



WYOMING DEPARTMENT OF
ENVIRONMENTAL
QUALITY

Department of Environmental Quality, Air Quality Division

Wildfires:
Air Quality and Policy Updates

CSG

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Wyoming – the “Equality State”



- ◆ 9th largest state – 97,914 square miles
- ◆ Elevation – 3100 to 13,804 feet
- ◆ Average annual precipitation = 14.5 inches
- ◆ Population – approximately 575,000



- ◆ Wyoming women were the first in the nation to vote, serve on juries, and hold public office



2020 Activities included:

- ◆ Training and Webinars
- ◆ Air Quality Awareness Week (May)
- ◆ Fire/Smoke Watch (internal)
- ◆ Coordination with Wyoming Department of Health and National Weather Service
- ◆ Deployed BAM trailer to Laramie; Riverton Mobile
- ◆ Exceptional Event demonstrations (PM_{2.5}, PM₁₀ and Ozone)

2020 Activities cont'd

- Air Quality Awareness Week in May

www.wyvisnet.com

<https://wsfd.wyo.gov/fire-management/fire-information-updates/current-fires>

<https://www.nifc.gov/index.html>

<https://www.fs.fed.us/managing-land/fire>

2020 Activities cont'd: Fire/Smoke Watch

- ◆ Internal - for AQD Monitoring Section
- ◆ Goal: identify days where monitoring data MAY be influenced by wildfire smoke
- ◆ Purpose: assess/collect info for informational data flagging and potential exceptional events

2020 Activities cont'd: Coordinate with WDH/NWS

- ◆ Developed a collaborative message
- ◆ NWS transmitted Air Quality Alerts
- ◆ **EXAMPLE:**



AIR QUALITY ALERT

Includes areas across the Laramie Valley

Poor Air Quality
Today

10 AM – 7 PM MDT

Wildfire smoke from the Badger Creek Fire has created poor air quality conditions.

Sensitive groups should avoid excessive physical exertion and minimize outdoor activities.

Logos: Wyoming Department of Health, Wyoming Department of Environmental Quality (DEQ), National Weather Service

2020 Activities: Coordinate with WDH/NWS cont'd

Special Weather Statement from National Weather Service Riverton WY on 247 PM MDT Fri Aug 21 2020

...AIR QUALITY ALERT FOR WILDFIRE SMOKE UNTIL 300 PM SATURDAY...

The following message is transmitted in collaboration with the Wyoming Department of Environmental Quality, Air Quality Division and the Wyoming Department of Health.

WHAT...Air Quality Alert for Wildfire Smoke.

WHERE...Western and Central Wyoming.

WHEN...Until 300 PM Saturday August 22.

IMPACTS...Heavy smoke from wildfires in California and Colorado has been observed across portions of western and central Wyoming. Very little change is expected in the overall pattern through the weekend. So, smoky conditions may persist until at least Monday morning.

HEALTH INFORMATION...It is recommended by the Wyoming Department of Health that the elderly, young children, and individuals with respiratory problems avoid excessive physical exertion and minimize outdoor activities during this time. Wildfire smoke is made up of a variety of pollutants, including particulate matter and ozone, which can cause respiratory health effects. Although these people are most susceptible to health impacts, the Department of Health also advises that everyone should avoid prolonged exposure to poor air quality conditions.

CURRENT CONDITIONS...The Wyoming Department of Environmental Quality, Air Quality Division offers near real-time air quality data for Wyoming's monitoring stations and health effects information to help the public interpret current conditions. Current air quality conditions across the state of Wyoming can be found at

