
**Decision Memorandum on Action and for Application of:
Categorical Exclusion 1.12 – Hazardous Fuels Reduction Activities
East Fork Prescribed Burn
Ecosystem Restoration Project/Hazardous Fuels Reduction
US Department of the Interior
Bureau of Land Management
Arizona Strip District
Grand Canyon-Parashant National Monument
Mohave County, Arizona**

Project Description

The East Fork Project is an effort to reduce hazardous fuels and restore ecosystem function and condition by using prescribed fire and mechanical treatment. The treatment unit is within the Grand Canyon - Parashant National Monument near the BLM/NPS boundary. The 309 acre unit (attached maps) is best characterized as stands of ponderosa pine, with some pinyon, juniper, oak, shrubs, forbs, and grasses. There is a 36 acre portion of the unit currently covered mostly by sagebrush.

Prior to initiating operations, BLM would conduct surveys and inventories of cultural and biological resources, as necessary. BLM would then prepare the unit for burning, and then apply low intensity understory fire. Sagebrush in a 36 acre portion of the unit would be broken up and mulched using a mechanical device known as a brush hog, which is attached to a skid-steer vehicle. BLM also proposes to apply native seed to the unit immediately post-treatment. BLM would rehabilitate surface disturbance immediately after operations are completed. BLM would conduct post-treatment monitoring of effects.

Burn Preparation

BLM would use handtools, including chainsaws, to prepare the units for burning. Burn preparation consists of removing duff/litter concentrations and ladder fuels around significant features such as fences, signs, pre-settlement trees, snags, and downed logs. The units would not be thinned mechanically except within approximately 30 feet of such features (less than 5% of the project area). Crews would rake around these features, and cut, lop, and scatter smaller diameter, post-settlement trees and brush. Short sections of fireline would be constructed as necessary to prevent the spread of fire outside of unit boundaries. Fireline is not needed in most areas where bare soil, roads, or trails serve as an effective barrier. Where fireline is constructed (less than two miles) it would be the minimum necessary – usually consisting of a 1-3 ft wide handline with a 10 ft wide sawline on each side. All stumps would be flush cut and camouflaged to reduce visual impacts. An unofficial campsite within the unit would be prepped to minimize likelihood of any damage from burn operations.

Prescribed Fire

BLM would introduce low intensity understory fire during the fall or spring in accordance with an approved burn plan. BLM would analyze smoke production and dispersal patterns and apply for a Smoke Permit from the Arizona Department of Environmental Quality, and would not burn unless a permit is granted by the State.

Mowing/Mastication

Brush hogs masticate above-ground vegetation and create a rough mulch through a grinding process. The disturbance from the brush hog and the mulching would provide cover for the seed. Seed would be applied by hand or spreader on an ATV. If the soils are too moist or wet, the treatment would not be implemented due to soil compaction or over disturbance.

BLM would use hand seeders to apply native seed mix to the Treatment Unit, using species listed in Table 1. Some variation in seed mix could occur, based on price and availability.

Table 1. Potential species and application rates

SPECIES	LBS/ACRE
Big bluegrass (Poa ampla)	0.6
Sand dropseed (Sporobolus cryptadrus)	0.5
Sideoats grama (Bouteloua curtipendula)	1.5
Utah serviceberry (Amelanchier Utahensis)	0.5
Fringed sagebrush (Artemisia frigida)	0.5
Wood's rose (Rosa Woodsii)	0.5
Arizona fescue (Festuca Arizonica)	1.75
Prairie Junegrass (Koeleria cristata)	1.0
Bottlebrush squirreltail (Sitanion hystrix)	1.25
Slender wheatgrass (Agropyron trachycaulum)	1.25
Mountain brome (Bromus marginatus)	1.25
Western wheatgrass (Agropyron Smithii)	1.25

Monitoring/Research

Prior to burning BLM would monitor fuel conditions on the units, measuring fuel moistures, and estimating fuel density. During the burn operations BLM would monitor fire behavior. BLM would implement pre-project herbaceous vegetation monitoring to establish baseline grass/forb conditions, including establishing a photo-point, and post-burn monitoring to evaluate treatment effectiveness (objectives) and determine seed mix success.

