

## COLORADO AIR QUALITY CONTROL COMMISSION AGENDA ITEM SUMMARY

**Item Title:** 2013 Ozone Update \_\_\_\_\_

**Meeting Date:** May 16, 2013 \_\_\_\_\_

<b>TYPES OF ACTION</b>		
<i><b>NON-HEARING ACTIONS</b></i>	<i><b>REQUEST FOR HEARING</b></i>	<i><b>HEARING</b></i>
<input type="checkbox"/> Administrative	<input type="checkbox"/> Rulemaking	<input type="checkbox"/> Rulemaking
<input checked="" type="checkbox"/> Briefing	<input type="checkbox"/> Public	<input type="checkbox"/> Public
<input type="checkbox"/> Policy	<input type="checkbox"/> Adjudicatory	<input type="checkbox"/> Adjudicatory
<input type="checkbox"/> Other	<input type="checkbox"/> Informational	<input type="checkbox"/> Informational
<b>RECOMMENDED ACTION</b>		
<input type="checkbox"/> Adoption	<input type="checkbox"/> Approval	<input type="checkbox"/> Denial
<b>MOTION</b>		
<input type="checkbox"/> Required	<input type="checkbox"/> Attached	<input type="checkbox"/> Not Applicable
<b>STATUTORY AUTHORITY</b>		
General _____	Specific _____	
<b>EPA SUBMITTAL</b>		
Is this issue considered a SIP revision? _____		
Which SIP? _____		
EPA submission deadline: _____		
Is this a delegated program? _____		

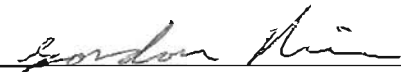
**ISSUE STATEMENT:**


The Division and the Regional Air Quality Council will pre-review the summertime ozone situation for Colorado, with a focus on the Front Range region, and will describe efforts to reduce ozone precursor emissions that will improve and reduce summertime ozone concentrations. Daily forecasting and public notifications by both the Division and the RAQC will be discussed. For the Division, this will include an overview of statewide forecasting efforts. The Division will also provide an update on wintertime ozone events in Colorado related to the Uinta Basin.

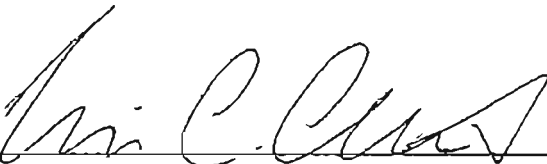
**ATTACHMENTS:**

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**SIGNATURES:**

1.  4/30/2013  
Preparer Date

2.  30 April 13  
Supervisor or Program Manager Date

3.  30 April 13  
Division Director Date

# 2013 Summer Ozone Season Pre-Review



Colorado Department  
of Public Health  
and Environment

Briefing to the  
Colorado Air Quality Control Commission  
5/16/2013

# Review of the Monitoring Data

National Ambient Air Quality Standard  
(NAAQS) for Ozone

0.075 ppm as the 3-year average of the  
4<sup>th</sup> maximum daily 8-hour values

