
DESIGNATING AREAS FOR THE 2015 OZONE STANDARD

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Air Planning Office



OUTLINE

- 2015 Ozone Standard
- Designation Process
- Implementing the Standard
- Next steps





2015 OZONE STANDARD



OZONE HEALTH EFFECTS

- Breathing ozone can trigger chest pain, coughing, throat irritation
- Ozone exposure can worsen bronchitis, emphysema, and asthma.
- Children, the elderly, and people with respiratory diseases are especially sensitive to ozone exposure.

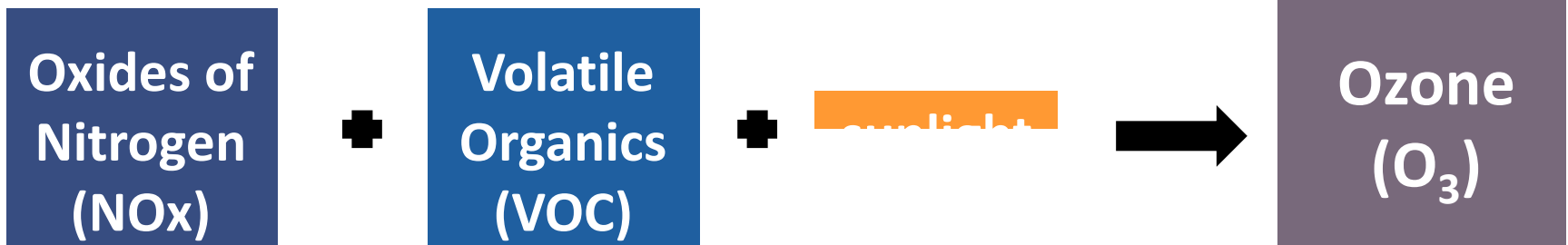


OZONE FORMATION

- Created in the atmosphere when oxides of nitrogen (NO_x) and volatile organic compounds (VOC) react in the presence of sunlight.

- Sources of NO_x and VOC include:

- Cars and trucks
- Construction equipment
- Industrial pollution
- Personal care products



OZONE TRANSPORT

- Ozone formation can take several hours
- Highest concentrations of ozone often found downwind of sources of NO_x and VOC
- Example: Alpine has highest ozone in San Diego County



2015 OZONE STANDARD

- Ozone regulated since the 1970's
- Clean Air Act requires periodic review of new science
- Ozone standard lowered in 2015 to 70ppb
- Triggers two-year process to designate all areas for new standard

