



# **Western Slope/Central Mountains Air Quality Regional Collaboration**

**Meeting #1 - 2/27/2012**

5/30/2013

# Participants

- Jannette Whitcomb, City of Aspen
- Carla Ostberg, Pitkin County
- Ken Nordstrom, Delta County
- Ray Merry, Eagle County
- Richard Stenson, Gunnison County
- Jim Rada, Garfield County
- Paul Reaser, Garfield County
- Morgan Hill, Garfield County
- Renelle Lott, Garfield County
- Steve Defeyter, Mesa County
- Ed Brotsky, Mesa County
- Randy Swepston, Montrose County
- Jeremy Simmons, Rio Blanco County
- Lisa Clarke, Colorado Department Public Health & Environment
- Chris Dann, Colorado Department Public Health & Environment
- Pat Reddy, Colorado Department Public Health & Environment



# Collaboration Goals



- Promote consistency in communicating air quality to local communities, cities, and counties
- Encourage local government flexibility
- Understand purpose of Air Quality Index and Action Days and how to efficiently convey information when alerting the public

# Why AQI/Action Days?



- EPA-preferred method
- Health-based
- Consistent with most other areas
- Multi-pollutant
- Conflict resolution (Example: No more Colorado “Red” advisory when AQI value is in the Green category)

# ACTION DAYS: Denver Example

## Advisory Forecast & AQI Conditions Thumbnail

### Example: No Action Day & No Advisory



Seasonal advisories, such as the summer ozone and winter residential burning programs, are displayed here. These advisories typically begin at 4PM, on the day they are issued, through 4PM the next day.

Visibility is a major factor in many residential burning restriction calls. When visibility is expected to be poor or extremely poor, winter-time residential burning restrictions are called independent of the expected air quality.

The expected air quality (AQI) is used to identify the worst-case pollution levels in relation to your health for the forecast period. Action days are called for air pollutants when health effects are expected to be "unhealthy for sensitive groups," or worse.

### Example: Action Day & Advisory



Action days will be called when a seasonal advisory is issued, pollution levels are expected to affect public health, or a significant air pollution event is occurring (such as smoke from wild fires).

# Western Slope Action Day Examples

Grand Valley – 5/23/2010



- Blowing dust advisories
- Wildfire smoke health advisories
- PM2.5 Action Days (typically winter)
- Ozone Action Days (typically summer)

# AirNOW, CDPHE Listservs, etc.

- CDPHE is working on a specific listserve and EnviroFlash expansion for Colorado communities (regional scale) and/or specific advisory events (i.e. blowing dust, wildfires, area-specific events such elevated ozone levels)
- Currently, the best place to check for any advisories is at: [http://www.colorado.gov/airquality/colorado\\_summary.aspx](http://www.colorado.gov/airquality/colorado_summary.aspx) under “Other Areas”
  - **Statewide advisories are currently issued**
- Rifle will be added to AirNOW in the coming months
  - Potential for other sites to be added – workload dependent
  - Any city on AirNOW can have citizens/interested parties be alerted via EnviroFlash



