Zoom Meet ps://us02web.z		8856894294	0?pwd=Irl4Ay	ucmkWFp	EEiTEfSa2V	W0j5qMZS.				

Meeting ID: 885 6894 2940

Passcode: 747687 Phone: +1 669 900 9128 US (San Jose)

<u>AGENDA</u>

ITEM NO.

- 1. Call To Order/ Roll Call
- 2. Period of Public Comment
- 3. Approval of Minutes from the August 2, 2024 Meeting

Approval of Minutes from the August 2, 2024 Meeting

4. Financial Status Reports

Financial Status Report

5. Status Reports

Basinwide Control Council (BCC) Members Report	Council Members
California Air Pollution Control Officers Association (CAPCOA) Report	CAPCOA Board Member
Broader Sacramento Area (BSA) Report	BSA Member
California Air Resources Board (CARB) Liaison Report	CARB Representative
Technical Advisory Committee (TAC) Report	TAC Chair
Smoke Management Program (SMP) Report	SMP Coordinator

6. 2024 Draft Ozone Attainment Plan

Recommended action: approve Triennial Ozone Attainment Plan (motion needed.)

7. Biomass Energy Report

Hear updates from work group for potential action items related to Biomass Energy.

8. In Person BCC Meeting

Review upcoming meeting dates and decide if one or more should be in person meetings (motion needed).

December 6, 2024 February 7, 2025 April 4, 2025 June 6, 2025 August 1, 2025 October 3, 2025 December 5, 2025

9. Outgoing BCC Board Members

Recognize retiring board members Mat Conant and Patrick Jones for their service.

10. Set Next BCC Meeting Agenda - December 6, 2024 Hosted by: Feather River AQMD

11. Adjourn Meeting.

MEETING AGENDAS ARE POSTED BY EACH MEMBER AIR DISTRICT OF THE SACRAMENTO VALLEY BASIN AND AT THE SVBCC WEBSITE LISTED BELOW.

*Meeting information can be viewed at www.airquality.org/SVBCC

Questions, comments, and correspondence may be directed to:

Sacramento Valley Basinwide Air Pollution Control Council Laurie LaGrone, Secretary-Treasurer 629 Entler Avenue, Suite 15 Chico, CA 95928 530-332-9400 ext. 105 bcctacsecretary@gmail.com Sacramento Valley Basinwide Air Pollution Control Council

Title: Approval of Minutes from the August 2, 2024 Meeting

Presenter: BCC/TAC Secretary-Treasurer

Motion needed.

ATTACHMENTS: Description 2024-08-02_BCC_Meeting Mnutes_DRAFT

Upload Date Type 8/5/2024 Suppor

Supporting Documents

SACRAMENTO VALLEY

BASINWIDE AIR POLLUTION CONTROL COUNCIL

			<u> </u>		Chair	Vice-Chair					
	Butte	Colusa	Feather River	Glenn	Placer	Sacramento	Shasta	Tehama	Yolo-Solano		
			Γ	Meeting M	inutes – A	ugust 2, 2024					
1.	Call to	Order/ Int	roductions								
			of the Sacrame by Chair Scott A								
	PRE	ESENT:	Butte County AQMD: Tami Ritter, BCC Member								
			Colusa Coun	•							
				-		t, BCC Membe on, BCC Memb					
			Placer Count								
						uerra, BCC Vic	e Chair				
				•		es, BCC Memb					
				•	•	lson, BCC Alte	ernate Men	nber			
			Yolo-Solano I	AQMD: ab	sent						
			Butte County	AQMD: S	tephen Ertl	e, TAC Memb	er				
			Colusa Coun	y APCD: I	Don Kitamı	ara, Alternate T	CAC Memb	er			
				-		n, TAC Membe	er				
			Glenn Count			TAC Member					
				•		o Ayala, TAC N	Member				
			Shasta Count			,					
				•		TAC Member					
			Yolo-Solano	AQMD: G	retchen Be	nnitt, TAC Mei	mber				
						tor: Kai Tawa					
				CA Air Resources Board: absent							
			BCC Secreta	ry-Treasure	er: Laurie L	aGrone					
2.	Period	of Public (Comment								
	Mr. Alv	ord opened	l the meeting to	public con	nments. He	earing none, the	e item was	closed.			
3.	Approv	al of Minu	ites from June	7, 2024 M	leeting and	June 21, 2024	4 Emergen	cy Meeting	g		
			onant moved to pproved in a ro						Mr. Guerra,		
4.		al Status I Grone provi	Report ided a summary	y of the fina	ancial statu	s report as of J	une 30, 202	24.			

MOTION: On a motion from Mr. Guerra, seconded by Mr. Carmon, the financial status report was approved in a roll call vote with no objections or abstentions.

5. Status Reports

• **Basinwide Control Council (BCC) Members Report** – Mr. Guerra said that on July 3rd climate bond measure SN 867 passed and will progress to the November ballot. The bond will include \$50

million for advanced biomass. Language clarification is being pursued to include ag waste in the bond. The challenge now will be to pursue GGRF (Greenhouse Gas Reduction Funds).

Mr. Ertle reported a new biomass project underway in Butte County, creating hydrogen energy from biomass fuels. They hope to begin producing in 2026.

- California Air Pollution Control Officers Association (CAPCOA) Report Joe Tona Items of interest for CAPCOA include prescribed burning, exceptional events standards, the lack of funding for FARMER grants, the increased funding for prescribed burning, and various legislation. CAPCOA will celebrate 50 years in 2025.
- Broader Sacramento Area (BSA) Report no report.
- CA Air Resources Board (CARB) Report no report.
- **Technical Advisory Committee (TAC) Report** Mr. Tona reported that TAC is focused on Title V revisions. Member districts are in the process of adopting rules and applying for extensions.
- Smoke Management Program (SMP) Report Mr. Tawa announced that the Fall Intensive Burn Season as will begin September 16 and conclude November 30. He proposed altering this year's preseason training format to include pre-recorded videos of annually-repeating information, followed by shorter on-line workshops. TAC members were receptive to this format. Trainings will be Thursday and Friday September 13-14.

<< Ms. Carlson joined the meeting before the next vote>>

6. Approval of Allowable & Conditional Rice Burn Reports – Kai Tawa Mr. Tawa presented the two reports.

MOTION: On a motion from Mr. Conant, seconded by Ms. Ritter, the Allowable & Conditional Rice Burn Reports were approved in a roll call vote with no objections or abstentions.

7. Investment Options

Mr. Ayala explained the findings of the TAC, that the financial gains possible through investment were outweighed by the amount of work required to manage the investments. Chair Alvord thanked the group for their efforts.

8. Biomass Energy Report – no report.

9. Climate Pollution Reduction Grants (CPRG)

Mr. Guerra reported that no northern or central California projects were accepted for grant funding.

Mr. Ayala reminded members that the Comprehensive Climate Action Plan is due next year.

10. Set Next BCC Meeting Agenda – October 4, 2024 Hosted by: Colusa County APCD

11. Adjourn Meeting

Mr. Alvord adjourned the meeting at 10:33 am.

Respectfully submitted by: Laurie LaGrone, BCC Secretary-Treasurer

BCC:11

Sacramento Valley Basinwide Air Pollution Control Council

Title: Financial Status Report

Presenter: BCC/TAC Secretary-Treasurer

Recommended action: receive Financial Status Report as of August 31, 2024 (motion needed).

ATTACHMENTS:

Description	Upload Date	Туре
Financial Report - Bank Account Register 8-31-2024	9/23/2024	Supporting Documents
Financial Report - Profit & Loss Budget vs Actual 8-31-2024	9/23/2024	Supporting Documents
2024-07-21_BCC_Reconciliation_Detail	9/23/2024	Supporting Documents
2024-08-20_BCC_Reconciliation_Detail	9/23/2024	Supporting Documents

09/12/24 Accrual Basis

Sacramento Valley Basinwide Air Pollution Control Council Bank Accounts Register As of August 31, 2024

Type	Date	Num	Name	Split	Debit	Credit	Balance
	os/15/2024			-SPLIT-	66,266.00		28,464.98 94,730.98
Total Tr	i Counties Bar	ık			66,266.00		94,730.98
U. S. Ba Total U.	ank S. Bank						
TOTAL					66,266.00		94,730.98

Sacramento Valley Basinwide Air Pollution Control Council Profit & Loss Budget vs. Actual July through August 2024

	Jul - Aug 24	Budget	% of Budget	
Ordinary Income/Expense Income				
Annual District Assessments	66,266.00			
Total Income	66,266.00			
Net Ordinary Income	66,266.00			
Net Income	66,266.00			

Sacramento Valley Basinwide Air Pollution Control Council Reconciliation Detail Tri Counties Bank, Period Ending 07/21/2024

Туре	Date	Num	Name	Clr	Amount	Balance
Beginning Balance	•					51,928.59
Cleared Tran	sactions					
Checks ar	nd Payments - 12	items				
Bill Pmt -Check	04/24/2024	1055	Western Weather G	Х	-4,283.33	-4,283.33
Bill Pmt -Check	04/24/2024	1054	Butte County AQMD	Х	-1,322.50	-5,605.83
Bill Pmt -Check	04/24/2024	1056	Western Weather G	Х	-814.67	-6,420.50
Bill Pmt -Check	04/24/2024	1057	Butte County AQMD	Х	-300.00	-6,720.50
Bill Pmt -Check	05/15/2024	1059	Western Weather G	Х	-4,283.33	-11,003.83
Bill Pmt -Check	05/15/2024	1058	Butte County AQMD	Х	-1,863.59	-12,867.42
Bill Pmt -Check	05/15/2024	1060	Western Weather G	Х	-814.67	-13,682.09
Bill Pmt -Check	06/20/2024	1063	Western Weather G	Х	-4,283.33	-17,965.42
Bill Pmt -Check	06/20/2024	1065	SDRMA	Х	-2,719.86	-20,685.28
Bill Pmt -Check	06/20/2024	1062	Butte County AQMD	Х	-1,389.45	-22,074.73
Bill Pmt -Check	06/20/2024	1064	Western Weather G	Х	-814.67	-22,889.40
Bill Pmt -Check	06/20/2024	1061	Butte County AQMD	х	-572.21	-23,461.61
Total Chec	ks and Payments			-22	-23,461.61	-23,461.61
Total Cleared	Transactions			_	-23,461.61	-23,461.61
Cleared Balance					-23,461.61	28,466.98
Uncleared Tr Checks ar General Journal	ansactions nd Payments - 1 i 08/16/2023	tem Jrnl 5			-2.00	-2.00
Total Chec	ks and Payments				-2.00	-2.00
Total Unclear	ed Transactions				-2.00	-2.00
Register Balance as	of 07/21/2024				-23,463.61	28,464.98
Ending Balance					-23,463.61	28,464.98

