

Decision Memo

Long Jim Fuels Reduction Project

USDA Forest Service
Tusayan Ranger District
Kaibab National Forest
Coconino County, Arizona

[T30N, R2E, Sections 11, 13, 14, 23 and 24 of the G&SRBM]

Decision and Reasons for the Decision

Background

This decision applies to the Long Jim Fuels Reduction project located on lands administered by the Tusayan Ranger District of the Kaibab National Forest. The Long Jim Project, identified as an urban interface area, encompasses approximately 1,375 acres of national forest system lands, including lands adjacent to private property, the community of Tusayan, the Grand Canyon Airport, and the Grand Canyon National Park (see attached map). The project area is within Ecosystem Management Area (EMA) 8, Arizona Game and Fish Department Game Management Unit 9, and the Rain Tank Grazing Allotment that is currently closed, indefinitely, to livestock grazing.

The Long Jim Project is a continuation of the district's planning process to improve forest health and sustainability, and lower the risk of severe stand-replacing wildfires in forested lands that surround the community of Tusayan and Grand Canyon National Park. The project area is predominantly ponderosa pine forest with some scattered clumps of Gambel oak that transitions into pinyon pine and juniper woodland, and sagebrush openings.

The potential for high-intensity wildland fire within the Long Jim project area is moderate. Accumulations of dead and down woody debris (surface fuels), "ladder fuels", unnaturally high tree densities, and a sustained drought have all contributed to an increase in wildland fire potential. The proximity of these fuels to private land, the community of Tusayan, and Grand Canyon National Park, make the Long Jim Project a high priority for vegetation and prescribed fire treatments.

Several factors have contributed to the increase in tree density that has occurred over the past 130 years. The character of the forest in general has changed from being open and savannah-like, and dominated by larger pine, to a forest today that is much denser and dominated by smaller trees of mixed species within a closed forest canopy. A shrub understory also dominates where grasses were once prevalent. Proposed treatments to reduce existing forest fuels and open up the forest canopy would likely reduce the risk of

a large fire that could occur if no action was taken, and at a lower cost now than in the event of a wildfire.

Decision and Rationale

I have decided to implement noncommercial fuels reduction treatments in the Long Jim project area in order to improve ecosystem health and sustainability; reduce the risk of uncharacteristically intense stand-replacement wildland fires; reduce the potential of wildland fire to enter private property, the community of Tusayan and the Grand Canyon National Park; protect community resources, as well as provide for firefighter and public safety in wildland fire situations within the wildland-urban interface; and continue to work collaboratively with the Tusayan Community Fire Plan.

Noncommercial treatments include mechanical tree thinning on approximately 713 acres within the project area, agra-axe or agra-mowing on 200 acres, prescribed burning on a majority of the project area, fuelwood collection, and slash treatments.

The project area essentially has three prescriptions for treatment: burn-only; thin and burn; and agra-axe or agra-mow and burn. Each prescription may vary slightly from stand-to-stand in regard to burning, tree spacing, and tree diameter limits for cutting. No trees larger than 12 inches in diameter will be removed. Residual stocking will result in small groups of trees as well as scattered large individuals that exhibit structural diversity. Cliffrose, Gambel oak, large mature trees, snags, and large down logs will be protected from fuels reduction activities (see Mitigation Measures).

Burn Only - 462 acres: (see attached Treatment Map for locations)

These sites (or stands) have light stocking of small pinyon and juniper with scattered patches of ponderosa pine and larger pinyon and juniper trees. Grass, forbs, and sagebrush are well-established across most of these sites, but are showing signs of competition from encroaching pinyon and juniper. These stands will benefit from a burn-only prescription as a tool to maintain the savannah/grassland stands and improve the health and vigor of existing shrubs and grasses.

Thin/Burn - 713 acres: (see attached Treatment Map for locations)

These sites (or stands) consist of ponderosa pine, pinyon pine, juniper, and Gambel oak trees. Mechanically thinning trees will return these stands to historical stocking levels while promoting vegetative diversity and ecosystem health. Trees selected for removal will be no larger than 12 inches in diameter. Slash generated from thinning treatments will be lopped and scattered to no more than two feet off the ground to provide a microclimate that will retain moisture and enable the establishment and growth of grasses and forbs more readily. Prescribed burning will return nutrients to the soil and assist in the improvement of overall ecosystem health.