Colorado's Official EPA Ozone Season  
March - September

For NAAQS of  
0.075 ppm

## Three Year Average 4th Maximum Ozone Values

<i>East Slope Sites</i>		<u>2010</u>	<u>2011</u>	<u>2012</u>		<u>2013</u>
Site Name	AQS #	8-hr. O3 4th Max. Value (ppm)	8-hr. O3 4th Max. Value (ppm)	8-hr. O3 4th Max. Value (ppm)	3-yr. Avg. 4th Max. Value (ppm)	Highest Allowable 4th Max. (ppm)
Welby	08-001-3001	0.063	0.075	0.077	0.071	0.075
Highland	08-005-0002	0.075	0.078	0.080	<b>0.077</b>	<b>0.069</b>
Aurora East	08-005-0006	0.070	0.077	0.074	0.073	0.076
S. Boulder Creek	08-013-0011	0.072	0.076	0.076	0.074	0.075
CAMP	08-031-0002	---	---	0.068	---	---
Carriage	08-031-0014	0.069	0.075	0.077	0.073	0.075
Denver Animal Shelter	08-013-0025	0.064	0.070	0.073	0.069	0.084
Chatfield State Park	08-035-0004	0.079	0.082	0.086	<b>0.082</b>	<b>0.059</b>
USAF Academy	08-041-0013	0.068	0.074	0.075	0.072	0.078
Manitou	08-041-0016	0.072	0.075	0.075	0.074	0.077
Welch	08-059-0005	0.072	0.077	0.079	<b>0.076</b>	<b>0.071</b>
Rocky Flats North	08-059-0006	0.076	0.081	0.084	<b>0.080</b>	<b>0.062</b>
NREL	08-059-0011	0.074	0.083	0.081	<b>0.079</b>	<b>0.063</b>
Aspen Park	08-059-0013	0.073	0.072	0.077	0.074	0.078
Fort Collins - West	08-069-0011	0.075	0.080	0.080	<b>0.078</b>	<b>0.067</b>
Rist Canyon	08-069-0012	0.071	0.073	0.071	0.071	0.083
Fort Collins - CSU	08-069-1004	0.066	0.068	0.074	0.069	0.085
Weld County Tower	08-123-0009	0.073	0.077	0.080	<b>0.076</b>	<b>0.070</b>
NPS - Rocky Mtn. NP	08-069-0007	0.077	0.077	0.081	<b>0.078</b>	<b>0.069</b>
NOAA - BAO Tower	n/a	0.071	0.076	0.077	0.074	<b>0.074</b>

For NAAQS  
of 0.075 ppm

## Three Year Average 4th Maximum Ozone Values

<b>West Slope Sites</b>		<b>2010</b>	<b>2011</b>	<b>2012</b>		<b>2013</b>
<b>Site Name</b>	<b>AQS #</b>	<b>8-hr. O3 4th Max. Value (ppm)</b>	<b>8-hr. O3 4th Max. Value (ppm)</b>	<b>8-hr. O3 4th Max. Value (ppm)</b>	<b>3-yr. Avg. 4th Max. Value (ppm)</b>	<b>Highest Allowable 4th Max. (ppm)</b>
Rifle - Health	08-045-0012	0.066	0.066	0.068	0.066	0.093
Palisade - Water	08-077-0020	0.068	0.066	0.071	0.068	0.090
Lay Peak	08-081-0002	---	---	0.066	---	---
Cortez	08-083-0006	0.064	0.071	0.070	0.068	0.086
CASTNET - Gothic	08-051-9991	0.068	0.064	0.070	0.067	0.093
USFS - Walden	08-057-0003	---	---	0.059	---	---
USFS - Shamrock	08-067-1004	0.074	0.077	0.069	0.073	0.081
SUIT - Ignacio	08-067-7001	0.068	0.072	0.067	0.069	0.088
SUIT - Bondad/Hwy 550	08-067-7003	0.067	0.069	0.069	0.068	0.089
NPS - Colorado NM	08-077-0101	0.065	0.068	0.071	0.068	0.088
NPS - Mesa Verde NP	08-083-0101	0.066	0.070	0.069	0.068	0.088
Pitkin Co. - Aspen	08-097-0007	0.063	0.064	n/a	---	---
BLM - Meeker	08-103-0005	0.066	0.063	0.064	0.064	0.100
BLM - Rangely	08-103-0006	---	0.073	0.069	---	0.085