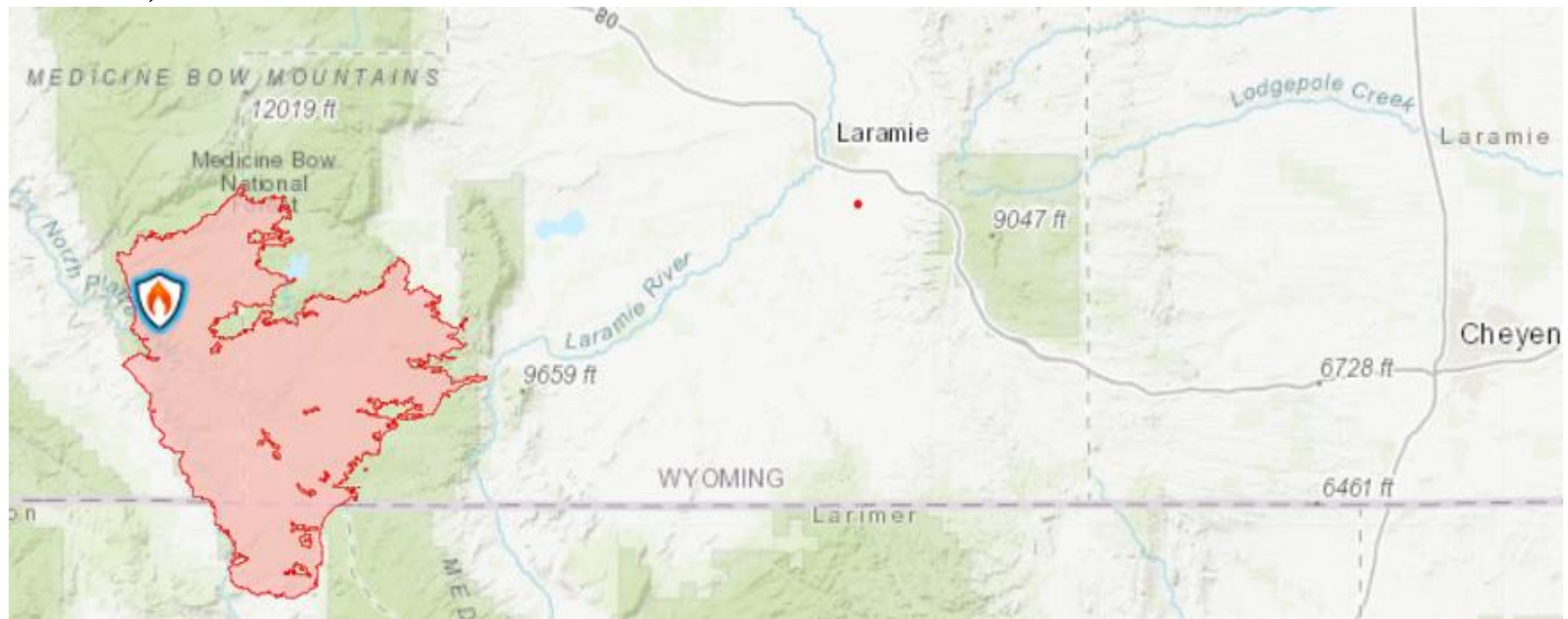
<http://www.wyvisnet.com/>

2020 Wildfires

- ◆ June – Reno Fire in Johnson County
 - 5 miles from Ambient Monitor
 - Shutdown preparations to save gaseous instruments
- ◆ July – scattered smaller fires (near Casper, Rock Springs, others)
- ◆ August
 - PineGulch Fire near Grand Junction Colorado (SE Wyoming Impacts)
 - California fires
 - Cameron Peak fire in Colorado
 - Mullen Fire in Wyoming
- ◆ September – continued
- ◆ October – continued
- ◆ November – Mullen fire restrictions rescinded

2020 – Mullen Fire

- Medicine Bow National Forest
- September 17, 2020 start
- November 10, 2020 restrictions rescinded
- 176,878 acres



2020 Activities: Deployed BAM and Mobile trailers

- ◆ WyVisNet (www.wyvisnet.com)
- ◆ BAM to Laramie near KOA Campground
- ◆ Mobile to Riverton



2020 Monitored Exceedances (Preliminary)

- ◆ Multiple locations
- ◆ 24-hour $PM_{10} > 150 \text{ ug/m}^3$
- ◆ 24-hour $PM_{2.5} > 35 \text{ ug/m}^3$
- ◆ 8-hour daily max $O_3 > 70 \text{ ppb}$



WyDOT Image on I-80



North Cheyenne Neighborhood, Deane Skinner (local photographer)

Next Steps: Exceptional Event Demonstrations

- ◆ 2016 EE Rule and Guidance
 - Regulatory Significance
 - Streamlining and Leveraging resources
- ◆ ECOSWIRE – November 6, 2020

Given widespread wildfires in 2020, state and local air regulators are considering asking U.S. EPA for concurrence on [exceptional events](#) to avoid counting smoke-related air pollution toward demonstrations of attainment for particulate matter and ozone National Ambient Air Quality Standards (NAAQS).

The Wyoming Department of Environmental Quality (WY DEQ) has created a [project page](#) on the E-Enterprise Community Inventory Platform (EECIP) to facilitate information sharing related to exceptional events demonstrations resulting from the 2020 wildfire season.

Wyoming's aim is to leverage and streamline the work many agencies are conducting.

Questions

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