09/12/24

Sacramento Valley Basinwide Air Pollution Control Council Reconciliation Detail - -Tri Counties Bank, Period Ending 08/20/2024

Туре	Date	Num	Name	Clr	Amount	Balance
Beginning Balance Cleared Balance						28,466.98 28,466.98
Uncleared Trans Checks and I General Journal	sactions Payments - 1 i 08/16/2023				0.00	0.00
General Journal	08/16/2023	Jrnl 5			-2.00	-2.00
Total Checks	and Payments				-2.00	-2.00
Deposits and Deposit	d Credits - 1 ite 08/15/2024	em		x	66,266.00	66,266.00
Total Deposit	s and Credits				66,266.00	66,266.00
Total Uncleared	Transactions				66,264.00	66,264.00
Register Balance as of	08/20/2024				66,264.00	94,730.98
New Transactio Deposits and Deposit	ns 3 Credits - 1 ite 09/11/2024	em			27,226.00	27.226.00
				1	· · · · · · · · · · · · · · · · · · ·	27,226.00
Total Deposit	s and Credits			-	27,226.00	27,226.00
Total New Trans	actions			-	27,226.00	27,226.00
Ending Balance					93,490.00	121,956.98

٠

Sacramento Valley Basinwide Air Pollution Control Council

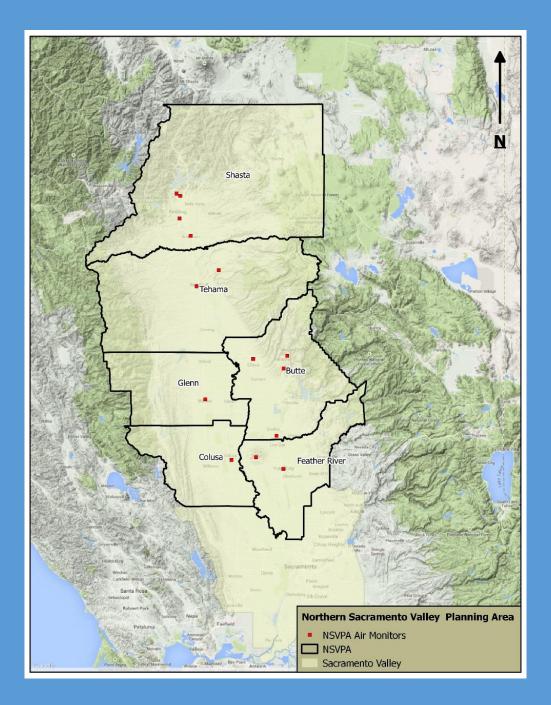
Title: 2024 Draft Ozone Attainment Plan

Presenter: Allyson Smith/Teresa Godoy, The Professionals (QEEPS)

Recommended action: approve Triennial Ozone Attainment Plan (motion needed.)

ATTACHMENTS:	
Description	Upload Date
BCC DRAFT 2024 Ozone Attainment Plan	9/27/2024
Timeline and Assignments 2024 Triennial Plan	9/23/2024

Type Supporting Documents Supporting Documents



NORTHERN SACRAMENTO VALLEY PLANNING AREA 2024 TRIENNIAL AIR QUALITY ATTAINMENT PLAN PREPARED BY THE SACRAMENTO VALLEY AIR QUALITY ENGINEERING AND ENFORCEMENT PROFESSIONALS (SVAQEEP)

EXECUTIVE SUMMARY

The California Clean Air Act (CCAA) requires air districts which have been designated as a nonattainment area for California Ambient Air Quality Standards (CAAQS) for ozone, carbon monoxide, sulfur dioxide, or nitrogen dioxide to prepare and submit a plan for attaining and maintaining the standards. The CCAA also requires that districts review their progress made toward attaining the CAAQS every three years.

The Air Pollution Control Districts and Air Quality Management Districts (Districts) for the counties located in the northern portion of the Sacramento Valley together encompass the Northern Sacramento Valley Planning Area (NSVPA). The NSVPA air districts of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba counties have agreed to jointly prepare an Air Quality Attainment Plan. Glenn and Colusa Counties are in Attainment but continue to participate in the regional effort.

The 2024 triennial update of the NSVPA Air Quality Attainment Plan (2024 Plan) assesses the progress made in implementing the previous triennial update and proposes modifications to the strategies necessary to attain the CAAQS by the earliest practicable date. The 2024 Plan includes an assessment of progress towards achieving the control measure commitments in the previous Triennial Plan, a summary of the last three years of ozone data, a comparison of the expected versus actual emission reductions for each measure committed to in the previous Triennial Plan, updated control measure commitments, and updated growth rates of population, industry, and vehicle related emissions.

In the NSVPA, ozone can be caused by stationary source emissions, such as from internal combustion engines or boilers, mobile sources such as cars, trucks, and trains, or area sources such as consumer products or wildfires. The NSVPA districts also experience transport ozone from the Broader Sacramento Area (BSA), which comprises all of the Sacramento Metropolitan AQMD, Yolo-Solano AQMD, and a portion of El Dorado, Placer, and Sutter Counties. Emissions that were originally created in the BSA can be transported northward via prevailing winds to affect the pollution levels of the NSVPA.

The 2021 to 2023 monitoring data shows a decrease in 8-hour ozone exceedances and an increase in 1-hour ozone exceedances of the CAAQS compared to the 2018-2020 monitoring data. Wildfires continue to be a contributor to these exceedances. ROG and NOx emissions are projected to decrease, with mobile sources accounting for 60% of the NOx emission inventory and area-wide sources account for 44% of the ROG inventory in 2025. In the past three years the Carl Moyer and FARMER programs have resulted in reducing 222 tons of NOx and 24 tons of ROG. The NSVPA Districts also fund emission reduction projects through AB 617 Community Air Protection Programs, AB 2788/AB 923 Vehicle Fee Programs, Wood Stove Changeout Programs, and Off-Road Voucher Incentive Programs.

CONTENTS

EXECUTIVE SUMMARY	1
CONTENTS	2
CHAPTER 1 – PLAN OVERVIEW	4
I.1 LEGISLATIVE REQUIREMENTS	4
I.2 BACKGROUND OF THE AIR QUALITY ATTAINMENT PLAN AND TRIENDUPDATES	
I.3 AREA DESCRIPTION	
a. Geography	
b. Population and VMT Growth	6
c. Meteorology and Inversions	9
I.4 AMBIENT AIR QUALITY STANDARDS	
I.5 AREA DESIGNATIONS	11
I.6 OVERVIEW OF AIR POLLUTANTS AND HEALTH EFFECTS	12
a. Ozone	12
b. Precursor	13
c. Nitrogen Oxides	13
d. Reactive Organic Gases	13
e. Health Effects of Ozone	13
I.7 TRANSPORT OF POLLUTANTS	14
CHAPTER II - AIR MONITORING	16
II.1 INTRODUCTION	16
II.2 MONITORING STATIONS	18
Butte County Monitoring Stations	19
Colusa County Monitoring Station	20
Glenn County Monitoring Station	21
Shasta County Monitoring Stations	21
Sutter County Monitoring Stations	24
Tehama County Monitoring Stations	25
CHAPTER III – EMISSION INVENTORY	27
CHAPTER IV – STATIONARY SOURCE CONTROL MEASURES	31
IV.1 ALL FEASIBLE MEASURES	31
IV.2 FEASIBLE MEASURES CONSIDERED FOR BASIN-WIDE MODEL RULES.	33
IV.3 RULES ADOPTED SINCE 2021 TRIENNIAL AQAP	33

CHAPTER V – NON-STATIONARY SOURCE MEASURES	35
V.1 INCENTIVE PROGRAMS	35
a. Carl Moyer Program	35
b. Vehicle Fee Programs	35
c. Funding Agricultural Replacement Measures for Emission Reductions (FARME Program	
d. Community Air Protection Program	36
e. Other Grant Programs	37
V.2 PUBLIC EDUCATION PROGRAMS	37
V.3 REDUCTIONS FROM LAND USE PROGRAMS	40
V.4 AIR QUALITY FORECASTING	41
V.5 DISTRICT RULES APPLICABLE TO NEW DEVELOPMENT	41
CHAPER VI CONCLUSION	42

CHAPTER 1 – PLAN OVERVIEW

I.1 LEGISLATIVE REQUIREMENTS

It is the responsibility of each District within the State of California to attain and maintain ambient air quality standards. If a standard is not met, the California Clean Air Act (CCAA) requires the District to create an Air Quality Attainment Plan for the designated criteria pollutant so the District can demonstrate how they plan to meet the standard in the future. Examples of criteria air pollutants include ozone (O₃), carbon monoxide (CO), sulfur oxides (SO_x), and nitrogen oxides (NO_x). ¹

The California Health & Safety Code (HSC) requires that the Plan be updated every three years.² The HSC §40910 and §40913 require the Districts to achieve CAAQS by the earliest practicable date to protect the public's health, particularly that of children, the elderly, and people with respiratory illness.

The 2024 Plan assesses the progress made in implementing the previous triennial update completed in 2021 and proposed modifications to the strategies necessary to attain the CAAQS by the earliest practicable date. The 2024 Plan includes the following:

- 1. Assessment of progress towards achieving the control measure commitments in the previous Triennial Plan (HSC §40924(a));
- 2. Summary of the last three years of ozone data to demonstrate improvement of air quality (HSC §40924(b) (1));
- 3. Comparison of the expected versus actual emission reductions for each measure committed to in the previous Triennial Plan (HSC §40924(b) (2)); and
- 4. Updated control measure commitments and growth rates of population, industry, and vehicle related emissions (HSC §40925(a)).

The HSC §41503(b) requires that control measures for the same emission sources are uniform throughout the planning area to the extent feasible. To meet this requirement, the Northern Sacramento Valley Planning Area (NSVPA) has coordinated the development of the 2024 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 Control Council. The protocol allows the Districts in the basin to act and work as a group to coordinate with the California Air Resources Board (CARB) as well as industry in the rule adoption process.

The HSC §40912, states that each District responsible for or affected 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

¹ HSC §40911(A)

² HSC §40924(b). §40925

in each District to below the levels which violates State ambient air quality standards, assuming the absence of the transport contribution.

HSC §40914 requires that each plan achieve a 5 percent or more per year reduction in ozone precursor emissions unless an alternative measure of progress is approved pursuant to HSC §39607. If a district cannot achieve these reductions, the CCAA provides that districts can develop approvable plan provided the plans commit to:

- 1. An alternative emission reduction strategy that is equal to or more effective than district-wide emission reductions in improving air quality; or
- 2. The implementation of every feasible measure on an expeditious schedule.³

CARB interprets the adoption of every feasible measure to mean that, at a minimum, a district considers regulations that have been successfully implemented elsewhere. Districts should also consider going beyond what has already been accomplished by evaluating new technologies and innovative approaches that may offer potential emission reductions. Further, districts should consider not only technological factors, but also social, environmental, economic (e.g. cost-effectiveness), and energy factors which prevail in the district, along with the resources realistically available to the district to adopt, implement, and enforce the measures.