There are ongoing USGS research efforts in the area, focusing mostly on the relationship between fire and cheatgrass. BLM would authorize non-intrusive USGS research efforts in the treatment unit.

Maintenance of Fire/Prescribed Burn Reentry

BLM would reenter the unit and apply low intensity, understory prescribed burning as necessary to complete treatments, and reapply prescribed fire on a five to 15 year cycle to mimic historic fire regimes.

Legal Land Description

- Maps showing project location attached
- Portions of T. 32 N., R. 12 W., sec. 23 and 26

Purpose and Need for the Action

While ponderosa pine forests in the region historically experienced low intensity fire on a short return interval, livestock grazing, timber harvesting, and fire suppression have altered the fire regime and resulted in fire exclusion. As a result of fire exclusion, unhealthy levels of fuel have accumulated, creating the risk of high intensity, stand replacing wildfires. Additionally, high densities of trees have

created unhealthy forest conditions where normal ecological functions are impaired and conditions are not conducive to ancillary values, such as wildlife habitat.

The goals of the project are:

- Restore ecosystem function and condition
- Reintroduce fire into the ecosystem
- Remove/reduce hazardous fuels
- Protect nearby private lands and structures from wildfire (Wildland/Urban Interface)
- Limit conflicts with visitors by avoiding burning during hunting seasons
- Minimize impacts on cultural resources
- Minimize impacts on wildlife and special status species (plants and animals)

Specific burn objectives are:

- Reduce forest litter and duff by 40-80% immediately postburn
- Reduce fuel loading of dead and down fuels <20" diameter by 40-80% immediately postburn
- Reduce live post-settlement overstory trees by 10-35% within two years postburn
- Reduce live understory trees and shrubs by 10-35% within two years postburn
- Increase native grass and forb cover by 5-25% within five years postburn
- Limit pre-settlement tree mortality from burn activity to less than 10% within five years postburn
- Limit consumption of presettlement snags from burn activity to less than 25%
- Limit reduction of downed logs greater than 20" diameter to less than 40%
- Keep the prescribed burn within the Maximum Manageable Area
- Limit smoke impacts on Class I airsheds in the Grand Canyon, nearby private lands, and wilderness areas to levels permitted by ADEQ
- Limit damage to structures such as fences to less than 5%
- Limit damage to historic structures, nearby private lands, and structures on private lands to 0%

Other agency involvements

The National Park Service, Lake Mead NRA will provide cultural inventories through an assistance agreement with BLM. The National Weather Service would provide weather forecast information. The State of Arizona Department of Environmental Quality would review applications for smoke permits and grant them, as appropriate. Arizona Game and Fish Department manages wildlife in the area in cooperation with BLM.

The Proposed Action is consistent with the 1992 Arizona Strip Resource Management Plan, as amended. The Proposed Action was designed in conformance with all bureau standards and incorporates appropriate guidelines for specific required and desired conditions relevant to project activities.

Specific RMP Decisions Include:

FW01 Develop and implement activity plans directed toward managing, maintaining and protecting ponderosa pine forest ecosystems located outside wilderness areas. Management practices that may be included in activity plans are:

1. Disease and insect control
2. Selective thinning necessary for the health, vigor, regeneration or biological diversity of the forest ecosystem.
3. Salvage harvest and rehabilitation of burned areas, diseased areas, and insect kill sites.
4. Reduction of fuel.
5. Prescribed burns.
6. Prescribed management of naturally occurring fires.

FW04 In forest management activities, ensure protection of natural aesthetics, recreation, special status species, cultural resources, and other multiple-use values.

