From the AIR PROGRAM

New California Air Resources Board Smoke Spotter App

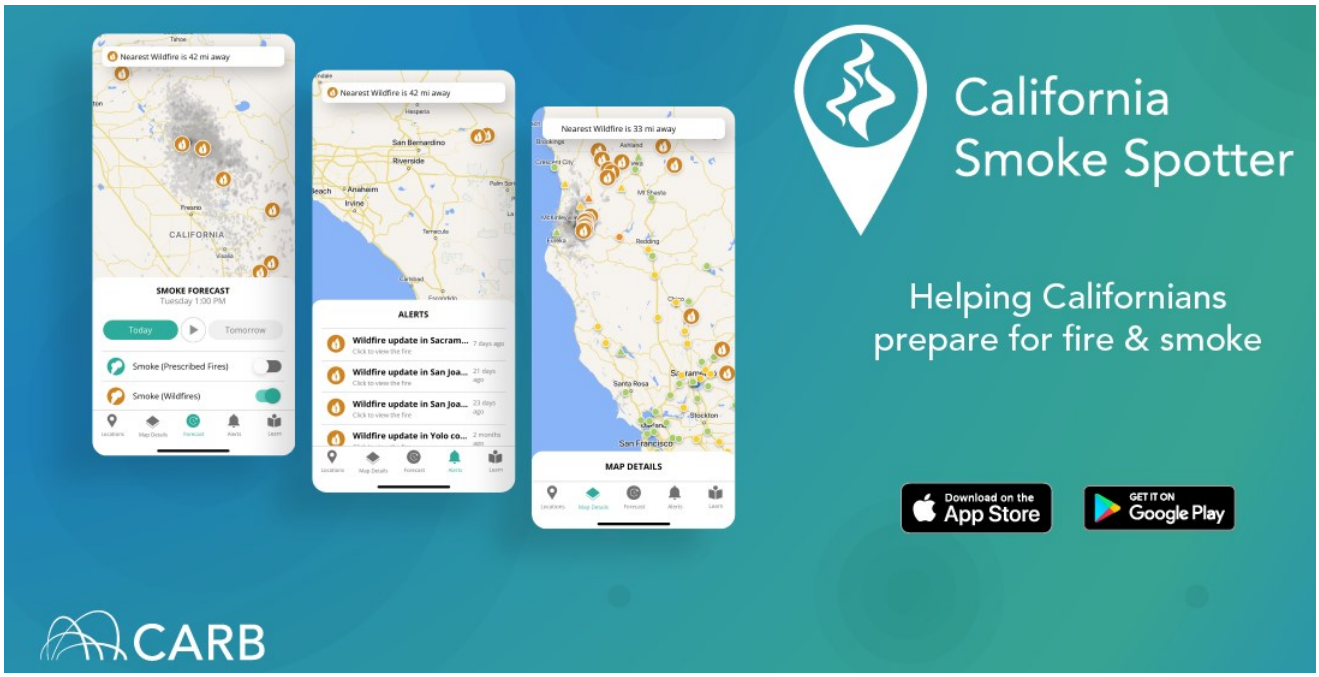

Image from CARB 2022

Western Regional Air Partnership Updates

In September, members of this group of Air Quality Agencies in the Western US met in Missoula, MT. We visited the National Forest Service Rocky Mountain Research Station Fire Sciences Lab, where scientists study everything from surface winds on wildfires, ecology including bark beetles, fire management strategies, air quality monitors, and combustion properties of fire fuels. The RMRS has facilities in various states, as far west as Reno. The Lab is about to begin studies of combustion properties of smoldering fuels.

RMRS staff presented findings on various air quality studies, including one which demonstrated that "low smoke" fire pits– in this case the Solo Yukon, Breeo and Pilot Rock– did have lower smoke emissions per fire than a standard outdoor firepit or typical campfire. Another RMRS study's findings were that low-severity fire (in this case, thin-burn treatments) or thinning of trees increased the resin duct apparatus in trees which enables some resistance against the Mountain Pine Beetle in the study areas (which were outside CA and NV). US EPA Office of Research and Development presented findings on toxicity in smoke of different fuels types, including pine and pine needles, and smoldering v. flaming conditions. While pine wood and pine needles were not found to be relatively toxic, or mutagenic (carcinogenic) in smoldering conditions, findings showed they had high mutagenicity under flaming conditions. Studies were also done on smoldering and flaming WUI fuels, and it was found that while plastics (or mixture containing plastic) had the highest toxicity during flaming stages, the material with highest toxicity counts during smoldering conditions was plywood.

FOR MORE INFO OR STUDY REFERENCES CONTACT THE AIR PROGRAM. 760-784-9308