Is Science Meeting the Needs of Land Management? A Case Study of the USFS and the Fisher

Dave Wrobleski, Wildlife Biologist, USFS, Lolo National Forest

Laws including the National Environmental Policy Act, National Forest Management Act and Endangered Species Act require both knowledge of potential effects on wildlife species and specify what effects may or may not occur to species. In the context of land management agencies such as the U.S. Forest Service, before a timber harvest, prescribed fire, or wildlife habitat improvement project occurs, these laws require a wildlife biologist to disclose the effects of the project on wildlife species and propose options to reduce potential negative effects. Decision-makers are then required to consider these effects and prevent jeopardizing listed species or impacting viability of "sensitive" species. These legal requirements result in biologists producing a report called a Biological Evaluation and Assessment specifying how a project would affect sensitive and federally listed species. Wildlife research is used to answer the following questions about each species of interest including, status, trend, habitat, applicable survey data, and mechanisms of effects on species. The key piece of information needed is the effect on the individual and population as a whole. However, the less research is available, the more logic and reasoned speculation are used to estimate these potential effects. Discerning the effect on the individual and population as a whole is usually based on little science because the science rarely reaches this point. Thus, the most critical pieces of the analysis – *what are the effects? And how important are they?* are based upon a logic string, and of course subject to judicial review. The fisher (*Pekania pennanti*) was used as an example by comparing recent research with conclusions reached in land management

documentation. As land managers we recommend that research 1) work closely with management to insure research is as applicable as possible, and 2) that research focus on how changes in a home range may affect the individual and population and to what degree.