Uintah Basin 2012 Winter Ozone Study

NATURAL RESOURCES, AGRICULTURE, AND ENVIRONMENT
Interim Committee Meeting, Wednesday, June 20, 2012 8:00 a.m.
Senate Building Room 210

Background - Over the past several winters the Uintah Basin has experienced numerous periods of very high ozone levels that were nearly twice the federal health standard. Ozone is typically associated with urban areas during hot summer periods, but in the Basin the high concentrations are occurring during cold, winter temperature inversions when snow covers the ground. The ozone levels during these periods have the potential to not only impact public health, but could affect the local economy as well if mandatory federal requirements are implemented. Furthermore, these mandated federal controls could be counterproductive since they are designed for an urban, summertime ozone problem.

Recognizing the implications of a mandated program, local and state officials are proactively working together with industry to understand the unique nature of the Basin's wintertime ozone problem and what can be done to solve it. Much of the State's leadership role in this effort is made possible as result of a 2011 legislative appropriation of $200,000 to DEQ.

2012 Winter Ozone Study - Ozone is not emitted directly from sources but is formed chemically in the atmosphere through the photochemical reactions of volatile organic compounds (VOCs) and oxides of nitrogen (NOx). To determine the right mix of pollution controls means solving a complex chemistry problem. This past winter scientists from the National Oceanic and Atmospheric Administration, USU – Energy Dynamics Lab, University of Colorado, Western Energy Alliance, and EPA worked under the direction of the DEQ in a multi-pronged study to identify appropriate and effective mitigation strategies for winter ozone in the Basin by developing emissions inventories, establishing ozone baselines, measuring chemical formation processes, and collecting source specific chemical "finger prints." The study was very successful even though strong inversion conditions and snow cover never developed. The researchers are currently compiling their results and drafting conclusions to be published in the study report due

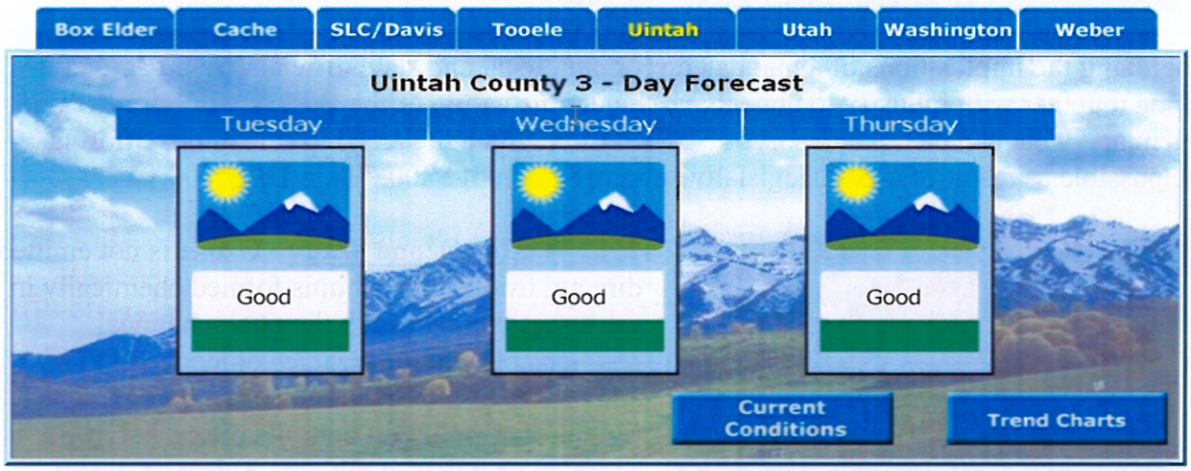
out this October. Recommendations for further research and a direction for ozone mitigation will be part of the report.

Credit for Early Reductions - The Uintah Basin is currently designated "unclassifiable" because the EPA does not have the 3 years of quality assured monitoring data needed to designate the area "nonattainment" even though the measured values in the area have been high. Utah has a unique opportunity to implement early reductions that will improve public health and provide more flexibility in future emission reduction strategies. Utah is participating in EPA's Ozone Advance Program to encourage these early reductions, with the following areas of focus:

- Develop an early reduction tracking system to give credit to companies for early action.
- Develop a framework to ensure that new development continues in the Basin using the best available technology.
- Work with EPA to develop a consistent permitting strategy throughout the Basin.

Uintah Basin Air Quality and Energy Development Web Site -

- **Public Information - http://www.deq.utah.gov/locations/uintahbasin/index.htm**
- **Current Conditions and Forecast - http://www.airquality.utah.gov/aqp/vl.html**



Air Quality Tutorials

- Air Quality: WMV | MP4
- How to Use DAQ's Web Site: WMV | MP4
- Recess Guidance: WMV | MP4