

San Joaquin Valley Smoke Management Program and Consideration of Modifications to Agricultural Burning Requirements



Air Resources Board

California Environmental Protection Agency

May 27, 2010

San Diego

Outline

- Smoke Management Program
- SB 705 Requirements
- Recommendation

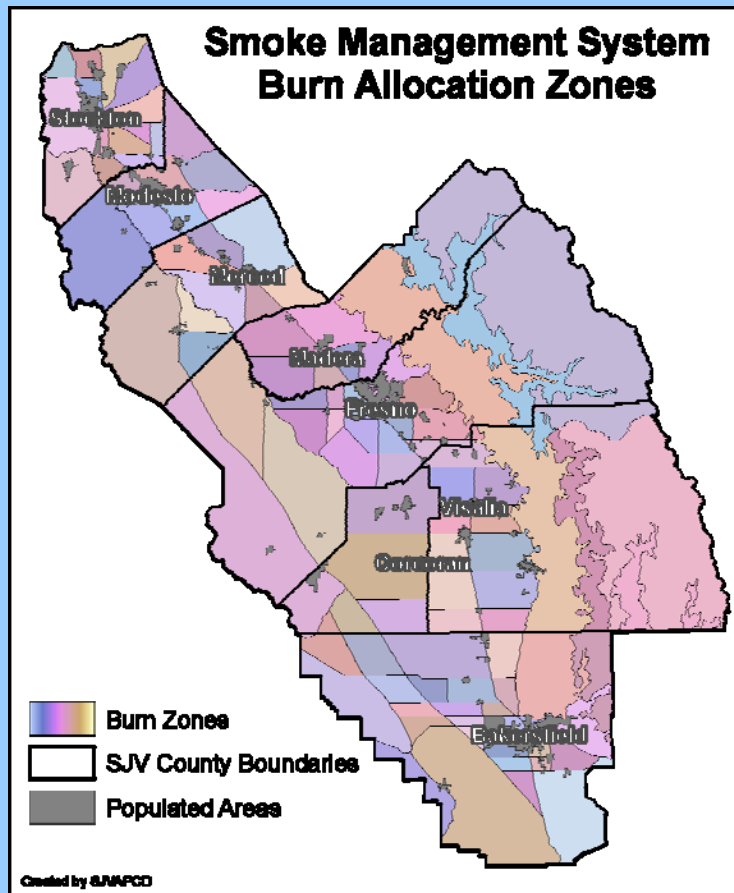
Smoke Management Program

State Law Requirements

Two State Law Requirements Govern Agricultural Burning in the San Joaquin Valley

- State's Smoke Management Guidelines
 - Required districts to strengthen smoke management programs
 - ARB to review and approve programs
- SB 705 requires scheduled burn phase-out