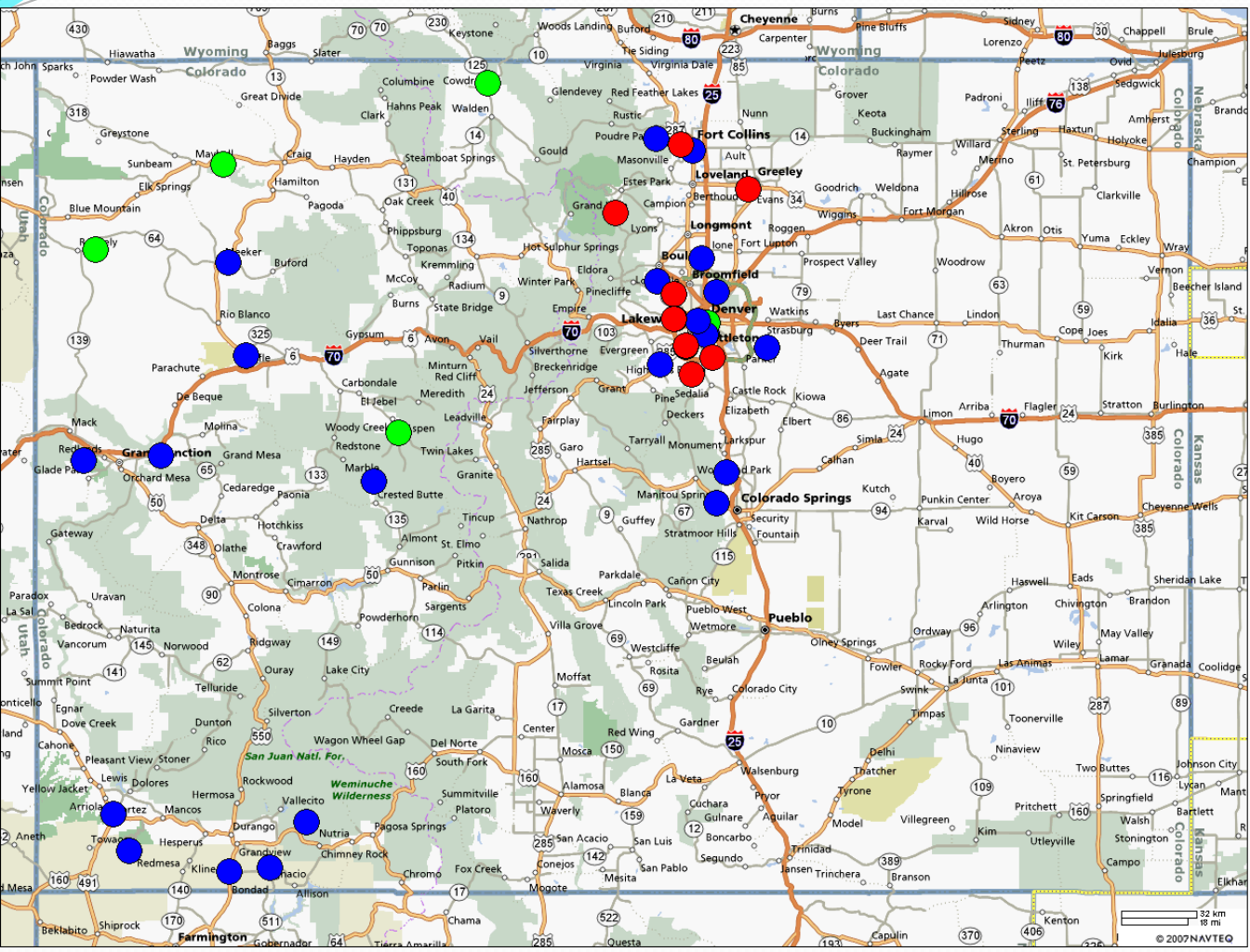
# Colorado Ozone Sites

## Comparison to Federal Ozone Standard (0.075 ppm)

### 2010 - 2012

Ozone Standard:  
3-year average of 4th maximum values must be  $\leq 0.075$  ppm

- Above level of standard (3+ years of data available)  
(Based on 3-yr. avg. of 4th max. for 2010 - 2012)
- Above level of standard (<3 years of data available)  
(Based on avg. of 4th max. for years available)
- Below level of standard (3+ years of data available)  
(Based on 3-yr. avg. of 4th max. for 2010 - 2012)
- Below level of standard (<3 years of data available)  
(Based on avg. of 4th max. for years available)