# LOCAL AIR QUALITY CONDITIONS AND FORECASTS

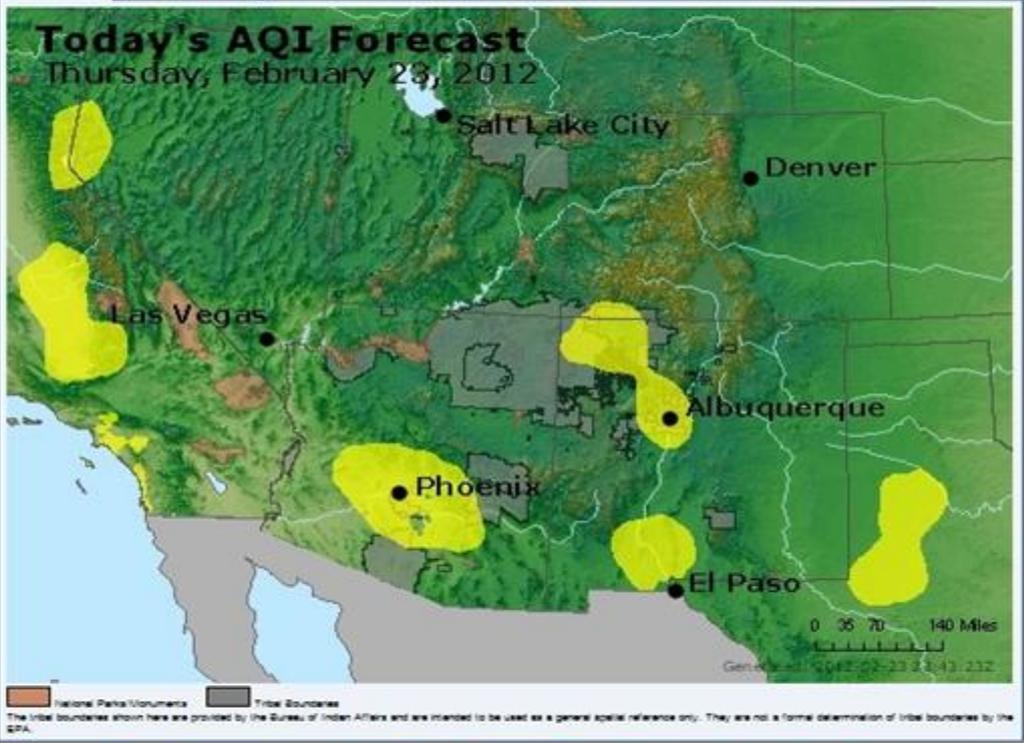
Zip Code:  Go      State:  Go

[U.S. Air Quality Summary \(text\)](#)

AIRNow Home >> **Colorado**

Data courtesy of: [Colorado Department of Public Health and Environment \(DPHE\)](#)

**Forecast**    **Current AQI**    **AQI Animation**



Good   
 Moderate   
 USG   
 Unhealthy   
 Very Unhealthy   
 Hazardous   
 ! Action Day

<a href="#">Click on the city name for more detailed information.</a> <a href="#">AQUA/USQ/USQ/USQ</a>	FORECAST		CURRENT AQI
	Thu Feb 23	Fri Feb 24	
<a href="#">Colorado Springs</a>	Good	Good	31
<a href="#">Denver</a>	Good	50	38
<a href="#">Fort Collins</a>	Good	Good	32
<a href="#">Grand Junction</a>	Good	Good	33
<a href="#">Greeley</a>	Good	Good	30
<a href="#">Mesa Verde National Park</a>	n/a	n/a	40
<a href="#">Rocky Mountain National Park</a>	47	48	34

**State Air Quality Resources**

- [American Lung Association \(ALA\) of Colorado](#)
- [Colorado Air Quality Summary](#)
- [Colorado DPHE - Air Pollution Control Division](#)
- [Colorado DPHE - Contact Information](#)
- [Colorado Department of Public Health & Environment \(DPHE\)](#)

**E-Mail Notification**

**EnviroFlash** provides air quality information such as forecasts and action day notifications via email for your area of interest. [Sign-Up](#)

# Colorado Air Quality Summary

[About the Air Quality Index \(AQI\)](#)  
[Today's Air Quality Summary \(detailed\)](#)

[Front Range  
Air Quality Forecast](#)

[Smoke Outlook](#)

## Air Quality Advisories

### Denver:

There should be adequate winds and mixing on Friday. [\(click for more...\)](#)

### Other Areas:

No advisories at this time. [\(click for more...\)](#)

Key	
<b>Scale - Air Quality Index (AQI)</b>	
0 - 50	<b>GOOD</b>
51 - 100	<b>MODERATE</b>
101 - 150	<b>UNHEALTHY for sensitive groups</b>
151 - 200	<b>UNHEALTHY</b>
201 - 300	<b>VERY UNHEALTHY</b>
301 - 500	<b>HAZARDOUS</b>
<b>Scale - Visibility Standard Index</b>	
0 - 50	<b>GOOD</b>
51 - 100	<b>MODERATE</b>
101 - 200	<b>POOR</b>
201 - 300	<b>EXTREMELY POOR</b>
	<b>WEATHER LIMITED</b>
	<b>NOT AVAILABLE</b>

## Current - Air Quality Summary

### Current - Air Quality Index (AQI) 3PM

Denver Metro	<b>GOOD</b>
Colorado Springs	<b>GOOD</b>
Ft Collins - Greeley	<b>GOOD</b>
Grand Junction	<b>GOOD</b>
Other Areas	<b>GOOD</b>

### Highest AQI (so far) Today 2/23/2012

Denver Metro	<b>GOOD</b>
Colorado Springs	<b>GOOD</b>
Ft Collins - Greeley	<b>GOOD</b>
Grand Junction	<b>GOOD</b>
Other Areas	<b>GOOD</b>

