



## DECISION MEMO

### **Ryan One Wildlife Habitat Improvement Project**

United States Department of Agriculture  
Forest Service

Southwestern Region, R-3  
KAIBAB NATIONAL FOREST

North Kaibab Ranger District  
Coconino County, Arizona

#### **Decision**

It is my decision to implement thinning, seeding and pile burning techniques to improve approximately 1,114 acres of pinyon-juniper habitat for wildlife use. The area lies 2 miles east of the White Sage community, and 7 miles west of Jacob Lake at the junction of Forest Roads 422A and 22. The location and treatment areas are shown on the attached map.

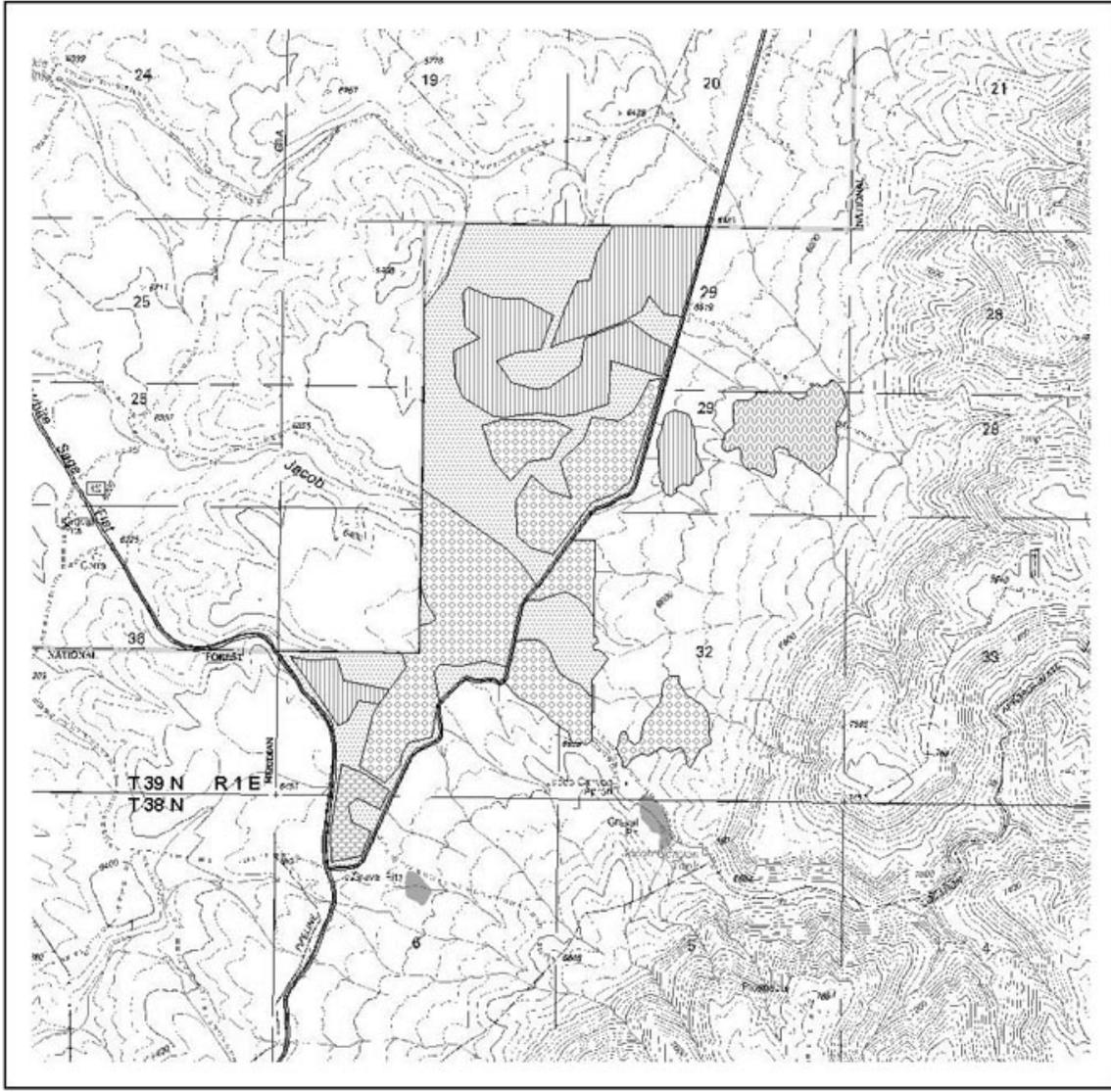
The project's western and northern boundaries are shared with the Arizona Strip Bureau of Land Management. The southwestern edge adjoins Forest Development Road (FDR) 22, and the eastern boundary is approximately one mile east of FDR 422A. The 1,114-acre project is located entirely in Coconino County, Arizona in T. 39 N., R. 01 E., in all or portions of Sections 29, 30, 31, 32; and T. 38 N., R. 01 E. in part of Section 6 (Gila and Salt River Meridian). The actions proposed for the project area include (see attached map for locations):