Agra-axe or Agra-mow and Burn – 200 acres: (see attached Treatment Map for locations)

These sites (or stands) consist of more scattered ponderosa pine, pinyon pine, juniper, and Gambel oak trees, and sagebrush openings on flatter terrain. Mechanical thinning

using an agra-axe, or agra mowing, will return these stands to historical stocking levels while promoting vegetative diversity and ecosystem health. Trees selected for removal will be no larger than 12 inches in diameter. Slash generated from thinning treatments will be lopped and scattered to no more than two feet off the ground to provide a microclimate that will retain moisture and enable the establishment and growth of grasses and forbs more readily. Prescribed burning will return nutrients to the soil and assist in the improvement of overall ecosystem health.

Overall, by thinning smaller diameter trees and reintroducing fire back into the project area, the forest would be more tolerant to the occurrence of low and moderate intensity fires, and less likely to fuel a devastating wildfire. The potential for moderate to high severity fire over the next 20 to 40 years would also be reduced. These treatments will restore the overall area by creating a residual forest within the project area that will be healthier and more resistant to natural disturbances such as drought, insects and disease, and wildfires. This area will continue to provide good quality wildlife habitat with an increased presence of grasses, forbs and shrubs, and enhanced health and vigor of residual trees to provide mast (pinyon nuts, juniper berries, Gambel oak acorns, ponderosa pine cone seeds).

Following proposed thinning activities, the project area would be available for personal-use, noncommercial fuelwood harvesting during the district's fuelwood season, May 1st through December 15th. After an adequate amount of time has been allowed for fuelwood collection, remaining slash would be piled (mechanically and/or by hand) and burned, or broadcast-burned depending on the amount of slash and slope of the area. No mechanical piling would occur on steep slopes where sensitive soils occur. Slash piles would be burned at a time when conditions are favorable for smoke management, control, and desired fire and resource effects. Broadcast burning would be implemented when weather conditions are appropriate for fuel consumption and adequate smoke dispersal. Maintenance burning may occur to maintain ecosystem health and satisfactory stand structure.

This project is designed to have only beneficial effects to the vegetation in the project area. In addition, there will be no significant negative effects to resources in the project area as the result of project implementation when the following mitigation measures are followed.

Mitigation Measures for the Proposed Action

Vegetation

1. Following tree felling, areas will be opened to the public for personal-use fuelwood permits.
2. Prior to prescribed burning, slash will be lopped to a height of two feet or less and bucked into 8 to 10 foot lengths.
3. Mechanical treatments will not take place between January 1st and July 1st to reduce the threat of *Ips* bark beetle outbreaks within and around adjoining stands. This timeframe may be shortened by the zone silviculturalist if drought conditions subside and/or monitored bark beetle populations decrease.

Prescribed Burning

4. Prescribed burning prescriptions will be designed to limit mortality in large old trees. Standard burn preparation will include such measures as lining snags, removing dead fuels near large oak and yellow pine, and reducing excessive duff layers around yellow pine.
5. Piles burned in visually sensitive areas will be chunked in order to ensure good cleanup. In the event that soils are severely scorched from pile burning, adjacent unburned soil will be added and manually worked in with hand tools.
6. The project-specific Burn Plan will adhere to the guidance provided by the Smoke Management Plan for Tusayan and Grand Canyon (2001). Other smoke management mitigation measures include avoiding direct ignition of stumps and large logs, burning smaller blocks of land, burning with adequate ventilation, and burning in the later afternoon/evening to take advantage of downslope/down valley airflow away from sensitive areas.

Noxious Weeds

7. Wash all equipment to be used off-road prior to entering project area.
8. Monitor the project area for noxious weeds for at least three years following both mechanical and burning treatments. Control weeds as necessary.

Special Emphasis Plant Species

9. If populations of Tusayan rabbitbrush are discovered during project implementation, the project manager will coordinate with the zone plant ecologist or range conservationist in order to avoid direct plant mortality from project activities.

