

### **3.3.7. Appendix G: Smoke Management/Smoke Management Techniques**

The land management plans of the Federal Agencies within the SWOFPU establish that the agency will meet or exceed applicable Federal and State air quality standards and that visibility and other air quality related values (AQRV) within Class I areas will not be impaired as a result of prescribed burning operations.

In Oregon, Congress designated eleven of the state's wilderness areas and Crater Lake National Park as mandatory federal Class I areas. An additional twenty-three areas were designated as wilderness lands under The Oregon Wilderness Act of 1984. Congress has not designated these lands as Class I areas.

Local Wilderness and National Park Lands included within the scope of the Visibility Protection Plan are the Kalmiopsis Wilderness (Rogue River-Siskiyou National Forest) and Crater Lake National Park. These lands have been designated in whole or in part as federal mandatory Class I Areas under the Clean Air Act, Public Law 95-95. Visibility Protection for the mandatory Federal Class I Areas is required by the Clean Air Act Amendments of 1990. Generally, all population centers in the Rogue Basin and along the coast are considered Smoke Sensitive Areas.

Consultation and approval by the State of Oregon is a continuing process, as described below. Management will cooperate with other land managers and the State of Oregon to minimize air quality impacts from smoke on local communities and individuals, including the following specific measures:

- Agencies will obtain all necessary air pollutant emission permits and approvals from the State of Oregon (or State of California for Rogue River-Siskiyou NF lands located in that state) prior to initiating a prescribed fire. The agencies will follow and implement the terms of the interagency Oregon Smoke Implementation Plan and MOU as well as any site-specific open burning permit.
- The agencies will assess potential air quality impacts through the use of smoke dispersion modeling techniques to predict particulate matter emissions, smoke plume characteristics, exposure and visibility impacts.
- The agencies will apply management techniques to minimize smoke production and to enhance dispersion, including burning under optimum weather conditions, expanding the burning season, using backing fires where applicable, burning small blocks, expediting mop-up, etc. These techniques

are described in the **Prescribed Fire Smoke Management Guide, published by the National Wildfire Coordinating Group (NFES No. 1279, PMS 420-1; 1985)**. Application of these techniques will minimize smoke exposure impacts.

- Once a prescribed fire is initiated, the agencies will monitor weather and the burning and smoke dispersion conditions to assure air quality impacts remain within prescribed smoke management levels. If monitoring indicates conditions are no longer within prescription, managers will declare the fire an unwanted wildland fire, and initiate the a suppression response.
- Monitoring of PM 10 and 2.5 levels occur at various locations across the FPU. For example, the Medford BLM has two mobile PM monitoring stations, and the Rogue River-Siskiyou National Forest maintains an IMPROVE Site at Agness to monitor air quality for the Kalmiopsis Wilderness Area.
- The agencies will establish and maintain close communications with State and local agencies regarding the status of prescribed fire projects and wildfires. They will notify concerned smoke-sensitive organizations (e.g.; hospitals, schools, retirement centers) of intentions and conditions, both prior to and during prescribed fire activities.
- The agencies will ensure that the general public is informed of the status of prescribed burns, including smoke management contingencies, through the local news media.
- The field personnel will maintain communications with the appropriate dispatch center. Dispatch will act as a clearinghouse, providing and maintaining daily information on burning projects throughout the region.

These potential impacts were considered in developing this Fire Management Plan, and mitigation measures have been built into the Plan to offset potential negative impacts from smoke pollution. For one, air quality is a factor that must be considered in the Prescriptive Criteria (Go/No Go Checklist) to determine the viability of implementing a prescribed fire. If the established federal and state standards for air quality cannot be met or mitigated in an acceptable manner, the project will not be implemented until conditions change. Secondly, even when these standards are met, the Plan also provides a list of smoke management techniques to mitigate potential impacts, which includes monitoring the amount of emissions and the direction of the smoke dispersal. Prescribed fire projects will comply with the more stringent regulations in these areas.

Finally, the Plan is also designed to accommodate areas where fire is not desired and other types of fuels treatments need to be used. Therefore, additional areas where concerns with air quality standards would require the use of alternative fuels treatments are identified in this plan. Alternatives such as mechanical treatments,

including brush beating, and thinning are utilized throughout the planning area. Chemical treatments are allowable for use on private lands.

The procedure for permit approval by the state of Oregon is carried on through the FASTRACS (Fuel Analysis, Smoke Tracking, and Report Access Computer System).