

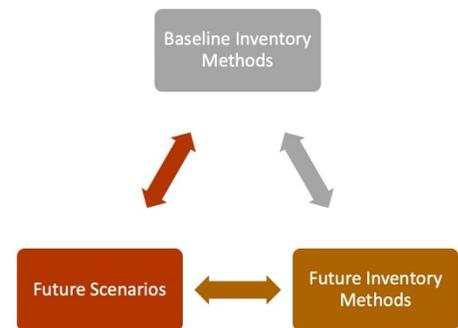


The WRAP Fire and Smoke Work Group is forming a technical working group to examine methods used to incorporate fire into the regional haze modeling process. The Representative Baseline and Future Fire Scenarios (RBFFS) Working Group will address three topics related to fire characterization for regional haze planning. Topics 1 and 2, described below, encompass three sets of recommendations that are highly inter-dependent. It will be important to consider the outcomes of these recommendations together as they will influence the methods and workflows developed for implementation.

1. Develop methods for building a planning emissions inventory of fire representative of the Baseline Period

To conduct photochemical modeling examining potential future conditions for regional haze planning, a multi-year baseline period emissions inventory is developed, along with multiple years of IMPROVE monitoring data, to represent current conditions to test against. Due to its high temporal and spatial variability, developing a fire emissions inventory representative of a multi-year period requires careful consideration.

The RBFFS group will evaluate the previous methods used to develop the representative baseline for fire, consider changes, improvements, and/or simplifications to the approach, and make recommendations for the final methodology.



2. Develop methods and scenarios for examining future fire emissions

Future conditions in the context of regional haze planning will be examined by developing scenarios, or possible futures, by analyzing the current conditions that affect fire activity (fire weather/climate, land management policy) considering the outcome of significant changes to one or more of those conditions.

The RBFFS group will evaluate previous methods used to develop future scenario *methods*, as well as consider what are the relevant conditions and uncertainties affecting fire activity now and into the future to develop *scenarios*.

3. Evaluate existing plume rise methods and recommend approaches for model implementation and sensitivity analyses

Many variations on two primary approaches (Briggs and WRAP) to plume rise have been developed and used for lofting fire emissions in photochemical models. However, there is a dearth of sensitivity testing, especially directly comparing the Briggs and WRAP approaches (as opposed to variations on a single approach).

The group will evaluate current approach available and consult with appropriate outside experts on their merits, both practical and technical, and will make recommendation on sensitivity analyses to conduct to evaluate the performance of the chosen approaches for various scenarios.

	2018												2019												
	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
2014 Base Year Modeling Platform v1 Shakeout - Emissions Processing, Met Modeling/MPE, Global Modeling/MPE, AQ Modeling/MPE, Modeling Plan (RTOWG and contractor team)																									
2014 Base Year Modeling Platform v2 and 2013-2017 Representative Baseline Development - Processing of revised Emission																									
OGWG Base Year Inventory Development and Finalization																									
FSWG Base Year Inventory Development																									
Completion of RH Monitoring Data Analysis Round 1 (MGSSC and contractor)																									
RH Monitoring Data Analysis Round 2 (contractor for MGSSC)																									
Dynamic Model Evaluations for Regional Haze Progress to Date (RTOWG and contractor team)																									
Assessment / possible application of data for 2016 & projections - National Collaborative																									
2023 and 2028 On-the-books Emission Inventory Development (RTOWG, EI & MP SC, and contractor team)																									
OGWG On-the-Books 2028 Inventory Development																									
OGWG Additional Reasonable Controls 2028 Inventory Development																									
FSWG Future Year Inventory Development																									
2023 and 2028 On-the-books Air Quality Modeling (RTOWG and contractor team)																									
2028 Source Apportionment/Sensitivity/Control Scenarios																									
Data and Documentation Delivery (SDSC with modeling contractor team and IWDW / TSSv2 team)																									