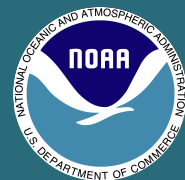


# The New Lower Federal Ozone Standard

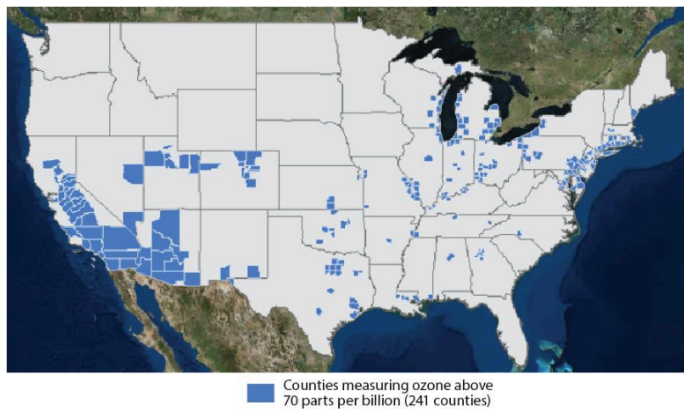
NOAA's Research Quantifies Sources of Ground-Level Ozone That Could Cause More Frequent Exceedances in the U.S. West



## Ozone Challenges in the U.S. West

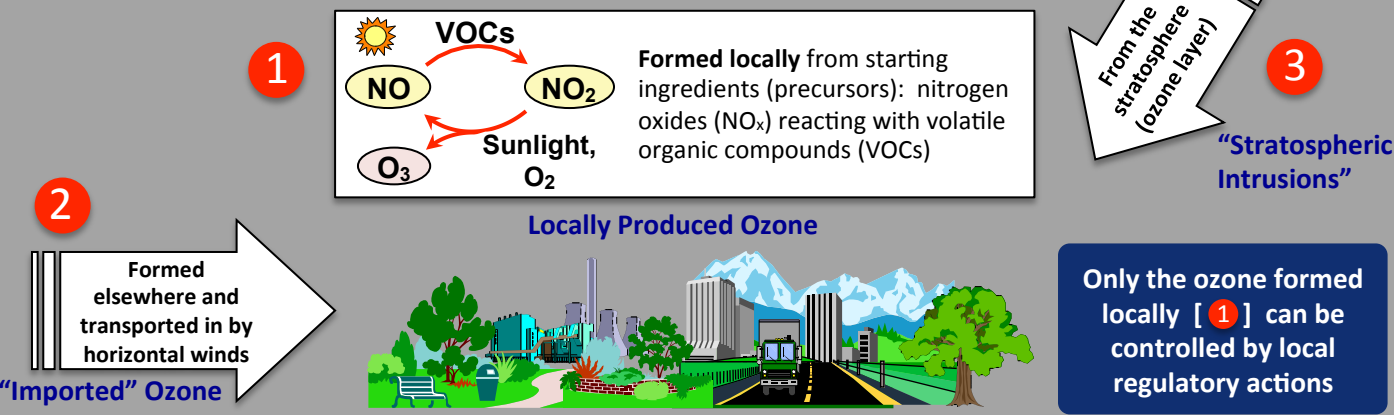
- Despite reductions in emissions of ozone precursors, some areas of the U.S. West still do not meet the previous federal ozone standard (75 parts per billion (ppb)/8-hour). The new 70 ppb/8-hour standard proposed in 2015 will exacerbate the issue.
- Many areas of the U.S. West are disproportionately affected by sources of ozone and its precursors that are not related to local emissions, and hence cannot be reduced by local or state air quality measures.
- **NOAA's Role:** Quantify the sources that contribute to ozone in the West and that could cause exceedances of the EPA's new 70 ppb/8-hour ozone standard.

Counties Where Measured Ozone is Above the Final Standard of 70 parts per billion, based on 2012-2014 Monitoring Data



Source: U.S. Environmental Protection Agency, "Ozone Maps," <http://www3.epa.gov/ozonepollution/maps.html>.

## What Are the Sources of Ground-Level Ozone Pollution?



## Significance of NOAA's Research to Air Quality Managers

- The U.S. West experiences significant influx of ozone and its precursors coming across the north Pacific Ocean from sources in Asia.
- High elevations in the U.S. West are especially prone to ozone that has been transported long distances or that originated in the stratosphere. Many rural and high-elevation sites in the Intermountain West are expected to exceed the new federal ozone standard more frequently.
- Quantifying the sources of a locality's ozone pollution helps air quality managers identify the causes of exceedances of the federal standard, which in turn enables them to formulate responses to the EPA.



NOAA's ozone measurements near Las Vegas showed that stratospheric intrusions pushed the region over the federal standard in spring of 2013

## Payoff

NOAA's research quantifies ozone sources at a critical time when many new locations are expected to be in nonattainment with the 70 ppb / 8-hour federal ozone standard more frequently, particularly in the Intermountain West.