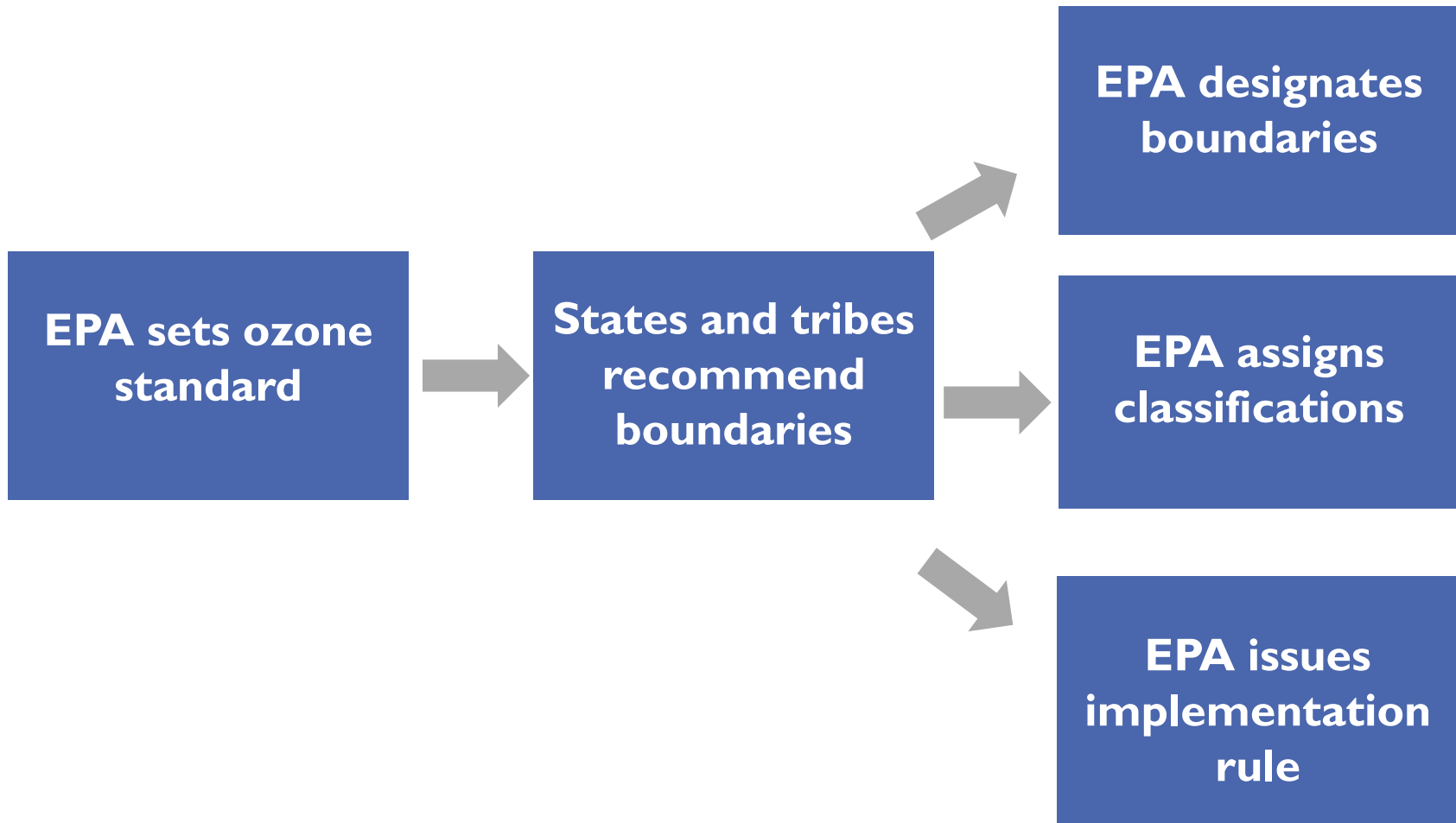




DESIGNATIONS PROCESS



NEW STANDARD TRIGGERS DESIGNATIONS PROCESS

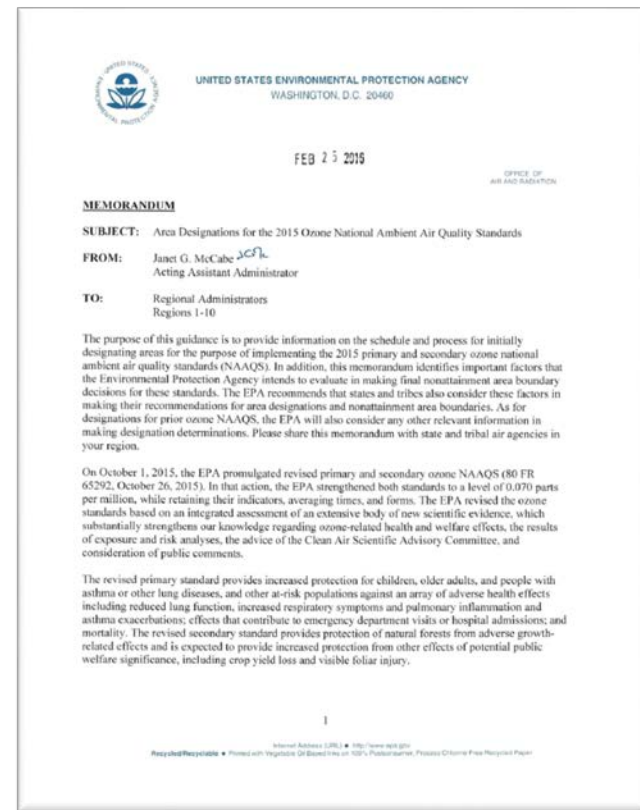


2015 OZONE STANDARD: DESIGNATIONS TIMELINE

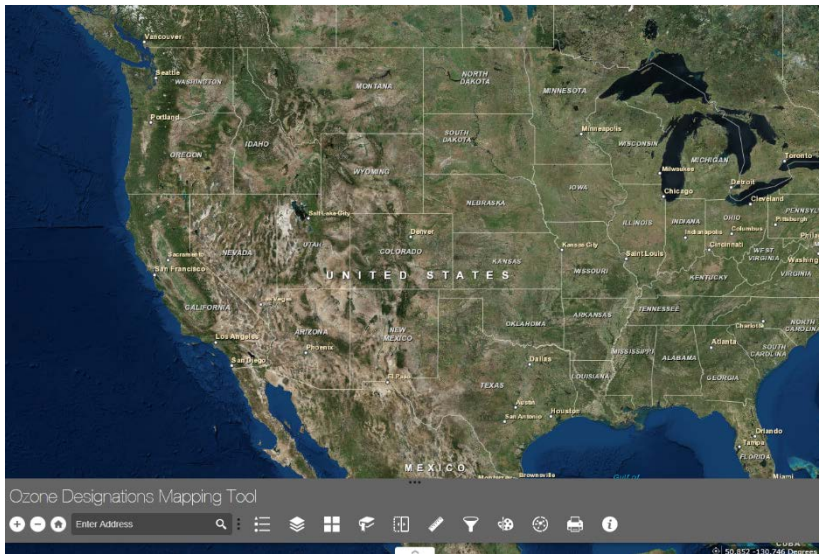
Date	Milestone
October 1, 2015	Standard lowered to 70ppb
October 1, 2016	Recommendations for ozone designations due to EPA ❖ Based on 2013-2015 air quality data
June 1, 2017	EPA responds to recommendations
October 1, 2017	Designations finalized ❖ Based on 2014-2016 air quality data

DESIGNATION GUIDANCE

- Memo distributed to tribes February 2016
- Describes factors EPA will consider in determining area boundaries:
 - Air quality data
 - Emissions and related data
 - Meteorological data
 - Geography / topography
 - Jurisdictional boundaries