I.2 BACKGROUND OF THE AIR QUALITY ATTAINMENT PLAN AND TRIENNIAL UPDATES

Due to the regional nature of the ozone problem and the fact that the NSVPA counties share the same air basin with the BSA, the Air Quality Attainment Plan and subsequent triennial updates were prepared by the Sacramento Valley Air Quality Engineering and Enforcement Professionals (SVAQEEP) with oversight form the Sacramento Valley Air Basin Control Council's Technical Advisory Committee (TAC). The Basin Control Council (BCC) approves the triennial updates prior to the individual NSVPA Districts adopting the Plan.

The NSVPA Districts jointly prepared the original 1991 Air Quality Attainment Plan. Triennial updates to the Plan were adopted by the BCC for the NSVPA districts in 1994, 1997, 2000, 2004, 2006, 2009, 2012, 2015, 2018, and 2021.

I.3 AREA DESCRIPTION

a. Geography

The NSVPA includes Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba counties. The Northern Sacramento Valley Air Basin (NSVAB) is synonymous with the NSVPA.

³ HSC §40914

These counties comprise the northern portion of the Sacramento Valley and are 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 6,000 feet above mean sea level (MSL), with individual peaks rising much higher. The mountains provide a substantial barrier to both locally created pollution and the pollution that has been transported northward on prevailing winds for the BSA. The NSVAB is shaped like an elongated bowl. Temperature inversion layers can act as a lid on the bowl, allowing air pollution to rise to unhealthy levels.

Although a significant area of the NSVPA is at elevations higher than 1,000 feet above MSL, the majority of its population lives and works below that elevation.

b. Population and VMT Growth

HSC §40925(a) requires that the triennial updates include population, industry and vehicle related emissions growth experiences in the district and projected for the future. Table I-1 includes the population and vehicle miles traveled data for each county from 2015 to 2020, and the projections for 2025 to 2050.⁴

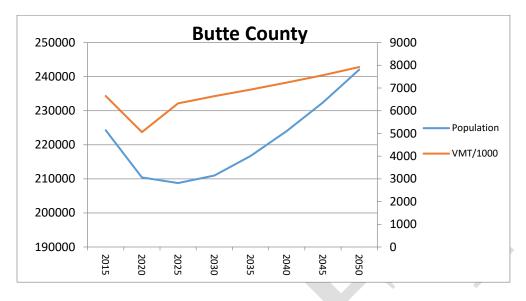
The population data were derived from reports developed by the California Department of Finance, Demographic Research Unit. The estimates of daily vehicle miles traveled (VMT) for the year 2015 through 2050 are found in CARB's on-road mobile source emissions inventory model, EMFAC2021v1.0.2 (<u>www.arb.ca.gov/emfac/emissions-inventory</u>). The average VMT has been divided by 1000.

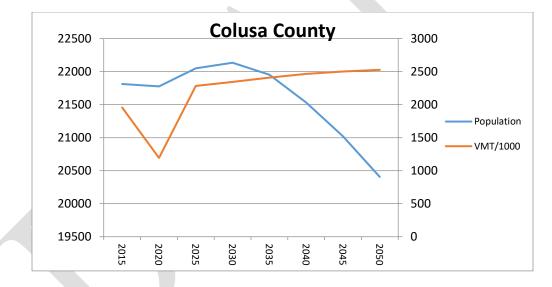
County	Parameter	2015	2020	2025	2030	2035	2040	2045	2050
Butte	Population	224,301	210,426	208,768	211,002	216,702	224,028	232,443	242,078
Dulle	VMT/1000	6,650	5,060	6,327	6,640	6,933	7,245	7,566	7,925
Colusa	Population	21,814	21,777	22,050	22,135	21,953	21,532	21,020	20,406
Colusa	VMT/1000	1,956	1,194	2,283	2,345	2,411	2,465	2,503	2,528
Glenn	Population	28,316	28,891	28,923	29,182	29,022	28,513	27,615	26,584
Glerin	VMT/1000	1,812	1,768	2,130	2,168	2,205	2,227	2,242	2,265
Shasta	Population	178,422	182,537	178,497	178,722	179,760	180,245	180,531	181,492
Shasta	VMT/1000	6,773	6,524	7,738	7,854	7,981	8,110	8,249	8,425
Cuttor	Population	96,976	99,355	100,756	104,005	105,386	105,803	105,487	104,604
Sutter	VMT/1000	3,185	3,014	3,831	4,094	4,369	4,624	4,873	5,146
Tehama	Population	63,155	65,706	64,666	65,151	65,195	64,900	64,581	64,129
Tenama	VMT/1000	3,481	3,366	4,043	4,132	4,246	4,341	2,503 27,615 2,242 5 180,531 8,249 3 105,487 4,873 9 64,581 4,427	4,528
Yuba	Population	74,472	81,706	83,993	87,172	89,541	91,389	92,915	94,142
Tuba	VMT/1000	1,665	1,626	2,050	2,173	2,308	2,439	2,566	2,699

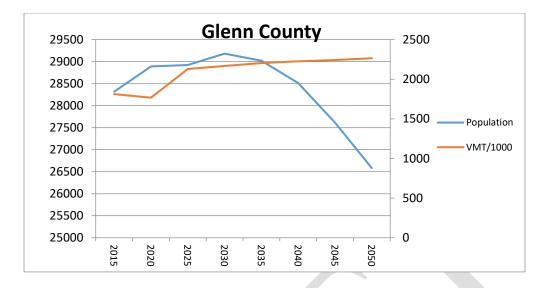
Table I-1: Population and VMT Growth in the NSVPA

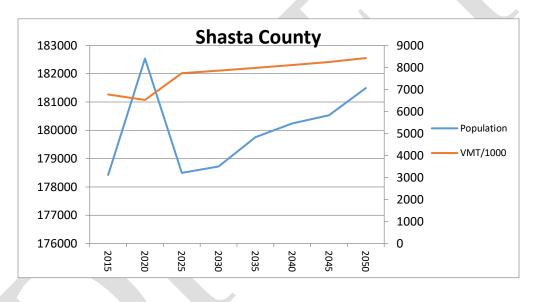
⁴ http://dof.ca.gov/forecasting/demographics/projections/

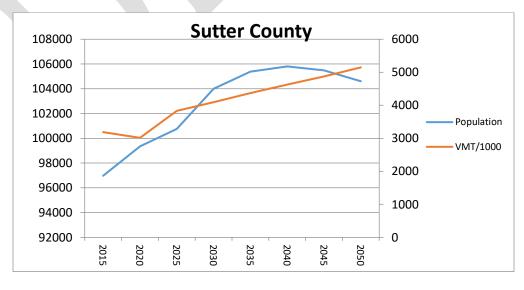
The following charts are a graphical representation of the data in Table I-1. Population and VMT in all counties of the NSVPA are expected to vary through 2050.

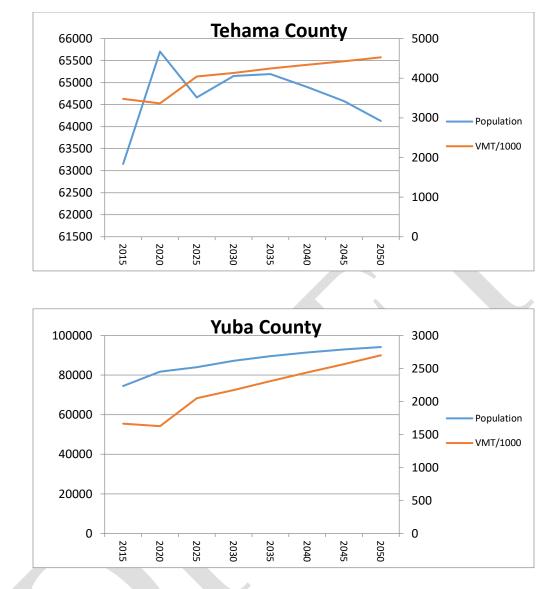












c. Meteorology and Inversions

Meteorology plays a critical role 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. Temperature inversions prevent the vertical dilution of pollutants. Thus, pollutants remain trapped and can increase in concentration in the layer of air closest to the earth's surface. Sunlight then causes a chemical reaction between the hydrocarbons and nitrogen oxides to form ozone. Summer subsidence inversions occur on long days and tend to intensify during the afternoon. Winter radiation inversions occur on 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.

The climate throughout the NSVAB is similar, especially regarding the valley floor where the majority of the population resides. Summers are typically dry and warm. Most of the precipitation occurs during the winter months from December to March. Table I.2 provides a range of meteorological data from a site in the northern portion of the NSVAB (Redding, CA), the southern portion of the NSVAB (Marysville, CA), and the foothill area (Paradise, CA).⁵

Site	Summer Avg. (max/min)	Winter Avg. (max/min)	Mean Precipitation		
Redding	95°F / 64°F	57°F / 37°F	34.63 Inches Avg - 2.886		
Paradise	88°F / 64°F	54°F / 40°F	58.13 Inches Avg - 4.844		
Marysville	94°F / 60°F	57°F / 39°F	22.01 Inches Avg - 1.834		

Table	I.2	Meteorology Data
-------	-----	------------------

I.4 AMBIENT AIR QUALITY STANDARDS

The 1-hour ozone CAAQS (0.09 ppm or 180 μ g/m³) was adopted in 1988. Pursuant to Senate Bill 25 (SB25), the ozone standard was analyzed in a report entitled "Adequacy of California Ambient Air Quality Standards: Children's Environmental Protection Act" in consultation with the Office of Environmental Health Hazard Assessment (OEHHA) to evaluate if the 1-hour standard was adequate in protecting public health. Results of the study concluded that adverse health effects could occur in sensitive groups at the existing standards and slated the ozone standard for potential revision. Effective July 26, 2007, the State adopted a more stringent 8-hour ozone standard of 0.070 ppm (or 137μ g/m³) in addition to the 1-hour standard.