# Future Ozone NAAQS

- EPA currently reviewing the NAAQS
  - “Integrated Science Assessment for Ozone and Related Photochemical Oxidants – Final Report” released Feb. 2013
- EPA plans to issue a proposal by the end of 2013 (likely including new monitoring seasons)
- EPA plans to promulgate a final NAAQS in Sept/Oct 2014
- Previous review:
  - CASAC recommended a range of 0.060 – 0.070 ppm
  - Monitoring season for Colorado to be Jan-Dec

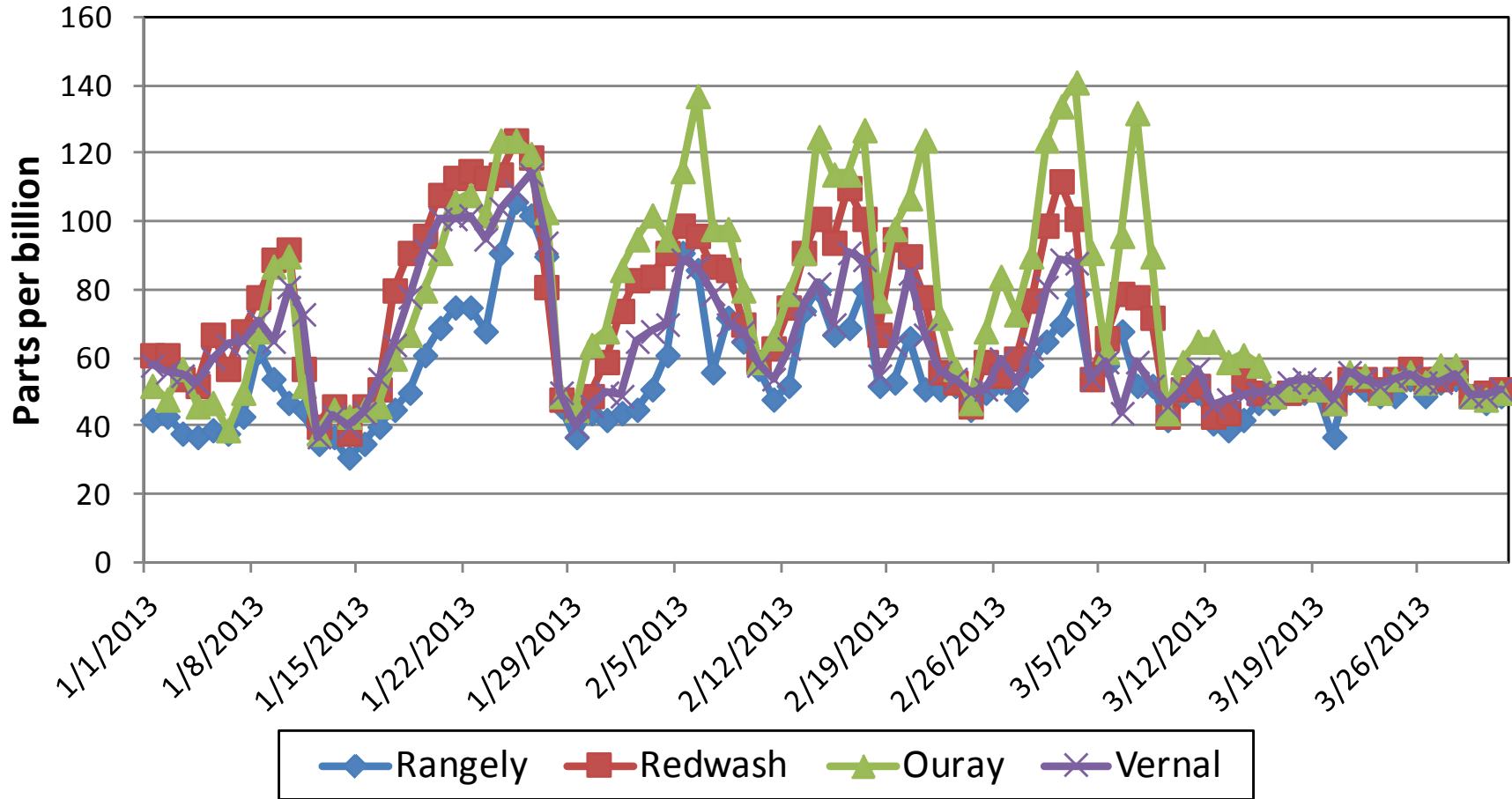




# Uinta Basin

# Uinta Basin, Jan-Mar 2013

## 8-Hr. Daily Max. Ozone




# 4<sup>th</sup> Max 8-Hr Values

## 4th Maximum 8-hr. (ppm)

	2006	2007	2008	2009	2010	2011	2012	2013*
Lay Peak, CO							0.066	0.054
BLM-Meeker, CO					0.066	0.063	0.064	0.056
BLM-Rangely, CO						0.073	0.069	<b>0.091</b>
Roosevelt, UT							0.067	<b>0.104</b>
Fruitland, UT						0.065	0.070	0.060
U&O Myton, UT						<b>0.111</b>		<b>0.108</b>
NPS-Dinosaur NM, UT	0.068	0.063	0.066	0.063	0.068	<b>0.090</b>	0.075	<b>0.120</b>
Vernal, UT							0.064	<b>0.102</b>
Redwash, UT				0.067	<b>0.098</b>	<b>0.100</b>	0.067	<b>0.114</b>
Ouray, UT				0.067	<b>0.117</b>	<b>0.116</b>	0.070	<b>0.132</b>
U&O Whiterocks, UT						0.068		<b>0.095</b>