Watershed and Soils

10. Designated drainage bottoms and sideslopes will be completely avoided by all-wheeled or tracked equipment/vehicles when the soil is moist, except on improved roads. These locations are shown on the map of Streamside Management Zones and Soils with Moisture Restrictions (in project file).
11. Selected drainage bottoms and slopes will be avoided by all wheeled and tracked equipment and vehicles at all times, except on improved roads. These locations are also shown on the map of Streamside Management Zones and Soils with Moisture Restrictions (in project file).
12. Provide adequate drainage on firelines and roads to prevent concentrated runoff. Methods and frequency of drainage control will be determined on-site at the time of project implementation. Methods may include, but are not limited to, water bars, siltation catchments, and road out-sloping.
13. All soil or rock berms, piles, ditches, and depressions created during dozer operations will be returned to the original contour upon completion of burning and slash treatments.
14. Implement Best Management Practices. (See list of BMPs in the Project File.)

Heritage

15. Prior to project activities, all sites will be marked.
16. The use of heavy equipment will be prohibited within site boundaries.
17. Hand thinning may occur on sites, provided that large diameter trees are felled away from all features and that fuels are not piled within the site boundary.

Fuel loading will be assessed to determine the need for slash removal treatments.

18. Broadcast burning may occur through sites that are not sensitive to fire. Equipment must be staged outside of site boundaries. Fire managers must consult with the Forest or District archaeologist prior to project implementation. In addition, they must have an archaeologist present at their pre-implementation tailgate safety meeting to discuss any sites that must be avoided during implementation activities.
19. Fire sensitive sites, such as prehistoric and historic sites that contain flammable features or artifacts, rock art sites, cliff dwellings, certain traditional cultural properties if present, or non-fire sensitive sites with heavy fuel loading, will be protected during prescribed burning. Possible methods of protection include hand line, black line, wet line, and foam retardant.
20. All sites must be avoided during road maintenance activities. All roads must be surveyed 100 feet on either side of the road centerline prior to road closures and obliterations. All sites must be avoided during these activities.
21. If any unrecorded sites are found during project activities, work in the vicinity must cease and the project administrator must contact the Forest Archaeologist immediately.

Recreation and Scenery Resources

22. To meet Scenic Integrity Objective Level 2 (High), all thinning slash along State Highway 64 will be pulled back in the first 100 feet from the edge of the roadway. The slash that is pulled from the first 100 feet will be combined with slash from the next 100 feet to construct hand piles. These piles will be no larger than 10x10 feet in size and no higher than 8 feet. Slash beyond the first 200 feet of this roadway will be lopped and scattered to less than two feet in height.
23. To meet Scenic Integrity Objective Level 3 (Moderate), all thinning slash along FR 328 will be pulled back in the first 50 feet from the edge of the roadway. The slash that is pulled from the first 50 feet will be combined with slash from the next 50 feet to construct hand piles. These piles will be no larger than 10x10 feet in size and no higher than 8 feet. Slash beyond the first 100 feet of this roadway will be lopped and scattered to less than two feet in height.
24. Thinning slash along commercial ATV routes and adjacent to private property, will be pulled back in the first 50 feet. All stumps within the first 50 feet will be cut horizontally to the ground and be no more than four inches high. Slash beyond 50 feet in these areas will be lopped and scattered to less than two feet in height. Hand piling (piles no larger than 10x10 feet and 8 feet high) may be needed in areas of denser slash to eliminate a windrow effect.
25. Apache Stables Riding Trails: Thinning along the horse trails will be consistent with thinning guidelines along ATV trails and adjacent to private property (#22 above). The only exceptions to this are T30N, R2E, Section 11, the east half of the SE ¼ where the horse trail parallels FR 328 for approximately 200 feet, and an area immediately west known as Brushy Knoll. No thinning will occur between FR 328 and the horse trail, or on Brushy Knoll. The district recreation

specialist will be contacted prior to thinning operations, so these areas can be identified with blue striped flagging.