### Highest AQI Yesterday 2/22/2012

Denver Metro	<b>GOOD</b>
Colorado Springs	<b>GOOD</b>
Ft Collins - Greeley	<b>GOOD</b>
Grand Junction	<b>GOOD</b>
Other Areas	<b>GOOD</b>

Denver's current visibility:

**NOT AVAILABLE**

Ft. Collins' current visibility:

**MODERATE**

(VSI is calculated between 12PM and 4PM local time)

## Forecast - Air Quality Summary

	Ozone	Fine Particulates	Carbon Monoxide	Nitrogen Dioxide
<b>Thursday</b>				
Denver - Boulder	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>
Colorado Springs	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>	<b>NOT AVAILABLE</b>
Ft. Collins	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>	<b>NOT AVAILABLE</b>
Greeley	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>	<b>NOT AVAILABLE</b>
Grand Junction	<b>GOOD</b>	<b>GOOD</b>	<b>GOOD</b>	<b>NOT AVAILABLE</b>
<b>Friday</b>				
	Ozone	Fine Particulates	Carbon Monoxide	Nitrogen Dioxide

# Blowing Dust Advisory Example

## Air Quality Advisory

Issued: 2/16/2011 2:08:00 PM

Residential Burning Unrestricted - No Action Day

Effective: 2/16/2011 4:00:00 PM - 2/17/2011 4:00:00 PM

Windy conditions will keep Visibility and pollutants in the Good category on Thursday.

Other Areas:

Blowing Dust Advisory for Western Colorado from 1 PM to 10 PM on Wednesday, February 16, issued by the Colorado Department of Public Health and Environment at 11:30 AM February 16, 2011.

A strong weather system will cause strong gusty winds across Utah, Arizona, New Mexico, and parts of Colorado today and tonight. These winds will cause areas of blowing dust. Gusts could reach 40 to 70 mph across parts of this area. The strong winds will cause blowing dust in parts of Arizona, Utah, New Mexico and Colorado which will be transported long distances causing hazy skies and restricted visibility at times even in areas where the winds are lighter. The area from Cortez east to Alamosa north to I70 and west to the Utah line has the best chance of dust being transported across it. Areas north of I70 could also experience hazy skies and local areas of blowing dust. There could be areas of dirty snowfall and or muddy rain across the area tonight. If significant blowing dust is present and reducing visibility to less than 10 miles across a wide area, the elderly, the very young, and those with respiratory problems should avoid prolonged exertion; everyone else should limit prolonged exertion. Limiting outdoor exposure is also advised.

