

Figure 1—Calculation of fire risk. There are three aspects to predicting fire. Fire is predicted from (1) the probability of ignition; (2) the biophysical influences on fire, such as fuel load, moisture content, flammability of the vegetation, and topography; and (3) the spread of fire once it gets established. Effects of fire can then be calculated to form a complete estimation of the risks related to fire.

Credits: D.A. Weinstein and P.B. Woodbury, 2010, Review of Methods for Developing Probabilistic Risk Assessments. Part 1: Modeling Fire, in Advances in Threat Assessment and TheirApplication to Forest and Rangeland Management, Pye, John M.; Rauscher, H. Michael; Sands, Yasmeen; Lee, Danny C.; Beatty, Jerome S. (tech. Eds.), Gen. Tech. Rep. PNW-GTR-802. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest and Southern Research Stations. 708 p. 2 volumes. DOI: https://doi.org/10.2737/PNW-GTR-802