

Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan

Marcella McTaggart
Air Quality Management District
February 10, 2009

Presentation Overview

- Background information
 - Health
 - Requirements
 - Emissions
- Attainment Demonstration
- Control Measures
- Conformity
- EIR
- Public Review
- Conclusions

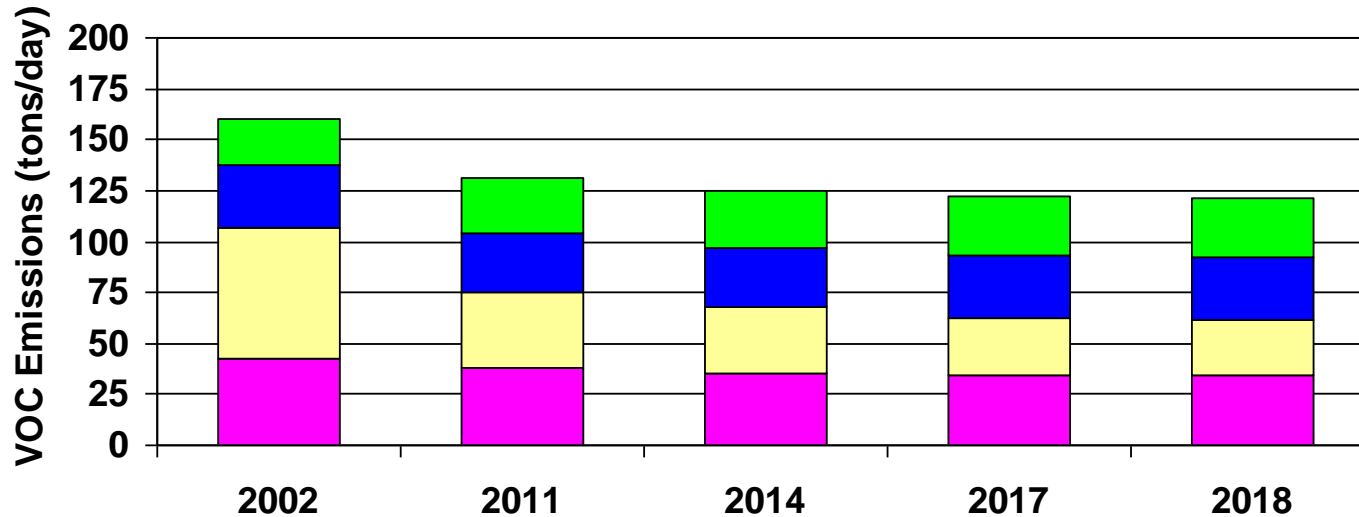
Health Effects

- Respiratory symptoms (e.g. asthma, bronchitis)
- Heart attacks and strokes
- Increased number of hospital admissions, emergency room visits, school absences
- Premature death in elderly, especially with heart and lung diseases

