

National Tribal Air Association and  
the California Air Resources Board's  
**Informational Webinar for Tribes on  
EPA's Proposed NAAQS Review of Particulate Matter**  
**June 10, 2020**



# Webinar Agenda

**1. Welcome and Introductions**

**Andy Bessler**  
NTAA Project Director

**2. Overview of the EPA Proposal**

**Dara Marks-Marino**  
NTAA Senior Research Specialist

**3. Overview of NTAA's Comments**

**Bill Auberle**  
NTAA Policy Advisory Committee

**4. Overview of CARB's Comments**

**Bonnie Holmes-Gen**  
California Air Resources Board

**5. Time for Discussion**





# Today's Speakers

**Dara Marks Marino** is the Research Specialist Senior for both the Tribes and Climate Change program and the National Tribal Air Association. Dara has a Master's of Science in Climate Science and Solutions from Northern Arizona University, a BA in Humanities from the University of Colorado, and a Post-Bac in Elementary Education from Arizona State University. Dara spent most of her adult years as a professional mountain bike racer and triathlete, as well as a coach for other cyclists and triathletes, before pivoting to environmental work. She and her husband have a mini-me daughter who also shares her mom's fervor for both social and environmental justice. Favorite family pastimes include backpacking, skiing, and mountain biking.



# Today's Speakers

**Dr. William M. (Bill) Auberle** is a founder and Principal at EN3 Professionals, LLC, an engineering consulting firm in Flagstaff. Dr. Auberle has more than 40 years experience in environmental engineering and management. His expertise includes environmental policy and permitting processes, air quality engineering, environmental risk assessment and management, and site investigation and remediation.

Bill remains active as a Professor Emeritus at Northern Arizona University. He is co-founder and a member of the Advisory Board to the Institute for Tribal Environmental Professionals (ITEP).



# Today's Speakers

Bonnie Holmes-Gen is the Chief of Health and Exposure Assessment Branch for the California Air Resources Board.

Previously to working for CARB, she worked at California's Department of Toxic Substances Control and also served as the Senior Policy Director for the American Lung Association of California (ALAC) in Sacramento.

Ms Holmes-Gen was previously the Senior Legislative Representative for Sierra Club California (1/96-1/2000) in Sacramento and the Senior Consultant for the consulting firm of V. John White Associates (9/89-9/95).

Ms. Holmes-Gen has a Bachelor of Science degree in Environmental Policy Analysis and Planning from the University of California at Davis (June, 1982) and a Master of Arts degree from New College Berkeley (August, 1993).



