

FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT
MEMORANDUM
August 7, 2017

TO: FRAQMD BOARD OF DIRECTORS

FROM: Christopher D. Brown, AICP, APCO

SUBJECT: Informational item on State Implementation Plan and SFNA.

BACKGROUND:

The United States Environmental Protection Agency (US EPA) sets health based ambient air quality standards for several pollutants. These standards are known as National Ambient Air Quality Standards, or NAAQS. The NAAQS are issued for pollutants for which a level can be established to protect public health and welfare, including ground level ozone and particulate matter.

After the US EPA sets a NAAQS, the agency uses monitoring data to determine whether areas are meeting the standards. For areas not meeting the standards, the Clean Air Act requires them to submit a plan to attain the standard. The higher the pollutant levels are above the standard, the higher the “classification” of the nonattainment area. The higher the classification, the greater amount of controls are required by the Clean Air Act. A higher classification also allows nonattainment areas additional time to meet the standard. The plan is called a State Implementation Plan, or SIP.

If a nonattainment area fails to submit the SIP by the date required in the Clean Air Act, the US EPA will issue a Finding of Failure to Submit, which starts a sanctions clock. If the SIP is not submitted within 18 months of the initiation of the sanctions clock then stationary sources requiring offsets will be forced to purchase them at increased ratios. If the SIP is not submitted within 24 months, the area will lose federal highway funding and the US EPA can adopt a Federal Implementation Plan (FIP) which will implement the requirements of the Clean Air Act without local input or control.

One pollutant for which US EPA issues NAAQS is ground level ozone. It is formed through chemical reactions between oxides of nitrogen and reactive organic gases in the presence of sunlight. Ozone can cause health impacts on humans, including difficulty breathing, shortness of breath, damage to lung tissue and airways, and increase the risk of cardiovascular problems such as heart attacks. It can also damage vegetation.

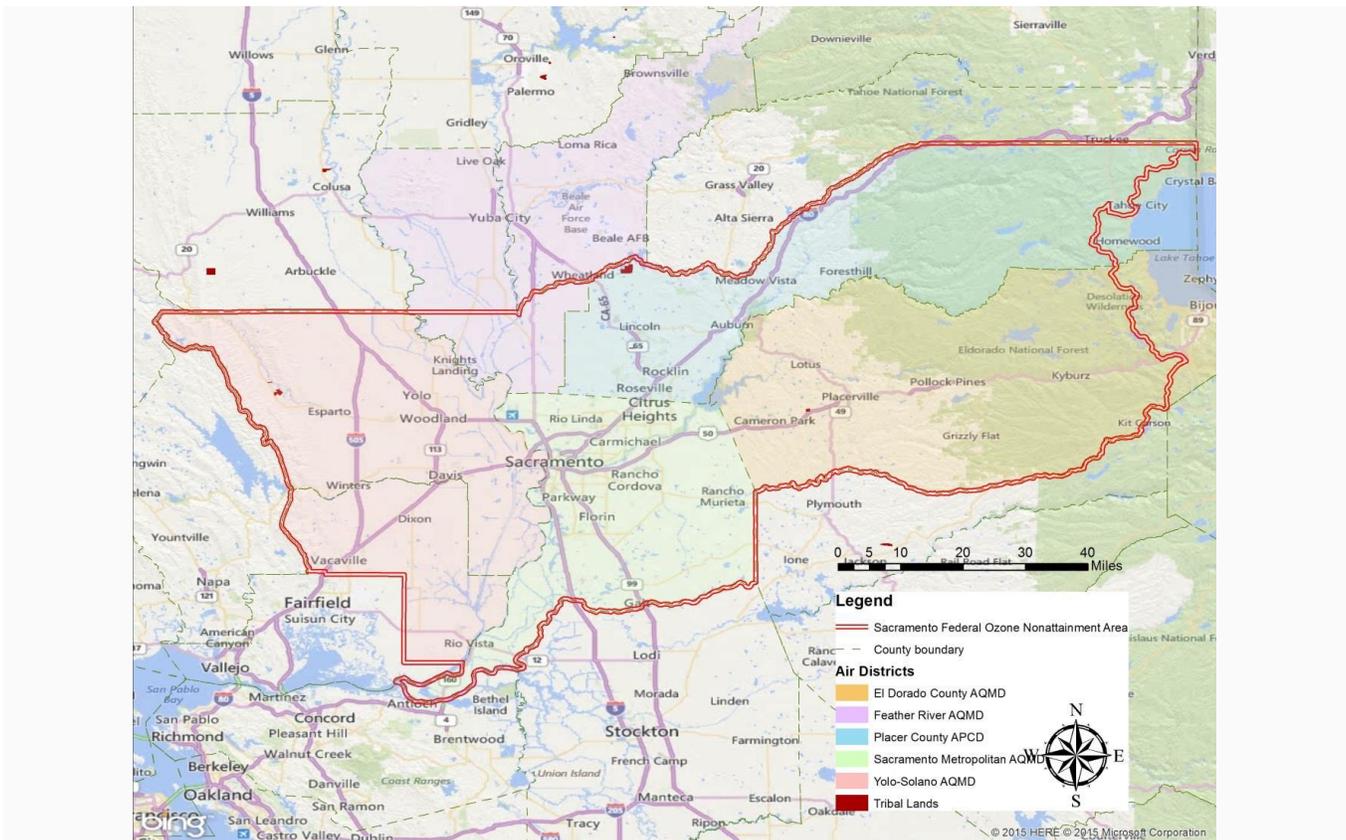
The US EPA set the ozone NAAQS at 75 parts per billion (ppb) in 2008. The designations for the standard were finalized on July 20, 2012. The southern portion of Sutter County was included in the Sacramento Federal Nonattainment Area (SFNA) and classified as a “severe” nonattainment area with an attainment date no later than July 20, 2027. The SFNA air districts were required to submit a