# Ozone Action Day Example

## Air Quality Advisory

Issued: 2/15/2011 2:45:00 PM

Residential Burning Unrestricted - No Action Day

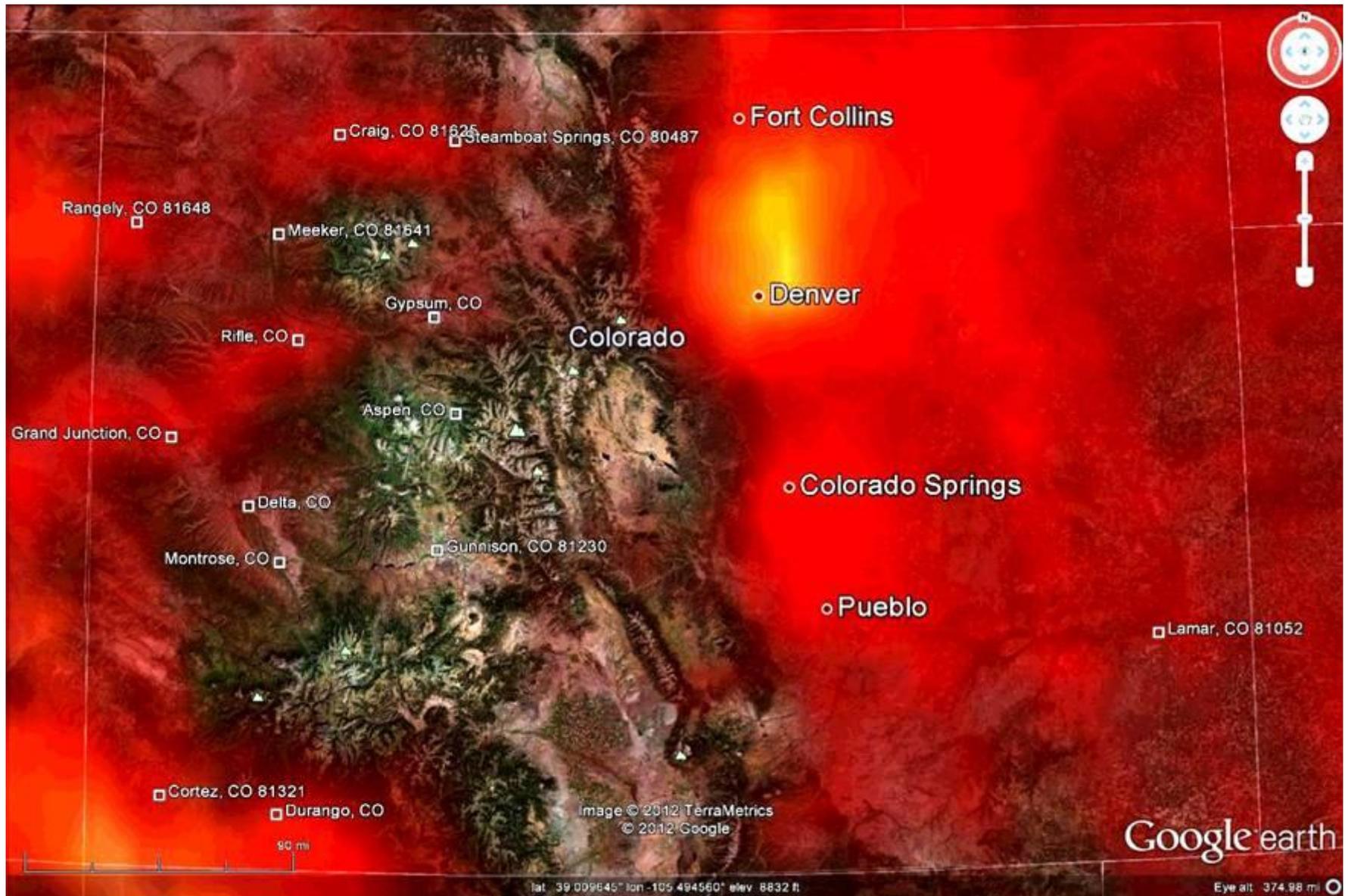
Effective: 2/15/2011 4:00:00 PM - 2/16/2011 4:00:00 PM

Adequate winds and mixing tonight and Wednesday should keep air quality in the Good-to-Moderate range through the period.

### Other Areas:

An Ozone Action Day Alert has been issued for the western portion of Rio Blanco County including Rangely, Colorado, and this alert will run from 4 PM Tuesday February 15 through 3 AM Wednesday February 16. Ozone concentrations are expected to reach the Unhealthy-for-Sensitive-Groups range this evening and early Wednesday morning. This means that there is an increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory symptoms such as asthma. Active children, active adults, and those with respiratory problems such as asthma should limit prolonged outdoor exertion between 4 PM Tuesday and 3 AM Wednesday.

# Regional Airsheds Example



# Community Participation

- Utilize environmental health websites
  - Place AQI Indicators on website with specific link to Colorado Air Quality Summary – consistency is vital!
- Sign up for listserv and/or check summary page daily
- Participate in social media
  - Facebook, Twitter, etc.

