
Development of an Western Ozone Scoping Plan (WOSP)

Western Meteorological, Emissions, and Air Quality Modeling Workshop

Boulder, CO

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Outline

- Conceptual Model vs. Scoping Plan
 - What has to be in a Conceptual Model?
 - What is the Scoping Plan project?
- Process
- Products
- Next Steps

What is required and needed in a Conceptual Model?

Formulate a conceptual description of an area's nonattainment problem

A “conceptual description” is a qualitative way of characterizing the nature of an area's nonattainment problem.

Helps identifying stakeholders

Helps identifying targeted source categories

Determines grid size for modeling

Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5, and Regional Haze - EPA -454/B-07-002

Conceptual Model definition for a specific nonattainment area

A "conceptual model" describing the principal features of the interaction of emissions, ozone chemistry, wind patterns (strength, convergence, recirculation) that qualitatively characterize an ozone episode should be included. It should highlight key factors in ozone formation for the particular episode, and their relative importance. A description of the overall urban plume direction, hour of occurrence for peak ozone concentration and distance downwind, typical wind flow patterns, expected influence of major sources or emissions categories, relationship between ozone concentrations to diurnal temperature and growth of mixing layer, the importance of ozone and precursors aloft, and multiple day carry-over of pollutants are a few items that should be used to discuss this conceptual model.

"Guidance on Urban Airshed Model (UAM) Reporting Requirements for Attainment Demonstration" EPA-454/R-93-056, March 1994

WOSP project - how do we get consistent Conceptual Models?

We need a scoping plan that defines and meet WRAP members' needs to help them develop SIPs

Identify and prioritize needs for technical support for:

Emissions inventories;

Modeling;

Source apportionment;

Control strategy development;

A plan that itemizes the CAA requirements for ozone planning

WOSP Products

Identify source categories, current regional data

Identify nonattainment areas

Variations in ozone events

Address transport of ozone and ozone precursors

Natural vs Anthropogenic sources

WOSP Project Process

WRAP staff will draft the scoping plan

Limited support from contractors

Depend on expertise of WRAP members

Establish WOSP Steering Committee

Have biweekly conference calls to discuss progress

Assign Steering Committee members to edit and draft WOSP sections

WOSP Project Process

Need to coordinate with the WESTAR Planning Committee

Local agency participation is desired

EPA Headquarters and Regional Office staff participation required

Other federal agencies involvement (FLM, NPS...)

Co-chairs (state and local) would direct the process

Timeline

WOSP could be developed between July and November

NAAQS and Implementation guidance to be released by end of July 2011

Exceptional events guidance (wildfires) – also late July

Agencies need some time to assess rule and guidance

Possible face-to-face meeting for WRAP (or WESTAR) members to discuss issues, needs

Next Steps

Input from WRAP members on this approach crucial

Short term products:

- Development of a template for state/local conceptual models
- Assist on the development of a “9-factor analysis”

Long term products:

- Discuss the desire to develop a template for the §110a2d Infrastructure SIP (I-SIP)
- Develop a template for the Attainment SIP