Reasonably Available Control Technology analysis and emissions inventory to US EPA within two years of designations (July 20, 2014) and the remaining Clean Air Act requirements by July 20, 2016.



The SFNA includes all of Sacramento and Yolo Counties, and portions of Sutter, Placer, El Dorado, and Solano counties, as shown in Figure 1. The 2008 ozone nonattainment area boundary of the SFNA remains the same as it was for the previous two standards (finalized in 1979 and 1997).

Figure 1: Sacramento Federal Nonattainment Area for Ozone



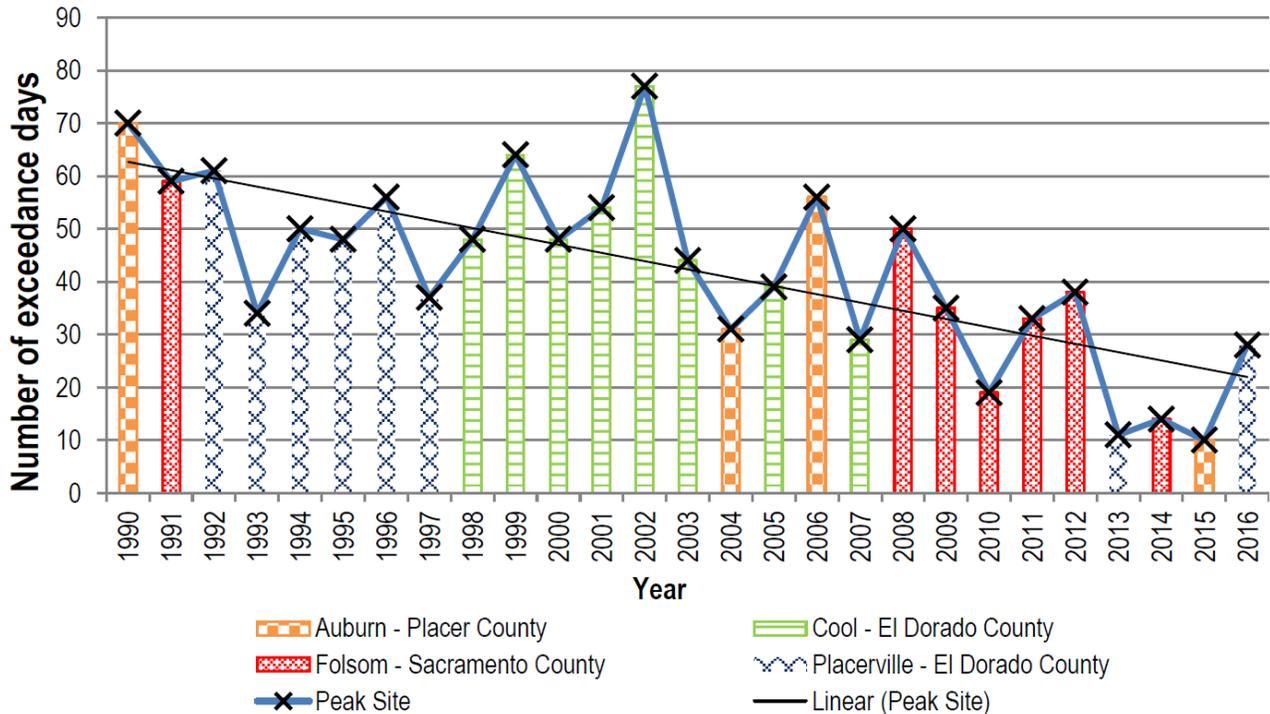
DISCUSSION:

