



Pecos Wilderness Class I Area – Photo credit Rhett Zyla



Stakeholder participation and Regional Haze

Air Quality Bureau

March 30, 2023



Photo: 2022 Stakeholder engagement at Four Corners Air Quality Group in Farmington, NM

Today's Agenda

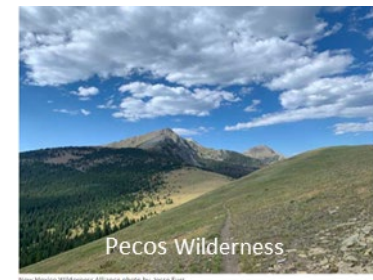
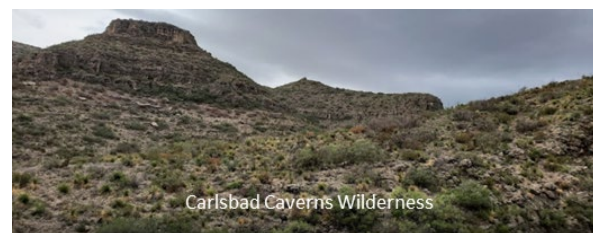
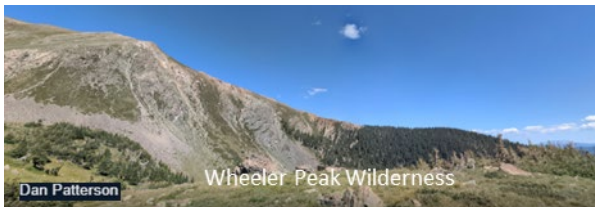
- ❑ Welcoming and Introduction
- ❑ Public Participation Process
 - ❑ Rulemaking and State Implementation Plan (SIP) Adoption
- ❑ Regional Haze
 - ❑ Step 1 Review
 - ❑ Step 2



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Air Quality Bureau – Our Mission

To protect the inhabitants and natural beauty of New Mexico by preventing the deterioration of air quality



Planning Section Introductions

Planning Section Chief

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Stakeholder Engagement

Objective:

Improve our relationship and engagement process with stakeholders by building trust and capacity to fully participate in our processes.

Through this engagement, stakeholders can be empowered to make informed decisions regarding air quality and their health.

- Outreach
- Education
- Communication
 - ▣ **Your input is Vital**
 - Guides development of SIPs, rules, and programs
 - Allows for local (i.e., New Mexican) solutions
 - NMED AQB v. EPA
 - Region 6 in Dallas, TX, or
 - HQ in Washington, D.C.
 - ▣ Continuous Dialogue
 - Beyond individual projects and pollutants

Public Participation

- ❑ General Process – Rulemaking and SIP Adoption
- ❑ Regional Haze Specific
 - ❑ Additional Federal Requirements
 - ❑ Additional Opportunities –
 - ❑ February 28th, March 30th (Today), April 27th, and more coming
 - ❑ Beyond normal requirements
 - ❑ Milestones for Public Participation



Rulemaking/SIP Adoption Process

- Assign Project Lead
- ▣ Information Collection and Analysis
 - Informal Industry and Public Comment
 - Data Collection
 - Other Jurisdictions and Legal Considerations
- ▣ Internal Workgroup
 - Compliance and Enforcement, Permitting, Monitoring Sections
 - Provide input and review
- Draft rule, rule revision or SIP revision.
- NMED consultation with FLMs
- Additional Outreach
 - ▣ Solicit comment from
 - ▣ Affected industries,
 - Interested individuals , and
 - General public
 - ▣ Open houses or one-on-one meetings



Rulemaking/SIP Adoption

- Revised Draft Rule, rule revision, or SIP revision
 - ▣ Incorporate public comment
- EPA Review
 - ▣ 110(l) demonstration
 - “Anti-backsliding”
 - SIP must remain as stringent as before
- Petition for Regulatory Change
 - ▣ Filed with Environmental Improvement Board (EIB)
 - Statement of Reasons
 - Public Review Draft
 - Proposed rule or SIP
 - Request hearing
 - ▣ EIB has 15-60 days to consider Petition
 - ▣ Usually considered at next EIB Meeting



Rulemaking/SIP Adoption: Hearing Phase

Formal Public Comment Period

Comments received by AQB during this time are included in the NOI as exhibits.

Formal public comment can be made directly to the EIB through the end of the hearing.

- Public Notice
 - ▣ Newspaper(s) of General Circulation
 - Area(s) of Interest
 - ▣ New Mexico Register
 - ▣ “Provide to the Public”
 - Legislative Services
 - Website
 - NMED Field Offices
 - ▣ Small Business Regulatory Advisory Commission
 - ▣ 60-Day Public Comment Period
- Notice of Intent
 - ▣ Technical Testimony and exhibits
 - ▣ Draft Final Order and Statement of Reasons for Adoption
- Hearing
 - ▣ Present our case
 - ▣ EIB Deliberations



Rulemaking/SIP Adoption: Post-Hearing Phase

SIP v. non-SIP Rule

SIP approved rules in the New Mexico Administrative Code are federally enforceable.

Likewise, air quality permits and their conditions are federally enforceable as the AQB issues these pursuant to SIP or federal rules.

□ New Rules

- ▣ File with State Records Center and Archives
- ▣ Publish Adoption in NM Register

□ New or Revised SIP

- ▣ Submit Administrative Record to EPA
 - Filed rule, hearing transcript, Notice of Intent, Testimony, exhibits, public notices, affidavits of publishing, public comments, and SIP Transmittal letter from Governor



Why are we developing a RH SIP?