San Joaquin Valley Smoke Management Program

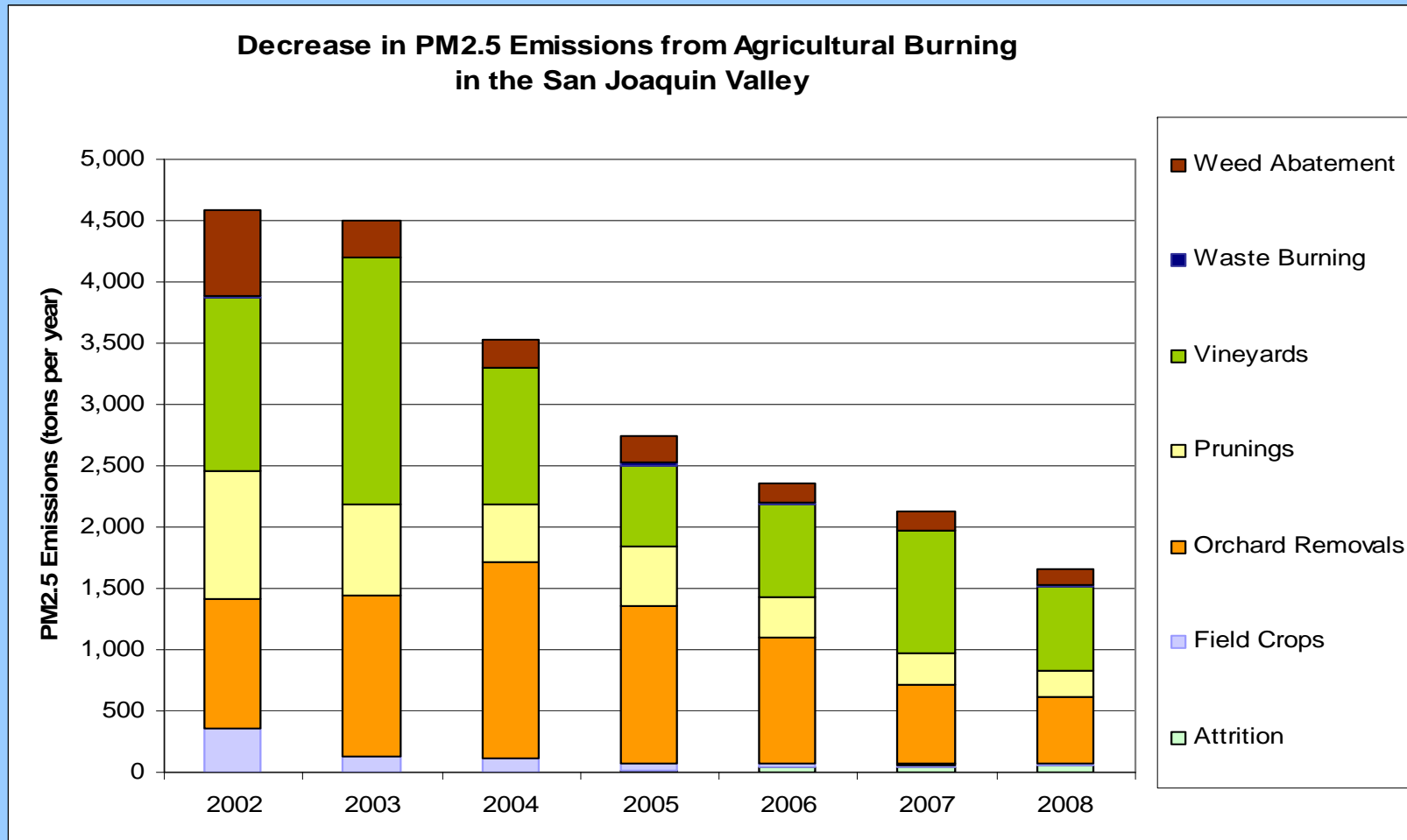


- Establishes 103 zones
- Sets burn allocations based on meteorology
- Prevents exceedances of federal standards
- Minimizes localized impacts

Air Resources Board Role

- Program Oversight
 - Daily Coordination Calls
 - Forecasting Consultation
 - Require Annual Reporting

Agricultural Burning Has Decreased Significantly



Source: District Burn Permit Data

SB 705 Requirements

SB 705 Provisions

- Requires District to:
 - Adopt agricultural burn phase-out schedule
 - Establish best management practices for certain weeds
 - Include provisions for diseased crops
- Allows burn prohibition postponements if economic and technological impediments exist

Initial Phases

- First three phases addressed:
 - Field crops
 - Prunings
 - Weed abatement
 - Diseased crops
 - Orchard removals

Final Phase

➤ Addresses:

- Vineyard Removals
 - Grape, kiwi
- Surface Harvested Prunings
 - Almonds, walnuts, pecan, grape vines/canes, raisin trays
- Other materials
 - Brooder paper, deceased goats, diseased beehives
- Previously adopted postponements
 - Fig, citrus, and small orchard removals
 - Rice straw phase-out
 - Apple, pear, quince prunings and orchard removal
 - Weed abatement affecting waterways

Conditions to Postpone Prohibitions

- No economically feasible alternative to burning
- No long-term federal or State funding commitment for:
 - Continued operation of biomass facilities or
 - Development of alternatives to burning
- Burning will not cause or contribute to federal air quality standard violation
- ARB concurs that all requirements met