Federal Planning Requirements

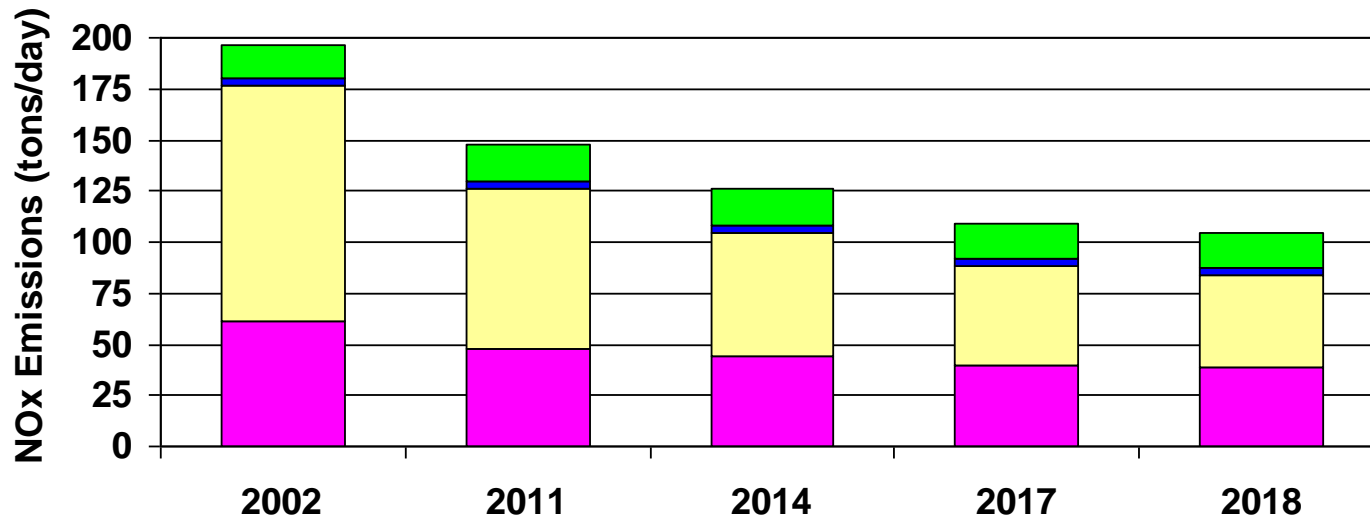
- History
 - Standard set in 1997 – 0.08ppm (avg. 8 hrs)
 - Sacramento designated “serious” nonattainment in 2004
 - Requested “severe” classification (2018 deadline)
- Plan requirements
 - Achieve ozone standard not later than 2018
 - Minimum emission reduction progress
 - 3% per year in milestones – 2011, 2014, 2017, 2018