26. Activity-generated slash piles will be treated within two years. Any large logs within the first 100 feet of travelways or state/private property may be used as a base for hand piles to ensure full consumption of the logs during burning. Burning of logs is not recommended if lingering smoke may become a nuisance to local residents. This type of visual treatment should be conducted in such a way so that residual trees are not harmed.
27. Slash that has been lopped and scattered will be treated with prescribed burning when conditions are conducive for treatment.
28. The district recreation specialist will be notified on the day thinning starts and when the project has been completed, to ensure mitigation measures are followed and scenic integrity objectives are met.

Wildlife and Habitat

29. Direct hand ignition of down logs that are greater than 12 inches at midpoint diameter and 8 feet long, and snags ≥ 18 inches dbh and ≥ 30 feet tall, will be avoided. When possible, burning will be done when logs have higher fuel moisture contents.
30. Slash will be piled at a sufficient distance from the following tree categories to ensure that the heat from pile burning will not cause tree mortality. Direct ignition of these features will also be avoided:
 - Mature ponderosa pine (yellow pine)
 - Oaks greater than 8 inches in diameter
 - Pinyon pine and juniper 16" or larger drc

Reasons for Categorically Excluding the Decision

Pursuant to FSH 1909.15, Chapter 30, Section 31.2, Category 10, "Hazardous fuels reduction activities using prescribed fire, not to exceed 4,500 acres, and mechanical methods for crushing, piling, thinning, pruning, cutting, chipping, mulching, and mowing, not to exceed 1,000 acres. Such activities:

- a. Shall be limited to areas:
 - (1) In the wildland-urban interface; or
 - (2) Condition Classes 2 or 3 in Fire Regime Groups I, II, or III, outside the wildland-urban interface;
- b. Shall be identified through a collaborative framework as described in "A Collaborative Approach for Reducing Wildland Fire Risks to Communities and Environment 10-Year Comprehensive Strategy Implementation Plan";
- c. Shall be conducted consistent with agency and Departmental procedures and applicable land and resource management plans;
- d. Shall not be conducted in wilderness areas or impair the suitability of wilderness study areas for preservation of wilderness; and
- e. Shall not include the use of herbicides or pesticides or the construction of new permanent roads or other new permanent infrastructure; and may include the sale of vegetative material if the primary purpose of the activity is hazardous fuels reduction."

President Bush has taken a series of actions to expedite high-priority fuel-reduction and forest restoration projects in our nation's forests and rangelands, including the December 2003 signing of the Healthy Forests Restoration Act. The primary goal of these projects is to reduce the fire danger and return our forests and rangelands to a healthier state. The parameters of the Long Jim proposed action meet the requirements of the new categorical exclusion #10 (June 2003) under the Healthy Forests Initiative. The Long Jim Project involved a collaborative process that involved federal, state, local, and Tribal partners.

This decision may be categorically excluded from documentation in an Environmental Assessment or Environmental Impact Statement in part due to the routine nature of the proposed action.

Based on my review of the results from public scoping and resource specialist reports, the categorical exclusion is appropriate in this situation because there are no extraordinary circumstances or significant issues potentially having effects which may significantly affect the environment.

Public Involvement

Public scoping efforts and comments are contained in the Project File located at the Tusayan District Office. To identify potential issues and concerns, scoping was conducted with forest and district resource specialists, Arizona Game and Fish Department resource specialists, environmental groups, tribal heritage resource specialists, and local community members.

Internal coordination in the identification and development of the proposed action was a collaborative effort that involved the following Forest Service personnel, federal, state, local, and Tribal partners: Richard Stahn, Tusayan District Ranger; Barbara McCurry, NEPA Planner; Cris Cordova, Fuels Assistant and Project Leader; Calla McNamee, Heritage Specialist; Heather Neeley, Timber Specialist; Chris Worthington, Silviculturalist; Chuck Nelson, Wildlife Biologist; Joel McCurry, Recreation Specialist; Lauren Johnson, Noxious Plants, Range and Watershed Specialist; Mae Franklin, Navajo Tribal Liaison; Melissa Schroeder, Forest Tribal Liaison; Bob Blasi, Fire Prevention Officer; Matt Bratz, Arizona Game & Fish Department; Murrel and Nancy Booth (Apache Stables); Robbie Evans and Bruce Baker (Tusayan Fire Department); John Vail (Tusayan resident/business owner); Eric Gueissaz (Tusayan resident/business owner); and Chris Marks (Grand Canyon National Park).