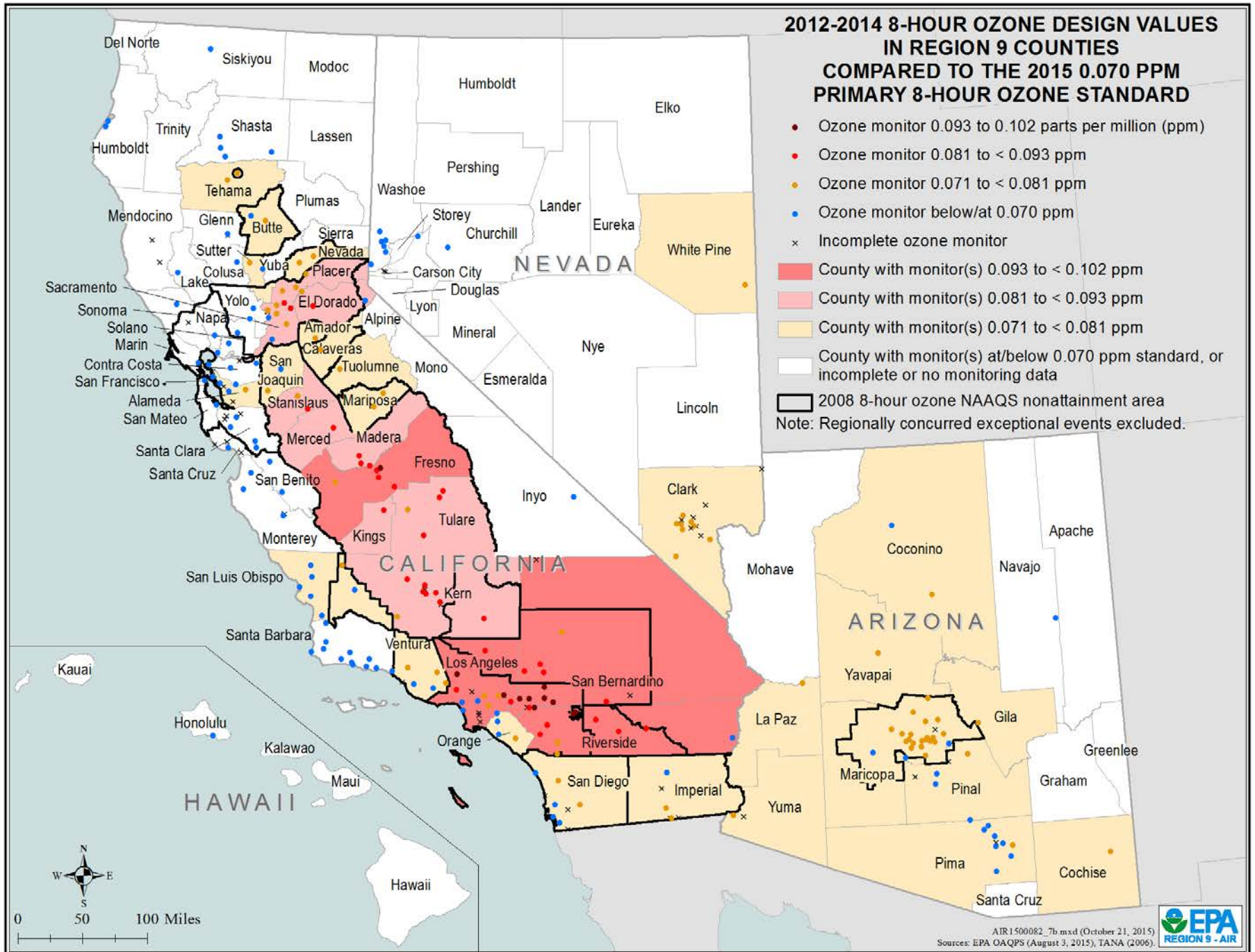
TRIBAL RECOMMENDATIONS



- Submitting a recommendation is optional
- Suggested analyses described in guidance memo
- EPA providing data via an interactive mapping tool