 - Include all reasonable control measures
 - Set emission budgets for federally approved transportation projects

Emission Reduction Progress Sacramento Region Nonattainment Area



- Reductions of 24% VOC and 47% NOx from 2002 with existing controls.

- Inventory includes ERCs (including rice burning).

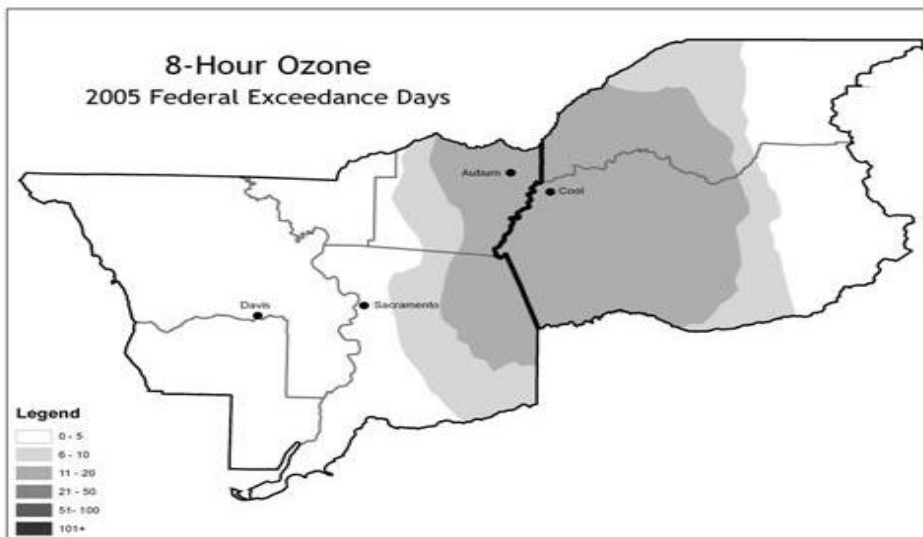
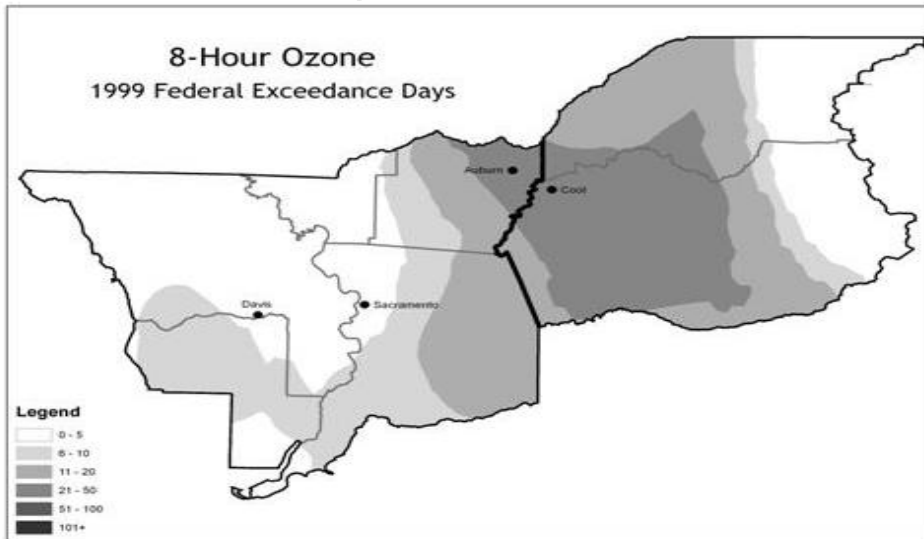


