

or were similar in size and scope. Field units were asked to send the Washington Office any results from past monitoring efforts on the effects of: (1) projects that were performed under Category 4, or (2) projects that were done with an environmental assessment (EA) or environmental impact statement (EIS) but fit the requirements of Category 4, or were similar in size and scope. In the request, there was no specific time period for the completion of projects selected.

If past monitoring data did not exist, then each forest that has historically used timber harvest CEs, or projects that are similar in size and scope to Category 4, were asked to monitor at least two randomly selected CEs or projects as defined above. Monitoring was accomplished by reviewing the site after the project was completed based on the professional observations of resource specialists and line officers. All monitoring results were submitted using Web-based forms designed specifically for this monitoring effort. Both individual and cumulative environmental effects were assessed as part of this monitoring procedure. Where forests had only one or two projects that met the request criteria, those projects were selected. Where forests had more than two projects that met the request criteria, projects were chosen using a process that was unbiased with respect to the level of potential environmental effects. A description of how each project was selected is available on the Web site <http://www.fs.fed.us/emc/lth>.

*Comment:* Some respondents suggested that the Forest Service monitor categorically excluded limited timber harvest activities to ensure that they do not have significant environmental effects.

*Response:* Monitoring would take place after the categories are established and after they are used for a particular action. Monitoring is not relied upon as a basis or rationale for establishing these categorical exclusions. Forest land and resource management plans already provide for monitoring of management activities to determine compliance with applicable laws, regulations, and standards and guidelines; effectiveness of project implementation, including any specified mitigation measures; validation of models and assumptions used in the planning processes; and environmental impacts. Projects implemented under these categories will be included in these ongoing monitoring efforts.

*Comment:* Some respondents suggested that, without NEPA analysis, categorically excluded actions would

not consider current scientific information and managers would be unaware of extraordinary circumstances that preclude the use of a categorical exclusion.

*Response:* The Forest Service has repeatedly conducted NEPA analyses for timber harvest projects using the best available science. Based upon the projects reviewed for these categorical exclusions, the agency concluded that these analyses describe categories of actions which do not individually or cumulatively have a significant effect on the human environment.

Consistent with existing direction, the Forest Service must conduct sufficient review to determine that no extraordinary circumstances exist when using categorical exclusions (FSH 1909.15, sec. 30.3). This determination includes appropriate surveys, use of the best available science, appropriate consultation with Tribes, and coordination with agencies that have regulatory responsibilities under other statutes such as the Endangered Species Act, the National Historic Preservation Act, Clean Water Act, and Clean Air Act.

*Comment:* Some respondents believed that limited timber harvesting for salvage purposes should not be carried out at all. They said the use of heavy equipment generates noise, air and water pollution, soil compaction, vegetation and habitat changes, and ecosystem modifications greater than the event causing the mortality. Still others cited research studies (e.g., Beschta, R.L.; Frissell, C.A.; Gresswell, R. [and others]. 1995. Wildfire and salvage logging: recommendations for ecologically sound post-fire salvage logging and other post-fire treatments on Federal lands in the West. Corvallis, OR: Oregon State University) that report that there is generally no ecological need to act, and that quick actions may create new problems. Some cited other research studies regarding environmental impacts of timber harvesting.

*Response:* Ecological reasons are not the only reasons for an agency to take action. Salvaging dead and dying timber provides commercial forest products in support of the Forest Service's legally mandated mission. Numerous laws, including the Multiple Use Sustained Yield Act and the National Forest Management Act, establish the basis for managing national forests in a manner to provide goods and services. In addition, salvage activities, in certain situations, can reduce fire hazard from excessive fuel buildup, or prevent the buildup of insect populations in accumulations of dead trees that can

then attack healthy trees; e.g., the spruce beetle. Severe fires and insect infestations can lead to reduced scenic, recreational, wildlife, and timber values on Federal and neighboring Tribal, State, or private land. Public comment from neighbors of Forest Service land expressed their concerns regarding risks to their property from untreated fire or insect hazards on neighboring Forest Service land.

As the Beschta *et al.* report points out, salvage activities can have negative environmental impacts, depending on the condition of the site, the harvesting system, time of the year, and many other factors. However, practices and guidelines have been developed with regard to soil and water protection and wildlife habitat, on appropriate sites that will lead to no significant effects. The Forest Service agrees with Beschta *et al.* that care should be taken in designing salvage projects, as well as other timber sale projects, and the agency has an extensive array of guidelines and procedures to prevent and mitigate negative environmental impacts during these activities.

The fact that none of the 154 sampled projects showed significant environmental impacts indicates that these practices are effective at reducing or eliminating environmental impacts. As described in the rationale for the categorical exclusion for fuels reduction projects <http://www.fs.fed.us/emc/hfi/rationale.pdf>, thinning methods are used for forest stand improvement, wildlife habitat improvement, and hazardous fuels reduction. The body of knowledge concerning these practices is mature. Scientific research and evaluations of project monitoring are reflected in laws, regulations, and agency policy related to implementation of these activities. Some of the many laws, regulations, and policies are described in the rationale document.

One example of these environmental safeguards that apply to proposed timber harvest projects that are described in categories 12, 13, and 14 is the protection of soil and water resources. This protection is provided through implementation of State and EPA approved Best Management Practices (BMPs) as well as forest plan standards and guidelines. BMPs are site-specific design and operating criteria intended to maintain soil productivity and water quality to State standards. Federal agencies incorporate BMPs into project design. For example, to minimize soil compaction, puddling, rutting, and gully with resultant sediment production and loss of soil productivity, the project supervisor and/or Contracting Officer are responsible