The proposal was provided to the public and other agencies for scoping on March 23, 2005 with a comment period through April 22, 2005. The following agencies and organizations were contacted during scoping:

- Grand Canyon National Park
- Tusayan Fire Department
- Arizona Public Service
- Arizona Game and Fish

- U.S. West Communications
- Grand Canyon News
- Coconino County Sheriff's Office
- GCNP Airport
- Southwest Forest Alliance
- Forest Guardians
- Grand Canyon Trust
- Center For Biological Diversity
- Sierra Club, Grand Canyon Chapter
- KSGC Radio
- Rocky Mountain Elk Foundation
- Pacific Legal Foundation
- Tusayan Businesses and Residents
- Havasupai Tribe
- Hopi Tribe
- Hualapai Tribe
- Navajo Nation
- Pueblo of Zuni
- Yavapai-Prescott Indian Tribe

The Agency also issued a news release on April 13, 2005 that was published in the Williams -Grand Canyon News on the week of April 13, 2005 – April 19, 2005.

Two comments were received during the public scoping period. No significant issues were raised as a result of these comments [see Project File: 4-20-05 Seely email and 4-25-05 phone call documentation (Stahn and Seely); Forest Guardians' 4-21-05 Comment Letter and Agency Response Letter dated 5-25-05].

Findings Required by Other Laws

This decision is consistent with the Kaibab National Forest Land Management Plan as required by the National Forest Management Act. The project was designated in conformance with Forest Plan standards and incorporates appropriate Forest Plan guidelines and management direction for Ecosystem Management Area 8 where the project is located (Kaibab Forest Plan, pages 55-58 and 69-87).

This decision is consistent with the goals and objectives outlined in the National Fire Plan's Ten Year Comprehensive Strategy (2001) to reduce the total number of acres at risk to severe wildland fire; ensure communities at risk in the wildland-urban interface receive priority for hazardous fuels treatment; and expand and improve integration of hazardous fuels management program to reduce severe wildland fires to protect communities and the environment.

The proposed project conforms to Forest Plan standards and guidelines for heritage resource operations (Forest Plan, page 72). No sites, that are listed on, or potentially eligible for the National Register of Historic Places, will be affected by this project. This project is in compliance with the National Historic Preservation Act of 1966, as amended.

Heritage clearance for this project was obtained on July 20, 2005. All heritage sites have been recorded and will be marked for avoidance prior to implementation.

A biological assessment and evaluation, prepared by the district wildlife biologist on May 19, 2005, states that no suitable or critical habitat is occupied within the project area for any of the federally listed threatened or endangered species. Therefore, this action will have “no effect” on any federally threatened or endangered species or their critical habitat.

A management indicator species (MIS) report, prepared by the district wildlife biologist on January 24, 2005, concluded that there will be no significant negative effects from the implementation of this project on MIS species found within the project area.

The existing forest road system provides adequate access for implementation of project activities. There is no need to re-open closed roads, improve existing roads, obliterate or close existing roads, or construct new roads. Therefore, a formal roads analysis process (RAP) will not be undertaken for this project.

Implementation Date

This decision may be implemented immediately after my approval in this decision. Prior to implementation, on-site coordination must occur with the project coordinator, silviculturalist, and heritage specialist.

Administrative Review or Appeal Opportunities

This decision is not subject to administrative appeal pursuant to 36 CFR 215.12 (f).

Contact Person

For additional information concerning this decision or the Forest Service appeal process, contact Barbara McCurry, NEPA Planner, Tusayan Ranger District, P.O. Box 3088, Grand Canyon, Arizona 86023; phone 928-638-2443 or 928-635-8220; or e-mail bmccurry@fs.fed.us.

/s/ Richard Stahn

RICHARD STAHN
District Ranger
Responsible Official

8/15/2005

Date

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Printed on recycled paper – August 2005