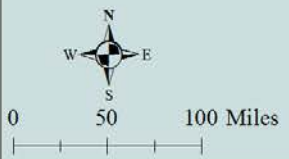
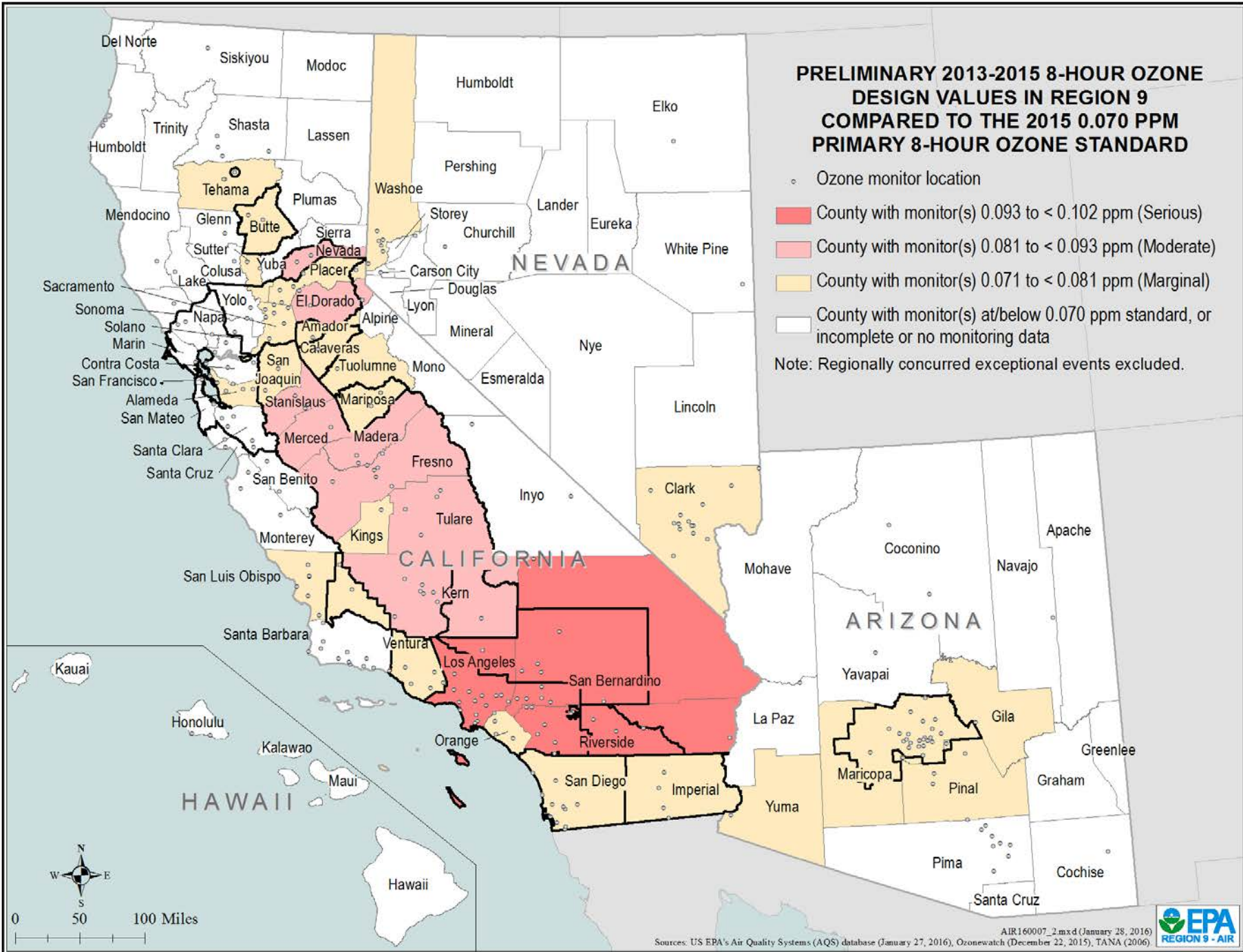
**2012-2014 8-HOUR OZONE DESIGN VALUES
IN REGION 9 COUNTIES
COMPARED TO THE 2015 0.070 PPM
PRIMARY 8-HOUR OZONE STANDARD**