The United States Environmental Protection Agency (US EPA or EPA) also adopted ambient air quality standards for ground level ozone. The National Ambient Air Quality Standards (NAAQS) for ground-level ozone of 70 parts per billion (0.070 ppm), became effective on December 28, 2015.⁶

AMBIENT AIR QUALITY STANDARDS FOR OZONE						
State Ozone Standard: National Ozone Standards:						
0.070 ppm for 8-Hours	0.070 ppm for 8-Hours					
0.09 ppm for 1-Hour Effective December 28, 2015						

⁵ https://www.usclimatedata.com

⁶ 80 FR 65292

I.5 AREA DESIGNATIONS

The area designations for the California ozone ambient air quality standards of the NSVPA counties can be found in Table I-3. The Table also includes the previous designations in effect for the 2021 Plan:

County	2024 Attainment Status ⁸	2021 Attainment Status		
Butte	Nonattainment -	Nonattainment		
	Transitional			
Colusa	Attainment	Attainment		
Glenn	Attainment	Attainment		
Shasta	Nonattainment-Transitional	Nonattainment-Transitional		
Sutter	Nonattainment	Nonattainment		
Tehama	Nonattainment	Nonattainment		
Yuba	Nonattainment	Nonattainment		

Several District in the NSVPA have also been designated as nonattainment for National ambient air quality standard for 8-hour ozone. The US EPA made the designations in Table I.4 for the 2015 8-hour standard of 0.070 ppm which became effective on August 3, 2018.⁹

Table I.4: NSVPA Designations for Ozone NAAQS

Area	Designation	Classification
Butte County	Nonattainment	Marginal ¹⁰
Sutter County (partial)	Nonattainment	Serious
Sutter Buttes	Attainment	Attainment

⁷ https://ww2.arb.ca.gov/aaqs-designation-tool

⁸ https://ww2.arb.ca.gov/sites/default/files/barcu/board/15day/sad/fro.pdf

⁹ https://www3.epa.gov/airquality/greenbook/jbcty.html

¹⁰ Ozone Designation and Classification Information | US EPA

Tuscan Buttes – Tehama	Attainment	Attainment
County (partial)		

Nonattainment Area Classification	8-Hours Ozone Design Value (ppm)
Marginal	0.071 - 0.081
Moderate	0.081 – 0.093
Serious	0.093 – 0.105
Severe-15	0.105 – 0.111
Severe – 17	0.111 – 0.163
Extreme	0.163 and Above

Table I.5: Classification Thresholds for the 2015 Ozone NAAQS

Butte County, the Sutter Buttes and Tuscan Buttes - Tehama County (partial) attained the standard by the August 3, 2021 date. As a serious nonattainment area and part of the Sacramento Federal Nonattainment Area (SFNA), south Sutter County must meet the standard by August 3, 2033.¹¹

I.6 OVERVIEW OF AIR POLLUTANTS AND HEALTH EFFECTS

a. Ozone

Ozone is found in two regions of the Earth's atmosphere – at ground level and in the upper regions of the atmosphere. Both types of ozone have the same chemical composition (O_3). While upper atmospheric ozone protects the earth from the sun's harmful rays, ground level ozone is the main component of smog.

Tropospheric, or ground level ozone, is not emitted directly into the air but is created by chemical reactions between nitrogen oxides (NO_x) and reactive organic gases (ROG) in the presence of sunlight. Generally, low wind speeds or stagnant air coupled with warm temperatures and cloudless skies provide the optimum conditions for ozone formation. 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. Ozone can also be transported long distances by wind. For this reason, even rural areas can experience high ozone levels.¹²

In the NSVPA, ozone is a seasonal problem typically occurring during the months of May through October. Sources of NO_x and ROG emissions include motor vehicles, power plants, factories, chemical solvents, combustion products from various fuels, and consumer products.

¹¹ https://www3.epa.gov/airquality/greenbook/jnc.html

¹²https://www.epa.gov/ground-level-ozone-pollution/ground-level-ozone-basics#formation

b. Precursor

Precursors are directly emitted pollutants 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. Nitrogen oxides and reactive organic gases are precursors to ground level ozone.

c. Nitrogen Oxides

Nitrogen oxides (NO_x) are a group of highly reactive gasses and are also known as "oxides of nitrogen." Nitrogen oxides included nitrogen dioxide (NO_2) , nitric oxide (NO), nitrous acid (HNO_2) and nitric acid (HNO_3) . Because NO_x is an ingredient in the formation of ozone, it is referred to as an ozone precursor.

 NO_x is emitted from combustion sources such as cars, trucks and buses, power plants, and off-road equipment. In addition to contributing to the formation of ground-level ozone, and fine particle pollution, NO_2 (a component of NO_x) is linked with a number of adverse effects on the respiratory system.

d. Reactive Organic Gases

Reactive organic gases (ROG) are carbon compounds that have atmospheric photochemical reactivity. ROG excludes carbon monoxide, carbon dioxide, carbonic acid, metallic carbines or carbonates, and ammonium carbonate. As required by the US EPA, the ROG inventory is expressed in terms of volatile organic compounds (VOC). VOC emissions are generally slightly less than ROG, because the VOC definition excludes certain compounds such as ethane, acetone, methyl acetate, and perchloroethylene, which do not contribute to ozone formation. The reader may find both terms used in this document.

e. Health Effects of Ozone

Ozone in the air we breathe can harm our health, especially on hot sunny days when ozone can reach unhealthy levels. Even relatively low levels of ozone can cause health effects.

People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure. Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma. Breathing ozone can trigger a variety of health problems including chest pains, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma.

Ground level ozone also can reduce lung function and inflame the lining of the lungs. Repeated exposure may permanently scar lung tissue.

Ozone can:

- Make it more difficult to breathe deeply and vigorously
- Cause shortness of breath and pain when taking a deep breathe
- Cause coughing and sore or scratchy throat
- Inflame and damage the airways
- Aggravate lung diseases such as asthma, emphysema, and chronic bronchitis
- Increase the frequency of asthma attacks
- Make the lungs more susceptible to infection

These effects have been found even in healthy people but can be more serious in people with lung diseases such as asthma. These effects may lead to increased school absences, medication use, visits to doctors and emergency rooms, and hospital admissions.

Ozone is a powerful oxidant that can irritate the airways causing coughing, a burning sensation, wheezing and shortness of breath. Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli. This leads to wheezing and shortness of breath. In people with asthma it can result in asthma attacks. Long-term exposure to ozone is linked to aggravation of asthma and is likely to be one of the many causes of asthma development. Studies in locations with elevated concentrations also report associations of ozone with deaths from respiratory causes.¹³

I.7 TRANSPORT OF POLLUTANTS

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).¹⁴ The CARB has identified that air pollution is transported from the Broader Sacramento Area (BSA)¹⁵ to the Upper Sacramento Valley (USV), thus establishing the BSA/USV transport Couple.¹⁶ The impacts of transported BSA air pollution to District in the USV are variable. Transport pollution impacts are classified using terms Inconsequential, Significant, and Overwhelming, as defined 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.

Inconsequential is defined as an ozone transport impact classification describing a condition that exists when upwind emissions are not transported or do not appear to

¹³ https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution

¹⁴ 17 CCR § 70500

¹⁵ 17 CCR § 70500

¹⁶ A pair of geographical areas. One considered upwind and one considered downwind.

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.

Significant is defined as 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 emission 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 the responsibility lying with both the upwind and downwind areas.

Overwhelming is defined as an ozone transport impact classification describing a condition which exist when emissions form 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.

CHAPTER II - AIR MONITORING

II.1 INTRODUCTION

This chapter of the Plan looks at air quality monitoring data from each of the ozone monitoring sites in the NSVPA. Figure II-1 shows the location of the air monitoring stations operating in the NSVAB. Between 2021 and 2023 there were twelve ozone monitors operating within the NSVAB.

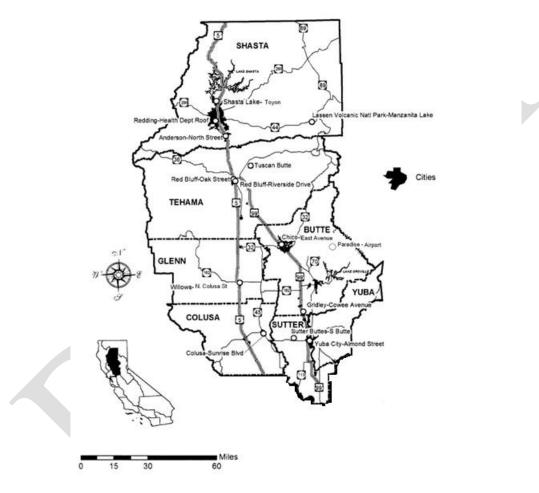


FIGURE II-1 Air Quality and Meteorological Stations in the NSVAB

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 maximum 1-hour and 8-hour concentrations observed between 2021 and 2023 for the NSVPA are shown in Figure II.2 and II.3 below. The state 1-hour standard is 0.09 ppm and the 8-hour standard is 0.070 ppm.

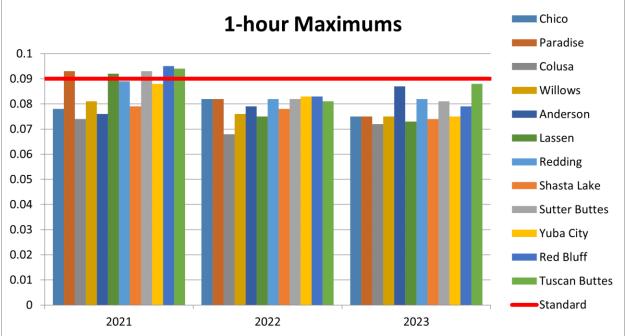
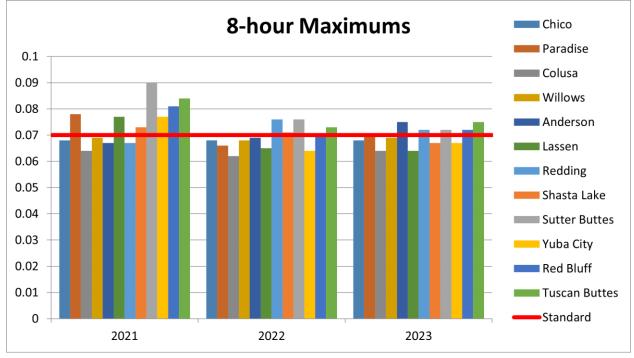


Figure II.2 NSVPA Monitoring Sites 1-hour Maximum Ozone Values

Figure II.3 NSVPA Monitoring Sites 8-hour Maximum Ozone Values



The 1-Hour ozone Expected Peak Day Concentration (EPDC) is a calculated concentration that represents the highest 1-hour ozone concentration expected each year. The 1-hour ozone EPDC is based on the maximum daily hourly observations within three consecutive years and is associated with the last year of the three consecutive years. It is expressed in parts per million (ppm).

The 8-Hour ozone Expected Peak Day Concentration (EPDC) is a calculated 8-hour average concentration that represents the highest State 8-hour ozone average expected each year. The EPDC is based on the maximum daily State 8-hour averages within three consecutive years and is associated with the last year of the three consecutive years. It is expressed in ppm.

The 1-hour Designation Value is the highest hourly ozone measurement, rounded to two decimal places, during the last three years that is less than or equal to the 1-hour <u>EPDC</u>, also rounded to two decimal places, provided that there is a valid 1-hour <u>EPDC</u>. If there is no valid 1-hour <u>EPDC</u>, the State 1-hour designation value is the highest measurement during the last three years, rounded to two decimal places. The 1-hour designation value represents all hourly ozone measurements in the listed year and the two years before the listed year and is expressed in ppm.

