

Ozone Alert and “Indoor Days” for Asthmatic Population

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Hypothesis: If asthmatic residents are notified of high ozone levels, they can remain indoors to lower exposure and decrease ER visits and improve health outcomes

Background

- Pinedale, Wyoming is a town of 2,000 within Sublette County, which contains around 10,000 people
- There is less than 1 person per square mile in the county
- It is a boom and bust town with natural gas being the largest industry
- American Lung Association graded Pinedale an “F” for air quality as compared to a “B” for Seattle

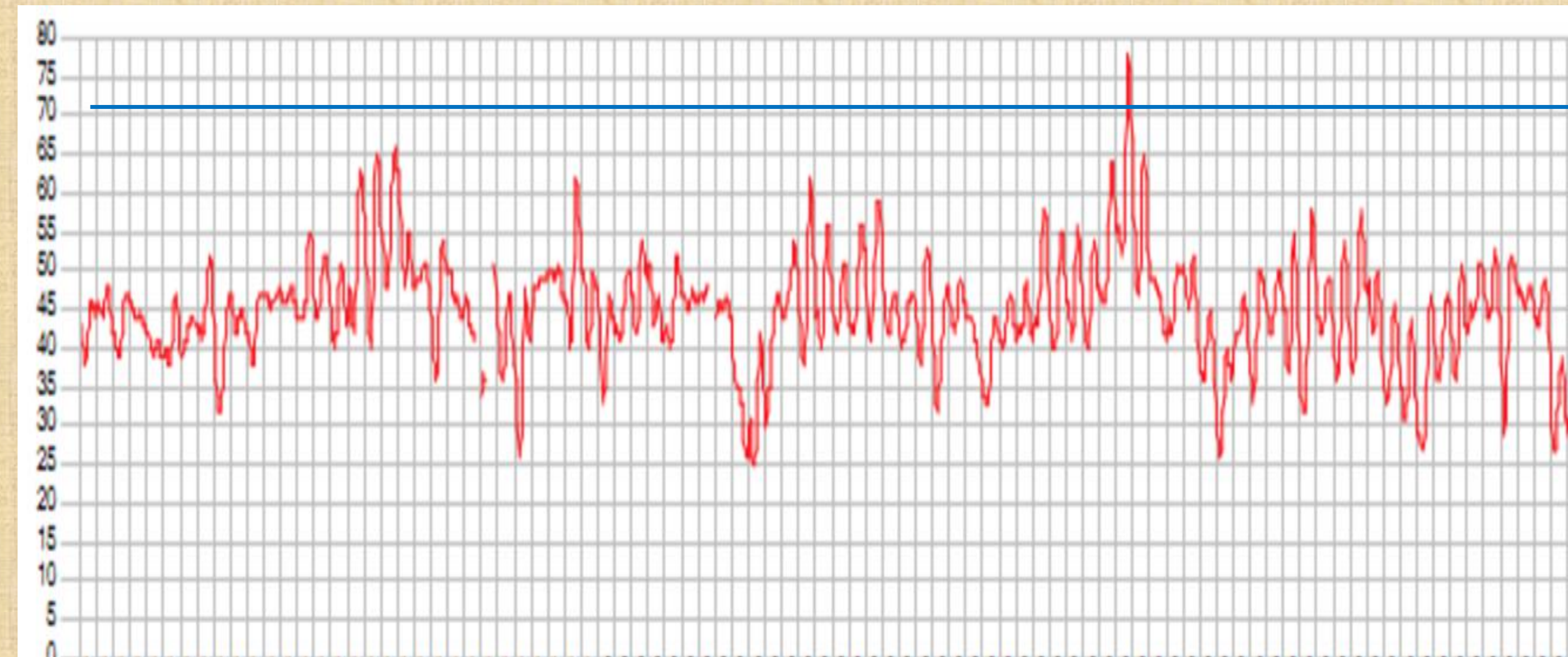
Literature Review

- Many studies confirm statistically significant correlation between elevated ozone levels and subsequent increase of asthma-related ER visits
- Additionally, several studies monitoring ozone levels have concluded that ozone levels are dramatically decreased inside buildings

