Fire and Fuels

Fire is a natural ecosystem process in the Blue Mountains National Forests. Historically, fire was a predominant disturbance type in the area, from natural ignitions and indigenous burning practices, especially in dry upland forests with limited moisture. Fire-adapted forests like those found in the Blue Mountains evolved with a range of fire frequencies and intensities such as low severity fire and frequent return interval in dryer forest types to more mixed severity fire and longer return intervals in moist fire types. Fire exclusion has altered natural fire regimes which has maintained forest ecosystems which in turn sustains native plant communities and wildlife species. Moreover, this has kept dry forests from becoming too dense, and fuels (from both live and dead understory vegetation) from accumulating.

Today, much of the landscape is currently moderately to highly departed from reference conditions for vegetation and fuel. Dry upland forests, which comprises approximately 55% of the Blue Mountains, exhibit moderate to declining ecological integrity and are less resilient to disturbance events. The threat of large wildfires under these conditions, exacerbated by expected temperature and drought trends, can create wide-ranging tree mortality. While fire is important to the Blue Mountains, uncharacteristically severe fire is now an ecosystem stressor and a potential threat to communities due to past management policies.

Management Tools

Managing fire within its range of variability contributes to restoring ecological integrity and forest resiliency through active forest management. Current forest plan direction allows the use of the following to achieve resource objectives.

Prescribed fire and managed natural fire	**Mastication (chipping and mulching small trees, shrubs, and fuels)**
Non-commercial & commercial thinning	**Debris piling and burning**

These tools can help reduce forest fuels, prepare a site for regeneration following harvest, and improve wildlife habitat. Prescribed fire can influence vegetation conditions in a similar manner to wildland fires. Over the past few years there has been an increased emphasis on the hazardous fuel management program within the Blue Mountains National Forests. Continued restoration of forests and watersheds using a suite of management tools including thinning and prescribed fire can improve resilience against larger and more severe wildfires.

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