The Feather River Air Quality Management will hold a public hearing at the October 2, 2017, Board Meeting to consider adoption of the Sacramento Regional 2008 National Ambient Air Quality Standard (NAAQS) 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Plan). The Plan was developed by the SFNA air districts, in consultation with Sacramento Area Council of Governments (SACOG) and the California Air Resources Board (CARB). Each air district will hold a separate public hearing prior to adoption by their respective Board of Directors.

The Plan documents how the region is meeting requirements under the Clean Air Act in demonstrating reasonable further progress and attainment of the 2008 ozone standard of 75 ppb. The Plan includes an updated emissions inventory, analyzes air quality trends and evaluates photochemical modeling results. This plan also establishes new motor vehicle emission budgets for transportation conformity purposes. In addition, the plan also documents the region’s reasonably available control measure analysis and vehicle miles travelled offset demonstration.

The Plan demonstrates attainment of the standard by the end of 2024; therefore attaining the standard two years early. Demonstration of attainment is made based on existing local, state and federal control measures. No new control measures are proposed in the Plan. Figure 2 shows the improvement in ozone exceedance days from 1990 to 2016 throughout the SFNA.

Figure 2: Number of 2008 ozone standard exceedance days in the SFNA



The 2008 ozone standard is met when the design value is less than or equal to 75 ppb. A design value is the three year average of the 4th highest 8-hour average. Table 1 lists the design values for the base year of the Plan (2012) and two future years (2022 and 2024) which were modeled. The modeling

shows the highest site (Folsom, Sacramento County) could meet the standard in 2022 but will be below the standard by 2026. The SFNA air districts selected 2024 as the attainment year for the Plan. There are no monitors in south Sutter County as the Pleasant Grove ozone monitoring station was removed by CARB in 2002.

Table 1: Design Values for SFNA

Site	Base year 2012	Future Year 2022	Future Year 2026
Placerville-Gold Nugget Way (El Dorado, MCAB)	82.3	68.0	64.0
Cool-Hwy193 (El Dorado, MCAB)	81.3	67.8	64.1
Auburn - Atwood Rd (Placer, SVAB)	79.0	64.6	60.6
Colfax-City Hall (Placer, MCAB)	73.7	60.9	57.5
Echo Summit (El Dorado, MCAB)	69.0	64.9	63.9
Folsom-Natoma Street (Sacramento, SVAB)	90.0	75.2	70.7
Sloughhouse (Sacramento, SVAB)	84.0	71.1	67.2
Roseville-N Sunrise Ave (Placer, SVAB)	82.3	69.8	66.3
Sacramento-Del Paso Manor (Sacramento, SVAB)	77.3	66.4	63.1
North Highlands-Blackfoot Way (Sacramento, SVAB)	76.0	65.2	61.9
Sacramento - 1309 T Street (Sacramento, SVAB)	70.0	60.5	57.7
Sacramento-Goldenland Court (Sacramento, SVAB)	70.0	61.7	58.9
Elk Grove - Bruceville Road (Sacramento, SVAB)	71.7	61.4	58.3
Woodland-Gibson Road (Yolo, SVAB)	68.7	58.1	54.9
Vacaville-Ulatis Drive (Solano, SVAB)	67.3	56.9	53.9
Davis-UCD Campus (Yolo, SVAB)	66.7	56.7	53.7

After the SFNA air districts adopt and CARB approve the Plan it will be submitted to the USEPA as a revision to the California State Implementation Plan.

The Plan was published on the Sacramento Metropolitan Air Quality Management District’s website on July 24, 2017, for a 30 public review period. Their Board of Directors will hold the first public hearing on the Plan on August 24, 2017. The Plan is available for viewing or download on their webpage: <http://airquality.org/About-Us/News-Notices/News-Notices-Details?UniqueID={E67C46C2-18D5-442A-A5C0-B5F0071F3053}>.

FISCAL IMPACT:

The District’s staff time preparing the Plan has no funding source since the US EPA did not include FRAQMD in its list of air districts with federal nonattainment areas which receive CAA section 105 grant funding.

The Plan does not include any additional control measures since the SFNA will attain the standard by the attainment date due to already adopted local, state and federal measures. Therefore, the adoption of the Plan and submittal to US EPA should have minimal additional fiscal impacts to the District.