The proposed action is in conformance with the following decisions as found in the Arizona Strip District RMP Implementation Plan of 1992 (Shivwits):

AFFECTED RESOURCE	DECISION NUMBER
Forest Resources	FW02, 06, 07, 15
Woodland Resources	FW03, 09, 19
Grazing Management	GZ01, 21
Recreation Resources	RR06, 13-1,3
Special Status Species	TE01, 02, 03
Soil, Water, Air Resources	WS01, 16, 20
Wildlife Resources	WL02
Transportation/Access	TA03

The proposal is consistent with the Parashant Interdisciplinary Plan (BLM/NPS, 1997), which states:

Objective C *Restore fire regimes to highest priority designated areas (based on Ecological Site Inventory and other planning) within the Parashant Area by the year 2000. Restore to other areas on an ongoing basis.*

Rationale: *Past and present fire suppression activities have resulted in unnatural ecosystem diversity and fuel build-up. Implementing this objective will restore the role of fire in the ecosystems.*

Actions: *CI. a. Prepare and implement Prescribed Fire Plans within one year of plan approval.*

Rationale: *This action will provide methodology to restore the natural role of fire and use it as a tool to meet resource management objectives.*

The proposal is consistent with the National Monument Interim Management Guidance (BLM Instruction Memorandum No. 2002-008), which states:

Vegetation Manipulation: *Vegetation manipulation should proceed only when consistent with conservation and protection of the national conservation area or monument's resources. Chaining and other vegetation manipulation methods that cause substantial surface disturbance shall not be permitted.*

The proposal is not inconsistent with the Proclamation for the Parashant National Monument (2000), which is silent on the issue of prescribed burning, but does direct the BLM and NPS to manage the Monument to protect Monument objects, which includes ponderosa pine forests that are at risk from catastrophic wildfires and other threats.

Compliance with the National Environmental Policy Act

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 2, Appendix 1, 1.12, because the project is outside wilderness and Wilderness Study Areas (WSAs), does not include any herbicide or pesticide use, requires no permanent road construction and the sale of vegetative material is not the primary purpose. The area is in Condition Class 3. The proposed project involves 309 acres of hazardous fuels reduction and prescribed fire treatment.

The application of this categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects which may significantly affect the environment. These extraordinary circumstances are contained in 516 DM 2, Appendix 2, and will be addressed below in the Exceptions Review.

Persons and Agencies Consulted

Arizona Game and Fish Department, Region II; NAU Ecological Restoration Institute; Lake Mead NPS; Wally Mathis (nearby landowner) were consulted.

Decision and Rationale on Action

It is my decision to implement the proposal to inventory, prepare, burn, rehabilitate, and seed the East Fork treatment unit. BLM will also monitor the project to determine if objectives have been met. Inventory activities include surveys for cultural and biological resources, and pre-burn vegetation monitoring.

Preparation activities include the construction of fireline using hand tools, including chainsaws, and selective thinning of small diameter pinyon, juniper, and ponderosa trees around fences, signs, pre-settlement trees, snags, and downed logs. The units will not be thinned mechanically except within approximately 30 feet of such features (less than 5% of the project area). Crews will rake around these features, and cut, lop, and scatter smaller diameter, post-settlement trees and brush. Short sections of fireline will be constructed as necessary to prevent the spread of fire outside of unit boundaries.

Burn activities include the application of fire in accordance with an approved Burn Plan, using a variety of handheld ignition devices, to create low intensity fire behavior and low burn severity. Rehabilitation includes obliterating firelines and any new ATV/vehicle routes and applying native seed to the burned area.

There are no anticipated significant impacts to any resource. In addition, I have reviewed the Plan conformance Statement and have determined that the Proposed Action is in conformance with the approved land use plan and that no further environmental analysis is required.

The action is necessary to attempt to restore fire as a natural process in the Grand Canyon – Parashant National Monument; to reduce abnormally high fuel loadings and ecosystem structure in vegetative communities that have been altered by past management activities; to increase biodiversity and promote the establishment of native grasses and forbs to aid in preventing soil erosion and increase wildlife forage; and, to restore wildlife habitat and increase potential habitat for sensitive species.

Compliance and Monitoring

BLM will implement pre-project herbaceous vegetation monitoring to establish baseline grass/forb conditions, including establishing a photo-point, and post-burn monitoring to evaluate treatment effectiveness (objectives) and determine seed mix success.

Measures will be taken to avoid impacts to cultural properties, special status species, wilderness, and visual resources. If any goshawk nest is found to be occupied in or near a treatment unit (or that may be affected activities occurring as part of this project) then BLM will flag prescribed avoidance area (based on 120 yard radius). All personnel will be notified and restrict activities to outside the avoidance area. These avoidance areas will remain in place until the nestlings have completely fledged. Occupied nest sites would be excluded from the burn treatment by constructing fireline outside the avoidance area. A qualified individual will be on site during all surface-disturbing activities to monitor compliance. Project personnel will adhere to Condor conservation measures (attached) at all times.

