



February 20, 2013

PM_{2.5} Motor Vehicle Emissions Budgets (MVEB) for the Feather River Air Quality Management District

Issue: The California Air Resources Board (CARB), in conjunction with the Feather River Air Quality Management District (District), is in the process of developing the PM_{2.5} Maintenance Plan and Re-designation Request for the Yuba City-Marysville Area. This will create motor vehicle emissions budgets for PM_{2.5} and the pre-cursor NO_x used in the transportation conformity process.

Recommendation: That the Partnership, as the designated interagency consultation body, approve the proposed emissions budgets to be included in the PM_{2.5} Maintenance Plan and Re-designation Request for the Yuba City-Marysville Area.

Discussion: In 2006, the Environmental Protection Agency (USEPA) revised the 24-hour National Ambient Air Quality Standard (NAAQS) for fine particle pollution (PM_{2.5}) to provide increased protection of public health and welfare. The Yuba City-Marysville Area is designated nonattainment for the 2006 NAAQS and includes all of Sutter and part of Yuba counties.

The Yuba City-Marysville Area attained the 24-hour PM_{2.5} standard in 2008 with continued attainment through 2011. The District is preparing a PM_{2.5} Maintenance Plan and Re-designation Request to be sent to request USEPA to take action and formally re-designated the area to attainment.

The maintenance plan must establish a motor vehicle emission budgets (MVEB) for PM_{2.5} and PM_{2.5} precursors. In the Yuba City-Marysville Area, the only precursor with significant contributions from motor vehicles is oxides of nitrogen (NO_x). A budget test will replace the build vs. no-build test used in the transportation conformity process after USEPA determines that the budgets are adequate for use. Approval of the maintenance plan will begin the first of two 10 year cycles, after which transportation conformity findings will no longer be required for the 2006 NAAQS, provided the area remains in attainment.

SACOG staff worked with CARB and local District staff on the development of the proposed MVEB budgets. The proposed budgets (CARB, 2012) incorporate the most recent on-road motor vehicle emission factors from EMFAC 2011, travel activity data, and the latest planning assumptions from SACOG’s Sacramento Region Metropolitan Transportation Plan and Sustainable Communities Strategy for 2035 (SACOG, 2012). The table below shows the proposed MVEBs for NO_x and PM_{2.5} vehicle emissions in the budget years of 2017 and 2024.

MVEB	PM _{2.5}	NO _x
2017 Emission Budgets	0.2 tpd	5.3 tpd
2024 Emission Budgets	0.2 tpd	3.1 tpd

*tpd: tons per day (winter)

References:

CARB. Crow, Jason P. “Feather River PM2.5 Budgets with Safety Margins.” Message to Renee DeVere-Oki, 13 February 2013. E-mail.

SACOG. *Sacramento Region Metropolitan Transportation Plan and Sustainable Communities Strategy for 2035*, Sacramento Area Council of Governments. Sacramento, CA [2012]

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Feather River Draft Motor Vehicle Emissions Budgets - PM 2.5

(tons per winter season day)

EMFAC2011 using SACOG 2012 RTP Activity

* Budget is established by rounding emissions total to the next highest tenth.

2017 Motor Vehicle Emissions Budget Adjustments

	Feather River Non-Attainment Area	
	NOx	PM2.5
RFG	0.00	0.00
Prop 1B	0.00	0.00
Moyer	0.00	0.00
AB1493	0.00	0.00
Smog Check	-0.04	0.00
ACC	-0.02	0.00
Total	-0.07	0.00

2024 Motor Vehicle Emissions Budget Adjustments

	Feather River Non-Attainment Area	
	NOx	PM2.5
RFG	0.00	0.00
Prop 1B	0.00	0.00
Moyer	0.00	0.00
AB1493	0.00	0.00
Smog Check	-0.02	0.00
ACC	-0.13	-0.02
Total	-0.15	-0.02

Feather River Draft Motor Vehicle Emissions Budgets - PM 2.5

(tons per winter season day)

EMFAC2011 using SACOG 2012 RTP Activity

* Budget is established by rounding emissions total to the next highest tenth.

2017 Motor Vehicle Emissions Budgets

Feather River Non-Attainment Area		
	NOx	PM2.5
Baseline EMFAC2011	4.59	0.15
RFG	0.00	0.00
Prop 1B	0.00	0.00
Moyer	0.00	0.00
AB1493	0.00	0.00
Smog Check	-0.04	0.00
ACC	-0.02	0.00
Safety margin	0.70	
Total	5.23	0.14
Budget*	5.3	0.2

2024 Motor Vehicle Emissions Budgets

Feather River Non-Attainment Area		
	NOx	PM2.5
Baseline EMFAC2011	2.66	0.15
RFG	0.00	0.00
Prop 1B	0.00	0.00
Moyer	0.00	0.00
AB1493	0.00	0.00
Smog Check	-0.02	0.00
ACC	-0.13	-0.02
Safety Margin	0.50	
Total	3.01	0.12
Budget*	3.1	0.2