

**Decision Memorandum on Action and for Application of:  
Categorical Exclusion 1.12 – Hazardous Fuels Reduction Activities**

**Aspens Project/Hazardous Fuels Reduction**

**CX-AZ-130-2006-0053**

**US Department of the Interior  
Bureau of Land Management  
Grand Canyon-Parashant National Monument  
Mohave County, Arizona**

**Project Description**

Federal Wildland Fire Policy (FWFP) defines fire as a critical natural process that should be reintroduced for the benefit of ecosystem integrity. It also recognizes fire hazards that can result as fuels accumulate where fire has been suppressed and recommends that fire be used to reduce these high fuel loads. The Bureau of Land Management, Grand Canyon-Parashant National Monument proposes to treat approximately 62 acres of quaking aspen (Populus tremuloides) on the north slope of Mt. Logan that are becoming decadent. The aspen are threatened with competition from nearby stands of oak and conifers (ponderosa and piñon-juniper). The sites have been protected from wildfire and other disturbances necessary for aspen regeneration, which has allowed high fuel loads to accumulate. As a result the aspen stand is nearly devoid of regeneration and remaining aspen overstory is dead or declining.

The Aspens Project is an effort to reintroduce low intensity fire into these stands in an effort to reduce hazardous fuels and restore ecosystem function and condition. BLM proposes to mechanically thin, burn, and seed 62 acres within and surrounding these aspen patches within the Grand Canyon-Parashant National Monument. The Aspen North treatment unit is three acres below the north overlook on Mt Logan, in T34N, R9W, Section 12. The Lower Aspen treatment unit includes 59 acres in T34N, R8W, Sections 7 and 18 (see attached location map).

Mechanical activities include the construction of fireline using hand tools, including chainsaws, and selective thinning of brush and small diameter piñon and juniper around aspen trees to remove potential ladder fuels and reduce competition.

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. Burning would be conducted only when it would not emit smoke into the Grand Canyon, a Class I airshed.

Rehabilitation includes obliterating firelines and applying native seed to the burned area.

The Lower Aspen unit is best characterized as mostly pure stands of aspen surrounded by piñon, juniper, ponderosa pine, oak, shrubs, forbs, and grasses. The lower unit is within an enclosure cooperatively developed by BLM and Arizona Game and Fish Department to protect a wildlife catchment and grassy meadow.

The Aspen North unit is characterized as a very rocky, steep slope with a very low volume spring or seep, with a small aspen stand surrounded by ponderosa pine, oak, and shrubs.

The treatment units have been inventoried for cultural resources. Any surface or sub-surface archaeological, historical, or paleontological remains not covered by the Cultural Resource Project Record discovered during preparation or actual work would be left intact; all work in the area would stop immediately and the Monument Manager would be notified. Commencement of work would be allowed upon clearance by the Manager in consultation with the Archaeologist. Additional archaeological survey would be required in the event the proposed project location is changed, or additional surface disturbing

activities are added to the project after the archaeological survey. Any such survey would have to be completed prior to the commencement or continuation of the project.

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.

The area has been inventoried for T/E or other special status species. A qualified biologist would be on site during all activities to monitor compliance. If a listed species was observed during preparation or burning, 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.

Portions of the Lower Aspen treatment unit that contain a high density of carvings or glyphs would be excluded from the thinning and burning treatments. Trees with carvings would not be cut; by handlining and through appropriate burn techniques these trees would not be burned. This will have the effect of restricting treatment on a substantial portion of the aspens, and provide a 'reserve area' that will be left untreated. This will provide an opportunity to study treatment options within the stand.

#### Mechanical Treatment

Dead or declining aspen would be felled. Post-settlement conifer and brush species would be felled or eliminated. Pre-settlement trees would not be treated. Approximately 10-15 mature aspens per acre would be retained in order to maintain viable root stock. Smaller aspen trees of favorable health would be retained. In addition, any tree deemed significant to wildlife would be retained.

#### 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 identified cultural sites. 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 areas where roads serve as an effective barrier. Where fireline is constructed 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. Crews would construct fireline around the wildlife catchment in the NE corner of the Lower Aspen treatment unit.

