

# Recommendations of the South-Central Oregon Smoke Management Work Group

October 7, 1999

## Objective

Smoke from prescribed fire is one of several issues identified as an air quality concern in light of the new fine particulate standards for PM<sub>2.5</sub>. Historically, the protection afforded nonattainment areas in Oregon has focused on the winter period, when particulate levels have been highest. Protection for the new PM<sub>2.5</sub> standards will require an increased focus on reducing overall smoke levels throughout the year. The South-Central Oregon Smoke Management Work Group is providing the following recommendations to the Oregon Department of Forestry in order to increase the air quality protection afforded Klamath and Lake Counties by the State Smoke Management Program. The South-Central Oregon Smoke Management Workgroup recommends the following:

- Retain a voluntary smoke management approach in Klamath and Lake Counties.
- Expand coordination among all state and federal smoke management agencies within the South-Central and Klamath Basin Fire Management Partnerships.
- Update and enhance local smoke management agreements.
- Improve interstate smoke management coordination with northern California.
- Explore funding for real-time monitoring in Klamath and Lake Counties to identify and track smoke impacts.
- Increase ODF resources to address increased burning, with emphasis on smoke management forecasting support.
- Support recommendations of the Southwestern Oregon Smoke Management Work Group.

## Recommendations

### 1. Retain a voluntary smoke management approach in Klamath and Lake Counties

The work group discussed the possibility of upgrading the Winema and Fremont National Forest Smoke Management Programs from voluntary to mandatory. One advantage of a mandatory program is it requires all land management agencies to comply with the daily advisory. Under a voluntary program there is potential for conflicting participation between land management agencies on days with marginal smoke dispersion. However, it is recognized that the current voluntary program has been mostly successful, and that at this time there does not appear to be a need for a mandatory program. It is recognized however, that a mandatory program may be necessary in the future if the voluntary program fails to meet smoke management objectives and protect the Klamath Falls and Lakeview PM<sub>10</sub> nonattainment areas.

## 2. Expand coordination between state and federal agencies within the South-Central and Klamath Basin Fire Management Partnerships.

While the voluntary smoke management approach has been generally successful, there remains the potential for smoke intrusions into Klamath Falls and Lakeview. In 1998, such an intrusion occurred in Klamath Falls resulting from multiple prescribed burns in and around the Klamath Basin. There is concern that planned increases in prescribed burning will make meeting smoke management objectives more difficult. Of special concern is the practice of multi-day burning, and the need for smoke management agencies to cooperate in minimizing smoke accumulation.

The group believes that the best way to address these concerns and improve smoke management is through better coordination between state and federal smoke management agencies, and private forestland owners. To that end, the work group recommends ODF support the new operating plan agreement developed for the South-Central Fire Management Partnership. This agreement was recently adopted as a supplement to the 1991 Klamath Falls Voluntary Smoke Management Agreement. It formalizes coordination of smoke management issues between the Fremont National Forest; Lakeview District BLM (including sections of the Klamath Resource Area); Lake Unit of the ODF Klamath-Lake District; and US Fish & Wildlife Hart Mountain/Sheldon Refuges. A similar agreement is currently being developed for the Klamath Basin Fire Management Partnership.

The work group recommends the Klamath Basin partnership agreement be adopted, and that formal coordination between the Klamath Basin and South-Central Fire Management Partnerships be established. The work group also recommends that ODF formalize and reaffirm through separate agreement smoke management coordination with local commercial and private forestland owners.

## 3. Improvements to supplemental operating plan agreements

The recent operating plan agreement developed for the South-Central Fire Management Partnership established a good basis for interagency coordination. The work group recommends that this agreement (and similar agreements established for other Fire Management Partnerships) be strengthened by adding the following:

- Specific recognition of the need to evaluate the effects of multi-day burning, residual smoke, and overall smoke accumulation before approving new prescribed burning. This is implicit in the current agreement. A more explicit statement would provide clearer guidance to smoke management agencies on the need to cut off or limit new burning based on current or anticipated smoke accumulation and dispersion.
- The current South-Central Fire Management Partnership agreement should be amended to establish formal coordination with the Klamath Basin Fire Management Partnership.
- Coordination with appropriate California smoke management agencies should be added as needed.

In addition to improving regional fire management partnerships, it is recommended that the 1991 Klamath County Memorandum of Understanding on Smoke Management be revisited so that new commercial timberland companies may be added to the agreement, and that the agreement be aligned with the new fire management partnership procedures.