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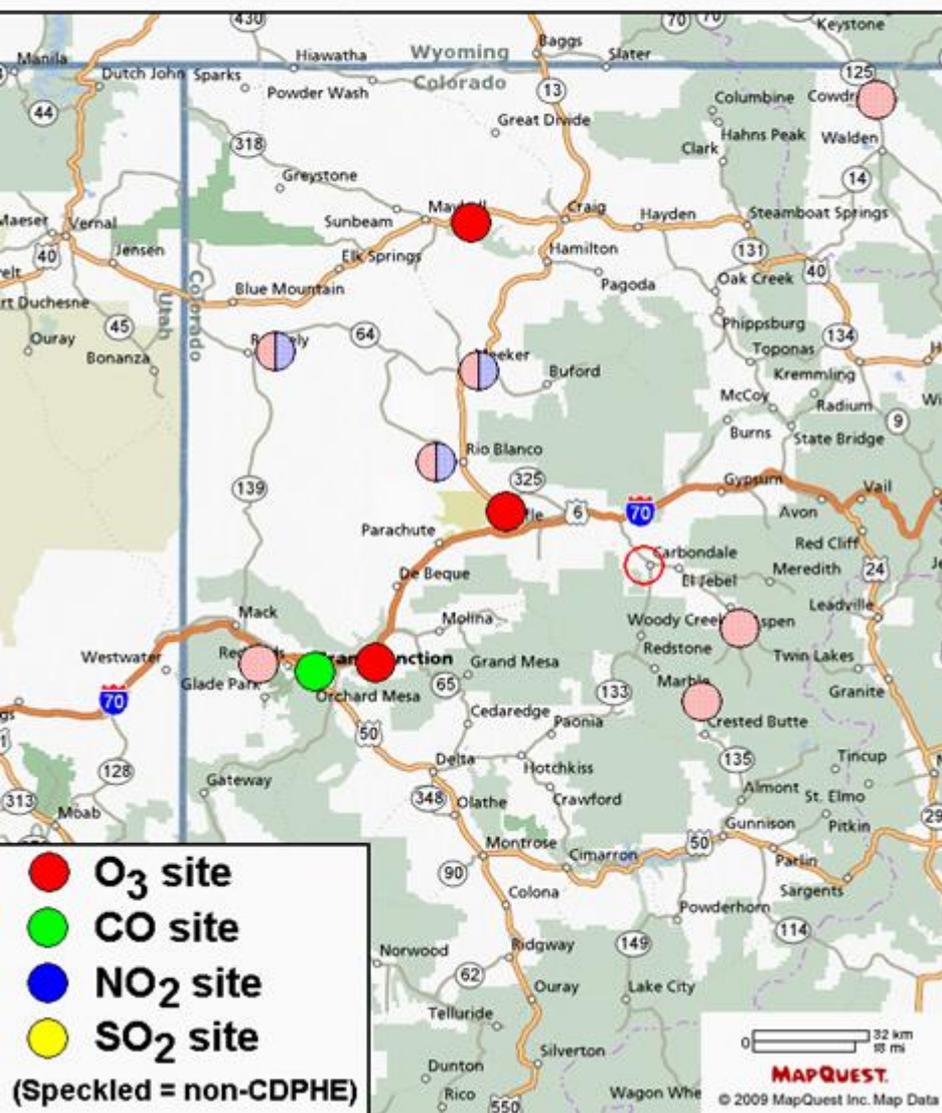
# Community Participation

- More data collected, the better!
  - Real-time monitor information
    - Example: Mesa County lending Delta County BAM monitor to collect PM2.5 data, with State assistance
    - Possible sites – Aspen, Carbondale...
- Explore community initiatives
  - Voluntary “Burn/No Burn” programs
  - Action Day Tips