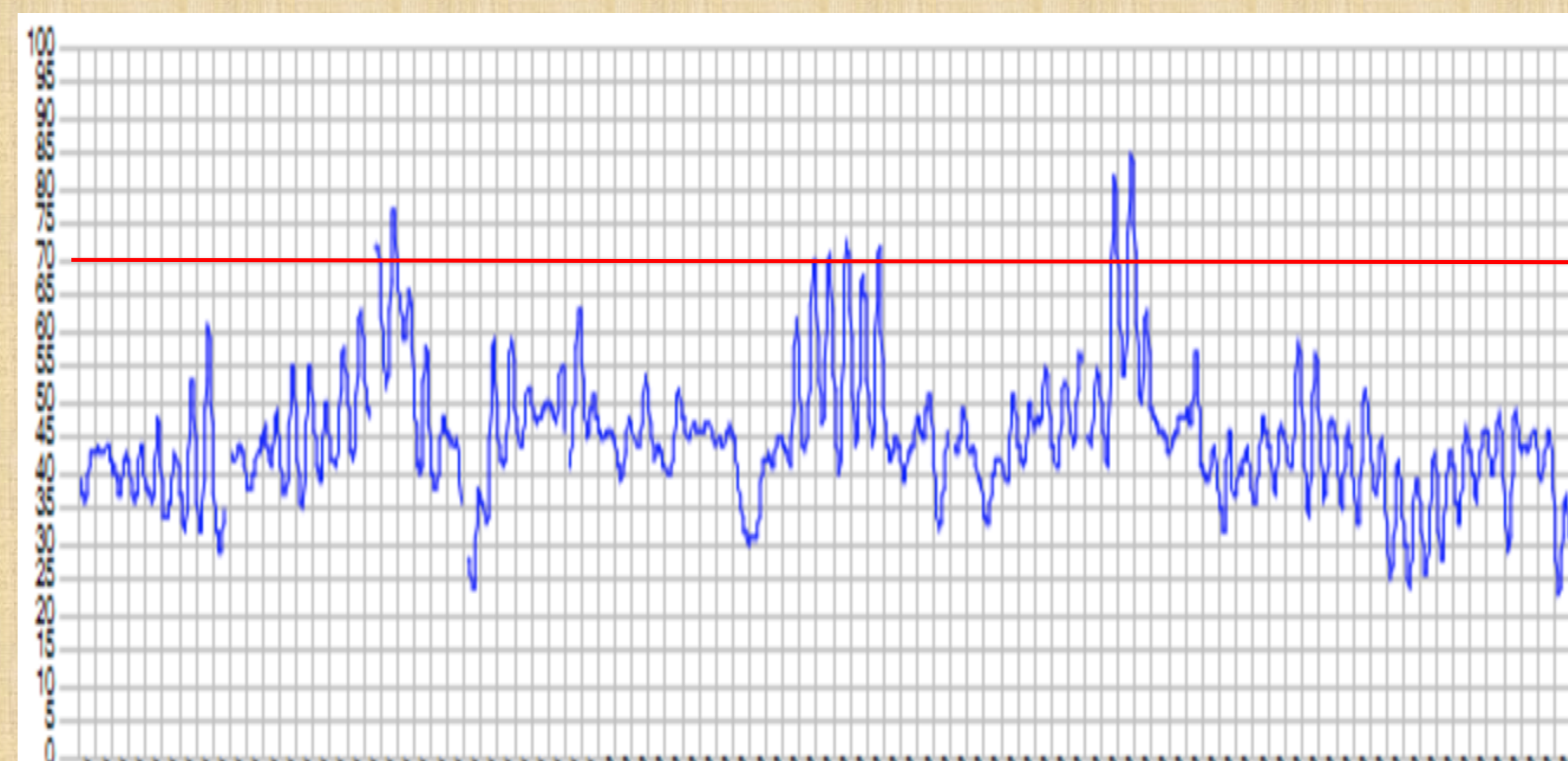
Community Health Project

- Work with Citizens United for Responsible Energy Development (CURED) leader Elaine Crumple to raise awareness toward using the notification system to receive alerts for high ozone days
- Meet with school board to implement action plan
- Educate population via health fairs and public service announcements to stay indoors on high alert days in order to lower asthma exacerbation risk