#### 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. The burn plan would prescribe environmental conditions under which burning could occur that would meet the objectives for the treatment.

Crews would implement measures to keep fire from damaging resources (fences, catchment, pipeline, cultural sites, pre-settlement trees, snags, and downed logs, ponderosa seedlings, research plots)

#### 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 and post-burn monitoring to evaluate treatment effectiveness (objectives) and determine seed mix success.

The treatment unit is immediately adjacent to the BLM/AGFD/NAU-ERI Mt Trumbull Ecosystem Restoration Project. BLM would authorize non-intrusive research efforts in the treatment units.

#### Maintenance of Fire/Prescribed Burn Reentry

BLM would reenter the units and mechanically treat locust or other brush species 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.

#### Seeding

BLM would use hand seeders to apply native seed mix to the units, using species listed in the following table. Some variation in seed mix could occur, based on price and availability.

SPECIES	LBS/ACRE
<b>Big bluegrass (Poa ampla)</b>	<b>0.6</b>
<b>Sand dropseed (Sporobolus cryptadrus)</b>	<b>0.5</b>
<b>Sideoats grama (Bouteloua curtipendula)</b>	<b>1.5</b>
<b>Arizona fescue (Festuca Arizonica)</b>	<b>1.75</b>
<b>Prairie Junegrass (Koeleria cristata)</b>	<b>1.0</b>
<b>Bottlebrush squirreltail (Sitanion hystrix)</b>	<b>1.25</b>
<b>Slender wheatgrass (Agropyron trachycaulum)</b>	<b>1.25</b>
<b>Mountain brome (Bromus marginatus)</b>	<b>1.25</b>
<b>Western wheatgrass (Agropyron Smithii)</b>	<b>1.25</b>

#### **Goals and Objectives**

The goals of the project are:

- Restore ecosystem function and condition
- Reintroduce fire into the ecosystem
- Remove/reduce hazardous fuels
- Provide treatment options for research
- Limit conflicts with visitors by avoiding burning during mule deer hunting season
- Enhance recreation settings for the long term
- Minimize impacts to visual resources
- 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 20-80% immediately post burn

Reduce live post-settlement aspen trees to 10-20 stems /acre immediately post burn

Reduce live understory trees and shrubs by 60 - 80% within one year post burn

Limit pre-settlement tree mortality from burn activity to less than 10% within five years post burn

Limit consumption of presettlement snags from burn activity to less than 10%

Limit reduction of downed logs greater than 20" diameter to less than 80%

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%

Zero reportable accidents/injuries

Zero injuries to goshawks, zero goshawk nests damaged

### **Other agency involvements**

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 could provide monitoring/inventory of wildlife.

### **Plan Conformance**

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 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 (as amended):

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 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.*

#### **Grand Canyon - Parashant National Monument**

From the Presidential Proclamation of January 11, 2000: "The Grand Canyon-Parashant National Monument is a vast, biologically diverse, impressive landscape encompassing an array of scientific and historic objects. This remote area of open, undeveloped spaces and engaging scenery is located on the edge of one of the most beautiful places on earth, the Grand Canyon. Despite the hardships created by rugged isolation and the lack of natural waters, the monument has a long and rich human history spanning more than 11,000 years, and an equally rich geologic history spanning almost 2 billion years. Full of natural splendor and a sense of solitude, this area remains remote and unspoiled, qualities that are essential to the protection of the scientific and historic resources it contains."

Interim Management for the Grand Canyon-Parashant National Monument was developed from the Monument Proclamation and Bureau policy and includes the statement: "*In general, actions that are not precluded by the Proclamation or legislation and which do not conflict with the established purposes of the monument or national conservation area may continue. Allowed activities can be restricted only where (1) the BLM, through processes required by existing law, identifies places where such uses ought to be restricted or prohibited as necessary to protect the federal lands and resources, including the objects protected by the monument or national conservation designation; or (2) where the BLM finds a clear threat from such a use to the federal lands and resources, including the objects protected by the national conservation area or monument designation and the circumstances call for swift protective action.*" (Instruction Memorandum No. 2002-008 Interim Management Policy for Bureau of Land Management National Monuments and National Conservation Areas).