The 8-hour Designation Value is the highest 8-hour ozone average, rounded to three decimal places, during the last three years that is less than or equal to the 8-hour <u>EPDC</u>, also rounded to three decimal places, provided that there is a valid 8-hour <u>EPDC</u>. If there is no valid 8-hour <u>EPDC</u>, the State 8-hour designation value is the highest 8-hour average during the last three years, rounded to three decimal places. The 8-hour designation value represents all 8-hour ozone averages in the listed year and the two years before the listed year and is expressed in ppm.

The number of days > 1-hour standard is the number of days in each year that the maximum 1-hour ozone concentration, after rounding to two decimal places, was greater than 0.09 parts per million. The 1-hour ozone CAAQS is exceeded whenever the daily maximum 1-hour observation (again, after rounding to two decimal places) is greater than 0.09 ppm.

The number of days > 8-hour standard is the number of days in each year that the maximum 8-hour average ozone concentration (after rounding to 3 decimal places) was greater than 0.070 parts per million. The 8-hour average ozone CAAQS is exceeded when the rounded average is greater than 0.070 ppm.

The maximum 1-hour observation is the highest 1-hour concentration observed within the year, expressed in ppm. The 1-hour CAAQS is exceeded when an observation, after rounding to two decimal places, is greater than 0.09 ppm.

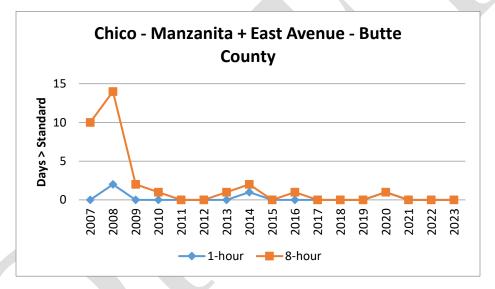
The maximum 8-hour average is the highest 8-hour average ozone concentration of each year. It is blank when there are too few days within the year with enough hourly measurements for the year to be considered representative. The 8-hour average CAAQS is exceeded when the highest 8-hour average during the current year and the two previous years is greater than or equal to 0.070 ppm.

II.2 MONITORING STATIONS

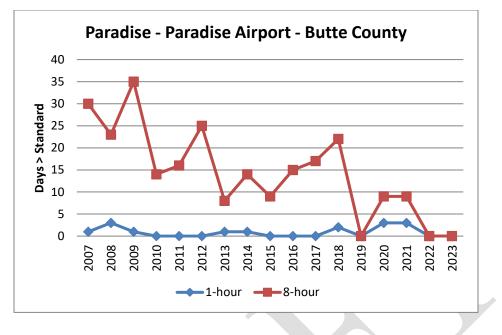
Butte County Monitoring Stations

Between 2021 and 2023 there were two ozone monitoring stations in Butte County. The station at East Avenue in Chico and the station at the Paradise Airport in Paradise. The station on Manzanita Avenue in Chico closed in 2012, when the East Avenue station was started. The station at the Paradise Airport was closed in 2023 and was replaced with a station on Clark Road in Paradise. The trend since 2007 shows minimal days over the 1-hour standard.

Chico - East Avenue - Butte County									
	Days > Standard Maximums Designation Values Exp. Peak Day Conc.								
Year	1-hour	8-hour	our 1-hour 8-hour 1-		1-hour	8-hour	1-hour	8-hour	
2021	0	0	0.078	0.068	0.08	0.07	0.077	0.073	
2022	0	0	0.082	0.068	0.08	0.07	0.080	0.073	
2023	0	0	0.075	0.068	0.08	0.069	0.077	0.073	



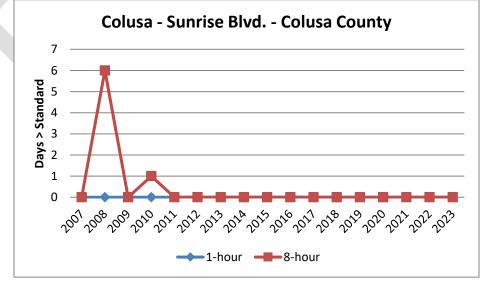
	Paradise - Paradise Airport - Butte County									
	Days > Standard Maximums Designation Values Exp. Peak Day Cond									
Year	1-hour 8-hour 1-hour 8-h		8-hour	1-hour	8-hour	1-hour	8-hour			
2021	3	9	0.093	0.078	0.09	0.079	0.087	0.083		
2022	0	0	0.082	0.066	0.09	0.079	0.086	0.083		
2023	0	0	0.075	0.07	0.08	0.077	0.081	0.077		



Colusa County Monitoring Station

There is one ozone monitoring station in Colusa County. There have been no exceedances of the 1-hour or 8-hour standard since 2010. Colusa County was designated to have an attainment status for the ozone CAAQS in 2013.

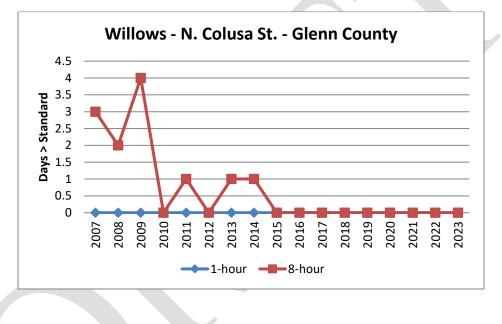
Colusa - Sunrise Blvd Colusa County									
	Days > Standard Maximums Designation Values Exp. Peak Day Cond								
Year	1-hour	8-hour	1-hour	1-hour 8-hour		8-hour	1-hour	8-hour	
2021	0	0	0.074	0.064	0.07	0.064	0.072	0.064	
2022	0	0	0.068	0.062	0.07	0.064	0.071	0.064	
2023	0	0	0.072	0.064	0.07	0.065	0.071	0.065	



Glenn County Monitoring Station

There is one monitoring station in Glenn County. There were no days where the site was over the 8-hour standard or the 1-hour standard between 2021 and 2023. The longer trend shows decreasing days over the 8-hour standard. Glenn County was re-designated to attainment for the ozone CAAQS in 2013.

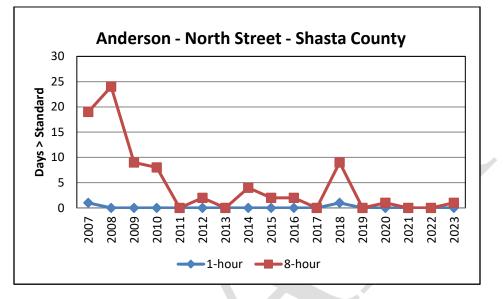
Willows - N. Colusa Street - Glenn County									
	Days > Standard Maximums Designation Values Exp. Peak Day Con								
Year	1-hour	8-hour	1-hour	1-hour 8-hour		8-hour	1-hour	8-hour	
2021	0	0	0.081	0.069	0.07	0.065	0.072	0.065	
2022	0	0	0.076	0.068	0.07	0.069	0.074	0.069	
2023	0	0	0.075	0.069	0.07	0.069	0.073	0.069	



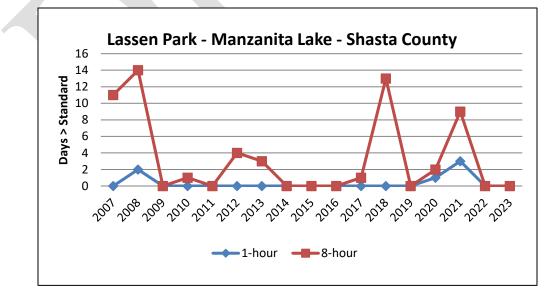
Shasta County Monitoring Stations

Shasta County has four monitoring stations. These sites are located at North Street in Anderson, Manzanita Lake in Lassen Volcanic National Park, the Health Department in Redding, and Lake Boulevard in Shasta Lake. The site located at North Street in Anderson was closed in October of 2023. The Anderson and Shasta Lake sites had no exceedances of the 1-hour standard. The Manzanita Lake location had three exceedances of the 1-hour standard and the Redding Health Department site had only one exceedance of the 1-hour standard between 2021 and 2023.

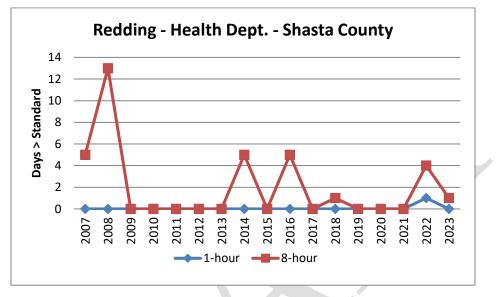
Anderson - North Street - Shasta County									
	Days > Standard Maximums		Designation Values		Exp. Peak Day Conc.				
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	
2021	0	0	0.076	0.067	0.08	0.070	0.078	0.070	
2022	0	0	0.079	0.069	0.08	0.070	0.078	0.072	
2023	0	1	0.087	0.075	0.08	0.070	0.077	0.070	



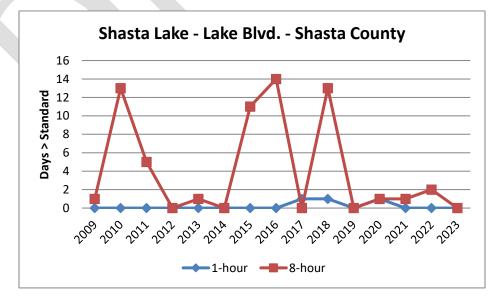
Lassen Volcanic National Park - Manzanita Lake - Shasta County									
	Days > Standard		Maximums		Designation Values		Exp. Peak Day Conc.		
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	
2021	3	9	0.092	0.077	0.08	0.079	0.084	0.079	
2022	0	0	0.075	0.065	0.08	0.079	0.083	0.079	
2023	0	0	0.073	0.064	0.08	0.078	0.082	0.079	



Redding - Health Dept Shasta County									
	Days > Standard		Maximums		Designation Values		Exp. Peak Day Conc.		
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	
2021	0	0	0.089	0.067	0.07	0.068	0.075	0.069	
2022	1	4	0.082	0.076	0.08	0.073	0.079	0.073	
2023	0	1	0.082	0.072	0.08	0.073	0.079	0.074	



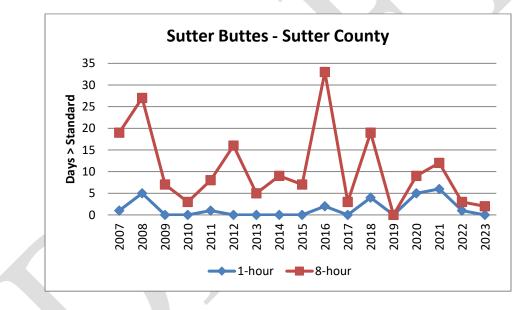
Shasta Lake - Lake Blvd Shasta County									
	Days > Standard		Maximums		Designation Values		Exp. Peak Day Conc.		
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	
2021	0	1	0.079	0.073	0.08	0.073	0.078	0.073	
2022	0	2	0.078	0.071	0.08	0.073	0.079	0.074	
2023	0	0	0.074	0.067	0.08	0.073	0.078	0.073	



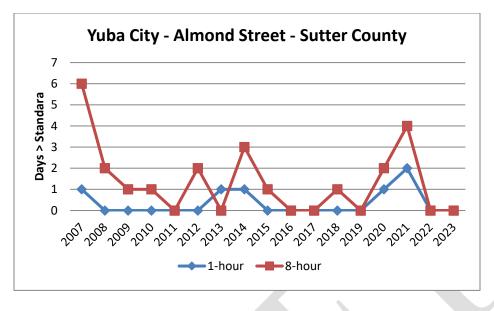
Sutter County Monitoring Stations

There were two ozone monitoring sites in Sutter County between 2021 and 2023. These sites are located on S. Butte Road at the Sutter Buttes and Almond Street in Yuba City. The Sutter Buttes site records transport ozone from the larger metropolitan areas to the south of the NSVPA. The Yuba City site is representative of air quality in Yuba and Sutter counties. There were seven days exceeding the 1-hour standard at the Sutter Buttes site and two days exceeding the 1-hour standard at the Yuba City site between 2021 and 2023.

