

## Cultural Resource Protection and Federal Fire Management Issues Paul Gleeson and A. Trinkle Jones

Recent wildland fire policy places greater emphasis on resource management protection through planning. The planning process takes final form in required Fire Management Plans. While the fire community is willing to fund appropriate cultural resource work under their Section 106 responsibility, there has been a reasonable reluctance to fund basic inventory of large areas that is seen as each land manager's Section 110 responsibility. Also at issue is the fact that survey and mitigation procedures and requirements seem to vary widely from park to park, between park and forests, between states, and between resource professionals. Many fire and cultural resource professionals seem to lack a clear understanding of the objectives and practices of both specialties and need to develop a mediation process. In many cases it has not been clear what the effects of fire are or what elements of a cultural resource are most important to protect. The following are efforts to provide a common frame of reference for making fire management decisions that also provide a reasonable level of protection for cultural resources.

### Wildland Fire Management Policy

After the loss of human life and resources and the costs of suppression that occurred in the 1994 fire season, it was apparent that agencies and the public must change their expectations that all wildfire can be controlled or suppressed. No organization, technology, or equipment can provide absolute protection when unusual fuel loads, extreme weather conditions, multiple ignitions, and extreme fire behavior come together to form a catastrophic event. A joint task force comprised of US Forest Service (USFS), National Park Service (NPS), Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), and US Fish and Wildlife Service (FWS) members participated in a program review that led to a new Federal Wildland Fire Management Policy (1995). The report had the following key points:

- Protection of human life is reaffirmed as the first priority in wildland fire management. Property and natural/cultural resources jointly become the second priority, with protection decisions based on values to be protected and other considerations.
- Wildland fire as a critical natural process must be reintroduced into the ecosystem. This must be accomplished across agency boundaries and will be based on the best available science.
- Where wildland fire cannot be safely reintroduced because of hazardous fuel build-ups, some form of pretreatment, particularly in wildland /urban interface areas must be considered.
- Every area with burnable vegetation will have an approved Fire Management Plan.
- Wildland fire management discussions are based on approved fire management and other land and resource management plans. The plans must provide the agency administrator flexibility to choose from the full spectrum of fire management actions – from prompt suppression to allowing fire to function in its natural ecological role.

### Section 106 Programmatic Agreement

There is a need for overall guidance that is consistent with the National Historic Preservation Act (Section 106; 36 CFR 800) and agency policy. A Programmatic Agreement (PA) is being developed for the protection of historic properties under the Federal Wildland Fire Management Policy.

From experience with incidents such as the "Exxon Valdez" oil spill, it was recognized that pre-incident planning could protect resources. This approach was codified in a PA for oil and other hazardous material spills. The question is not if there will be wildland fire, but when a wildland area will burn. Like oil spills, hurricanes, floods and other unscheduled disasters, the question is are we are dealing with an action for which there is a preplanned response? With an unscheduled and unplanned response event, the result is chaos and unneeded resource loss, while with an unscheduled and planned response event, there is a managed response that results in a logical level of resource protection.

The National Interagency Fire Center (NIFC) convened an interdepartmental group of agency cultural resource specialists from NPS, BIA, FWS, BLM and USFS to draft a similar PA for the fire program that will address responsibilities, pre-incident planning (mechanical hazard fuel reduction and prescribed fire),

emergency response, and post-fire rehabilitation. Initial discussion was undertaken with NCSHPO and ACHP representatives, who are supportive of this approach. The group developed a Strategy Paper for discussion with colleagues at the 1999 Society for American Archaeology meetings in Chicago. The PA will integrate a number of existing agreements, guidelines, and studies to provide a uniform process for considering the effect of actions on cultural resources resulting from the fire management policy. On the local level, the planning document will be the Fire Management Plan.

#### Training Class for Fire Management Officers and Cultural Resource Specialists

In the planning process for prescribed fire it is apparent that few cultural resource specialists or fire management officers fully understand the objectives and needs of both the fire program and the cultural resource program. The goal of this class is to provide tools to evaluate fire effects on cultural resources and to aid in the cooperative rewriting of Fire Management Plans. The course, sponsored by the Stephen T. Mather Training Center, was presented twice to a full house in January 1999 and 2000. A third class is scheduled for 2001.