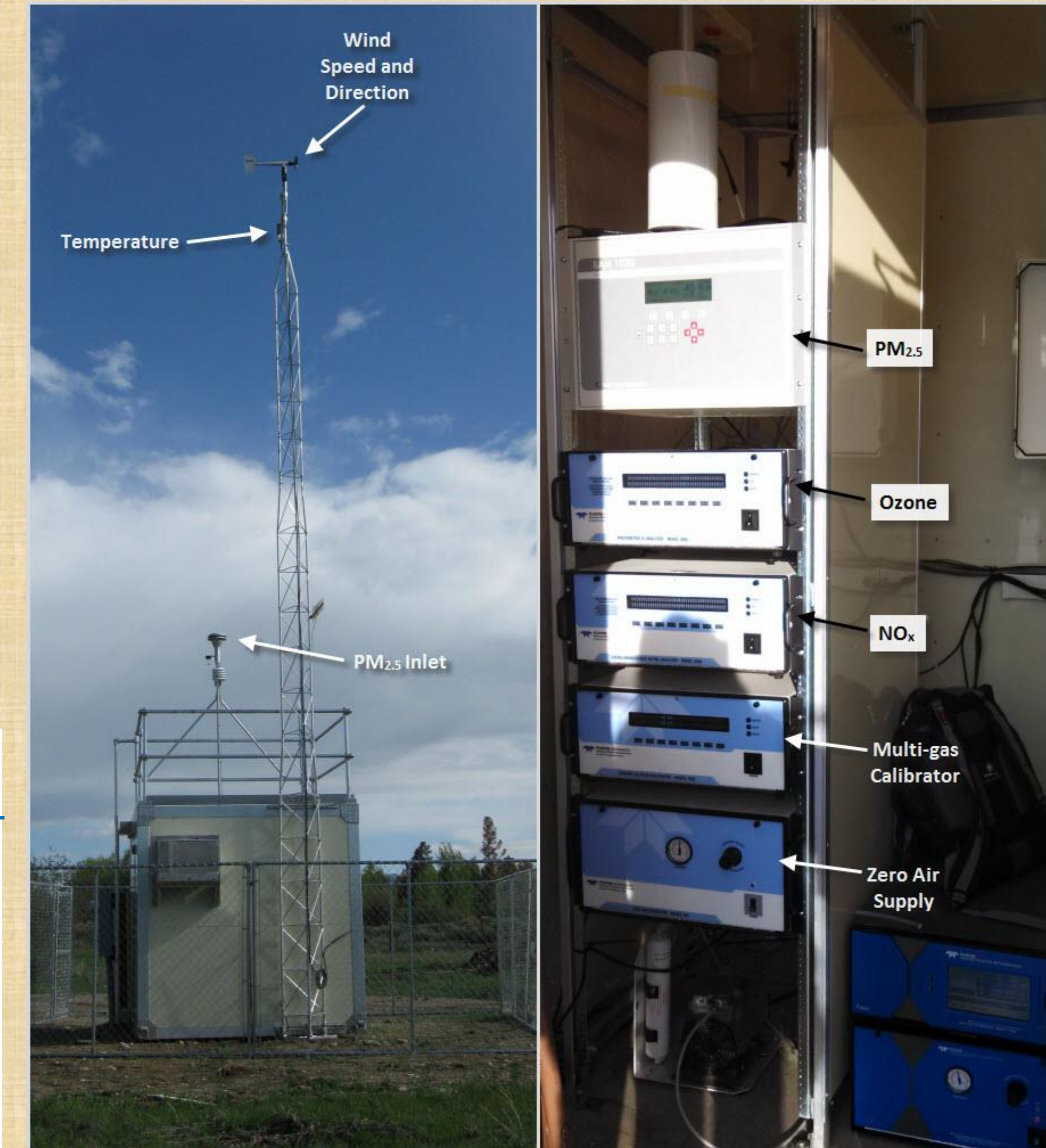
Daily 8-hr Ozone (ppb) in Sublet County



Jan. 1st 2017-March 31st 2017-Pinedale, WY



Jan. 1st 2017-March 31st 2017-Boulder, WY



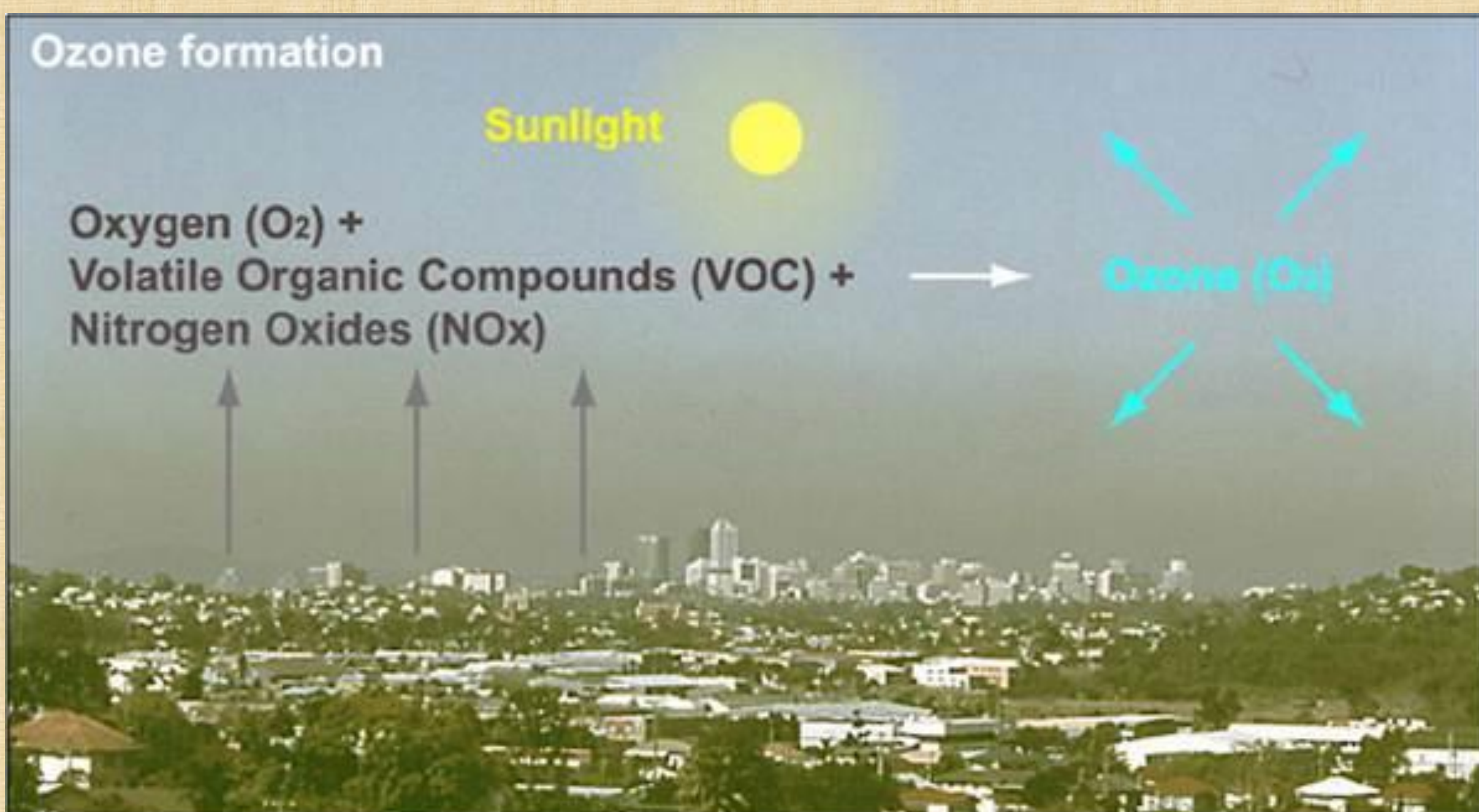
Ozone Monitoring System- Pinedale, WY

Deliverables to community

- Literature Review
- Roadmap for CURED to carry out
- Suggestion of utilization of Pinedale Anticline Project Office (PAPO) funds if needed

Next Steps

- Educational meetings with local schools to discuss high alert ozone protocols
- Working with public health to seek further partnerships
- Seek modalities for broadcasting the message such as radio or other advertisements



Ozone chemical process of formation