# EPA's Proposed Updates to the NAAQS for PM

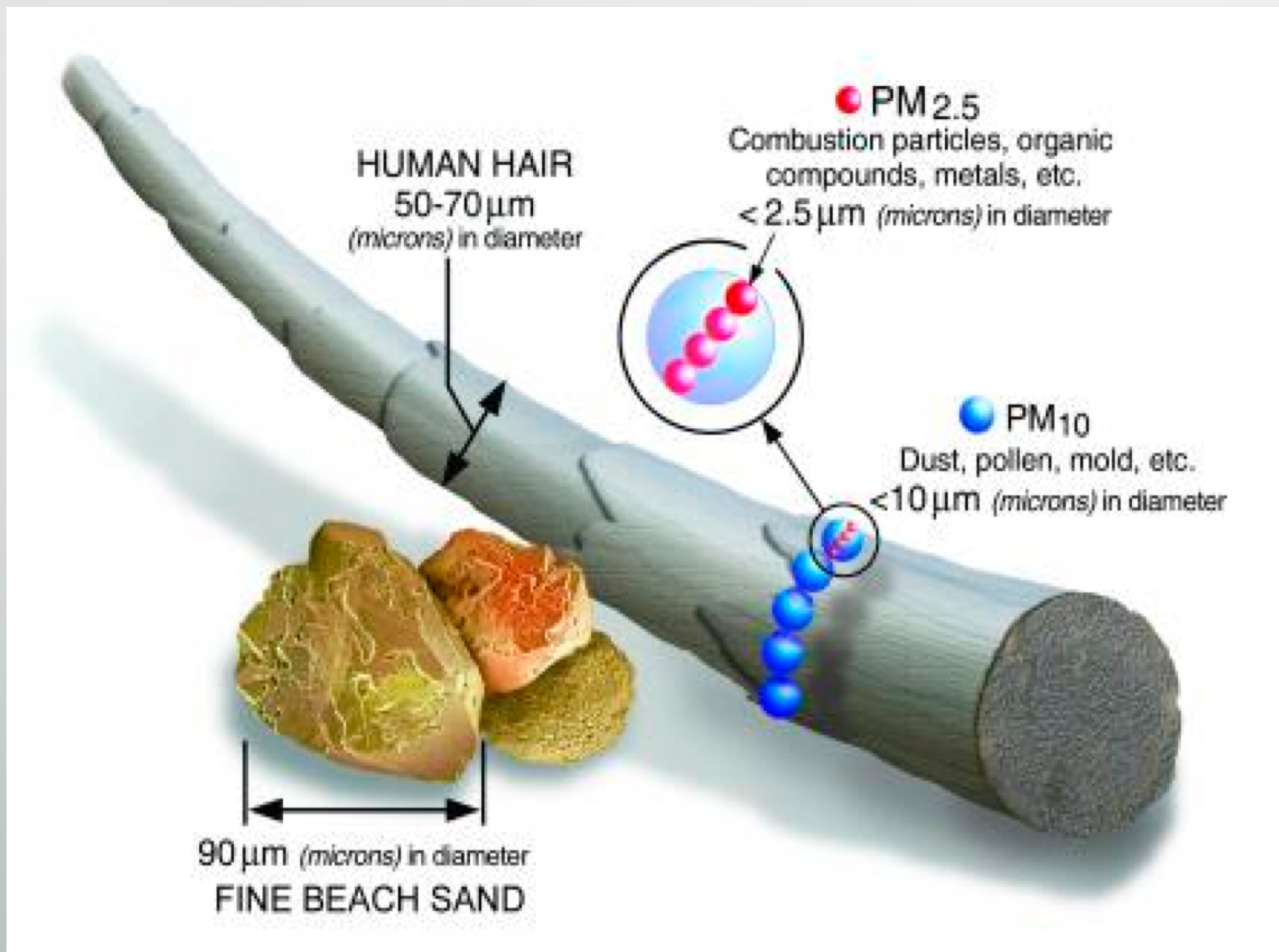
- EPA required by the Clean Air Act to review National Ambient Air Quality Standards (NAAQS) for the criteria pollutants every 5 years to provide the required protection for public health and welfare.
  - Primary standards: protect human health
  - Secondary standards: protect the environment
- For particulate matter, standards include both fine (PM<sub>2.5</sub>) and coarse (PM<sub>10</sub>) particles. Particles are measured in micrograms per cubic meter (ug/m<sup>3</sup> ).
- Proposing to retain NAAQS for particulate matter (PM) without change.



# What is Particulate Matter? (PM)

- Microscopic particles of solid or liquid matter suspended in the air
- Emitted from power plants, industries, and automobiles
- Contributes to smog and regional haze





# Health and Environmental Impacts

- PM<sub>2.5</sub> poses the greatest risk to health including:
  - premature death in people with heart or lung disease
  - nonfatal heart attacks
  - irregular heartbeat
  - aggravated asthma
  - decreased lung function
  - increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing

*See: NTAA's 2020 Updated White Paper Detailing the Science and Connections Between Air Pollution, Tribes, and Public Health [www.NTAATribalAir.org](http://www.NTAATribalAir.org)*

- PM's contributions to regional haze impacts the environment through:
  - acidification of lakes and streams
  - depletion of soil nutrients
  - damage to sensitive forests and farm crops





# Review Process for PM NAAQS

- EPA staff prepares an Integrated Review Plan with several assessments:
  - Integrated Science Assessment (ISA)
  - Risk/Exposure Assessment (REA)
  - Policy Assessment
- Clean Air Scientific Committee (CASAC) reviews the assessments and provides recommendations to the Administrator
  - CASAC disbanded by Administrator; Independent PM Review Panel formed
- EPA proposes a rule to implement the NAAQS based on the EPA Administrator's decision