□ EPA State Plan Requirement

- Sometimes, the EPA will develop an entirely new program that must be adopted by States, such as the Regional Haze Rule which required states to develop a Regional Haze SIP. The Environmental Protection Agency (EPA) promulgated the Regional Haze Rule in 1999, directing states to implement pollution control plans to improve visibility and air quality at national parks.
- These plans often require new or revised rules to implement the specific control strategies within "A" SIP. For example, 20.2.65 NMAC, *Smoke Management* and 20.2.81 NMAC, *Western Backstop Sulfur Dioxide Trading Program* were adopted in 2003 as part of the first period Regional Haze SIP.



RH SIPr -Milestones for stakeholder participation

□ Initial outreach and continuing engagement 2019-2022

▣ 2019-2020

- Outreach webinars

- launch of new Regional Haze website, listserv, and dedicated email

▣ 2020-2022 other public engagement activities / events.

- Updated website

- Four Factor Analyses submitted by facilities

- Stakeholder Comments

- Four Corners Air Quality Group public meetings (2019-2022)

- Stakeholder engagement meetings



RH SIPr - Milestones for outreach, education and engagement

- **Reengagement phase January – December 2023**
 - ▣ Feb 23, 2023 – April 27, 2023 - reengagement webinar series
 - Feb 23, 2023 - Background and ambient data analysis.
 - March 30, 2023 - interstate considerations.
 - April 27, 2023 - overview of selected sources.
 - ▣ Website update - “Outreach, Education, Engagement.”
 - ▣ Continuing engagement opportunities on a case-by-case basis with stakeholders
 - ▣ Completion of a comprehensive first SIPr proposal*
 - *Timeline being developed



RH SIPr - Formal Federal Land Managers (FLMs) consultation period

□ **Formal FLM Consultation Period**

- NMED offers virtual or in-person meetings with FLMs to discuss NMED's proposal.
- FLMs to provide written comments on state's policy analyses of its Long-term strategy emission reduction obligation.
- NMED decides on any revisions necessary based on comments
- NMED prepares written response to comments on how state addressed comments as part of the hearing phase, and in proposal revisions.



RH SIPr - Hearing Phase: Milestones for public and other stakeholder participation

□ Hearing phase

▣ Request a hearing

■ NMED requests a hearing before the **Environmental Improvement Board**

- Includes a Statement of Reasons and a Petition for Regulatory Change.
- Formal responses to FLM comments and a new draft plan submitted to EIB at this time.

▣ Public Notice and Formal Public Comments

■ Newspapers, NM Register, Website, Field Offices, etc.

■ Notice includes

- Date, time, location of the hearing,
- Instructions for participating and requesting accommodations

▣ Hearing of the board and decision on the proposed SIPr.

Regional Haze planning overview

- ❖ New Mexico's Regional Haze State Plan Development for 2nd Implementation Period (2019-2028)
 - ❖ Step 1 – (review) Ambient data analysis and discuss requirement to determine the Uniform Rate of Progress
 - ❖ Step 2 – Determining affected areas in other states



EPA's guidance on state implementation plans (2nd implementation period)

