campaigns, public meetings, employee training, etc.

 Be designed to maximize open communications and reduce polarization among conflicting interests regarding prescribed fire.

Build on existing efforts of the Interior Interagency Wildland Fire Education Initiative to develop and implement a strategic plan that includes education of the general public and agency personnel about the role of fire. As part of this effort, agencies will:

- —Develop and transmit a clear message about the role of fire and the consequences of its use and exclusion.
- Integrate this message into existing agency communication systems.
- Tie the role-of-fire message to other agency initiatives such as forest health, ecosystem management, etc.
- Broaden the Initiative to include all interests.
- Incorporate risk assessments into the Initiative.
- Encourage, create, and coordinate partnerships to achieve consistency in messages, build public trust, and obtain public opinion.
- —Recognize and use educable moments (where the attention of the public is focused on fire, e.g., fire emergencies and visible prescribed fire operations) to facilitate high-impact information and education.
- —Develop mandatory national and regional interagency training programs to instill in all employees an understanding of the role of fire in natural systems.
- —Commit funding and support to public information.

Use of Prescribed Fire and Fuels Management

Situation

Since the early 1900's, our national fire policy of aggressively limiting and excluding fire has unwittingly turned many wildlands into altered, high-risk fire zones. As stated in the preceding chapter, this exclusion policy has modified the living landscape, changing plant species composition as well as diversity. In many cases it has transformed a landscape of diffuse, native, fire-adapted plant species into a dense, solid, and often vulnerable fuel load of standing vegetation and ground litter. When lightning inevitably strikes, fires ignite faster, burn hotter, and spread faster and farther. These highintensity fires are more likely to result in unacceptable environmental conditions such as sterilized or waterrepellent soils, accelerated erosion, and

displacement of native vegetation by less desirable species.

Recent fire tragedies in the West have helped focus that understanding and, along with it, a consideration of how risk might be mitigated. Some areas will need immediate management intervention to prevent high-intensity fire and to maintain their sustainability as healthy ecosystems.

Prescribed fire or burning is often mentioned by land managers, fire practitioners, and scientists as a potential tool to mitigate fuels and hazards. Prescribed burning is the deliberate application of fire to wildlands to achieve specific resource management objectives. Prescribed fires may be ignited either by resource managers or by natural events such as lightning. They may be used for a number of resource management purposes, from simple fuel reduction to achieving specific responses from firedependent species, such as the regeneration of aspen.

When the purpose of a prescribed fire is simply to reduce the amount of fuel, alternative treatments are available. Physical removal or substantial alteration of both dead and living vegetation may be accomplished by mechanical means in areas where heavy equipment can operate. Fuel loads can also be treated by hand but at a relatively high cost. Other land management activities, such as grazing and logging, may also serve to accomplish fuel reduction. But when a land management objective is more complex, the number of acceptable treatment alternatives becomes limited. For instance, there is no alternative to the use of fire as a natural process in Wilderness.

Prescribed burning is a wellestablished practice utilized by most Federal, Tribal and State land management agencies as well as some private individuals and organizations. In order to use prescribed fire, land managers must prepare burn plans. Each plan specifies desired effects, weather conditions that will result in acceptable fire behavior, and the forces needed to ignite, hold, monitor, and eventually extinguish the fire. In the past, the practice of prescribed burning has been used on a relatively small scale and confined to single land ownerships or jurisdictions. Success has been built around qualified and experienced people, their understanding of vegetative types and terrain conducive to fire, adequate funding, a supportive public, and a willingness on the part of agency administrators to assume a reasonable amount of risk to achieve desired results.

Because of its potential for undesirable results, prescribed fire is one of the highest-risk activities Federal land management agencies engage in. Escaped prescribed fires can result from poorly designed or poorly executed projects, but they can also result from events beyond the control of those conducting the project, such as unpredicted winds or equipment failure. Currently, the stigma associated with an escaped prescribed fire does not distinguish between poor performance and bad luck.

Although prescribed fire is used in many areas of the United States, it is rarely used enough to significantly improve ecosystem health or reduce hazards. One reason for this is lack of commitment to the concept. While land management agencies as a whole generally recognize the role of fire as a natural process, not all individual disciplines and managers fully understand or support this role. Some managers are unwilling to accept the potential negative consequences associated with prescribed fire. Differences of opinion concerning the effect of fire on specific resources, such as cultural values, water quality, air quality, and certain flora and fauna, can also impede the process.

Another shortcoming is lack of access to qualified people. In the current atmosphere of downsizing and reduced budgets, agencies may not be able to maintain sufficient skills to accomplish broad-scale prescribed fire programs. Many of the employees who are most experienced in the application of prescribed fire are the same ones who are responsible for wildfire suppression. This can lead to potential competition for their time during the fire season. Administrative procedures also inhibit temporary hiring of personnel needed to conduct on-the-ground prescribed burning.

The direction in the Interagency Fire Business Management Handbook on hazard-duty pay also tends to limit the number of prescribed fire professionals. This guidance restricts fire-related hazard pay to activity within or adjacent to the perimeter of an uncontrolled wildfire, even though prescribed fire practitioners are exposed to as much risk if not more than firefighters engaged in suppressing wildfire.

Retirement benefits have also been a factor in career choices involving prescribed fire. However, the BLM has now recognized that, based on 5 CFR 831.900 and 842.800, prescribed fire activity qualifies for primary coverage under special firefighter retirement. In some agencies, however, it is still