	Sutter Buttes - S. Butte Road - Sutter County										
	Days > S	tandard	Maxir	nums	Designati	on Values	Exp. Peak	Day Conc.			
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour			
2021	6	12	0.093	0.09	0.11	0.091	*	*			
2022	1	3	0.082	0.076	0.11	0.091	*	*			
2023	0	2	0.081	0.072	0.09	0.09	*	*			



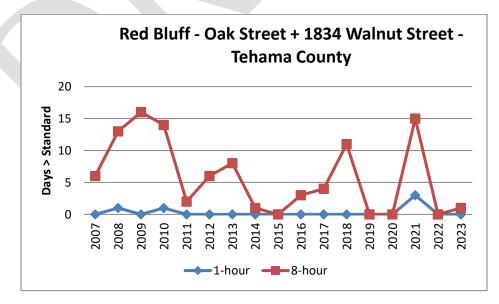
	Yuba City - Almond Street - Sutter County										
	Days > Standard Maximums Designation Values Exp. Peak Day Conc										
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour			
2021	2	4	0.088	0.077	0.08	0.073	0.084	0.076			
2022	0	0	0.083	0.064	0.08	0.073	0.084	0.076			
2023	0	0	0.075	0.067	0.08	0.073	0.080	0.074			



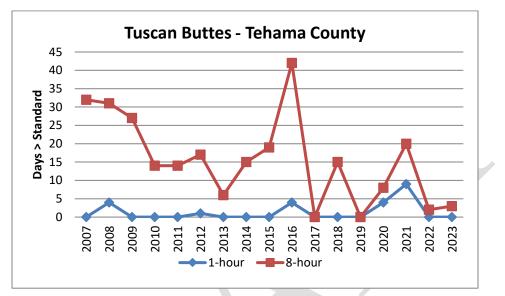
Tehama County Monitoring Stations

There were two ozone monitoring sites in Tehama County between 2021 and 2023. The Oak Street site was relocated to 1834 Walnut Street early in 2015. The long-term trend shows a decreasing number of days over the 8-hour standard.

	Red Bluff – 1834 Walnut Street - Tehama County										
Days > Standard Maximums Designati							Exp. Peak	Day Conc.			
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour			
2021	3	15	0.095	0.081	0.08	0.081	0.084	0.081			
2022	0	0	0.083	0.07	0.08	0.077	0.085	0.080			
2023	0	1	0.079	0.072	0.08	0.077	0.085	0.080			



	Tuscan Buttes - Tehama County										
	Days > Standard Maximums Designation Values Exp. Peak Day Co							ak Day Conc.			
Year	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour	1-hour	8-hour			
2021	9	20	0.094	0.084	0.09	0.088	0.089	0.088			
2022	0	2	0.081	0.073	0.09	0.085	0.089	0.087			
2023	0	3	0.088	0.075	0.09	0.084	0.087	0.084			



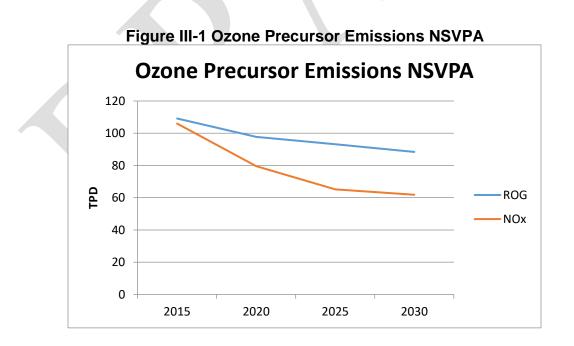
CHAPTER III – EMISSION INVENTORY

The California Air Pollution Control and Air Quality Management Districts; as well as the CARB 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 2017 inventory. The air quality emissions inventory data contained in this Plan was provided by the CARB.

In the following tables are forecast emissions for the NSVPA for ROG and NOx for several source categories. The annual average emissions are reported in tons per day for the years 2015, 2020, 2025 and 2030. In the NSVPA, ozone can be caused by stationary source emissions, such as from internal combustion engines or boilers, mobile sources such as cars, trucks, and trains, or area sources such as consumer products or wildfires.

Mobile sources comprise the majority of the projected NOx emission inventory in 2025, an estimated 60% of the total. Area-wide sources account for 44% of the projected ROG emission inventory in 2025.

The projected emissions show a downtrend for both ROG and NOx, which are the precursor emissions for ozone. The NOx emissions are forecasted to decrease by 42% and the ROG emissions are forecasted to decrease by 19% between 2015 and 2030.



2015 24.030 18.925 0.077 0.008	2020 21.535 17.244 0.081	2025 20.950 16.657	2030 20.114 16.053
18.925 0.077	17.244	16.657	
0.077			16.053
	0.081	0.005	
0.008		0.085	0.087
	0.009	0.010	0.010
2.198	1.693	1.463	1.264
2.822	2.508	2.735	2.700
5.176	4.944	4.928	4.925
2.085	1.898	1.885	1.876
3.082	3.038	3.034	3.040
0.009	0.008	0.009	0.009
76.790	53.135	39.335	36.809
43.302	28.513	19.109	19.410
33.488	24.622	20.226	17.399
105.996	79.614	65.213	61.848
	5.176 2.085 3.082 0.009 76.790 43.302 33.488	5.176 4.944 2.085 1.898 3.082 3.038 0.009 0.008 76.790 53.135 43.302 28.513 33.488 24.622	5.176 4.944 4.928 2.085 1.898 1.885 3.082 3.038 3.034 0.009 0.008 0.009 76.790 53.135 39.335 43.302 28.513 19.109 33.488 24.622 20.226

Table III-2 ROG Emission Inve	ntory Projecti	ons (tons/o	day)	
SUMMARY CATEGORY NAME	2015	2020	2025	2030
STATIONARY SOURCES	26.438	26.190	25.944	25.790
Fuel Combustion	1.179	0.992	0.945	0.899
Waste Disposal	3.002	4.086	4.175	4.416
Cleaning and Surface Coating	6.695	7.258	7.911	8.199
Petroleum Production and Marketing	10.480	9.001	7.742	6.779
Industrial Processes	5.082	4.853	5.171	5.497
AREA-WIDE SOURCES	40.593	39.285	41.005	40.696
Solvent Evaporation	18.938	19.751	20.563	21.504
Managed Burning and Disposal	4.616	4.899	5.886	4.883
Farming Operations	5.503	5.363	5.195	5.069
Residential Fuel Combustion	11.429	9.166	9.145	9.124
Miscellaneous Processes Other	0.107	0.106	0.216	0.116
MOBILE SOURCES	42.117	32.239	26.235	21.926
On-Road Motor Vehicles	15.398	9.916	7.301	6.802
Other Mobile Sources	26.719	22.323	18.934	15.124
TOTAL ROG FOR NSVPA	109.148	97.714	93.184	88.412

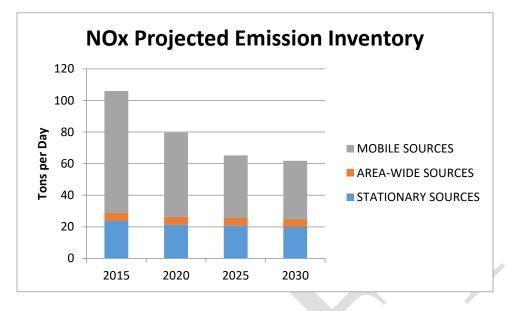
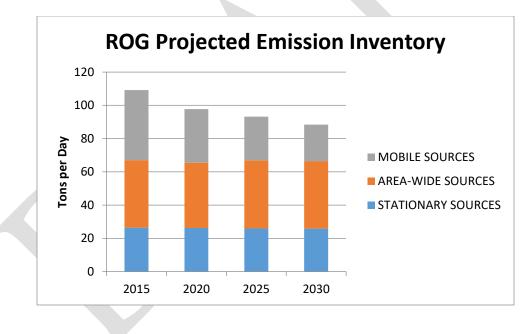
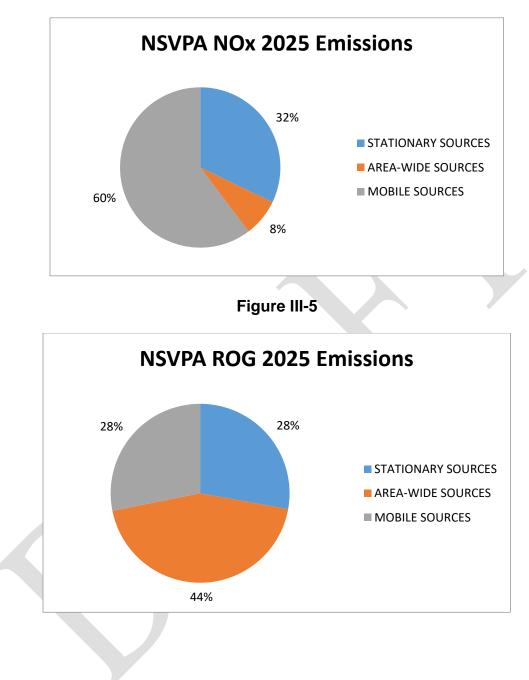


Figure III-2 NOx Forecasted Emission Inventory

Figure III-3 ROG Forecasted Emission Inventory







CHAPTER IV – STATIONARY SOURCE CONTROL MEASURES

To attain and maintain air quality standards, the Districts adopt control measures to limit the amount of air pollutant releases from sources. The Districts have regulatory authority over stationary sources of air pollutants and some area sources. Some common types of stationary sources regulated by the Districts include gasoline dispensing facilities, internal combustion engines, natural gas wells, power plants, and asphalt plants. The Districts also have regulatory authority over some area sources and many have adopted control measures to reduce emissions from architectural coatings, solvents, and residential wood burning devices.