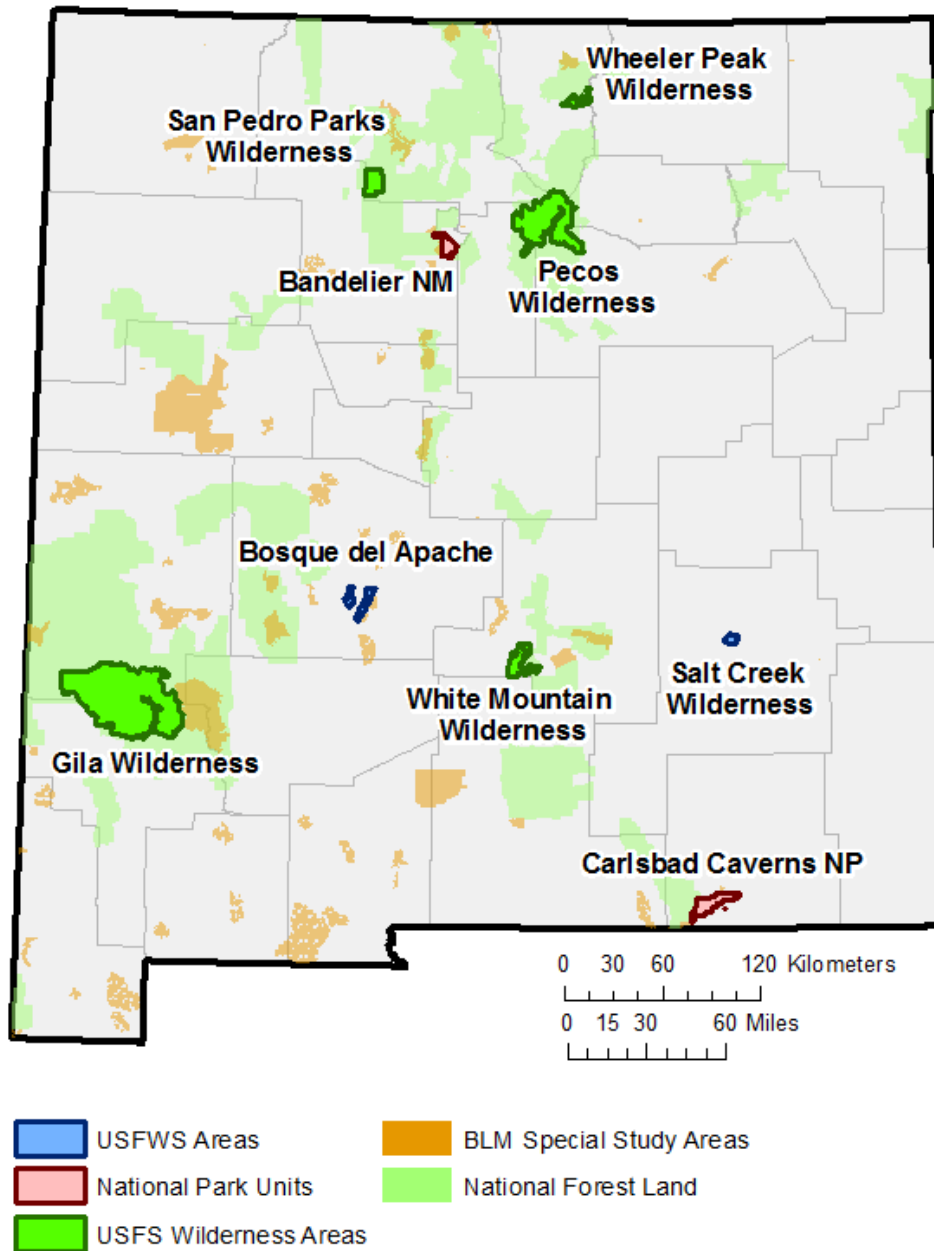
Step 1	Ambient data analysis
Step 2	Determination of affected Class I areas in other states
Step 3	Selection of Sources for Analysis
Step 4	Characterization of Factors for Emission Control Measures
Step 5	Decisions on Control Measures Necessary to Make Reasonable Progress
Step 6	Regional Scale Modeling of the LTS to set RPGs for 2028
Step 7	Progress, Degradation, and URP glidepath checks
Step 8	Additional Requirements for SIPs

Mostly completed – under internal review

In progress

New Mexico Mandatory Federal Class I Areas

The Clean Air Act gives special air quality and visibility protection to national parks larger than 6,000 acres and national wilderness areas larger than 5,000 acres that were in existence when it was amended in 1977. These are “Class I” areas.



CIA wilderness areas & parks in NM:

- Bandelier Wilderness Area
- Bosque del Apache Wilderness Area
- Carlsbad Caverns National Park
- Gila Wilderness Area
- Salt Creek Wilderness Area
- San Pedro Parks Wilderness Area
- Pecos Wilderness Area
- Wheeler Peak Wilderness Area
- White Mountains Wilderness Area

NM Class I Areas

San Pedro Parks Wilderness Area



Photo credit: Mark Jones

Bandelier Wilderness Area



Photo credit: Rhett Zyla

Wheeler Peak Wilderness Area



Photo credit: Mark Jones

Bosque del Apache Wilderness Area



Photo credit: Kip Carrico

White Mountain Wilderness Area



Photo credit: Rhett Zyla

Photo credit: Rhett Zyla

Pecos Wilderness Area



Photo credit: Rhett Zyla

Gila Wilderness Area



Photo: <https://www.fs.usda.gov/>

Salt Creek Wilderness Area



Photo credit: Jeff Howland, <https://wilderness.net/>

Carlsbad Caverns National Park



Photo credit: National Park Service (unidentified photographer, <https://www.nps.gov/im/chdn/cave.htm>)