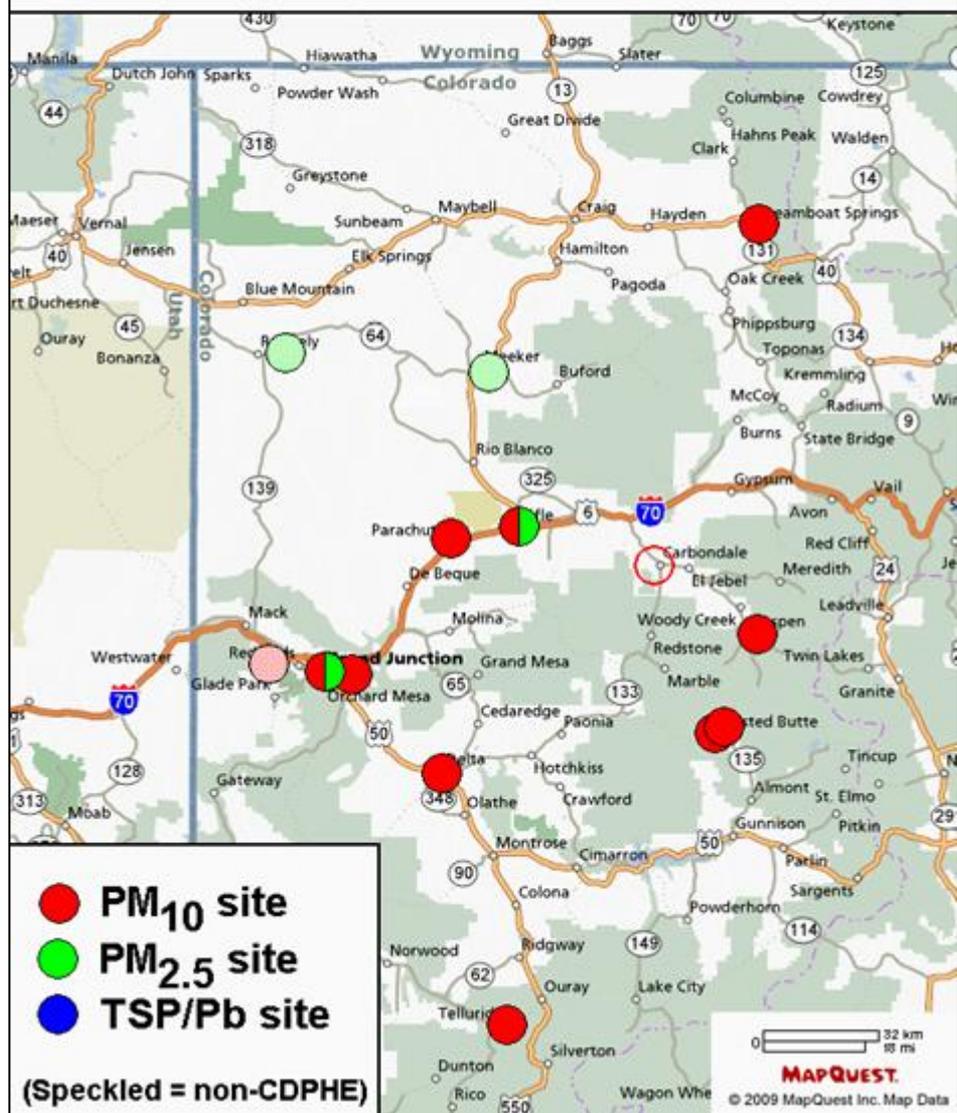
# Gaseous Sites --- 2011

## O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>



# Particulate Sites --- 2011

## PM<sub>10</sub>, PM<sub>2.5</sub>, TSP/Pb



# Moving Forward

- CDPHE issues health-based Action Day issuances → can help with burn/no burn programs and how to communicate to media or on websites
- Action Days not associated with mandatory actions
- Moving away from color-coded system to “Burn/No-Burn” will make for more effective communication for local air quality
- How do you communicate air quality in your area to local media?



“Burn” Day (no restrictions)



“No Burn” Day (burning restrictions/  
encourage no burning)



# Questions/Discussion?!

**Lisa Clarke, Air Quality Planner**  
**303-692-3117 or [Lisa.Clarke@state.co.us](mailto:Lisa.Clarke@state.co.us)**

# Historic Denver Red/Blue



**BLUE**

- The current air quality advisory is **BLUE**. No mandatory restrictions are in place. Enjoy the clean air!
- Your actions to limit driving improve air quality. Consider using alternate modes of transportation.
- Air quality advisories are issued daily at 4 p.m. For updated advisories and air quality information call the Air Quality Advisory hotline at 303-758-4848 or log on at <http://apcd.state.co.us/psi/advisory.html>



Colorado Department  
of Public Health  
and Environment



**RED**

- The current air quality advisory is **RED**. Air quality conditions are poor or expected to worsen.
- Mandatory woodburning restrictions are in effect. Please observe all restrictions and, if possible, limit your driving. Your efforts are appreciated.
- Air quality advisories are issued daily at 4 p.m. For updated advisories and air quality information call the Air Quality Advisory hotline at 303-758-4848 or log on at <http://apcd.state.co.us/psi/advisory.html>



Colorado Department  
of Public Health  
and Environment

# Parallel Red/Blue Example

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## AIR QUALITY ALERT

UPDATED: 4:04 pm MST January 12, 2012

Mesa County, Colo -- The air quality advisory for Mesa, Delta and Montrose counties is currently at **CODE BLUE**.

There are **NO BURN RESTRICTIONS** in place through January 15th, 2012.

The next update will be issued by January 15th, 2012

ENLARGE

OK

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# Action Day Tips

- Days when particle pollution is expected to be high:
  - Reduce or eliminate fireplace and wood stove use.
  - Avoid using gas-powered lawn and garden equipment.
  - Avoid burning leaves, trash, and other materials.
  - Choose a cleaner commute – share a ride to work or use public transportation. Bicycle or walk to errands when possible.
  - Combine errands and reduce trips.
  - Limit engine idling.
- Days when ozone pollution is expected to be high:
  - Conserve electricity and set your air conditioner at a higher temperature.
  - Try to delay using gas-powered lawn and garden equipment until air quality is better.
  - Choose a cleaner commute – share a ride to work or use public transportation. Bicycle or walk to errands when possible.
  - Combine errands and reduce trips.
  - Limit engine idling.
  - Refuel cars and trucks after dusk.
  - Use household, workshop, and garden chemicals in ways that keep evaporation to a minimum, or try to delay using them until air quality is better.

<http://www.airnow.gov/index.cfm?action=resources.whatyoucando#action>