IV.1 ALL FEASIBLE MEASURES

Under the CCAA, air districts are to develop plans to attain the State ambient air quality standard for ozone by the earliest practicable date. As part of this plan, the CCAA requires districts that are unable to achieve five percent annual emission reductions to demonstrate to the CARB's satisfaction that it has included every feasible measure and an expeditious adoption schedule. Since the CCAA did not define the term "every feasible measure" the CARB developed a tiered list of measures CARB considers feasible. Using the definition of "feasible" as used for the California Environmental Quality Act (CEQA) guidelines, CARB has determined that at a minimum, districts consider regulations that have been successfully implemented elsewhere.

Using this approach, CARB developed the document "Identification of Performance Standards for Existing Stationary Sources – A Resource Document." This document identifies control measures and ranks them into three tiers, based on their emissions and emission reduction potential. As part of the Triennial Plan review, member air districts in the NSVPA reviewed the control measure lists and existing emission inventories to evaluate potential reductions and prioritize rule development efforts. Only those categories applicable to the NSVPA and showing promise for emission reductions were included. Table IV-1 identifies these feasible measures and the district's status adopting them. Most of the feasible measures have been adopted as control measures by districts with applicable sources. In addition to the feasible measures table, the NSVPA districts are working to develop model rules and adopt CARB's Suggested Control Measures for Automobile Coatings and Architectural Coatings.

Control Measure	Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Adhesives and Sealants	C (03/08)	A (05/02)	NAS	С	A (05/13)	A (04/03)
Architectural Coatings	A (04/02)	A (07/02)	A (08/14)	С	A (05/13)	A (02/14)
Automobile Coatings	A (06/07)	A (03/98)	A (08/19)	A (05/99)	A (05/13)	A (11/98)
Cutback Asphalt	A (01/93)	A (07/97)	NAS	A (09/94)	A (06/95)	A (06/97)
Disposal of Organic Waste	A (03/03)	A (01/96)	A (08/11)	A (07/98)	A (06/95)	A (03/95)
Gas Turbines	NAS	A (03/98)	С	NAS	С	A (01/02)
Gasoline Terminals and Bulk Plants	A (06/05)	A (03/98)	A (06/14)	A (12/72)	A (06/97)	A (04/98)
Industrial Boilers	A (03/04)	A (01/96)	A (06/06)	A (07/98)	A (12/95)	A (01/02)
Internal Combustion Engines	A (12/04)	A (03/98)	A (08/21)	A (05/10)	A (04/97)	A (02/09)
Landfills	A (08/02)	NAS	A (06/97)	A (05/99)	A (04/97)	A (06/97)
Model Rule for Metal Parts and Products Coatings	A (12/17)	A (07/06)	С	A (07/98)	S (2021)	S (11/23)
Polyester Resin Operations	A (09/05)	A (01/96)	AC	A (07/98)	A (06/95)	A (03/95)
Residential Wood Combustion	A (12/08)	S (12/24)	A (10/09)	A (11/94)	A (03/94)	A (03/95)
Solvent Degreasing	A (09/05)	A (01/96)	A (08/16)	A (07/98)	A (06/95)	A (06/97)
I. Suggested Control Measure for Architectural Coatings (2007 Update) or	AC	NAS	A (08/14)	С	С	С
II. Suggested Control Measure for Architectural Coatings (2019/2020)	A (9/22)	NAS	S (06/24)	-	С	S (11/26)
Suggested Control Measure for Automotive Coatings (2005 Update)	S (12/24)	С	A (04/19)	С	С	S (11/26)
Vapor Recovery Systems for Gasoline Distributors	A (06/05)	A (01/89)	A (06/14)	A (11/98)	A (06/97)	A (04/98)
Wood Products Coatings	С	NAS	A (08/11)	С	A (05/13)	S (11/26)

Table IV-1 Feasible Measures Considered for Adoption

Notes:

A – Rule has been adopted by District, most recent adopted/amended date.

S – Scheduled date for consideration.

C - Rule has been considered but determined not feasible at this time.

NAS - District does not have applicable sources.

AC – Already complying in practice; no emission reductions would be achieved by rule adoption.

IV.2 FEASIBLE MEASURES CONSIDERED FOR BASIN-WIDE MODEL RULES

Table IV-2 identifies control measures to be considered for model rule development by the NSVPA Districts. Due to the regional nature of the ozone non-attainment status in the NSVPA, it is anticipated that adoption of the new regulations to address control measures will benefit air quality for all air districts within the NSVPA even though some of the sources affected by the control measures may not exist in each district within the NSVPA. The Districts of the NSVPA collectively work to develop model rules which then may be adopted by each District. The Sacramento Valley Air Quality Engineering and Enforcement Professionals (SVAQEEP) committee is tasked with developing the model rules.

Table IV-2 Basin-wide Model Rules

Control Measure	Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Graphic Arts	S	NAS	S	NAS	S	S

Notes:

A – District has already adopted a control measure applicable to these sources
 S – District is scheduled to consider once model rule is complete
 NAS – District has no applicable sources

Additional model rules that may be considered by the NSVPA include:

- A control measure to reduce VOC's from composting facilities
- A control measure to reduce fugitive VOC's emissions from oil and gas production

IV.3 RULES ADOPTED SINCE 2021 TRIENNIAL AQAP

In the 2024 Triennial Update to the Air Quality Attainment Plan, the NSVPA the Districts committed to adopt specific control measures. Table IV-3 shows the control measures as identified in the 2021 Plan and their expected versus revised emission reductions as required by HSC §40924(b)(2).

Table	IV-	3:	202	4	Control	Measure	Commitments
-------	-----	----	-----	---	---------	---------	-------------

District	Control Measure	Date to Adopt	Status	Expected vs. Revised Emissions	Notes
BCAQMD	Automotive Coatings (2005 Update)	2024	Not Adopted	N/A	Adoption of SCM to be considered.
CCAPCD	Residential Wood Coatings	2026	Not Adopted	N/A	Adoption of SCM to be considered.
FRAQMD	Architectural Coatings (2019/2020)	2024	Not adopted	N/A	Scheduled to be adopted June 2024.

TCAPCD	Architectural Coatings (2007 Update)	2026	Not Adopted	N/A	Adoption of SCM to be considered.
TCAPCD	Automotive Coatings (2005 Update)	2026	Not Adopted	N/A	Adoption of SCM to be considered.
TCAPCD	Wood Products Coatings	2026	Not Adopted	N/A	Adoption of SCM to be considered.

CHAPTER V – NON-STATIONARY SOURCE MEASURES

V.1 INCENTIVE PROGRAMS

The Districts of the NSVPA administer several grant programs that achieve emission reductions in addition to stationary source and area-wide control measures. These incentive programs are voluntary and often target mobile sources, of which comprise the majority of the NOx emission inventory, yet the Districts have no regulatory authority over.

a. Carl Moyer Program

The Carl Moyer Memorial Air Quality Standards Attainment Program¹⁷ (Carl Moyer Program) provides grant funding for cleaner-than-required engines and equipment. Grants are administered by local air districts. ARB works collaboratively with the districts and other stakeholders to set Guidelines and ensure the Program reduces emissions and improves air quality for Californians. The Carl Moyer Program achieves reductions in emissions of key pollutants which are necessary for California to meet its clean air commitments under regulatory requirements. Eligible projects include cleaner on-road, off-road, marine, locomotive, lawn & garden, light duty passenger vehicles being scrapped and agricultural equipment.

Table V-1 Carl Moyer Program

	Moyer Funding (23-	NOx Reductions	ROG Reductions	
	25)	(tons/year)	(tons/year)	
NSVPA Total	\$5,113,319.12	62.58	6.25	

b. Vehicle Fee Programs

Sections 44220 through 44247 of the Health and Safety Code (AB 2766) authorize air pollution control districts to impose a \$2 to \$4 motor vehicle registration fee to provide funds for air districts to meet new responsibilities mandated under the California Clean Air Act. Section 44225 of the Health and Safety Code (AB 923), amended in 2004, authorized air pollution control districts to increase this motor vehicle registration fee to \$6 per registered vehicle. Revenue from the AB 2766 fee is to be used to reduce air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988. The AB 923 portion may be used for limited project types which include school bus replacements and retrofits according to the Lower Emission School Bus Program Guidelines and Carl Moyer eligible projects. Not all NSVPA district Board of Directors have authorized the collection of vehicle fees or directed staff to apply fee revenue towards grant programs.

¹⁷ http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm

Table V-2 Vehicle Fees Allocated to Grants 2021 to 2023

	AB 2766	AB 923		
NSVPA Total	\$549,085	\$938,150.33		

c. Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program

In 2017, the State of California authorized \$135 million to reduce emissions from the agricultural sector from Assembly Bill (AB) 134 (Committee on Budget, Chapter 254, Statutes of 2017) and AB 109 (Ting, Chapter 249, Statutes of 2017). The bills provided funding for agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations. This funding became the FARMER Program. Additional funding was authorized in 2018, 2019, 2020, 2022, and 2023.

Table V-3 FARMER Program

	FARMER Funding	NOx Reductions	ROG Reductions	
	(Years 3-6)	(tons/year)	(tons/year)	
NSVPA Total	\$14,575,628.53	159.98	17.51	

d. Community Air Protection Program

The Community Air Protection Program (CAP Program was established in response to <u>Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017)</u>. The Program's focus is to reduce exposure in communities most impacted by air pollution. The California Legislature appropriated funding to support early actions to address localized air pollution through targeted incentive funding to deploy cleaner technologies in these communities, as well as grants to support community participation in the AB 617 process. AB 617 also includes new requirements for accelerated retrofit of pollution controls on industrial sources, increased penalty fees, and greater transparency and availability of air quality and emissions data.

The incentives program established to support the CAP Program generates emission reductions by replacing older equipment with newer technologies in accordance with the Carl Moyer Program Guidelines. The CAP Incentives Program also established new funding categories for emission reductions at schools and stationary sources. The CAP administrative funding is used to implement the AB 617 program in the air districts.

	CAP Incentives expended	NOx Reductions (tons/year)	ROG Reductions (tons/year)		
NSVPA Total	\$3,563,754.19	30.71	6.3		

Table V-4 CAP Program

e. Other Grant Programs

Woodsmoke Reduction Program provides NOx & ROG emission reductions, in addition to PM reductions primarily during the fall and winter seasons.

The Feather River AQMD expended \$22,235.96 in Mini Grants between 2021 and 2023, for Pesticide Jug collection events and other cleanup event activities, May Is Bike Month events, and educational programs.

