

## WORKING TO REDUCE OZONE IN CALIFORNIA

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Oct. 1, 2015 - The map at right shows EPA's projections of the California counties with monitors that would violate the updated ozone standard of 70 ppb, after the state meets the 2008 ozone standards of 75 ppb, and after implementation of proposed and final federal and state rules.

In practice, however, EPA recognizes that achieving the reductions to meet the 2008 standards will be particularly difficult in some areas of California, which has unique challenges in addressing ozone pollution.

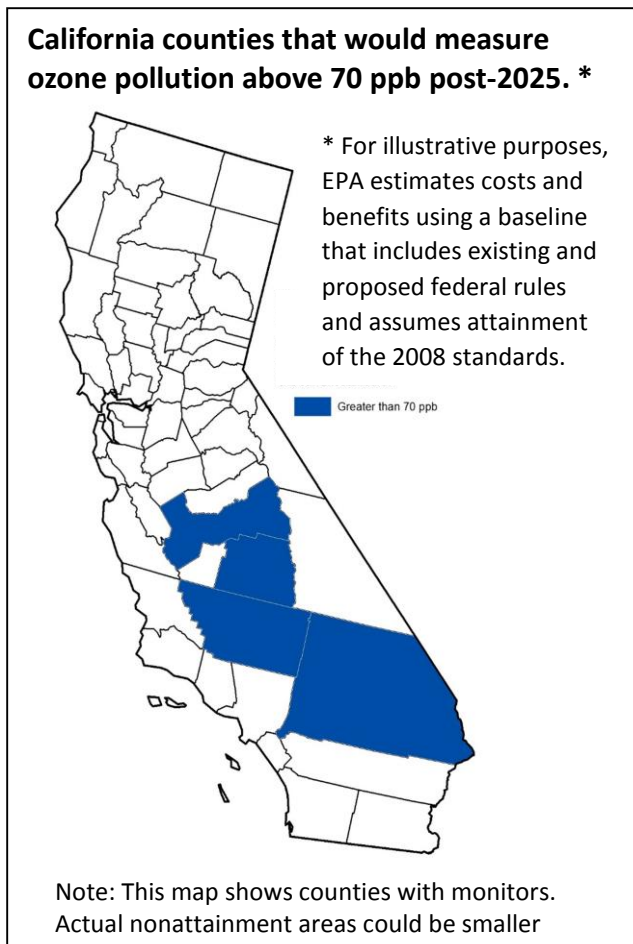
Air basins surrounded by mountains and a generally warm climate combine to make many areas of the state conducive to ozone formation. And with a population of 39 million, ports that bring in 40 percent of the nation's goods, and agricultural areas that produce nearly half the nation's produce, California is challenged by high levels of ozone-forming NO<sub>x</sub> pollution from transportation and freight movement.

California also can experience severe wildfires, which emit ozone-forming pollutants. In addition, background ozone from other sources outside the state's control can affect California's air quality.

California is working on its plan to meet the 2008 ozone standards. Some nonattainment areas in the state, such as Los Angeles-South Coast Air Basin and San Joaquin Valley, have until 2032 to meet the 2008 standards.

For California's nonattainment areas to meet the updated ozone standards, the state and EPA have recognized that transformational change is likely needed, such as a transition to largely zero or near-zero emission vehicle technologies, and a significant turnover of the legacy fleet of vehicles, among other changes.

Beginning in the 1970s, California used its authority under section 209 of the Clean Air Act to set stringent emissions standards for cars and trucks. In 2008, California began regulating in-use trucks and buses to reduce emissions from the legacy fleet, the only such mandatory program in the country. More recently, it adopted a voluntary low-NO<sub>x</sub> emissions standards for heavy-duty engines



to help engine technology move toward even cleaner levels. In addition, the state has funded incentive programs to further reduce emissions from the legacy fleet and has pursued numerous advanced mobile source technologies. Since 2008, California has spent nearly \$3 billion in funding the demonstration and deployment of innovative technologies such as zero-emission trucks and buses, hybrid-electric medium- and heavy-duty vehicles, and zero-emission freight equipment. Additionally, California is undertaking a comprehensive review of its goods movement system with the goal to release a sustainable freight plan in July 2016.

The federal government has provided more than \$200 million, largely through Diesel Emissions Reduction Act grants and the Department of Agriculture's Environmental Quality Incentives Program funds. EPA will work closely with California, local air agency officials, NGOs, other federal agencies, and interested commercial representatives to identify both regulatory and non-regulatory emission control solutions best designed to achieve reductions in the transportation sector.