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EPA/WRAP Step 1

Ambient Data Analysis



Step 1 – Ambient data analysis

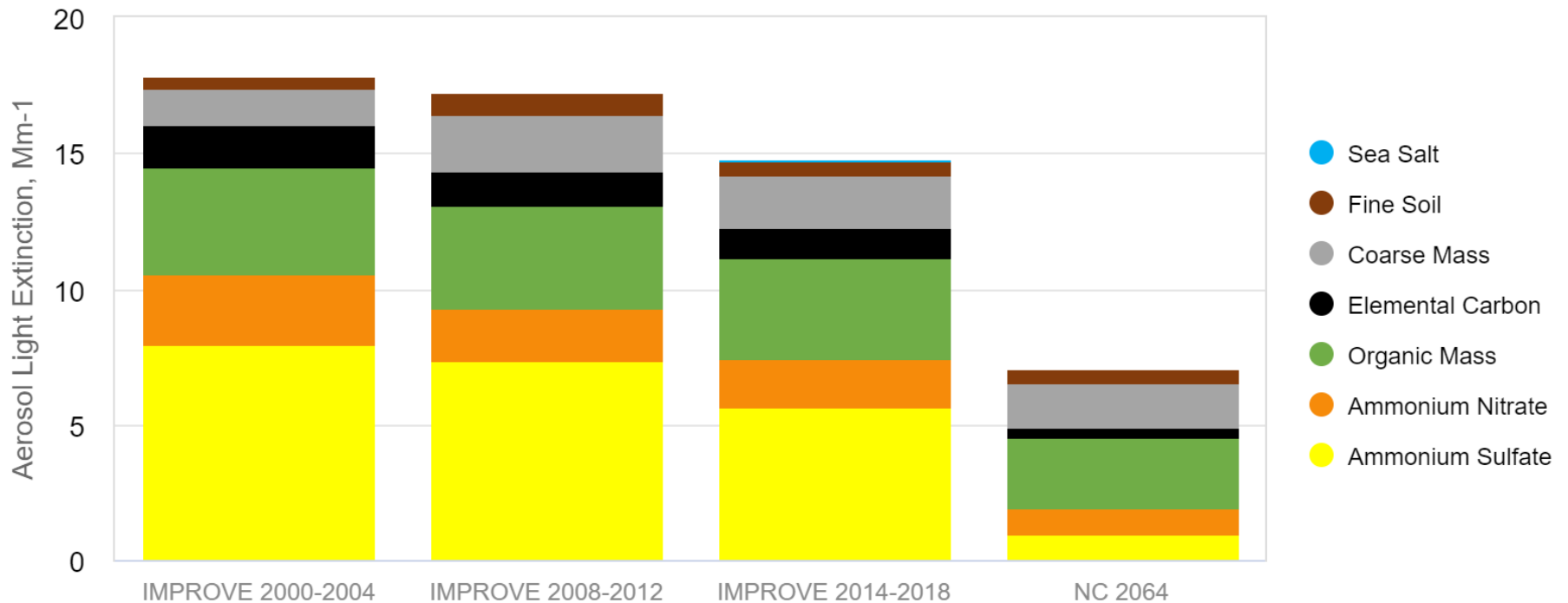
- For each implementation period, the Regional Haze Rule requires states to calculate the following for each of its Mandatory Class I areas (CIAs):
 - The baseline, current, and natural visibility conditions;
 - Progress to date;
 - and a uniform rate of progress glidepath.
- Additional guidance on how to complete this task is provided in the 2018 EPA Technical Guidance on Tracking Visibility Progress for the Second Implementation Period of the Regional Haze Program document addresses this step and can be found here:
<https://www.epa.gov/visibility/technical-guidance-tracking-visibility-progress-second-implementation-period-regional>.



Example Step 1 Analysis (Bandelier Wilderness Class I Area) – “20% Most Impaired Days”

IMPROVE 5-year Averages and 2064 Estimated Natural Conditions

Light Extinction - Avg. Most Impaired Days - Bandelier NM



IMPROVE Monitor: Bandelier NM (BAND1)

Highcharts.com



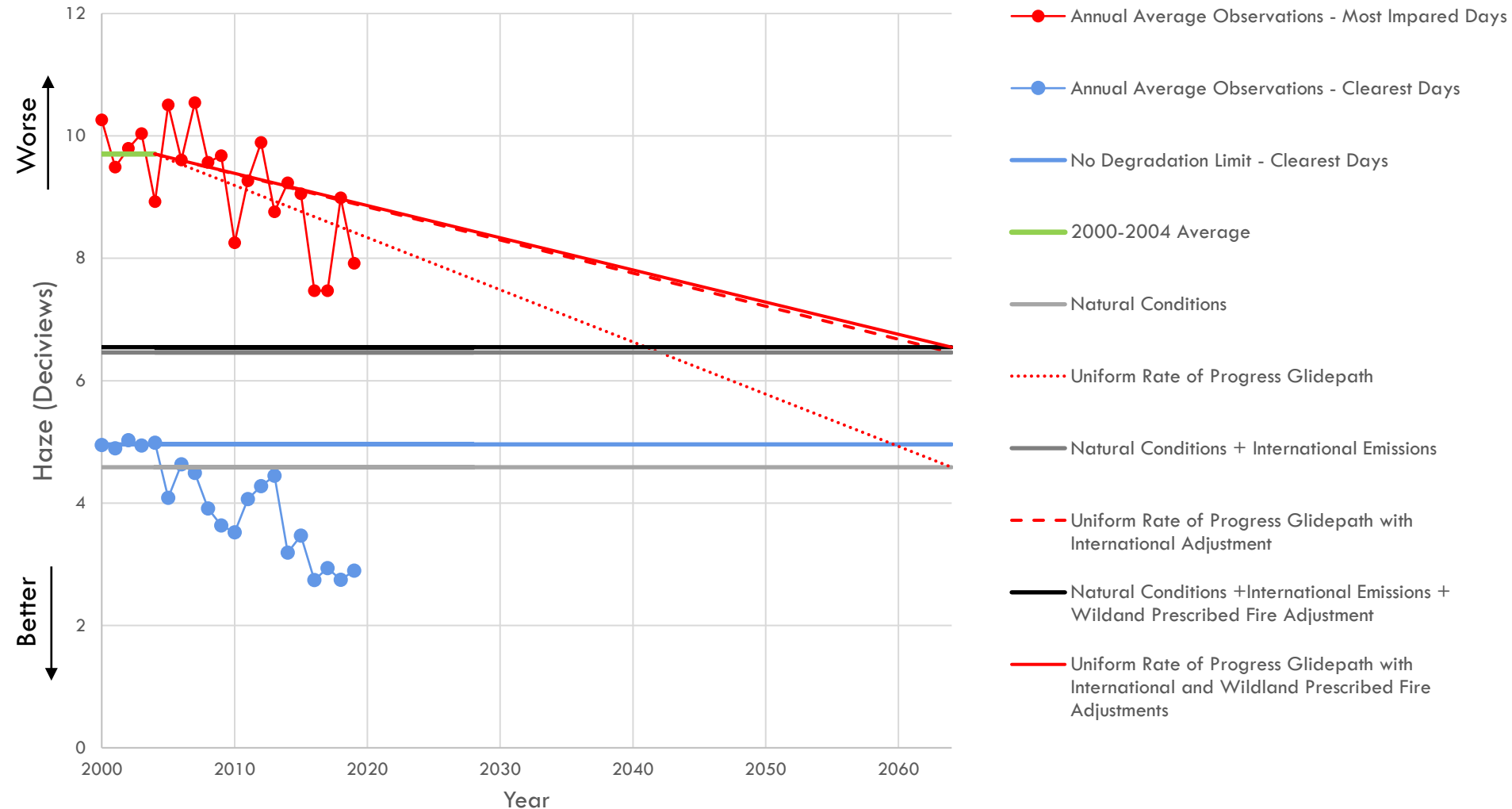
Step 1 – Tracking visibility: uniform rate of progress & adjustments