# **Summary of NTAA Comments**

- **Protecting the Health of Native People**
- **Impaired Visibility**
- **Climate Change**
- **Scientific Integrity in the NAAQS Process**
- **NTAA Recommendations**



# Current PM NAAQS Standards

- Primary PM 2.5  
12.0 ug/m<sup>3</sup> (annual) and  
35 ug/m<sup>3</sup> (24-hour)  
(standards set in 2012)
- Secondary PM 2.5  
35 ug/m<sup>3</sup> (24-hour)  
(standard set in 2006)



# Summary of NTAA Comments

## Protecting the Health of Native People

- The current NAAQS for particulate matter, and this proposal to maintain these standards, fail to meet this basic principle of the Clean Air Act and our nation's long-standing approach to protecting public health
- NTAA agrees with EPA Staff's Policy Assessment that, based on the available scientific evidence in the ISA, the current primary standards for PM<sub>2.5</sub> are inadequate to protect public health including the health of Tribal citizens.
- National Tribal Air Association recently published an updated white paper titled, ["Detailing the Science and Connections Between Air Pollution, Tribes, and Public Health."](#) Study after study has shown the detrimental health effects of pollutants including PM on our bodies in the areas of respiration, reproduction, endocrine systems, and more, meaning that reductions of pollutants are important for public health reasons.
- Recent research has found increased mortality from COVID-19 in locations with higher PM<sub>2.5</sub> exposures.



# Summary of NTAA Comments

## Impaired Visibility

- Particulate matter contributes to impaired visibility of sacred vistas for many Tribal communities.
- The proposed annual secondary NAAQS of  $15 \mu\text{g}/\text{m}^3$  does not respect or protect these important cultural values.
- This numerical standard should be lowered to reduce the frequency and severity of particulate matter on our atmosphere.



# Summary of NTAA Comments

## Climate Change

- Particulate matter in the atmosphere is a factor in climate change and the effects of these changes.
- Many Tribal communities are disproportionately affected by both ongoing changes and the threats of climate modifications.
- The NAAQS for particulate matter should be reconsidered frequently and lowered accordingly as additional relational knowledge with climate change is gained.





# Summary of NTAA Comments

## Scientific Integrity in the NAAQS Process

- Recent EPA actions that have undermined the agency's ability to meet its statutory obligations.
- Former Administrator Pruitt issued a Directive that prohibited EPA grant recipients from participating on EPA advisory committees forcing academic scientists off important committees and panels while increasing the participatory number of industry affiliated scientists. Courts have since found the Directive unlawful.
- Administrator Wheeler disbanded the twenty-four-member CASAC Particulate Matter Review Panel in October 2018, midway through the review, and forced their work on the seven-member CASAC that lacked the requisite expertise or capacity.





# Summary of NTAA Comments

## NTAA Recommendations

- The annual average NAAQS for PM<sub>2.5</sub> (primary) should be changed to 8 µg/m<sup>3</sup> .
- The 24-hour average NAAQS for PM<sub>2.5</sub> (primary) should be reevaluated to reflect the cumulative effects of particulate matter and COVID-19 and set between 30 µg/m<sup>3</sup> to 25 µg/m<sup>3</sup>
- The secondary NAAQS for PM<sub>2.5</sub> should be identical to the primary standards, including the changes in recommendations listed above.
- EPA must implement a continuous review process for all particulate matter standards that restores the reliance on scientists with expertise in the field and plan enough time and capacity to perform the necessary work within the five-year statutory review period.



# NTAA's Policy Resource Kit

**Comments due into EPA by 11:59 pm ET on June 29, 2020.**

- NTAA Fact Sheet
- Tribal Template Letter
- Recording and slideshow of this Informational Webinar
- NTAA Comment Letter will be submitted on June 29, 2020.
- Found on NTAA's website here: <https://www.ntaatribalair.org/policy-resource-kits/#CurrentNTAAPolicyResourceKits>

***ANY QUESTIONS OR COMMENTS?***