The proposal is not inconsistent with the Proclamation for the Grand Canyon - 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 aspen forests that are at risk from catastrophic wildfires and other threats.

## **Mt Trumbull Resource Conservation Area**

The Mt Trumbull RCA Plan (June 1995) identified issues and objectives for management of the area:

*Major Issue 1 - "Past and current management practices in the Mount Trumbull RCA are allowing some less than desirable vegetative/soil conditions and are promoting conflicts among different uses of these resources."*

*Objective 1 - Restore the ponderosa pine vegetation type to a mosaic of uneven aged stands with an understory of grass and forbs with small openings, allowing wildfire to return as a natural process of the ecosystem.*

*Major Issue 3 - " Opportunities for the public to engage in high quality, backcountry, recreation activities need to be maintained."*

*Objective 4 - Manage the spectrum of recreational settings in the Resource Conservation Area so that selected indicators of resource and social conditions are within or below the ranges described in Table 9.*

*While not specifically mentioned in the Mt Trumbull RCA Plan, this project is consistent with the goals and objectives for the area. Recreation settings, and their ability to produce opportunities for various recreation activity and experience opportunities, would be slightly hindered during the early stages of the project, but moderately enhanced with successful completion of the project. Likewise, visual contrasts would be created early in the project, but VRM Class II objectives would be achieved with the successful completion of the project's seeding component.*

### **Standards and Guidelines**

The Arizona Standards and Guidelines for Rangeland Health include the following:

*Standard 1: Upland Sites: Upland soils exhibit infiltration, permeability, and erosion rates that are appropriate to soil type, climate, and landform (ecological site).*

The proposed action is to reintroduce low intensity fire into the treatment areas, then to seed. Low intensity fire was a frequent occurrence prior to European settlement. Based on similar treatments in the area, that there would be only negligible change to soil infiltration, permeability, and erosion from low intensity fire. The proposal would not preclude attainment of Standard #1.

This proposed application of low intensity fire differs from the impacts that a high intensity wildfire would have. Under summertime conditions, the intensity and severity of a wildfire in these areas could have the effect of reducing permeability, increasing erosion, and perhaps even sterilizing soils. Failure to implement the proposal could lead to a situation where Standard #1 would not be met.

Fires could result in some soil erosion and run-off, depending on amount of vegetation burned, soil, slope, and fire frequency. In the event that a high intensity fire occurs, this could result in soil sterilization that could take several years to recover. Most impacts to soils would be short-term (less than 5 years).

*Standard 2: Riparian-Wetland Sites: Riparian-wetland areas are in properly functioning condition.*

There are no riparian/wetland sites within the unit, nor any that would be affected by the proposal..

*Standard 3: Desired Plant Communities: Productive and diverse upland and riparian-wetland plant communities of native species exist and are maintained.*

In past prescribed burns in overdense ponderosa pine forests in the area, grasses and forbs have re-established in the burn areas and have provided ground cover, decreasing erosion. There would be a

temporary, short-term loss of herbaceous ground cover in treatment unit. The current % of ground cover in the form of duff and leaf/needle litter is quite high, nearly 100% in some areas. There would be short-term loss of ground cover in areas covered by needle and duff litter, but it is expected that herbaceous cover would increase within one or two growing seasons.

The proposed project would be in compliance with the Arizona Standards and Guidelines for Rangeland Health and would not preclude attainment of any of the three standards.

### **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 62 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**

The Grand Canyon Trust, NAU Ecological Restoration Institute and Arizona Game and Fish Department were consulted.

### **Decision and Rationale on Action**

It is my decision to implement the proposal to prepare, burn, rehabilitate and seed the Aspens Treatment Unit.

Preparation activities include the construction of fireline using hand tools, including chainsaws, and selective thinning of small diameter piñon, juniper, and brush around aspen trees (to remove ladder fuels), and felling dead or declining aspen. Post-settlement conifer and brush species will be felled or eliminated. Pre-settlement trees will not be treated. Approximately 10-15 mature aspens per acre will be retained in order to maintain viable root stock. Smaller aspen trees of favorable health will be retained. In addition, any tree deemed significant to wildlife will be retained.