All vehicles and equipment used for this project would be power washed to remove any weed seeds or biomass prior to being brought to the project location. Should noxious weeds occur as a result of this treatment, BLM would follow up with appropriate treatment.

No work will be started before a cultural resource inventory has been completed and any sites found evaluated and a suitable mitigative treatment applied to minimize impact to any cultural resource. No fire will be allowed on archaeological (historic or prehistoric) sites that may be susceptible to fire damage such as sites containing wooden structures, or features, and rock art. On all other sites any heavy fuels loads will be removed from the sites to keep surface ground fire temperatures low and reducing the potential for destructive thermal alteration of artifacts, rock, or disturbance of subsurface features by prolonged exposure to high temperatures.

If, in connection with this work, any human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection Act are discovered, the operation would cease in the area of the discovery. The discovery would be protected and operations would not resume until authorized by the Monument Manager.

If a listed species is observed, all work in the area would stop and would not be allowed to resume if there was any possibility that activities could adversely affect the species. If it is determined that the project would affect any listed species, the project would halt until consultation with the US Fish and Wildlife Service could occur.

Prior to initiation of burn operations, BLM prescribed fire managers will contact Arizona Game and Fish Department Region II and schedule burning to avoid conflicts with hunting (burning is not prohibited during a hunting season, but should be avoided if practicable).

Implementation Date

This project will be implemented on or after July 1st, 2007.

Administrative Review or Appeal Opportunities

The decision is subject to administrative appeal to the IBLA (see 43 CFR 4 for appeal rules and information).

Contact Person

For additional information concerning this decision, contact Tim Duck, Fuels Program Manager, Arizona Strip District Office, 345 East Riverside Drive, St. George, Utah 84790, (435) 688-3238.

