Studies & Recommendations
Air Quality and Health Impacts of June 2012 Colorado Wildfires
Health Outcomes Associated with Smoke Exposure in Albuquerque, New Mexico during 2011 Wallow Fire
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09/09/2013 15:06

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Ozone
Typically occurs during sunny, high-temperature conditions (late spring, summer, early fall)
Usually formed in heat of afternoon and early evening, dissipating during cooler
Why smog is harmful
Effects on health
How ozone forms
U.S. ozone limits
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AQI & EPA Standards
09/09/2013 15:07

Best Available Retrofit Technology
for San Juan Generating Station
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EXIT
09/09/2013 16:02

Panasonic
09/09/2013 16:54

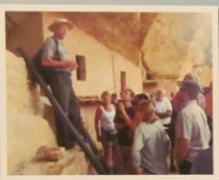
SOUTHERN UTE INDIAN TRIBE
Environmental Program Division-Air Quality Program
P.O. Box 737 MS #84
Ignacio, CO 81137
http://www.southernute-nsn.gov/air-quality
Air Monitoring:
NJT/CO Environmental Commission:
Part 70 Operating Permit Program:
Data Results:
Four Corners O3 Design Value
Four Corners Monitoring Stations
Development of a Minor Source Program for the Reservation:
09/09/2013 18:32

Breathe easy, see far and let nature thrive

National Park Service
U.S. Department of the Interior

Natural Resource Stewardship & Science
Air Resources Division

The National Park Service is charged with preserving and protecting our nation's treasures unimpaired for current and future generations. This includes the ancient wonders of Mesa Verde National Park, the park's natural environment, and the clean clear skies that surround the park.



People come from around the world to tour the cliff dwellings at Mesa Verde NP and learn about the Ancestral Pueblo people.

Healthy air is important for park visitors and employees as well as for park ecosystems.

Spectacular clear views of Mesa Verde NP are an essential part of the visitor experience.

Clean air is vital to human health and well-being, it allows people to breathe easy, experience clear views that inspire and nurture the human spirit, and keeps ecosystems healthy which, in turn, provides even more benefits to people.

Every National Park has air resources, and everyone who breathes, enjoys looking out across our treasured lands, and cares about having healthy ecosystems is affected by air quality.

What's in the air?
Most people who visit national parks expect clean air and clear views. However, Mesa Verde National Park (NP), Colorado, lies downwind of pollution from coal-fired power plants in the Four Corners region, nearby energy development, and urban and industrial pollutants from the Southwest U.S., California, and Mexico. Pollutants from these sources include nitrates, sulfates, fine particles, toxic compounds (like mercury and pesticides), and ozone precursors. These pollutants can harm the park's natural and scenic resources such as vegetation, surface waters, and visibility.

How do we know?
Mesa Verde NP has a long history of participating in national air quality monitoring programs. We have monitored deposition for more than 30 years, ozone for more than 20 years, and both visibility and mercury deposition for more than 10 years

Every year we look at the past five years' worth of data to evaluate the condition of air quality and the past 10 years' of data to look for trends.

Conditions are based on National Park Service Air Resources Division benchmarks that consider monitored levels of pollutants and the sensitivity of park resources. Air quality at Mesa Verde NP warrants moderate concern and has a stable trend for ozone, haze, and deposition of nitrogen and sulfur. Visibility on the cleanest days has improved but remains relatively unchanged on the haziest days. A Clean Air Act goal is that visibility on these haziest days improve.

What are we doing?
The National Park Service engages in monitoring, special studies, air quality regulatory processes and collaborative activities to protect the air quality and related resources in Mesa Verde NP. For example, we:

- work with other federal land managers to ensure oil and gas development in the area considers air quality and viewsheds to the extent practicable;
- work with all states to implement federal regional haze requirements;
- engage in special studies looking at ozone levels, as well as mercury and nitrogen impacts; and
- have been a part of the Four Corners Air Quality Group since its inception.

We believe that working together is the best way to address air quality concerns that go beyond our borders.

Air quality at Mesa Verde NP warrants moderate concern and has a stable trend for ozone, haze, and deposition of nitrogen and sulfur.

For more information

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Branch Chief
Air Resources Division
Policy, Planning, and Permit Review Branch

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NATURAL RESOURCE STEWARDSHIP AND SCIENCE
Science, Stewardship, Solutions

