## Senate Environment and Natural Resources

High density fuel buildup and high- intensity fire particulate emission (PM) figures from: Pyne, Stephen J., Patricia L. Andrews, and Richard D. Laven, Introduction to Wildland Fire (1996). New York: Wiley

Battye, William, and Rebecca Battye of EC/R Incorporated. 2002. Development of Emissions Inventory Methods for Wildland Fire Final Reort, Feburary 2002, Prepared for U.S. Environmental Protection Agency, EPA Contract No. 68-D-98-046, Work assignment No. 5-03 http://www.epa.gov/ttn/chief/ap42/ch13/related/firerept.pdf

90% of wood smoke particulate can enter the human lung up to 10 micron. (U.S. EPA)

25 to 40 pounds of (PM) is produced per ton of wood fuel burnt. Using 20 pound average of (PM)/ton of fuel, the Biscuit Fire of 2002 of 500,000 acres, with 20 ton of fuel per acre consumed produced 3,000,000 pounds of (PM).

In 2007 wildfires scorched hundreds of thousands of acres in Oregon, producing an estimated 4.5 million pounds of (PM). EPA states forest fires nationally 2000-2005 unleashed 562 million tons of carbon.

In addition in 2007 greenhouse gas (GHG) emissions, principally CO2, from forest fires in Oregon resulted in emissions of 56 teragram. One teragram equals 1.1023 million tons (US). Emissions from Oregon forest fires in 2007 were equivalent to GHG emissions from 11.1 million cars driven all year, and constituted as much or more than all human-caused emissions in the State combined. This has happened many years in the past as we continue to have major forest fires continue into the future.

Among other emissions from forest fires are carbon monoxide, sulfur dioxide, nitrogen dioxide, ammonium, volatile organic compounds, formaldehyde, methanol, and air-borne lead and mercury. The Environmental Protection Agency states after years of study exposure to these PMs and compounds listed above can cause extreme health problems

If we managed our federal forests properly we could drastically cut down these emissions create thousands of jobs in rural Oregon save lives and personal property

Thank you, Bill J. Kluting Carpenters Industrial Council