Dennis Curtis

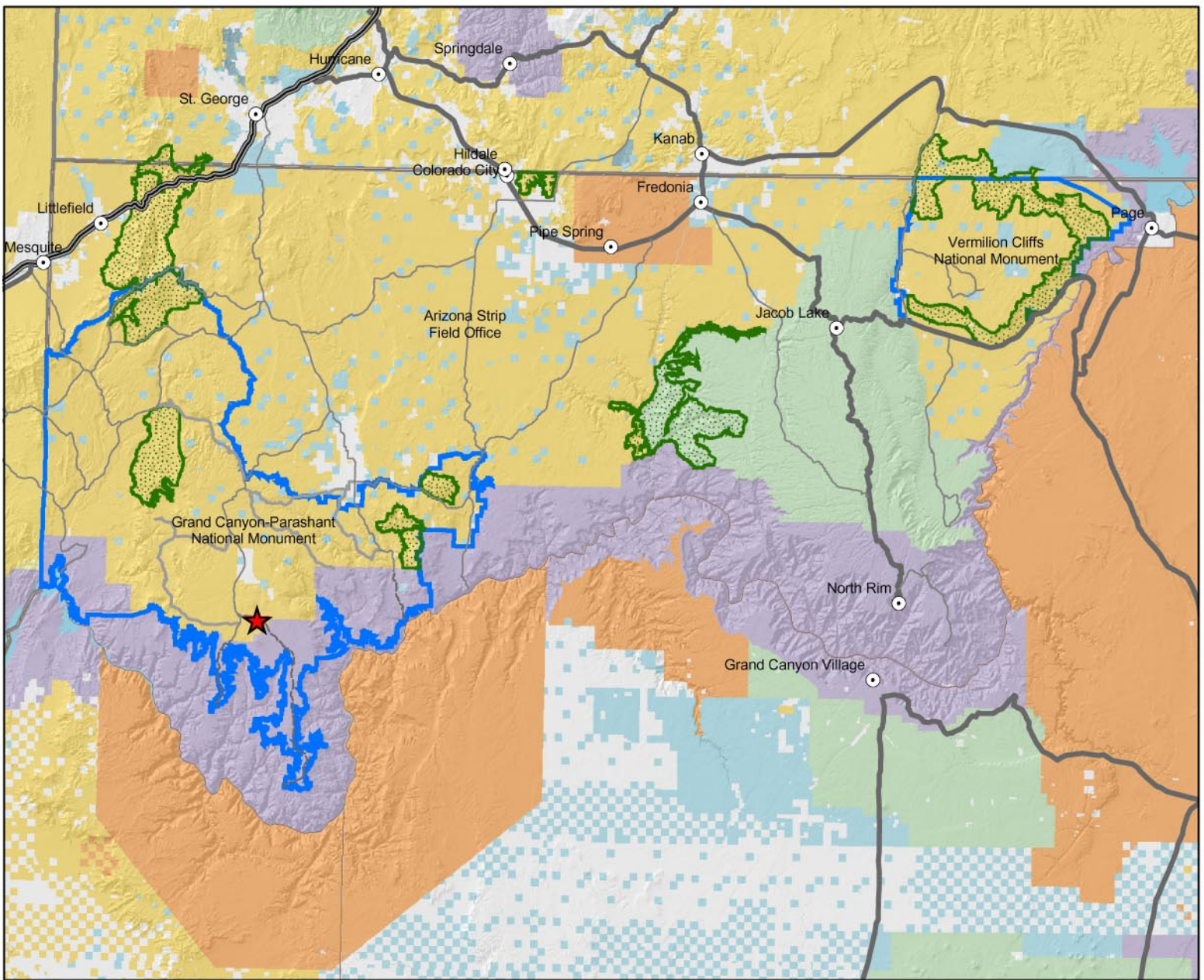
Date

Monument Manager
Parashant National Monument

Attachments:

- Location Maps
- Condor Mitigation

Exceptions Review		
List of Exceptions	Specialist Signature/Date	Comments/Explanation
1. Have significant adverse impacts on public health or safety.	Klein	
2. Have adverse effects on unique geographic characteristics, historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, or ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks.	Spotts Herron	
3. Have highly controversial environmental effects.	Spotts	
4. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.	Spotts	
5. Establish a precedent for future actions or represent a decision in principle about future actions with potentially significant environmental effects.	Spotts	
6. Be directly related to other actions with individually insignificant, but cumulatively significant environmental effects.	Spotts	
7. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places.	Herron	
8. Have adverse effects on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have adverse effects on designated critical habitat for these species.	Herder	
9. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act. Will not have adverse effects on impaired waters.	Herder	
10. Threaten to violate a Federal, State, local or tribal law or requirement imposed for the protection of the environment.	Spotts Benson	
11. Project was identified through a collaborative framework as described in the 10 year Comprehensive Strategy Implementation Plan.	Duck	
12. Project will not involve the construction of new permanent roads or other infrastructure, or have adverse effects on inventoried roadless areas.	Folks	
13. Project will not include sales of vegetative material that do not have hazardous fuels reduction as their primary purpose, or require the use of herbicides or pesticides.	Duck	
14. Project will not exceed 1,000 acres for mechanical hazardous fuels reduction activities and will not exceed 4,500 acres for hazardous fuels reduction activities using fire.	Duck	



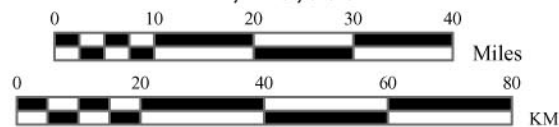
Legend

- | | | | |
|-----------------------|---------------------------|-----------------------|-------------------|
| Area of NEPA Project | Bureau of Land Management | National Park Service | Interstate |
| Designated Wilderness | State Lands | Indian Lands | Primary Routes |
| Monuments | Private Lands | National Forest | Secondary Routes |
| | | | Light Duty Routes |
| | | | 4WD Routes |

Location Map



1:1,220,000



CAUTION:
Land ownership data is derived from less accurate data than the 1:24000 scale base map. Therefore, land ownership may not be shown for parcels smaller than 40 acres, and land ownership lines may have plotting errors due to source data.

No warranty is made by the Bureau of Land Management for the use of the data for purposes not intended by the BLM.