- The Regional Haze Rule (2017) requires states to track visibility in the form of a uniform rate of progress glidepath for each CIA within it's state.
 - The uniform rate of progress glidepath is the rate of visibility improvement (in deciviews) that would need to be maintained, during each implementation period, in order to attain natural visibility conditions by the end of 2064.
 - States may propose adjustments to the glidepaths based on accounting for impacts from:
 - (1) international anthropogenic sources; and
 - (2) wildland prescribed fires.
 - NMED is planning to adjust NM's CIA glidepaths, using methods provided by WRAP modelling, for both of these allowances.



Uniform Rate of Progress

Bandelier URP Glidepath



EPA/WRAP Step 2

- ❖ Determining affected Class I areas in other states



Step 2 – Determine affected CIAs in other states

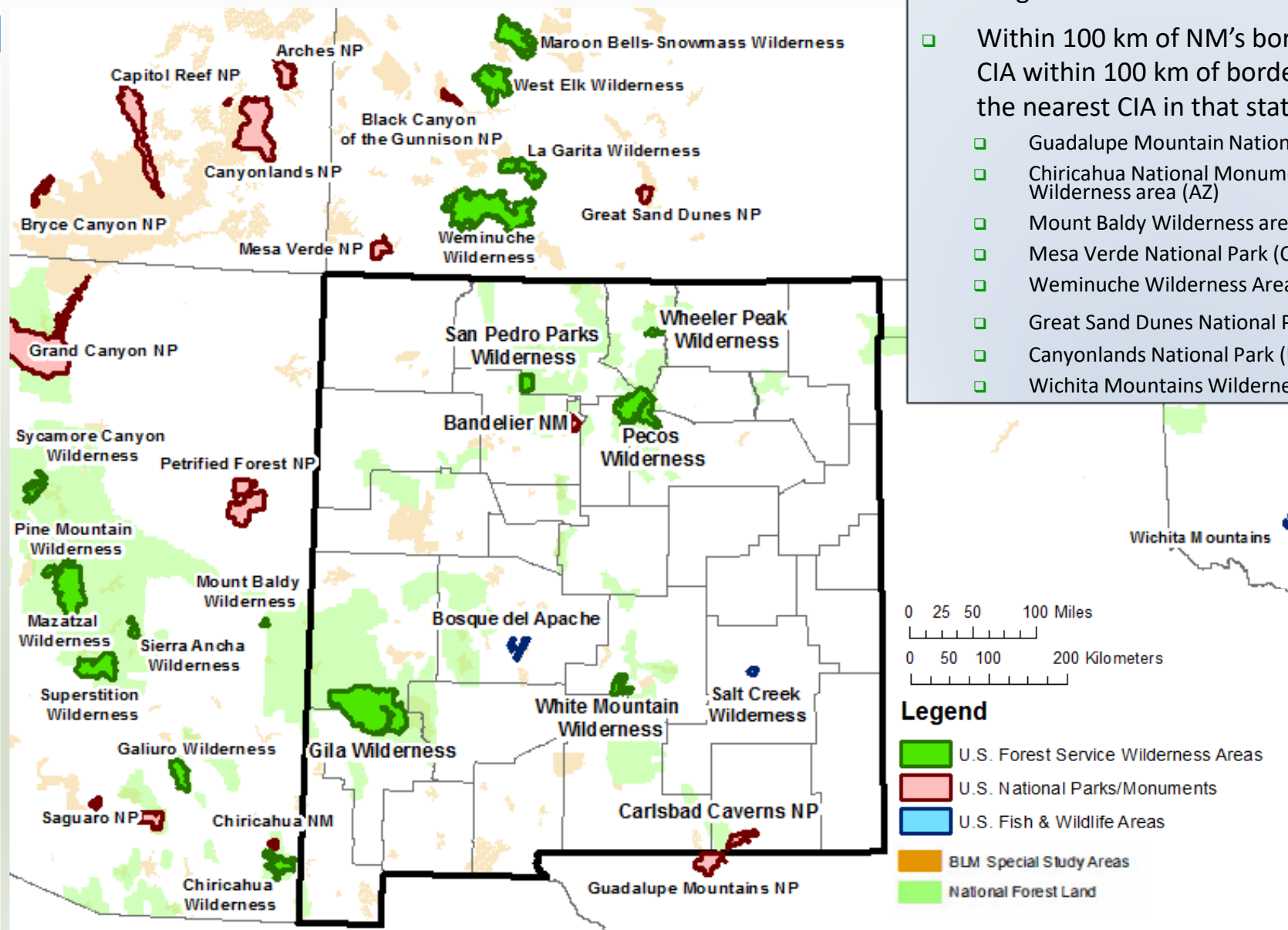
- The Regional Haze Rule (2017) requires that:
 - “each State must submit a long-term strategy that addresses regional haze visibility impairment for each mandatory Class I Federal area within the State,”
 - “and for each mandatory Class I Federal area located outside the State that may be affected by emissions from the State...” Reference [40 CFR 51.308(f)(2)].
 - EPA’s guidance (2019) indicates that States have flexibility to use any “reasonable” method for quantifying the impacts of its own emissions on out-of-state Class I areas.
 - This is also a suitable subject for interstate consultations
- Reference: [EPA Guidance on Regional Haze State Implementation Plans for the Second Implementation Period, issued August 8, 2019]



