A study quoted in Ashland's Climate Energy Action Plan shows the increasing probability of large wildfires (over 50,000 acres).

#### HOW WILL CLIMATE IMPACT ASHLAND?

Regional projections indicate that by the 2080s, Ashland could experience the following climate-driven environmental changes:4





### Heavy rainfall and drought risk

+0.8-1.3 in rainfall increase during the heaviest rain days'

+4-6 day increase in the longest dry spells' More winter precipitation



## Temperature increase and extreme heat

+7-12° F increase in the hottest day of the year

+39-90 more days a year of warm spells

\*\*\* Source: Sheehan, Bachelet, & Ferschweiler (2015).



#### Wildfire risk

+30% increase in probability of large wildfires" -40 year decrease in average time between fires' Increased burn acreage



## Changes to snowpack and water availability

-71 to -86% decline in April 1 snowpack in the Middle Rogue subasin More precipitation as rain instead of snow Earlier spring snowmelt Higher winter streamflow Lower summer streamflow

<sup>&</sup>lt;sup>4</sup>These ranges represent mean projections under the high emissions scenario (RCP 8.5). Source: Oregon State University, 2016 \*Some models show decreases

<sup>\*\*</sup>Source: Stavros, Abatzoglou, Larkin, McKenzie, & Steel (2014).

This study predicts that with a 1.8°F rise in global temperature, we will see a 400% increase in acres burned in wildfires. Temps in the western U.S. are predicted to rise 2.5 to 6.5 degrees by mid-century.



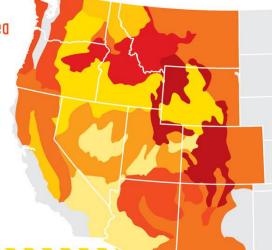
Wildfires are projected to burn more land as temperatures continue to rise.

# Projected increase in annual burn area

with an additional 1.8° F rise in temperature



By mid-century, temperatures in the Western U.S. are expected to increase even more (2.5°-6.5° F) due to heat-trapping emissions from human activity.



The choices we make today will determine how much temperatures increase this century, how long and damaging wildfire seasons become, and how prepared communities are for the growing risks of wildfires.