4. Improve interstate smoke management coordination with northern California.

The group recognized as a priority the need to improve coordination with smoke management agencies in California given the anticipated regional increase in prescribed burning and the proximity of several California National Forests, Parks, and Monuments to the Klamath Falls and Lakeview PM10 nonattainment areas. Representatives from several California smoke management agencies who participated in the South-Central Oregon work group said that there is willingness on the part of California agencies to develop a coordinated program. The group has also learned of a new regional group called the Northeast Air Alliance, representing state, federal, private and county land managers, and local air quality districts operating in California. The NE Air Alliance was formed to address smoke management issues in northeastern California.

The work group recommends that the Oregon Department of Forestry pursue coordination of smoke management issues with the Northeast Air Alliance and other appropriate California agencies. The group recommends that a formal mechanism for daily notification and information sharing of interstate prescribed burning activity be placed in the Operational Guidance to the Oregon Smoke Management Plan. The group also strongly recommends that this guidance and coordination effort be kept as simple as possible, so that staff resources can be used most efficiently.

5. Explore funding for real-time monitoring in Klamath and Lake Counties to better identify and track smoke impacts.

The group discussed the benefits of investing in an air quality monitoring system as a way to track smoke transport into sensitive areas. Such a network was recently installed in the Medford area through the efforts of the Bureau of Land Management and Forest Service, and will be used extensively to identify potential ground and residual smoke impacts and accumulation in areas where increased prescribed burning is planned. Such information would be useful in Klamath and Lake Counties for tracking smoke transport and accumulations, and in making daily burn decisions. The US Forest Service has recently agreed to fund the operation of a nephelometer at Peterson School in Klamath Falls for six months in the summer so that year round data can be available on smoke impacts in the Klamath Falls nonattainment area.

The group recommends that appropriate agencies work to expand the real-time particulate monitoring and meteorological network in Klamath and Lake Counties.

6. Improvements to address increased understory burning.

The current prescribed burning approach used in Klamath and Lake Counties is based on understory burning, which often produces considerable ground smoke. This can make it difficult to ensure adequate smoke dispersion. Addressing this issue, especially in light of increased understory burning, will likely require the need to develop new smoke management techniques, or improve existing approaches.

The group encourages the Oregon Department of Forestry to review its current smoke management plan and determine what improvements are needed to address this issue in Klamath and Lake Counties. This may require increased resources and staffing in order to manage this burning and to coordinate with similar burning in northern California. We recommend that ODF's review emphasize the need for increased expertise in the specific nature and characteristics of prescribed burning in Klamath and Lake Counties, and the need for increased meteorological forecasting support.

7. Endorse recommendations of the Southwest Oregon Smoke Management Work Group.

Since November 1998, the Southwest Oregon Smoke Management Work Group has been meeting to discuss possible smoke management improvements for southwestern Oregon. As with the Klamath Falls group, prescribed burning was identified as an important air quality issue. On June 2<sup>nd</sup> the Southwest Oregon group sent their final recommendations to the Oregon Department of Forestry. The South-Central Smoke Management group endorses these recommendations, specifically:

- Improve interstate smoke management coordination with northern California.
- Increase the use of non-burning alternatives and emission reduction techniques.
- Revise (if necessary) Smoke Drift Restrictions on OAR 629-43-043.
- Develop special Smoke Management Guidance for understory burning.
- Make full use of the new SW Oregon monitoring network.

While no regular meeting schedule has been established, it is expected that the South-Central Oregon Smoke Management Work Group will continue to meet as necessary to address prescribed burning issues. The South-Central Oregon Smoke Management Work Group appreciates your consideration of these recommendations.

The recommendations above are based on the June 17, 1999 and July 15, 1999 meetings of the South-Central Oregon Smoke Management Work Group. Group members in attendance were:

Brian Goff–Oregon Department of Forestry,  
Bill Hunt- Oregon Department of Forestry  
Dave Goheen–US Fish & Wildlife,  
Bob Flowers-Farm Bureau,  
Larry Bowman-Fremont National Forest & Lakeview-BLM,  
Richard Stubbs-Fremont National Forest,  
Gene Rogers, Winema National Forest,  
Doug Bright-Winema National Forest,

Craig Ditman-Jeld-Wen,  
Jim Carpenter-Carpenter Design,  
Ruth Johnson-Lava Beds National Monument,  
Polly Haessig-Klamath National Forest,  
Dave Sinclear, Modoc National Forest  
David Collier-ODEQ