the risk of fire. This paper presents the results of this hypothesis test. Our geographic focus is the ponderosa pine ecoregion of central Oregon. We analyzed GIS vegetation data based on forest inventory and analysis plots together with satellite imagery data that model and map forest structure, as indicators of fire risk. The results of our analysis show that Forest Service lands have higher fuel loadings than private nonindustrial lands, and support our hypothesis. We draw on data from interviews with and surveys of family forest owners to examine how their forest management practices might explain this difference. To conclude we identify the policy implications of our findings for fire and fuels management across ownership boundaries.

IMPACTS OF POST-FIRE GEOLOGICAL PROCESSES ON AMPHIBIAN AND FISH HABITAT IN SOUTHERN CALIFORNIA (Tues., 4:40)

Fisher, Robert (Doctor, Western Ecological Research Center, U.S. Geological Survey), rfisher@usgs.gov

Carlton J. Rochester (Western Ecological Research Center, U. S. Geological Survey)

Coastal southern California is a fire prone landscape that traditionally experienced summer lightning strike fires associated with monsoonal conditions. Human caused fall firestorms in southern California are becoming more common and the burn areas are greater and often now include entire watersheds. Several amphibians and fish in southern California are very rare or almost extirpated and they may now exist only as localized populations within the headwaters of specific watersheds. Many of these species are federally and/or state listed and at risk of global extinction or local extirpation. Post-fire aquatic habitat change has been documented to be causing continued loss of populations. Two geological processes appear important in these changes: dry ravel and debris flows. The USGS has been developing a series of predictive models to predict the volume and probability of debris flows following burns as tools for reducing risk to life and property under various precipitation scenarios, and could serve as a natural resource management tool. We evaluate these models as they relate to amphibian and fish habitat and document the physical processes that take place following watershed burning from our recent observations. We also discuss recent data about ash from the 2007 firestorms as it potentially relates to distributional patterns observed following the 2003 firestorms. Active management through extreme measures may be required in some instances to salvage populations until ecological resilience is restored in the southern California landscape.

CALIFORNIA BUILDING CODE, FIRE CODE AND URBAN FUELS (Wed., 4:40)

Fotheringham, CJ (Research Scientist, Western Ecological Research Center, U.S. Geological Survey), fire_ecology@verizon.net

CJ Fotheringham (Western Ecological Research Center, U.S. Geological Survey), Jon E. Keeley (Western Ecological Research Center, U. S. Geological Survey)

New state codes effective 1 January 2008 are the first in California to specifically address wildland fire issues. New requirements are set forth for construction of new structures in high fire hazard zones including improved requirements for roofs, exterior walls, wall vents, windows and doors. There are also fire standards set forth for outside decking materials. However, there are no specific standards for "ancillary buildings and structures" such as fencing and sheds. There does not appear to be any state guidance when it comes to questions of landscaping with fire safe plants. While there is ongoing concern about wildland fuels and their management, many of our fire woes can be attributed to the build up and subsequent combustion of urban fuels. In the presentation I will