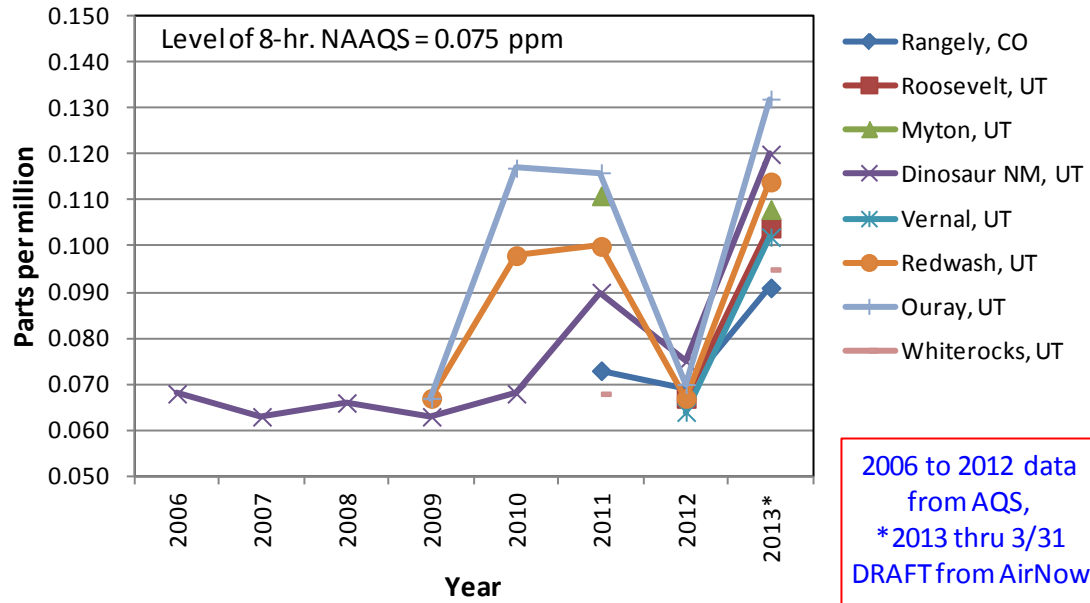
\* Thru 3/31/2013

 = Regulatory

**#.###** = Exceeded level of NAAQS

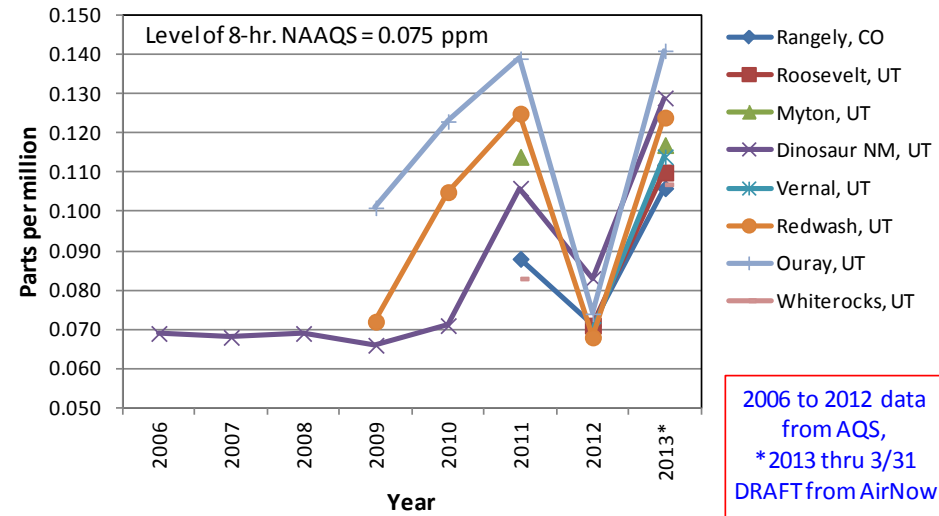
# 8-Hour Ozone --- 4th Maximum

## Uinta Basin



# 8-Hour Ozone --- 1st Maximum

## Uinta Basin




# 3-Year Averages of 4<sup>th</sup> Max 8-Hr Values

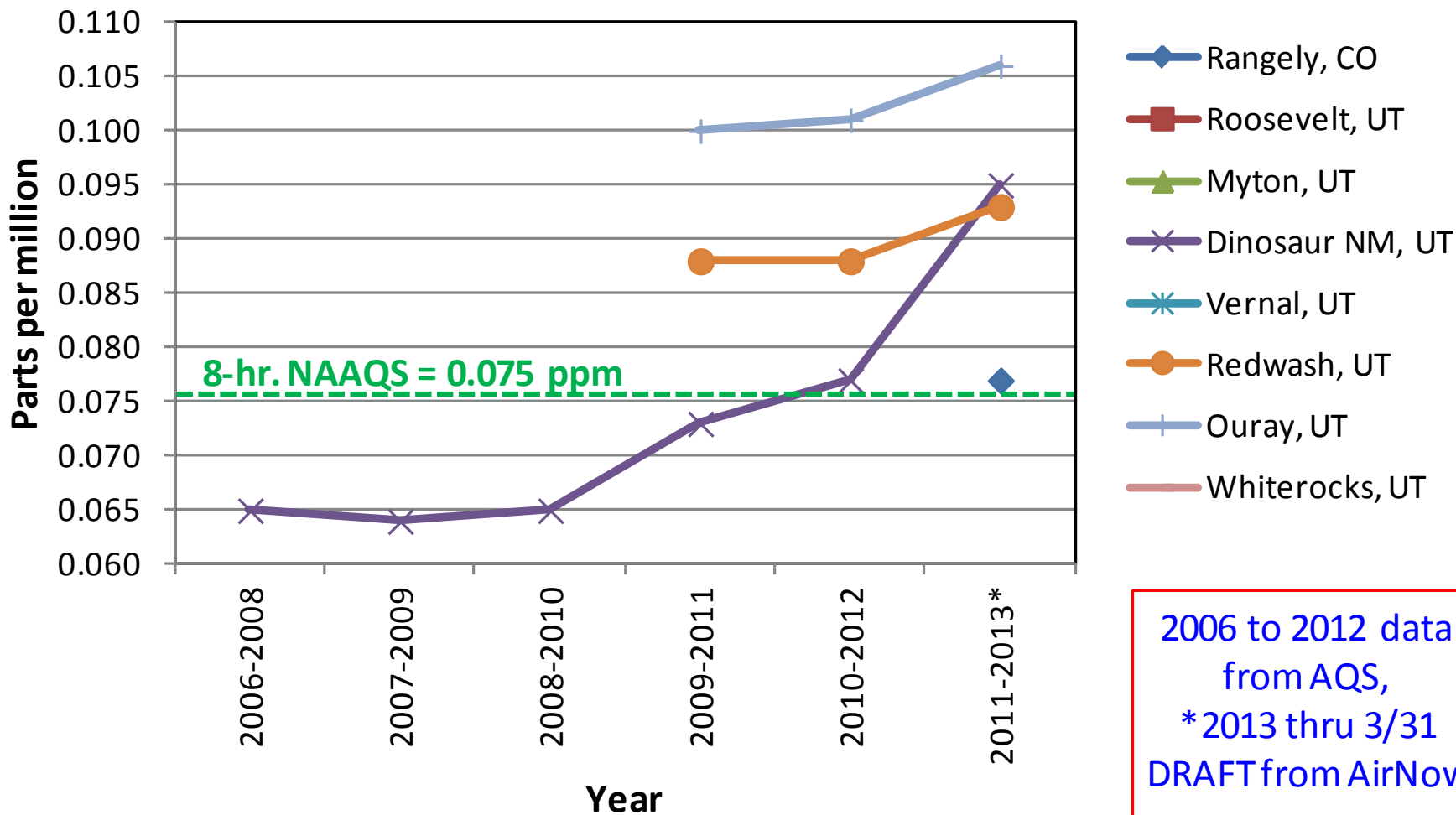
3-yr. Average of the 4th Max. 8-hr. (ppm)

	2006-2008	2007-2009	2008-2010	2009-2011	2010-2012	2011-2013*
Lay Peak, CO						
BLM-Meeker, CO					0.064	0.061
BLM-Rangely, CO						<b>0.077</b>
Roosevelt, UT						
Fruitland, UT						0.065
U&O Myton, UT						