Step 2 - NM's proposed approach

New Mexico's current draft analysis includes evaluation of potential impacts on contiguous state CIAs with the following criteria:

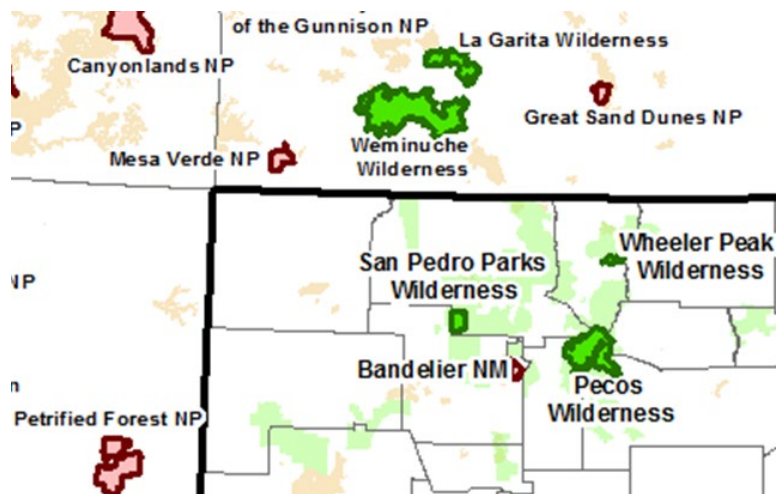
- ❑ Within 100 km of NM's border; If no CIA within 100 km of border then the nearest CIA in that state.
- ❑ Guadalupe Mountain National Park (TX)
- ❑ Chiricahua National Monument, and Wilderness area (AZ)
- ❑ Mount Baldy Wilderness area (AZ)
- ❑ Mesa Verde National Park (CO)
- ❑ Weminuche Wilderness Area (CO)
- ❑ Great Sand Dunes National Park (CO)
- ❑ Canyonlands National Park (UT)
- ❑ Wichita Mountains Wilderness (OK)



