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Comments on 3rd Draft ISA for Ozone NAAQS

Prepared for CASAC

September 11, 2012

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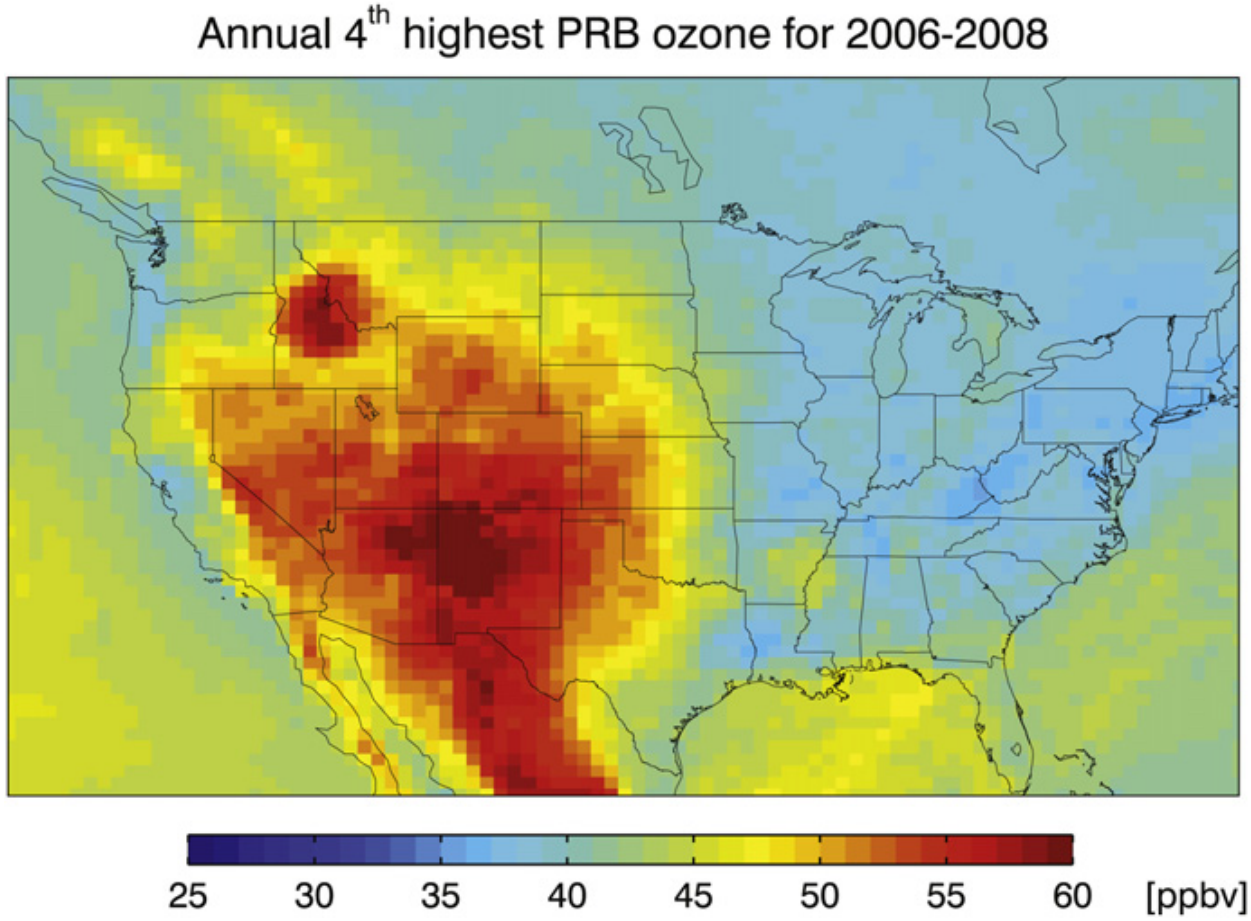
Background Ozone



Going forward, how does uncertainty propagate through the Health, Welfare and Policy Assessments?

What is the appropriate 'floor' for estimating health and welfare benefits?