NPS-Dinosaur NM, UT	0.065	0.064	0.065	0.073	<b>0.077</b>	<b>0.095</b>
Vernal, UT						
Redwash, UT				<b>0.088</b>	<b>0.088</b>	<b>0.093</b>
Ouray, UT				<b>0.100</b>	<b>0.101</b>	<b>0.106</b>
U&O Whiterocks, UT						

\* Thru 3/31/2013

 = Regulatory  
**#.###** = Violates NAAQS

# 8-Hour Ozone --- 3-year Avg. of 4th Max. Uinta Basin



# Next steps

- Rangely will have 3-years of “regulatory” data at end of 2013
- Violating UT sites will not have 3-years until end of 2014
- Potential policy options available:
  - Option 1: submit recommendations on Colorado designations for the Rangely area when BLM monitoring data is certified (May 1st, 2014)
  - Option 2: submit recommendations on Colorado designations for the Rangely area after a new NAAQS has been finalized (likely in late 2014)
  - Option 3: wait until UT monitoring sites have 3-yrs of regulatory data above the NAAQS (maybe spring of 2015?)
  - Option 4: wait until EPA (either voluntary or court ordered) forces designations on the area (maybe 2016 or longer?)
- Preference is to coordinate as a whole basin, not piecemeal
- Much of the land in UT is Tribal, so EPA would need a FIP

# Questions?

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