



Plate 2

Grand Oak

Sierra Nevada Foothills

Studies that have modeled the impact of climate change on California's vegetation over the next century indicate that the effects on oaks will vary by species. Mixed evergreen woodlands (oak and oak savannah) and conifer forests are expected to decrease in extent overall, as springtime moisture stress increases, while mixed evergreen forest and hardwood forest will likely increase in extent.^{18, 19, 20} This suggests that the range of black oak (*Quercus kelloggii*) will increase, but valley oak (*Q. lobata*) and blue oak (*Q. douglasii*) could lose respectively 46% and 41% of their current potential ranges.²¹