Mesa Verde National Park CIA



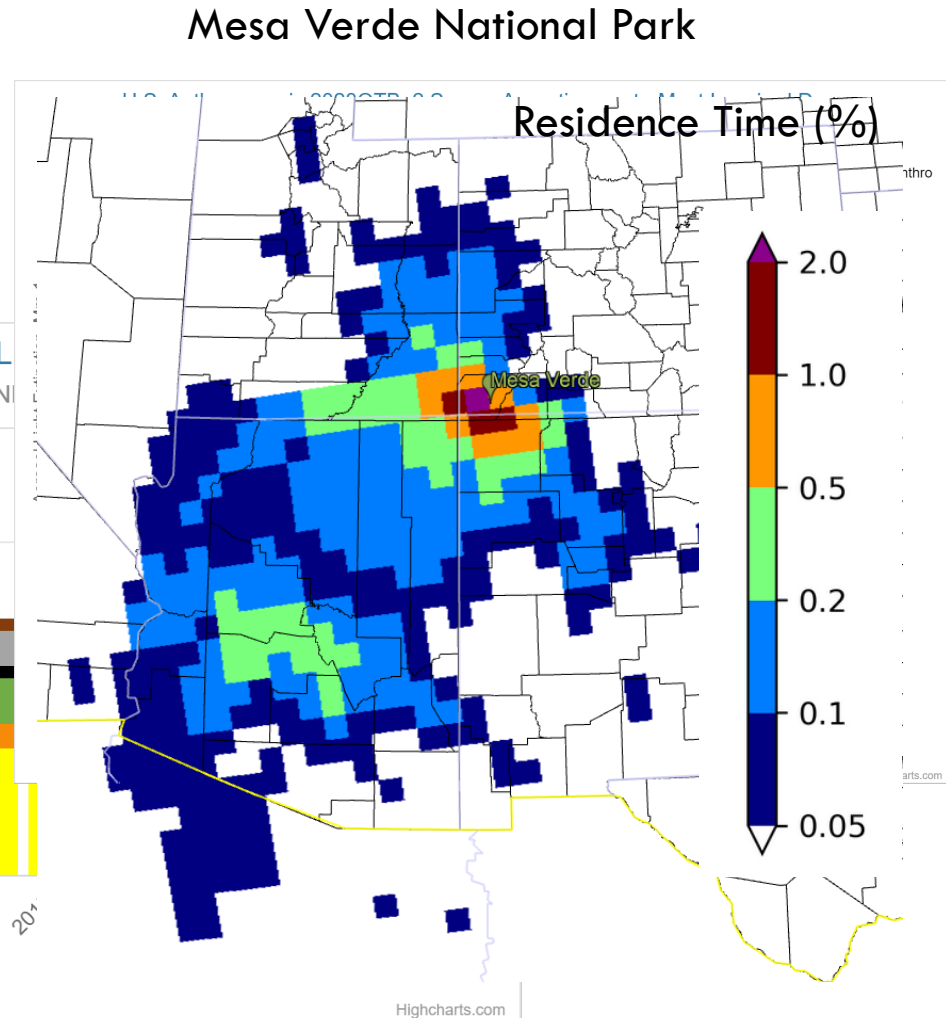
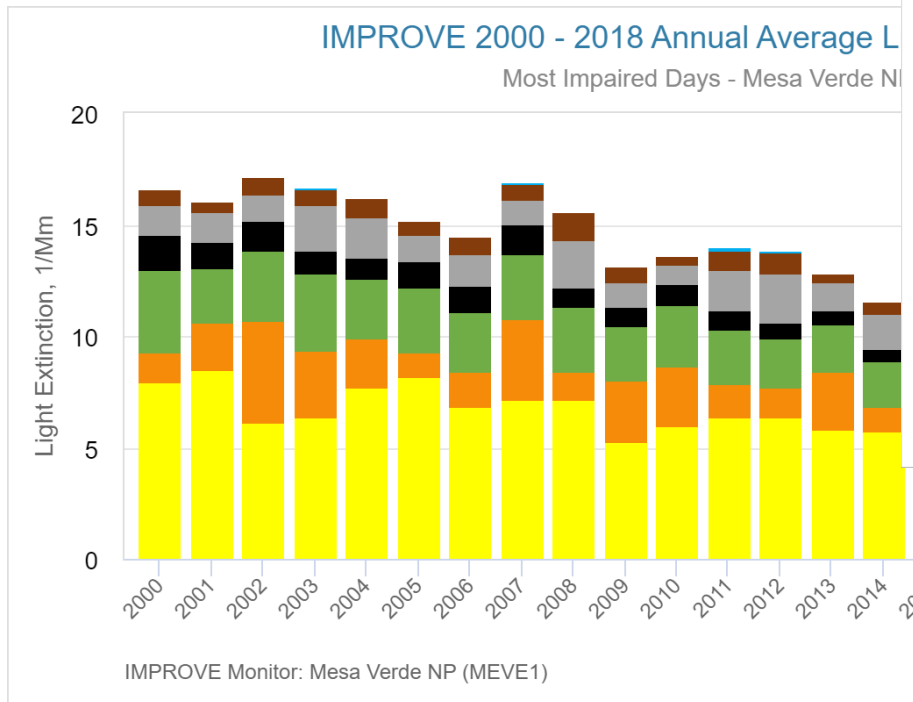
Mesa Verde National Park Class I Area – Photos (top and bottom) credit: NPS photos





Analysis for potentially affected Class I areas outside NM

- Weight of evidence analysis - Western Regional Air Partnership (WRAP) resources
 - Improve Monitoring Trends from 2000-2018





Future webinars in 3-part series (March – April 2023) will cover step 2 and 3 in EPA's 2nd implementation period guidance.

Step 1	Ambient data analysis	Feb 23, 2023 webinar
Step 2	Determination of affected Class I areas in other states	Today's webinar
Step 3	Selection of Sources for Analysis	April 27, 2023 (4-6 pm) Registration: https://nmed-oit.webex.com/weblink/register/r8fa2b740e432b0a25b9be037d8406a17
Step 4	Characterization of Factors for Emission Control Measures	
Step 5	Decisions on Control Measures Necessary to Make Reasonable Progress	
Step 6	Regional Scale Modeling of the LTS to set RPGs for 2028	
Step 7	Progress, Degradation, and URP glidepath checks	
Step 8	Additional Requirements for SIPs	

- Future event info (i.e. April 27, 2023) webinar is available on NMED Events Calendar:
<https://www.env.nm.gov/events-calendar/>
- Previous archived webinars (i.e. 2019-2020, Feb 23 and today's webinar are accessible on NM's Regional Haze Planning website: <https://www.env.nm.gov/air-quality/reg-haze/>



NMED/Albuquerque Regional Haze contacts

Roles	Name	Email	Phone
leadership / direction	Kirby Olson	kirby.olson@env.nm.gov	505-629-5107
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technical lead	Mark Jones	mark.jones@env.nm.gov	505-629-6626
technical support	Neal Butt	neal.butt@env.nm.gov	505-629-2972
emissions inventory, modeling, interstate impacts	Sufi Mustafa, Angela Raso Roslyn Higgin	sufi.mustafa@env.nm.gov angela.raso@env.nm.gov roslyn.higgin@env.nm.gov	505-629-3808
Albuquerque EHD – coordination	Ken Miller	kjmilller@cabq.gov	505-768-2660

Regional Haze NMED AQB website: <https://www.env.nm.gov/air-quality/reg-haze/> (you may sign up to receive notices from our listserv on the website as well.) You may contact Mark Jones and Michael Baca for interest in additional engagement opportunities or questions/comments.



NM's Regional Haze planning website:

<https://www.env.nm.gov/air-quality/reg-haze/>

The blue skies and scenic vistas of New Mexico are considered some of the most beautiful in the United States, but air pollution can threaten those views. Human-caused pollution of varied concentrations and sizes in the atmosphere can, along with natural events like dust storms and wildfires, impair or reduce visibility. Widespread visibility impairment caused by man-made pollutants over a broad geographic area is known as regional haze.