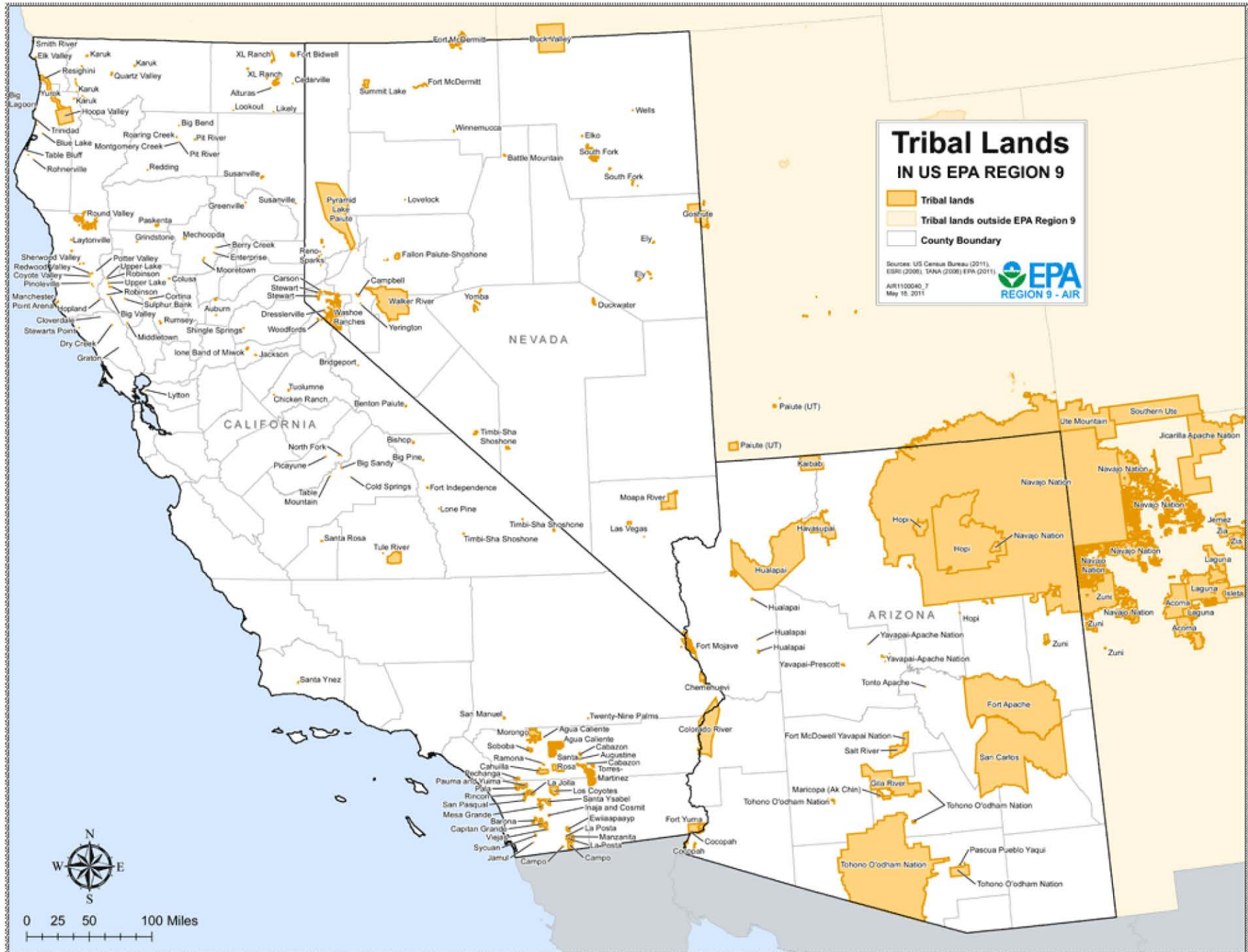
- Ozone monitor 0.093 to 0.102 parts per million (ppm)
 - Ozone monitor 0.081 to < 0.093 ppm
 - Ozone monitor 0.071 to < 0.081 ppm
 - Ozone monitor below/at 0.070 ppm
 - × Incomplete ozone monitor
 - County with monitor(s) 0.093 to < 0.102 ppm
 - County with monitor(s) 0.081 to < 0.093 ppm
 - County with monitor(s) 0.071 to < 0.081 ppm
 - County with monitor(s) at/below 0.070 ppm standard, or incomplete or no monitoring data
 - ▭ 2008 8-hour ozone NAAQS nonattainment area
- Note: Regionally concurred exceptional events excluded.