The class has been integral in the development of the PA. The class members now generate a matrix of fire effects on cultural resources that can serve as the basis for protecting cultural resources and as the point of discussion for consultation with the SHPO under Section 106.

#### Rainbow Volume on Fire Effects on Cultural Resources

One of the most difficult issues has been the question of the effect of fire on cultural resources, especially those in the archeological record. Fortunately the USFS "Rainbow series" on fire effects is being updated, and a volume on cultural resources is being prepared for the first time. The overall objective of the project is to write, publish, and distribute a series of "state of the art" reviews of the effects of fire on fauna, flora, air, cultural resources, and soil and water. The USFS Missoula Fire Lab proposes to complete the preparation of 3 volumes (cultural resources-archeology, fauna, and flora) and to provide for the publication of all five volumes in 1999 and 2000.

The cultural resources volume will emphasize archeological remains. Cultural landscape vegetation and archeological matrix issues are referred to the flora and soil volumes. A team of archeologists and fire scientists are reviewing the literature, including internal agency reports, on the effects of fire on materials covered under the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act of 1979, and others. Much of the literature is anecdotal and qualitative. In many cases conclusions are drawn only from post-fire observations of select resources. Often little is known about the fire behavior characteristics that led to the resource damage. At times, it is uncertain if the observed damage can be attributed solely to the most recent fire. Cultural resource specialists on the team, coordinated by NPS Archeologist Trinkle Jones, will assemble the literature on fire effects and provide interpretations of the significance of the described effects. Fire scientists on the team, led by USFS scientists Kevin Ryan and Roger Hungerford, will carefully review the fuel and environmental conditions associated with the various fires. Jointly the team will identify known and potential fire effects on cultural resources, develop a conceptual framework for assessing and predicting potential effects, and identify needed fire effects research.

#### Burned Area Emergency Rehabilitation Planning (BAER)

Each BAER team is an interdisciplinary group consisting of a watershed specialist, a vegetation specialist, wildlife specialist, certified silviculturalist, cultural resource specialist, facility specialist, environmental protection specialist and an operations specialist. BAER teams have prepared management plans for 20 large fires and have consulted on many other fire events. They provided sound management recommendations at Bandelier and Mesa Verde in 1996 and have been assigned to produce a plan for the May 2000 Cerro Grande fire at Los Alamos. A handbook, which is being updated, guides BAER activities.

While the BAER program can do much to protect resources from further damage, the activities permitted are limited by law to specific fire effects and suppression related damages. The objectives of a BAER team are to provide guidance as to appropriate emergency treatments that are required immediately post-fire.

Proposed treatments must prevent loss of life and/or property and reduce negative impacts to critical resources resulting from fire effects or activities related to the suppression of the fire.

BAER cultural resource protection objectives are as follows:

- All treatments to achieve the BAER objectives will be evaluated to assess potential effect on historic properties. Treatments may or may not have an effect.
  - Treatments have critical time frames for implementation to minimize threats and losses.
  - Efforts will be made to design the treatments to have No Effect or to undertake Section 106 consultation in an expeditious manner. No Adverse Effect treatments will be undertaken only after either the BAER CRM team member or agency representative have completed appropriate consultation with SHPO. All Adverse Effect actions will be referred to the agency NHPA coordinator for consultation.
- Known historic properties damaged by fire or fire suppression activities may be stabilized by specific treatments if such treatments will result in mitigation of further damage.
- Areas of fire-induced sediment instability may be evaluated and treatments may be taken that will reduce the potential for loss of historic properties.
- Survey and/or evaluation of all known historic properties are not required. Inventory of known historic properties and/or unstable areas will be limited to the effort needed to determine the appropriate treatments that will reduce the potential for loss of historic properties.
- Research is not an objective of this program, however studies that provide effective post-fire protection of cultural resources will be supported on a limited basis.

#### Conclusion

Management of cultural resources within the Federal Wildland Fire Management Program is a complex process. Responsive actions cannot be achieved with one guidebook, one research project, or one strategy. The current work done by the NPS, USFS, BIA, BLM, and FWS seeks to develop a management strategy that protects varied historic sites, structures, landscapes and traditional cultural sites while achieving fire management objectives.

Index Key subject categories:

Anthropology/Archeology, Planning, Resource Management