The Off-Road Voucher Incentive Program (ORVIP) provides a streamlined approach to reduce emissions by replacing existing, high-polluting equipment with newer and lower emission equipment. The ORVIP provides real emission benefits by retiring the high-polluting equipment earlier than would have been expected through normal attrition or by regulation. Carl Moyer Program funds for voucher projects are used to offset part of the cost of the replacement equipment.

V.2 PUBLIC EDUCATION PROGRAMS

Public education and information programs are important components of local and regional efforts to reduce air pollution. 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." Many of the public education programs and projects have been funded using Vehicle Registration Surcharge Fees (AB 2766). Each District conducts its own public education program. A summary of District public education programs is provided below.

Butte County AQMD

The 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
- Develop and distribute District brochures on various air quality issues
- Distribute CARB brochures and informational handbooks
- Provide presentations to schools, agricultural and business groups as requested

- Participate in community events
- Provide Press Releases and Public Service Announcements
- Respond to public inquires and requests for information
- Fund Community Air Protection Support Grants that reduce air pollution or exposure to air pollution.

Colusa County APCD

The 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
- Presentations at High School Career Days

Feather River AQMD

The District 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 subject matter such as Air Quality Permits, Air Toxics Program, Enforcement Procedures, Agricultural Burning, and Residential Burning.

The District participates in local events to provide air quality information to the public, such as educational events at schools, Earth Day events, and May Is Bike Month activities. The District maintains a web site at http://www.fraqmd.org/, which provides updates on District events, grant programs, current ambient air quality readings, and educational materials available to the public to access 24 hours a day. The District responds to public and media questions and concerns received by telephone, e-mail, postal mail and in person. The District also provides information to the public through a Facebook and Twitter account.

Glenn County APCD

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

- Distribute and display pamphlets, brochures, and Fact Sheets in English and Spanish
- Public Service Announcements
- Press releases inviting applicants to apply for grant programs
- Local newspaper articles on agricultural burning and grant programs
- Presentations on air pollution and health effects to elementary school classes
- Glenn County 8th Grade Career Day
- Glenn County Clean Air Center Program air filters deployed at local libraries
- Information booth at the Glenn County Fair

- Presentations to Agricultural and Business Groups
- Participation in Resource Conservation District, Firesafe Council, and Fire Chief's meetings
- Presentations to the Board of Supervisors and other Government groups
- Public workshops
- Response to public inquiries
- Maintain District web site: <u>http://www.countyofglenn.net/APCD</u>
- Maintain Twitter Account: @GlennCountyAir

Shasta County AQMD

The 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:

- Provide low-cost sensors for school site air quality monitoring
- 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
- Utilize the smoke and fire map 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
- School Flag Program (EPA) for air quality awareness at K-12 schools

Tehama County APCD

The office also maintains a website: <u>http://www.tehcoapcd.net</u>. 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
- 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
- Operate Carl Moyer Program and Equipment Replacement Program allowing for successful turnover of older stationary and mobile farm equipment

V.3 REDUCTIONS FROM LAND USE PROGRAMS

The California Environmental Quality Act (CEQA) was adopted by the State legislature in 1970 and has been amended several times since. Some objectives of CEQA are to disclose to decision-makers and the public the significant environmental effects of proposed activities and to prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.

An air district has three primary roles under CEQA:

- Lead Agency: The District is the Lead Agency for adoption of air quality plans, rules, and regulations.
- Responsible Agency: The District is a Responsible Agency when it will issue a permit for a project and another agency, such as a city or county, is the Lead Agency.
- Commenting Agency: The District comments on the air quality impacts of projects where another public agency is the Lead Agency, but for which the District has no discretionary authority. CEQA requires Lead Agencies to consult with agencies that exercise authority over resources that may be affected by the project¹⁸.

The District staff works with appropriate land use jurisdictions to assess the air quality impact of proposed land use projects and to incorporate appropriate mitigation measures for projects under CEQA. Through this process, the District can realize ROG and NOx reductions by encouraging project design features that promote walking, biking, and transit and which can help to reduce total VMT.

In addition, several Districts have adopted thresholds of significance and local guidance to further assist their local agencies with determining the significance of land use projects and how much mitigation is feasible. The following Districts have adopted guidance:

Table V-5	Local	CEQA	Guidance
-----------	-------	------	----------

District	Title	Adopted or last amended	Located at
Butte County AQMD	CEQA Air Quality Handbook	3/28/2024	https://www.bcaqmd.org/ceqa-california- environmental-quality-act
Feather River AQMD	Indirect Source Review Guidelines	6/7/2010	www.fraqmd.org/CEQA%20Planning.html

¹⁸ California Code of Regulations §15086 and §15073(b)

Shasta County AQMD	CEQA Air Quality Handbook	2012	Available at District office.
Tehama County APCD	Planning & Permitting Air Quality Handbook	4/2015	http://tehcoapcd.net/PDF/CEQA%20Handboo k%20Mar%202015%20Final.pdf

V.4 AIR QUALITY FORECASTING

Several NSVPA air districts offer ozone forecasting and alert systems to their residents. This service is offered through a partnership with the local air district, ARB, US EPA and Sonoma Technologies. Residents can sign up at the website <u>www.airnow.gov</u> to receive daily air quality forecasts or alerts when air quality reaches unhealthy levels. The US EPA, National Oceanic and Atmospheric Administration, National Park Service, tribal, state, and local agencies developed the AirNow system to provide the public with easy access to national air quality information. The local air quality monitoring sites report the current air quality index (AQI) and the air district issues the forecasts.

V.5 DISTRICT RULES APPLICABLE TO NEW DEVELOPMENT

The NSVPA air districts have adopted several control measures and programs that reduce emissions from new development either through the planning process or through control of specific sources of emissions. Local planning agencies should contact their applicable air district to ensure new development is in compliance with the measures listed on Table V-6.

Control Measure Name/Program	Butte	Colusa	Feather River	Glenn	Shasta	Tehama
Air Quality Element	A (01/08)	С	A (6/10)	A (6/93)	A (04/94)	A (11/07)
Smoking Vehicle Program	A (10/01)	SVP	SVP	SVP	SVP	SVP
Wood Stoves and Fireplaces	A (12/08)	С	A (10/09)	A (11/94)	A (3/95)	A (3/95)
Backyard Residential Burning	A (2/11)	С	A (10/08)	С	A (3/04)	С
Architectural Coatings	A (4/02)	A (5/91)	A (8/14)	С	A (5/13)	A (8/02)
Fugitive Dust During Construction	A (5/10)	С	A (4/94)	С	A (11/07)	A (2/08)

Table V-6 Rules and Programs Applicable to New Development

Notes:

A – Rule has been adopted by District, most recent adopted/amended date.

S – Scheduled date for consideration

C – Rule has been considered but determined not feasible at this time.

SVP – District relies on CARB Smoking Vehicle Program

CHAPER VI CONCLUSION

The California Clean Air Act (CCAA) requires air districts which have been designated as a nonattainment area for California Ambient Air Quality Standards (CAAQS) for ozone to prepare and submit a plan for attaining and maintaining the standards. The Air Pollution Control Districts and Air Quality Management Districts (Districts) for the counties located in the northern portion of the Sacramento Valley together establish the Northern Sacramento Valley Planning Area (NSVPA).

The 2024 triennial update of the NSVPA Air Quality Attainment Plan (2024 Plan) assesses the progress made in implementing the previous triennial update and proposed modifications to the strategies necessary to attain the CAAQS by the earliest practicable date. The 2024 Plan includes an assessment of progress towards achieving the control measure commitments in the previous Triennial Plan, a summary of the last three years of ozone data, a comparison of the expected versus actual emission reductions for each measure committed to in the previous Triennial Plan, updated control measure commitments and growth rates of population, industry, and vehicle related emissions.

The 2021 - 2023 monitoring data shows the number of exceedances of the 1-hour ozone CAAQS varies. Wildfires continue to be a major contributor to variations in ozone concentrations due to the rapid release of VOCs when vegetation combusts. Overall, air quality data continues to show a decrease in the number of exceedances of 8-hour ozone CAAQS. From 2018 to 2023, the number of 8-hour exceedances has decreased by 39%. Glenn and Colusa counties have been in attainment for the ozone CAAQS since 2013.

The projected emissions continue to trend downward for both ROG and NOx, which are the precursor emissions for ozone. NOx emissions are forecasted to reduce by 42% and ROG emissions are forecasted to reduce by 19% between 2015 and 2030. Mobile sources continue to comprise the majority of the NOx emission inventory in 2025, an estimated 60% of the total. Area-wide sources account for 44% of the ROG inventory in 2025.

The Carl Moyer and FARMER programs in the NSVPA have resulted in an estimated 222.6 tons of NOx and 23.8 tons of ROG reduced during the past three years. The NSVPA Districts also funded emission reduction projects through AB 617 Community Air Protection Programs, AB 2788/AB 923 Vehicle Fee Programs, Wood Stove Changeout Programs, and Off-Road Voucher Incentive Programs. The voluntary incentive programs, along with stationary source and area-wide control measures, CEQA review programs, and public education and outreach programs all achieve emission reductions that assist the NSVPA with attaining the ambient air quality standards and improving air quality for residents in the area.

SACRAMENTO VALLEY AIR QUALITY ENGINEERING AND ENFORCEMENT PROFESSIONALS (QEEPS, PROFESSIONALS)

Butte Colusa Feather River Glenn Placer Sacramento Shasta Tehama Yolo-Solano

TIMELINE AND CHAPTER(S) ASSIGNMENTS FOR THE 2024 NORTHERN SACRAMENTO VALLEY PLANNING AREA TRIENNIAL AIR QUALITY ATTAINMENT PLAN (ATTAINMENT PLAN)

I. TIMELINE

September (2023) Participating QEEPs Districts assigned chapter(s) of 2024 Attainment Plan for updating

- January (2024) QEEPs complete first draft of Attainment Plan compiled from each participating Districts assigned chapter(s)
- April QEEPs review first draft & provide comments on overall format and direction
- May QEEPs comments incorporated into second draft. APCOs review second draft & provide comments
- **June** QEEPs prepare final draft based on APCO comments received
- **July** QEEPs review final draft and approve Plan to send to TAC for final review.
- August Final draft to TAC for review
- August TAC meeting reviewing comments
- September TAC meeting to address TAC revisions/comments to plan if needed. Draft Resolution sending TAC approved plan to BCC
- October BCC review and approval

October through December – District Board adoption

II. CHAPTER(S) ASSIGNMENTS

Participating District*	Assigned Chapter(s) of the 2024 Attainment Plan
Butte	Chapter 3
Colusa	Chapter 1 and Chapter 6
Feather River	Chapter 5
Glenn	Compilation and Coordination
Shasta	Chapter 4
Tehama	Chapter 2
ALL	Tips for 2027 TAP

*Placer, Sacramento, and Yolo-Solano generate their own respective Attainment Plans