

Western Regional Modeling Plan – August 2019 update

Modeling Scenario	Timeframe	Objectives / Characteristics / Change from previous scenario(s)
2014 Shakeout v1 (actual emissions)	Dec. 2018 through early April 2019	<ul style="list-style-type: none"> Compare Met and Biogenics datasets Evaluate Boundary Conditions (BCs) Uses 2014 NEIv2 data with limited corrections by states Modeling Performance Evaluation Identify Modeling Needs in Plan
2014 Shakeout v2 (actual emissions)	May through Sept. 2019	<ul style="list-style-type: none"> Finalize MPE results with improved inputs Re-run GEOS-Chem global model for BCs with natural / anthro. sensitivity Revised emissions – all CA anthro data, OGWG inputs Will use recommended model configuration from v1
Current/Representative Baseline (planning rather than year-specific emissions, basis of all subsequent runs)	July through October 2019	<ul style="list-style-type: none"> Apply v2 GEOS-Chem global model BCs Revised emissions from 2014 actual, new EGU, OGWG, and FSWG inputs <ul style="list-style-type: none"> reflective of current emission rates and "normal" operations "representative" annual fire emissions to smooth out variation Basis of all 2028 scenarios, will use model configuration from v1 / v2 Best reflect current emissions profile for each source potentially impacting Class I area visibility [source(s) identified from Q/D analysis]
Dynamic Model Evaluations (02, 14, 28)	Start Summer 2019	<ul style="list-style-type: none"> Scoping memo in August Use 2014 met, BCs, biogenics for all Actual 02 and 14 emissions, OTB for 2028 Provide modeled glide path, Regional Haze Progress for anthro emissions
2028 Emissions from Rules OTB / OTW	October through December 2019	<ul style="list-style-type: none"> Model visibility impact / calculate Reasonable Progress Goal for each Class I area "if no additional controls" were adopted 2028 OTB emissions <u>may be</u> same as Current/Representative Baseline rate Add international anthro contributions from Shakeout V2 Gridded emissions to be used for Weighted Emissions Potential analysis
2028 Source Apportionment / Sensitivity	November 2019 through early 2020	<ul style="list-style-type: none"> 2 sensitivity runs: increased emissions separately for wildfire and Rx fire PSAT/OSAT run for state/source sector groups
2028 Control Strategy Run	January through March 2020	<ul style="list-style-type: none"> SCC-level "potential additional" SO₂, NO_x, PM % decreases from each state Model visibility impact / calculate RPG for each Class I area "if additional controls" were to be adopted