**PRELIMINARY 2013-2015 8-HOUR OZONE
DESIGN VALUES IN REGION 9
COMPARED TO THE 2015 0.070 PPM
PRIMARY 8-HOUR OZONE STANDARD**

- Ozone monitor location
 - County with monitor(s) 0.093 to < 0.102 ppm (Serious)
 - County with monitor(s) 0.081 to < 0.093 ppm (Moderate)
 - County with monitor(s) 0.071 to < 0.081 ppm (Marginal)
 - County with monitor(s) at/below 0.070 ppm standard, or incomplete or no monitoring data
- Note: Regionally concurred exceptional events excluded.





Tribal Lands IN US EPA REGION 9

- Tribal lands
- Tribal lands outside EPA Region 9
- County Boundary

Source: US Census Bureau (2011),
 ESRI (2006), TANA (2008) EPA (2011).
 AIR110040_7
 May 18, 2011

EPA
 REGION 9 - AIR



0 25 50 100 Miles

DESIGNATING TRIBAL LANDS

- Historically designated together with state land
- Submitting recommendations is optional for tribes
- State recommendations do not include recommendations for nearby tribal land



DESIGNATING TRIBAL LANDS

- Purpose of designating tribal land:
 - Inform the public of air quality in and around tribal lands
 - Not a statement about whether tribal sources contribute to air pollution
- Designating a tribe as its own area requires regulatory air monitoring data





IMPLEMENTING THE 2015 OZONE STANDARD

MEETING THE STANDARDS

EPA projections show federal rules will reduce air pollution on tribal lands:

- Regional Haze regulations
- Mercury and Air Toxics Standards
- Clean Power Plan
- Tier 3 Vehicle Emissions and Fuels Standards
- Light-Duty Vehicle Tier 2 Rule
- Mobile Source Air Toxics Rule
- Light-Duty Greenhouse Gas/Corporate Average Fuel Efficiency Standards
- Heavy-Duty Vehicle Greenhouse Gas Rule
- Reciprocating Internal Combustion Engines (RICE) NESHAP
- Industrial/Commercial/Institutional Boilers and Process Heaters MACT
- Requirements to reduce the interstate transport of air pollution.



PERMITS

- New and modified sources of pollution on tribal lands require permits
- New designation may change permit threshold for major and minor sources
- For more information on tribal air permits:

Lisa Beckham

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R9AirPermits@epa.gov



PLANS AND CONTROL MEASURES

- Tribes are not required to submit plans or enact controls
- States must submit plans and enact controls on state land
- Tribes may submit plans and enact controls and can participate in state planning process



TRIBAL NONATTAINMENT AREAS

- For tribal areas designated separately from states:
 - Tribe or EPA addresses control requirements
 - Regulatory air monitoring data required
- For more information see EPA policy on tribal designations:
<https://www.epa.gov/tribal-air>





NEXT STEPS



NEXT STEPS

Important Deadlines*

October 1,
2016

Recommendations due to EPA

June 1, 2017

EPA responds to recommendations

*These deadlines are set by Clean Air Act

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