

in the proposal. Other respondents suggest that the agencies should not allow grazing to be categorically excluded as a fuels reduction technique because grazing removes grasses, allowing woody vegetation to invade, which contributes to hotter, more intense fires.

*Response:* The grazing activity included in the proposed hazardous fuels reduction categorical exclusion, as the sole biological method, was intended to be limited to livestock grazing to maintain fuelbreaks. Subsequent review determined that only four of the projects reviewed involved livestock grazing for fuelbreak maintenance. While some agencies have effectively used livestock grazing to maintain fuelbreaks in certain circumstances without significant environmental effects, the agencies believe they have not gathered sufficient data for its inclusion in this categorical exclusion. The agencies will continue to review the effects of this type of activity. Therefore, the hazardous fuels reduction categorical exclusion has been modified to remove "biological" and "grazing" from the list of included activities.

*Comment:* Some respondents stated that some prescribed burns have resulted in unanticipated effects such as burns too cool/hot to meet objectives and increases in noxious weeds/non-target grasses.

*Response:* The agencies' review of hazardous fuels reduction and fire rehabilitation projects found 11 cases where the actual results were other than what was predicted. These cases reported that prescribed fires burned either cooler or hotter than anticipated. Cooler than expected burns resulted in less fuel being consumed by fire, and, therefore, not completely achieving the project's fuel reduction objective. Hotter than expected burns resulted in increased scorch of tree crowns and more tree mortality than predicted. In some instances undesirable grass species occupied the site after treatment. In each of these cases, however, the unanticipated effects were found not to be significant.

*Comment:* Some respondents asked that the categorical exclusion for rehabilitation be modified to include, but not be limited to, specific suggested activities such as fire and safety hazard tree removal, natural or mechanical soil rehabilitation, and rehabilitation of recreation sites.

*Response:* The rehabilitation categorical exclusion does not include removal of fire and safety hazard trees. Removal of fire hazards is addressed in the hazardous fuels reduction categorical exclusion. Safety hazard

trees associated with roads, trails, recreation facilities, and administrative sites may be removed as part of routine maintenance of those facilities. Most agencies already categorically exclude these maintenance activities from further analysis and documentation in an environmental assessment or environmental impact statement. Post-fire soil rehabilitation, either natural or mechanical, and recreation site rehabilitation are included in the category of actions described in the rehabilitation categorical exclusion. The list of examples is not exhaustive.

*Comment:* Some respondents indicated a belief that the proposal for rehabilitation is unnecessary as existing legal frameworks provide for emergency fire rehabilitation.

*Response:* In January 2003, the Wildland Fire Leadership Council, a cooperative, interagency organization dedicated to achieving consistent implementation of the goals, actions, and policies in the National Fire Plan and the Federal Wildland Fire Management Policy, identified three types of fire recovery activities: Emergency stabilization; rehabilitation; and restoration. Emergency stabilization is defined as planned actions within one year of a wildland fire to stabilize and prevent unacceptable degradation to natural and cultural resources, to minimize threats to life or property resulting from the effects of a fire, or to repair/replace/construct physical improvements necessary to prevent degradation of land or resources. The rehabilitation categorical exclusion does not cover emergency stabilization. The Wildland Fire Leadership Council defines rehabilitation as "Post-fire efforts (<3 years) to repair or improve lands unlikely to recover to a management approved condition from wildland fire damage, or to repair or replace minor facilities damaged by fire." The Wildland Fire Leadership Council defines restoration as the continuation of rehabilitation beyond three years. The rehabilitation categorical exclusion has been edited to be consistent with the Wildland Fire Leadership Council's definition of rehabilitation. The scope of fire rehabilitation activities allowed under the proposed categorical exclusion has not changed as a result of this new definition. What has changed is the time limit of three years for completion of those activities and a size limit of 4,200 acres.

*Comment:* Some respondents believe that rehabilitation activities should require an environmental impact statement. Others believe that these activities should not be carried out at

all. They say the use of heavy equipment generates noise, air and water pollution, soil compaction, vegetation and habitat changes, and ecosystem modifications greater than those which follow fires. Still others cite research studies (e.g., Beschta, *et al.*, 1995) that report that there is generally no ecological need to act, and that quick actions may create new problems.

*Response:* The agencies have repeatedly conducted NEPA analyses for fire rehabilitation projects using the best available science. Based upon approximately 300 fire rehabilitation projects reviewed, the agencies have concluded that the category of activities described do not individually or cumulatively have a significant effect on the human environment. When using the rehabilitation categorical exclusion, agencies must review the proposed action to ascertain whether extraordinary circumstances exist.

While the Beschta report focused on salvage logging, there are also statements on rehabilitation practices in the report. This report questions, in general, the effectiveness of installation of hard structures and their siting on the landscape. This report also criticizes introduction of non-native species. Situations such as steep slopes, drinking water protection, and threats of invasive species may influence the need to act in local situations. Years of research since the Beschta report have informed current choices of technologies. The utility of fire rehabilitation practices chosen and the need for these practices will be decided on a site-specific basis using current knowledge and technologies. Thus, the projects selected, based on local scientific expertise, will both meet the environmental protection goals for the projects and have no potential to individually or cumulatively have a significant effect on the human environment.

*Comment:* Some respondents requested that herbicide use be allowed under the fire rehabilitation categorical exclusion, while others oppose herbicide use and even want an explicit prohibition against herbicide use on future activities that follow categorically excluded actions.

*Response:* the agencies will continue to review and analyze new information on the effects of herbicides used for hazardous fuel reduction. At the present time, the agencies have elected to not include actions involving herbicide use.

*Comment:* Some respondents are concerned that 30 days was insufficient time to review the proposed categorical exclusions along with the other proposals. Others criticized the release