- Existing controls exceed minimum CAA (3%/yr) progress requirements.

■ Stationary
 ■ Area-Wide
 ■ On-Road Motor Vehicles
 ■ Other Mobile Sources

Improvements in Spatial Area & Exceedance Days

Sacramento Region Nonattainment Area



1999

½ area >11 days

¼ area 21-50 days

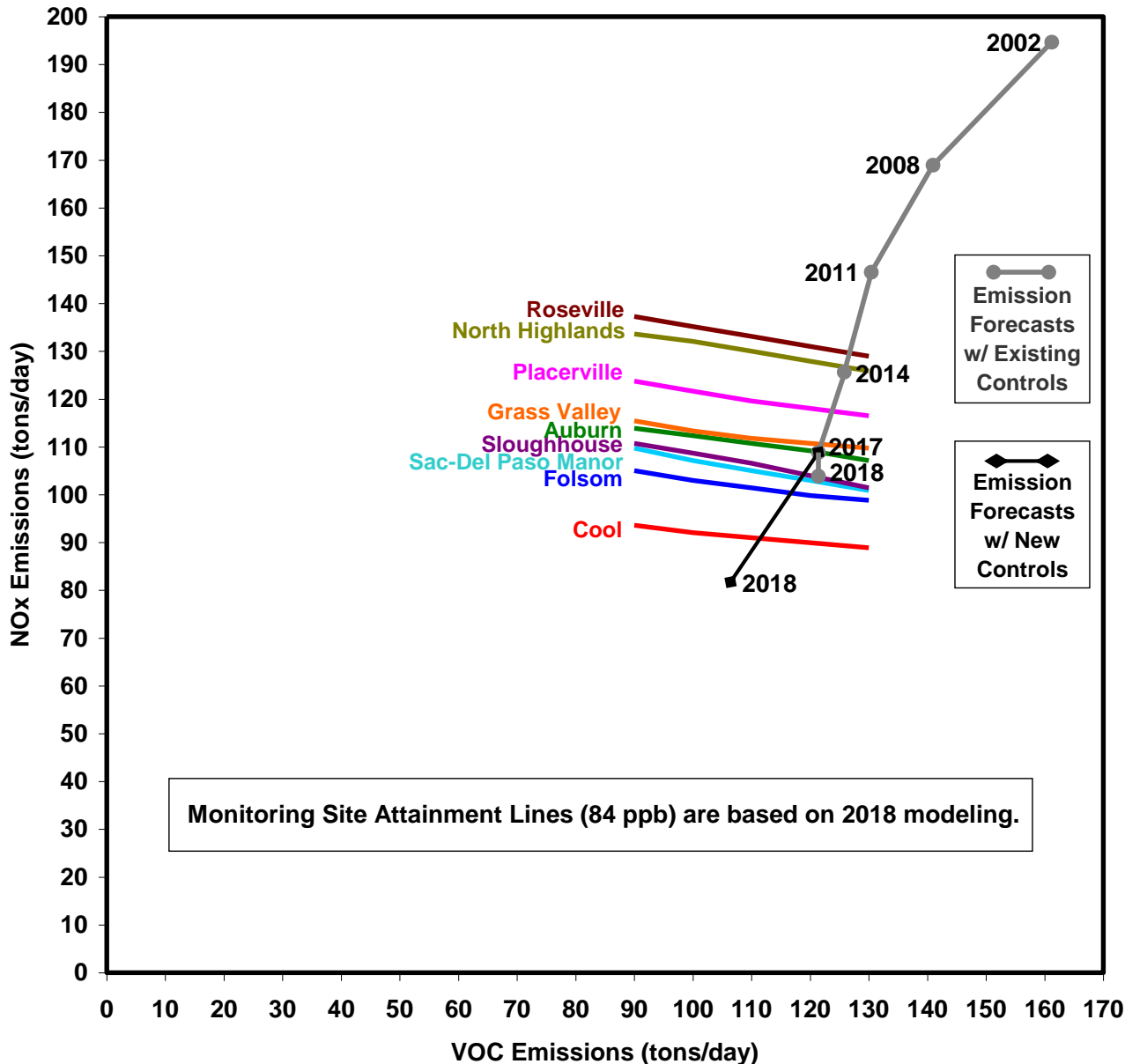
2005

< ½ area 11-20 days

- Monitored ambient VOC, NO_x, and ozone levels are declining, linked to emission reductions.

- Increasingly adverse weather conditions, such as higher temperatures, are needed to create ozone level exceedances.

Predicted Attainment Dates for High Ozone Sites in Sacramento Region



- Model results used to project attainment based on declining emissions

- Colored lines show attainment dates for each part of the region

Attainment demonstration

- Sacramento Region **cannot** attain with existing controls alone
- New controls have been identified to meet deadline

Sacramento Region Nonattainment Area	VOC (tpd)	NOx (tpd)
A) 2002 Planning Emissions Inventory	160	196
B) 2018 Planning Emissions Inventory with Existing Controls	121	104
C) Additional Reductions Needed to Attain at Cool in 2018	4 (3.3%)	13 (12.5%)
D) Additional Reductions from New State/Federal Measures	11	15
E) Additional Reductions from New Regional/Local Measures	3	3
F) Total Reductions from New Measures	14 (11.6%)	18 (17.3%)
G) Is Attainment Demonstrated by 2018?	Yes !!	

Regional Voluntary / Incentive and New EDCAQMD SIP Control Measures

Measure Name	Adoption Year	Implement Year
<u>Regional – Voluntary / Financial Incentive Measures</u>		
Regional Mobile Incentive Program – On-road	2010*	2008-2018
Regional Mobile Incentive Program – Off-road	2010*	2008-2014
Spare The Air Program	2009*	2008-2018
Urban Forest Development Program	2009	2008-2018
<u>Local – Regulatory Measures</u>		
Miscellaneous Parts and Products (Rule 246)	2009	2009
Architectural Coating (Rule 215)	2013	2015
Degreasing/Solvent Cleaning (Rule 225/235)	2013	2015
Large Water Heaters and Small Boilers (Rule 239)	2013	2015

*Existing district programs that are proposed for SIP adoption.