EPA Requirements on Regional Haze

New Mexico is required to develop and submit to EPA its own regional haze plans. NMED cooperates with the City of Albuquerque Environmental Health Department (EHD), which implements air quality regulations in Albuquerque and Bernalillo County. Because NMED and EHD have separate jurisdictions, they submit separate Regional Haze State Implementation Plans to EPA.

Outreach, Education, and Engagement

Public comment is an important part of the regional haze planning process. Regional haze planning is currently in the second implementation period of planning. Resources for outreach, education, and comments received are identified below.

- **NM Regional Haze Guiding Principles** describes the strategy and goals New Mexico focuses on for addressing regional haze.
- **Timeline for Developing the New Mexico Regional Haze SIP Revision - 2nd Implementation Period** presents a draft of the timeline for revisions to the regional haze State Implementation Plan.
- **NMED Air Quality Bureau Stakeholder Engagement: Regional Haze & Other Emerging Topics, Feb. 23, 2023** (video, 2 hours 1 minute) is part 1 of NM 2023 regional haze stakeholder re-engagement 3-part series.
- **Regional Haze and Emerging Issues, Feb. 23, 2023** (slides) provides the slides from part 1 of NM 2023 regional haze stakeholder re-engagement.
- **Regional Haze Stakeholder Comments** provides a folder of the comments from the public about regional haze.

For inquiries related to the development of the NM Regional Haze SIP, contact Mark Jones at 505-629-6626 or mark.jones@env.nm.gov. For inquiries related to the Albuquerque – Bernalillo County Regional Haze SIP, contact Ken Miller, City of Albuquerque at 505-768-2660 or kjmillier@cabq.gov. Input on New Mexico's Regional Haze Planning can also be sent to nm.regionalhaze@env.nm.gov.

Q&A, Feedback, & Next Steps

- ❑ Questions, comments, or ideas
 - ❑ Projects, plans or rules
 - ❑ Enhanced stakeholder engagement efforts
- ❑ Additional resources
 - ❑ Contact information and websites



Opportunities for public to learn more about New Mexico's RH SIP and how to become involved in the development of the RH SIP.

- ❑ Website [<https://www.env.nm.gov/air-quality/reg-haze/>]
- ❑ WRAP "Storyboard". An overview of Western perspective on Regional Haze. Publicly accessible content, and abundant visuals.
[https://views.cira.colostate.edu/wrap_rhpwg_Storyboard_draftNov20_2019/]
- ❑ List Serve sign up. [<https://public.govdelivery.com/accounts/NMED/subscriber/new>]
- ❑ Stakeholder Outreach Webinars. Past webinars available for viewing on RH website [<https://www.env.nm.gov/air-quality/reg-haze/>] Upcoming webinars advertised on NMED Events Calendar [<https://www.env.nm.gov/events-calendar/>]
- ❑ Comments, questions or requests for additional engagement
[nm.regionalhaze@env.nm.gov] mark.jones@env.nm.gov or (505) 629-6626]
- ❑ NMED's Smart Comment Portal. Not accepting comments for RH yet. Website [<https://nmed.commentinput.com/comment/search>]
- ❑ You Tube Tutorial on NMED Smart Comment Portal
- ❑ English [https://www.youtube.com/watch?v=narGKh_4HzY]
- ❑ Spanish [https://www.youtube.com/watch?v=sGhuYS_lr4c]



AQ Resource Library

□ NMED

- Homepage: <https://www.env.nm.gov/>
- AQB: <https://www.env.nm.gov/air-quality/>
 - Planning: <https://www.env.nm.gov/air-quality/planning-section/>
 - Monitoring: <https://aqi.air.env.nm.gov/>
- EIB: <https://www.env.nm.gov/opf/environmental-improvement-board/>
- SmartComment Portal: <https://nmed.commentinput.com/comment/search>

□ EPA

- Clean Air Act: <https://www.epa.gov/clean-air-act-overview>
- NAAQS: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>
- Nonattainment Areas: <https://www.epa.gov/green-book>
- NM SIP: <https://www.epa.gov/sips-nm>
- AirNow: <https://www.airnow.gov/>
- Fire and Smoke: <https://fire.airnow.gov/>
- Air Data: <https://www.epa.gov/outdoor-air-quality-data>
- Design Values: <https://www.epa.gov/air-trends/air-quality-design-values>



Wrap-up & next stakeholder engagement webinars

- **Additional stakeholder engagement events**
 - ▣ April 27, 2023 – Regional Haze Step 3, 4 – 6 PM
 - ▣ May 9, 2023 – Southern NM Dust Symposium, 9 AM – 12 PM
 - ▣ November 7-9, 2023 – Four Corners Air Quality Group Meeting
 - ▣ <https://www.env.nm.gov/events-calendar/>
- **Regional Haze Feedback**
 - ▣ Comments, questions or requests for additional engagement
 - nm.regionalhaze@env.nm.gov, mark.jones@env.nm.gov or (505) 566-9746
 - ▣ Website: <https://www.env.nm.gov/air-quality/reg-haze/>
- **Control Strategies**
 - ▣ Armando Paz; armando.paz@env.nm.gov; (505) 629-3242
 - ▣ Mark Jones; mark.jones@env.nm.gov; (505) 629-6626
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