

Roadless Areas and Wildland Fire: Dispelling the Myths.

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Myth: Forests in roadless areas are unhealthy and have a higher wildfire risk than forests in roaded areas.

Fact: Roadless areas are healthier and at less risk of wildfire because of three reasons: 1) Roadless areas have not been subjected to intensive timber management; 2) Areas without roads have been less influenced by fire suppression than intensively managed stands; and 3) Widespread road access associated with intensively managed stands increase the risk of human caused ignitions.

- 1) Roadless areas have not been subjected to intensive timber management. Two comprehensive scientific assessments conducted on federal lands in the Sierra Nevada in California and the Interior Columbia River Basin (WA, ID, MT, NV, OR, WY) have shown that the fire hazard is significantly higher in intensively managed areas than in unroaded areas (Hann et al. 1997, SNEP 1996). The studies show that intensively managed stands are typically denser and have higher fuel loads than Roadless Areas, and subsequently experience higher fire severity.

Since 1945, the fluctuation pattern of acres burned in the 11 Western states has shown a steady rise, with some of the worst fire seasons in the late 1980s when timber harvest peaked at 12 billion board feet. In fact, the 10-year average annual number of acres burned nationwide in the 1980s – when logging activity was heaviest – was higher (4.2 million acres) than in both the 1970s (3.2 million acres) and the 1990s (3.6 million acres) (NFP 2001).

Qualitative analysis by a Congressional Research Service (CRS) report supports the same conclusion. “Timber harvesting removes the relatively large diameter wood that can be converted into wood products,” according to the CRS, “but leaves behind the small material, especially twigs and needles. The concentration of these fine fuels on the forest floor increases the rate of spread of wildfires.” Between 1980 and 1999 the data indicate that fewer acres burned in areas where logging activity was limited (CRS 2000).

- 2) Areas without roads have been less influenced by fire suppression than intensively managed lands. Fire suppression has allowed fuels to accumulate to excessive levels in many forest types, and has changed forest structure and composition. In the last two decades, the additional fuels and changes in forest structure have contributed to high intensity, high severity fires in forests that were normally frequented by low intensity, low severity fires. The Interior Columbia Basin Assessment found that “fire suppression was generally more effective in the roaded areas. The combination of past harvest practices and more effective fire suppression moved the roaded landscapes much further from their unaltered biophysical templates, as measured by dominant species, structures, and patterns, relative to unroaded areas. In general, all forests which showed the most change from their historical condition are those that have been roaded and harvested” (Hann et al. 1997).
- 3) Widespread road access associated with intensively managed stands increase the risk of human caused ignitions. Today, humans are the most common ignition source for wildfires. More than 90% of wildfires are ignited from operating of motorized vehicles and logging equipment, smoking, arson, campfires, and debris burning (USDA 1996, 1998). Roadless areas are shielded from unregulated motorized access, and thus from the increase in fire ignitions. “Fires are almost twice as likely to occur in roaded areas as they are in unroaded areas” (NFP 2001).

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Myth: Road building and commercial logging is necessary to reduce fire risks.

Fact: The National Fire Plan (2001) “does not rely on commercial logging or new road-building to reduce fire risks – and it can be implemented under current forest and land management policies. Removal of large merchantable trees from forests does not reduce fire risk and may, in fact, increase risk”. The CRS also determined that the current wave of forest fires is not related to a decline in timber harvest on federal lands (CRS 2000).

Myth: Roadless areas need to be treated to reduce fire risk.

Fact: Of the 89 million acres in the National Forest System identified by the Forest Service as having moderate to high risk of catastrophic fire, less than 16 percent are in inventoried roadless areas. Moreover, the National Fire Plan states “the Forest Service would prioritize efforts to reduce fuels in areas that have already been roaded, because these areas tend to be much closer to communities and therefore are at higher risk of fire. Under current funding levels and considering the scope of the fuels issue, the Forest Service could do fuels reduction work in roaded areas for 15 years”.

The forests of most roadless areas are typically characterized by higher elevations, wetter conditions, and less frequent natural fires. The forests that are most susceptible to moisture stress, insects, disease, and high intensity fire tend to be those at the lowest elevations (Everett et al. 1994). The wildland fires that burned last summer were deemed “catastrophic” because they put human lives, homes, and property at risk. Many of the fires burned in the Wildland Urban Interface- areas where wildland fuels threaten to ignite combustible homes or structures. Restoration projects will target areas where the risk is greatest to communities, municipal watersheds, and habitat for threatened and endangered species.

Myth: The fires that burned in the summer of 2000 burned mostly in roadless and wilderness areas.

Fact: The summer 2000 fires occurred mainly in managed timberland, not pristine old growth and roadless areas. In fact, most forests that burned had already been logged. A report by Pacific Biodiversity Institute determined that only 38% of the acres burned were in roadless or designated wilderness areas. Analysis of five of the largest fires confirmed that 36% burned in non-forested areas, 57% burned in naturally high intensity burn forest types, and only 8% burned in naturally cool burning forest types. Most of the acreage burned was located in roaded, intensively managed areas (Morisson et al. 2000).

Myth: The Roadless Area Policy will keep land managers from treating forests to reduce fire risk in roadless areas.

Fact: Although forests in roadless areas tend to be healthier and have relatively little need for restoration to reduce fire risk, the Roadless Area Policy still allows removal of trees from roadless areas to reduce fire risks where exceptional circumstances mandate. Fire treatment will be allowed the few atypical roadless areas that do meet the profile of low elevation, dry forest in the Wildland Urban Interface.

According to the National Fire Plan (2001), “the proposed Roadless Area Protection Policy will not affect the

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federal agencies' ability to control wildland fires. "The agencies' success rate in extinguishing wildfires on initial attack is the same in roadless, wilderness, and roaded areas. Approximately 98 percent of all fires are extinguished before they grow large and out of control. The proposed roadless policy would allow for road construction in the area of a wildland fire if it threatened public health and safety" (NFP 2001).

For more information on wildfire and Roadless Areas check out the report titled The Scientific Basis for Managing Fire and Fuels in National Forest Roadless Areas by Evan Forest at: http://www.fireecology.org/Fire_Science/roadless_area_fire_managem.htm

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