Portions of the Lower Aspen treatment unit that contain a high density of carvings or glyphs will be excluded from the thinning and burning treatments. Trees with carvings will not be cut; by handlining and through appropriate burn techniques these trees will not be burned. This will have the effect of restricting treatment on a substantial portion of the aspens, and provide a 'reserve area' that will be left untreated. This will provide an opportunity to study treatment options within the stand.

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 that will meet the goals and objectives described in the CX.

Rehabilitation includes obliterating firelines and applying native seed to the area. Treatment area monitoring will be conducted before, during, and after the burn to determine if objectives are being met.

BLM will reenter the units 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.

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**

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 by 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 will 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. BLM will adhere to condor management guidelines (attached).

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 will be protected and operations will not resume until authorized by the Monument Manager.

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

### **Implementation Date**

This project will be implemented on or after October 15, 2006.

### **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 Field Office, 345 East Riverside Drive, St. George, Utah 84790, (435) 688-3238.

---

**Dennis Curtis**

Grand Canyon - Parashant National Monument Manager

---

**Date**

### **Attachments:**

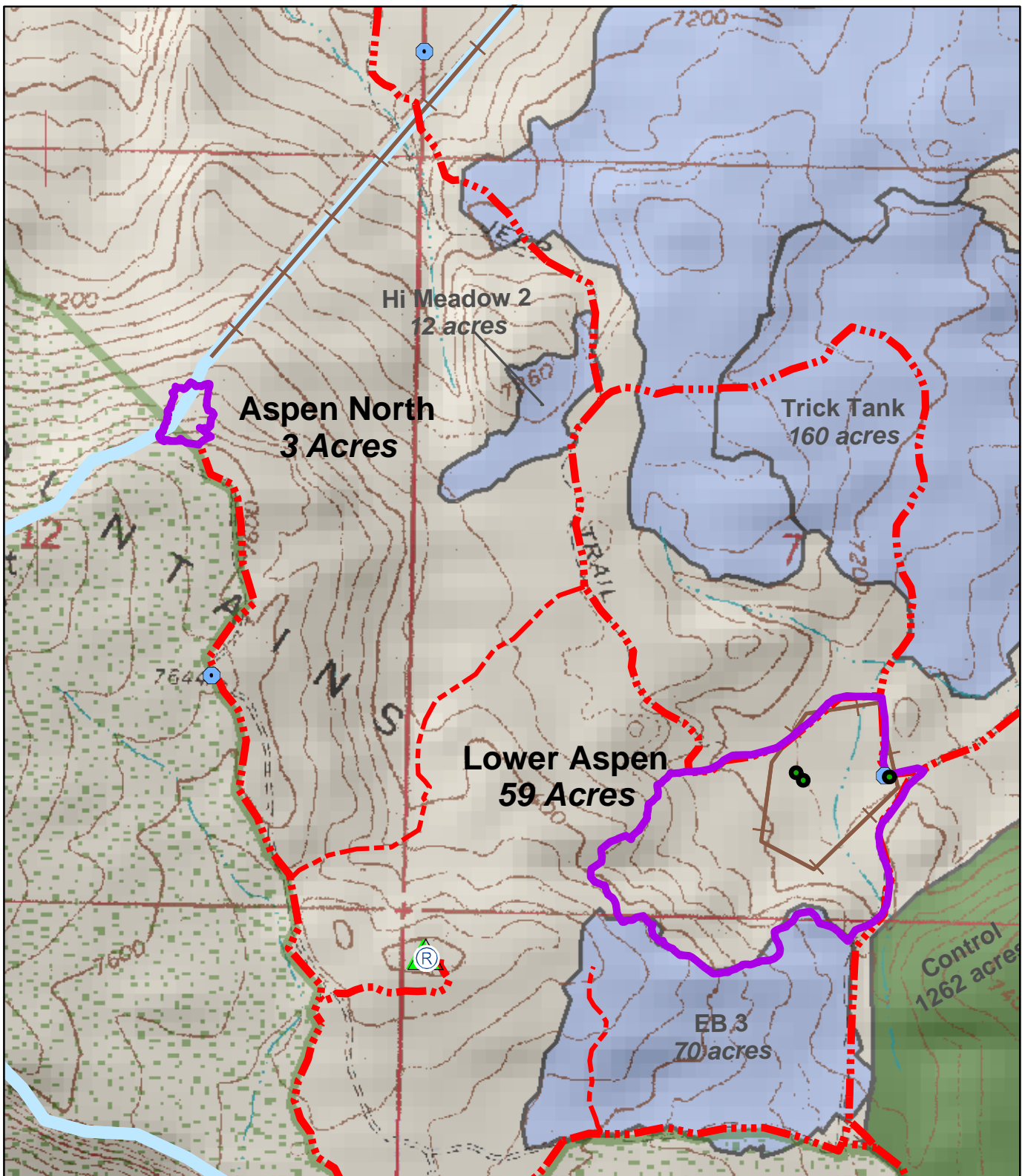
Location Maps  
Condor Mitigation

<b>Exceptions Review</b>		
<b>List of Exceptions</b>	<b>Specialist Signature/Date</b>	<b>Comments/Explanation</b>
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.	Smith	
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/Bailey	
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.	Wilkerson	
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	

**Attachment to Aspens CX Condor Mitigation Stipulations**

**The following Conservation Measures apply to BLM-administered lands within the designated 10(j) area for California condors:**

- CC-1 All helicopter dip tanks will be covered when not in use.**
- CC-2 Any presence of condors in the project area will be recorded and reported immediately to the Resource Advisor.**