District Assessment of Feasible Alternatives

- Identified technologically feasible alternatives
- Evaluated economic feasibility
 - Used USDA, UC Cooperative Extension, California Ag. Commissioner, Dun & Bradstreet data on production, prices, and profit rates
 - Used orchard/vineyard removal contractor and agriculture industry data on cost of alternatives

Criteria 1: Economic Feasibility Evaluation

- Compliance cost of alternative as percent of profit
 - Additional cost of compliance
 - Impacts on net after tax profit
- If compliance cost is greater than 10% of profit, alternative not economically feasible
- ARB uses similar metric with 10% threshold

Prohibit Burning

Economically Feasible Alternative Available

- Grape Vine and Cane Prunings
 - Shred and incorporate into soil
- Fig Prunings
 - Shred and leave in place
- Brooder Paper
 - Send to Landfill
- Deceased Goats
 - Bury

Allow Limited Burning

Limited Economic Feasibility of Alternative

- Almond, Walnuts, and Pecan Prunings
 - Large farms: burning is prohibited
 - Smaller farms
 - Allow burning of up to 20 acre prunings per year
 - Allow additional burning depending on
 - ✓ Shredding cost and availability of timely service
- Fig Orchards and Other Orchards of 20 Acres or less
 - Reduce burning to 15 acres or less per location per year
- Rice Straw: Continue 70% burn allowance

Allow Burning

No Technologically Feasible Alternatives

- Beehives, Pome Fruit Prunings/Orchard Removals
 - Spread of disease
- Weed Abatement Affecting Waterways
 - Worker safety and water quality issues
- Raisin Trays
 - Lack of recycling market

Allow Burning

No Economically Feasible Alternative

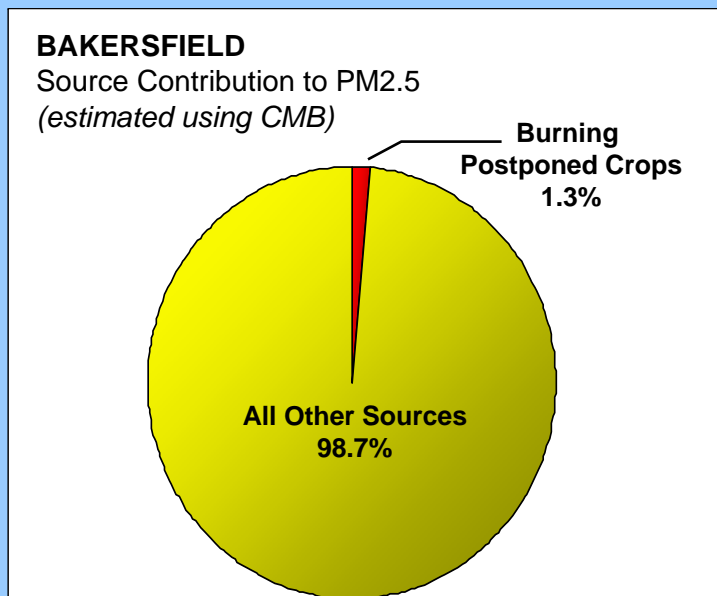
- Grape and Kiwi Vineyard Removal
 - Removal of embedded wire required for chipping/biomass
- Citrus Orchard Removal
 - Type of wood increases processing cost

Criteria 2: Current Funding for Alternatives

No long-term federal or State funding commitment for:

- Continued biomass facility operation or
- Development of alternatives to burning

Criteria 3: Air Quality Impact of Postponements



- District programs ensure burning does not contribute to short-term standard violations
- Air quality analysis shows burning does not contribute substantially to annual PM_{2.5} standard violation

Criteria 4: ARB Staff Recommendation

- The basis for postponing agricultural burn prohibitions meets the statutory criteria
- ARB staff recommends
 - Provide initial two year concurrence with District's postponements
 - Work with Legislature and other State agencies on incentive funding to increase agricultural waste use at biomass facilities
 - Pursue permit conditions providing more certainty on use of agricultural waste at biomass facilities
 - In 2012 reconsider ARB concurrence based on progress made
 - Provide for an extension of concurrence if statutory criteria continue to be met