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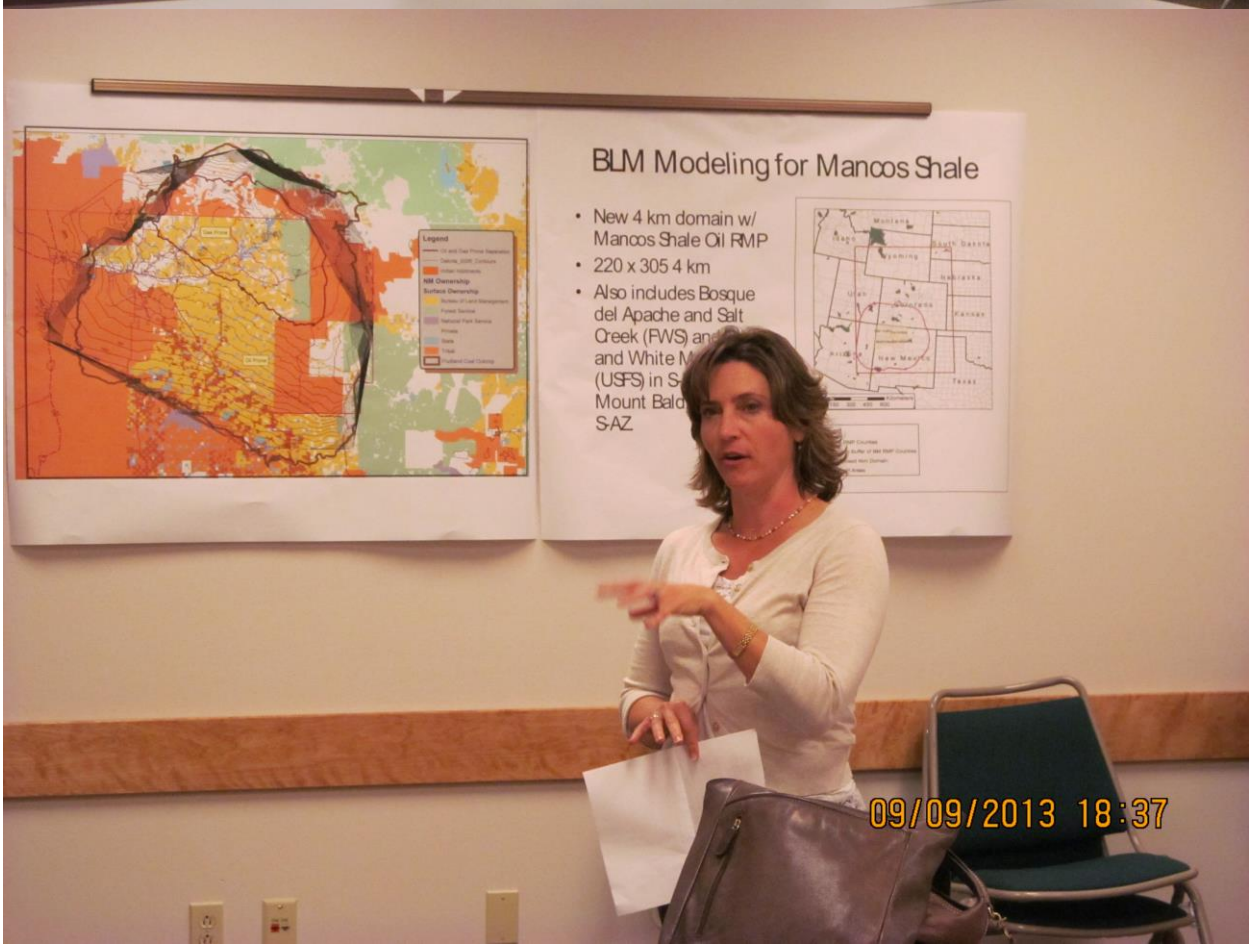
BLM Modeling for Mancos Shale
• New 4 km domain w/ Mancos Shale Oil RMP
• 220 x 305 4 km
• Also includes Bosque del Apache and Salt Creek (FWS) an
and White M
(USFS) in S
Mount Bald
S-AZ
09/09/2013 18:37

LM Modeling for Mancos Shale
New 4 km domain w/
Mancos Shale Oil RMP
220 x 305 4 km
Also includes Bosque
del Apache and Salt
Creek (FWS) and Gila
and White Mountains
in S-NM and
Baldy (USFS) in
Open Burn Regul
09/09/2013 18:38

Best Available
San Juan Gen
09/09/2013 19:20

Best Available Retrofit Technology for
San Juan Generating Station
EPA requires PNM to retire units 2 and 3 of the SJGS by December 31, 2017;
EPA requires PNM to install selective non-catalytic reduction (SNCR) emission control technology on units 1 and 4, and PNM continues operating these units without setting a retirement date;
New Mexico agrees to submit a revised state implementation plan, including a Best Achievable Retrofit Technology ("BART") determination for nitrogen oxides ("NOx") for the SJGS, to EPA for approval after obtaining the necessary administrative approvals.
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09/10/2013 12:37

US Regulates Pollutants to Protect Human Health (NOx, PM, SO2, CO, Hydrocarbons)
US Considering Permitting Greenhouse Gases
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Also includes Bosque del Apache and Salt Creek (FWS) and Gila and White Mountains (USFS) in S-NM and Mount Baldy (USFS) in S-AZ
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US Regulates Pollutants to Protect Human Health (NOx, PM, SO2, CO, Pb)
NOx + HCs + (time (distance, flow)) => O3
Reporting Emissions
Monitoring Emissions (in situ)
Verifying Emissions
Monitoring Air Quality (Trends-Long Term)
Forecasting Air Quality
Verifying Air Quality
Point to Local to Regional Scales
US Considering Permitting Greenhouse Gases (CO2, CH4, N2O)
09/10/2013 12:38