- CC-3 If condors arrive at any area of human activity associated with fire suppression or fuels treatment projects (wildland fire use, prescribed fire, vegetation treatments), the birds will be avoided. The assigned Resource Advisor or a qualified wildlife biologist approved by BLM will be notified, and only permitted personnel will haze the birds from the area.**
- CC-4 All camp areas will be kept free from trash.**
- CC-5 Aircraft use along the Vermilion Cliffs or sites where condors are attempting to breed or roost will be minimized**
- CC-6 The Resource Advisor will contact the Peregrine Fund daily (at 520-606-5155 or 520-380-4667) to check on locations of condors during fire suppression or fuels treatment activities involving aviation. This information will be communicated to the Incident Commander and aviation personnel.**
- CC-7 If any fire retardant chemicals must be used in areas where condors are in the vicinity (see CC-6), the application area will be surveyed and any contaminated carcasses will be removed as soon as practical to prevent them from becoming condor food sources.**
- CC-8 Aircraft will remain 400 meters from condors in the air or on the ground unless safety concerns override this restriction. If airborne condors approach aircraft, aircraft will give up airspace to the extent possible, as long as this action does not jeopardize safety.**
- CC-9 Smoke from wildland fire use and prescribed fire projects will be managed to minimize negative effects to condor breeding. A potential wildland fire use event will not be initiated, or an existing event will be modified or terminated, to prevent or stop significant amounts of smoke, or smoke that will remain in place for an extended period of time, or chronic smoke events, from occurring in area(s) where condors are attempting to breed.**
- CC-10 BLM will adhere to the air quality standards set by the Arizona Department of Environmental Quality.**



**MT. TRUMBULL PONDEROSA PINE ECOSYSTEM RESTORATION PROJECT**  
**Aspen Rx Units**

- |                    |                    |                            |
|--------------------|--------------------|----------------------------|
| Aspen Rx Units     | Treated            | National Monument Boundary |
| Soil Pits          | Control            | Fence                      |
| Wildlife Catchment | Grazing Allotments | Primary Road Unpaved       |
| Repeater           | Wilderness         | Secondary Road Unpaved     |
| Communication Site | Private            | Tertiary Road Unpaved      |
|                    | State              |                            |



This map was produced by  
 Arizona Strip District Office Staff  
 17 May 2006



This product may not meet agency standards for accuracy and content. Differing data sources and input scales may cause some misalignment of data layers.