(Zhang et al, 2011)

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Background Ozone and Human Health

EPA defines *'background ozone concentration in a way that distinguishes between concentrations that result from precursor emissions that are relatively less controllable from those that are relatively more controllable through US policies'* (ISA p. 2-7).

The goal of the Clean Air Act, and EPA's mandate is to *'protect public health with an adequate margin of safety…[and] EPA's task is to establish standards that are neither more nor less stringent than necessary for these purposes'* (ISA p. 1xxix).

Entire risk analysis should be formulated to optimize human health not to maximize control.

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Background Ozone

All anthropogenic emissions are removed when estimating background including

- Food (agriculture)
- Clean water
- Shelter
- Hospitals, Doctors
- Public Health Infrastructure
- Heat and Air Conditioning

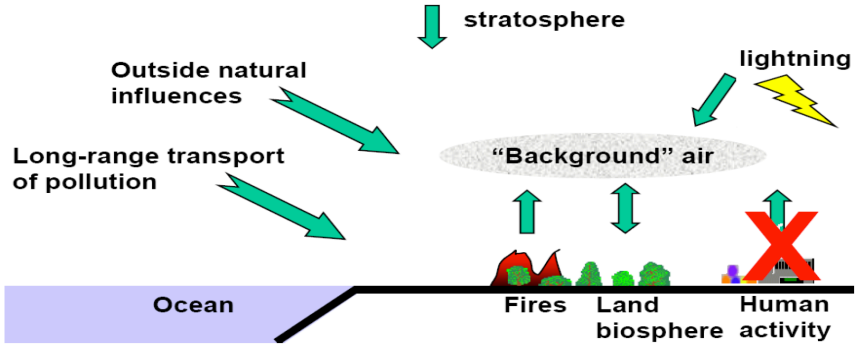
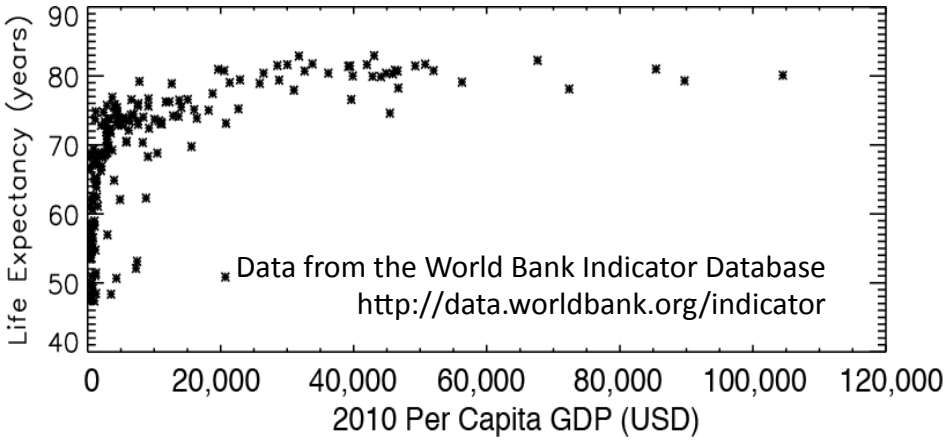


Figure 3-7 of the second draft of the ISA showing that background ozone is calculated relative to a scenario where all anthropogenic activity has been eliminated.

This scenario would have significant negative impacts on public health nationally

A broad and open discussion is needed to evaluate what is the most appropriate 'floor' for calculating benefits in the Health, Welfare and Policy Assessments.



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Addressing Background in Implementation

- The only currently available legal avenue to address background in the implementation process is the Exceptional Events Rule

- As proposed standards are lowered, the frequency of background events and combinations of background sources leading to an exceedance of the standard will increase

- There is no readily available tool that can be used to screen the sources of high ozone events due to background sources and development of such a tool is non-trivial

- Guidance issued in 2012 states that

  'Exceedances due to natural emissions that occur every day and contribute to policy relevant background, such as biogenic emissions, do not meet the definition of an exceptional event and are thus not eligible for exclusion under the EER. Routine anthropogenic emissions outside of the U.S. contribute to policy relevant background, but are not exceptional events.'