Voluntary / Financial Incentive Measures

- Mostly managed by SMAQMD

Reasonably Available Control Measure (RACM) Requirements

Measures in place elsewhere that are:

- Cost effective
- Technically feasible
- Authority to implement
- Can omit measures if collectively will not advance attainment by a year or more

Transportation Control Measures

(Approved by SACOG – Aug. 21, 2008)

- Intelligent Transportation Systems
- Park & Ride, Transit Centers
- Transit Funding – Acquisition and Operations
- Regional Funding Programs
 - Air Quality
 - Bicycle and Pedestrian
 - Transportation Demand
 - Community Design Funding
- Light Rail Grade Separation Watt/Folsom
- Spare the Air
- SECAT
- Research and Policy Measures
 - Blueprint Implementation and Technical Assistance
 - Rural Urban Connections Strategy and Best Practices Toolkit
 - Research a Transportation Pricing Policy
 - Research a Regional Parking Regulation Policy
 - Adopt a "Complete Streets" Policy
 - Initiate a "Complete Streets" Technical Assistance Program
 - Adopt a "Safe Routes to School" Policy and Implement a Pilot Program

Transportation Conformity

- Clean Air Act prohibits federal approval of plans and projects that interfere with air quality goals
- Plan sets new “emission budgets” for 2011, 2014, 2017, 2018
- Based on SACOG’s 2035 MTP & ARB’s EMFAC2007 model
 - 3-4% less growth in VMT compared to prior plans
- SACOG plans to amend transportation plans in May 2009
- EPA must find budgets adequate before amendments

New Motor Vehicle Emissions Budgets Sacramento Nonattainment Area		
Year	VOC (tpd)	NOx (tpd)
2011	38	78
2014	32	61
2017	29	48
2018	24	34

Public Review Process

- **Workshops on control strategy - October 2006**
- **Workshops on Draft Plan / DEIR - September 2008**
 - Sacramento, Vacaville, Marysville, Auburn, El Dorado Hills
- **Outreach**
 - 3,500 mailed
 - 2,000 e-mail
 - local newspapers in each district, and
 - district Web sites
 - met with stakeholders
 - Agencies, Business, Environmental groups, Nevada County
- **Published Plan and FEIR - December 19, 2008.**
- **Minor correction following Dec. 19th publication**
 - Corrected inconsistency in SECAT program funding

Conclusions

- **Includes important health protective strategies**
 - Innovative strategies - Incentives, Spare the Air, Urban Forest, ISR
 - TCMs
 - New and amendments to regulatory measures
- **Sets new conformity budgets needed for transportation funding approval May '09**
- **Meets Federal Clean Air Act requirements**
 - Establishes updated emission inventory
 - Demonstrates reasonable progress goals are met
 - Includes all reasonably available control measures (including TCMs)
 - Includes air quality modeling and other information that demonstrate that the region will attain the 1997 ozone health standards not later than 2018
 - Establishes new motor vehicle and airport emission budgets
- **Provides air quality benefits to downwind areas (Nevada County)**

Environmental Impact Report - SUMMARY

- **SMAQMD lead agency.**
- **The EIR evaluated the potential impacts of the project – approving the 8-Hour Ozone Attainment and RFP plan.**
- **Based on the Initial Study, the Notice of Preparation determined that the EIR would be focused on potential impacts on air quality and hazards.**
- **Conclusions:**
 - **Potential Impacts on Air Quality**
 - **Emission reductions outweigh emission increases**
 - **No increase in emissions of toxic air contaminants is expected**
 - **Cumulative air quality impacts are beneficial**
 - **Hazards**
 - **No significant hazard impacts are expected**

Recommendation

- **Conduct public hearing**
- **Adopt Resolution**
 - **Adopts Plan**
 - **Recognizes the Final EIR**
 - **Directs staff to forward plan to ARB/EPA as SIP revision**

Acknowledge Contributions

- **SMAQMD** – Larry Greene, Brigette Tollstrup, Kathy Pittard,
- **Other Air Districts** – PCAPCD, YCAQMD, FRAQMD
- **Other Agencies** – SACOG, CARB
- **EDCAQMD** – Carolyn Craig