- Thinning pinyon-juniper areas using mechanical and/or hand tools (1,114 acres).
- Creating sporadic, small (1-4 acre) openings with uneven edges to mimic natural patterns (within 338 acres of pinyon-juniper thinning areas), followed by seeding natural plant seeds in the created openings using a rangeland drill seeder – approximately 100 acres.
- Cleaning areas after thinning with an agri-axe to remove or crush smaller vegetation and prepare created openings for seeding (730 acres).
- Hand or machine piling existing and thinning/cleaning woody debris, leaving between 4-6 tons per acre (1,114 acres).
- Burning the piles after the wood has time to dry out (approximately one year after cutting).

The entire project area (1,114 acres) is proposed for thinning, piling and burning, but only a portion of the project area would have openings created followed by seeding. The exact number of acres to be cleared for openings has not been determined at this time, but is expected to not exceed 100 acres.

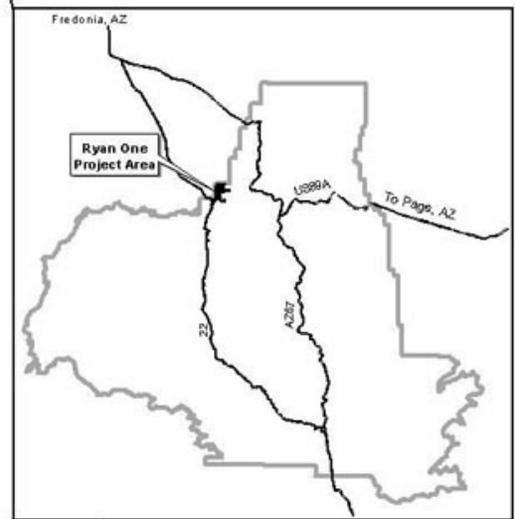
All areas receiving thinning will be available for piling and burning. Acreages are not meant to total because some areas will receive multiple types of treatment. Refer to the attached map for treatment combinations by area.

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**Treatment Areas**

-  Roads
-  Thin or crush existing cliffrose and sage plants with agri-axe only to stimulate new growth. Pile and burn existing slash where needed.
-  Thin using handtools only and follow with hand-piling of slash and pile burning.
-  Thin juniper only followed by agri-axe cleaning and pile burning.
-  Thin using mechanical or handtools followed by agri-axe cleaning, machine or hand piling and burning.
-  Thin using mechanical or handtools creating 1-4 acre openings to be drill-seeded. Follow thinning with agri-axe cleaning, machine or hand piling and pile burning.





## **Purpose and Need for the Decision**

This area is dominated by pinyon pine and juniper trees growing more densely than suggested by historical information. Other areas of similar density have shown die-off in pinyon pines from *Ips* spp. beetle attacks combined with drought (e.g. LeFevre, Trail Canyon, etc.). Overstocking combined with reduced moisture in recent years has led to a reduction in herbaceous plant species quantity and quality that provide important forage for wildlife. Reduction in the number of trees per acre would reduce the stress on the remaining trees, limit the between-tree movement of *Ips* spp., reduce the potential for high intensity wildfire, and reduce competition for limited moisture available for ground level plants.

Intermingled with the pinyon-juniper trees are areas dominated by decadent sage and cliffrose plants. These plants need stimulation for new growth and thinning to provide a greater variety of vegetative material for wildlife to use.

Most of the area received “push” treatments in the 1950s. Vegetation in these areas was pushed out by a bulldozer, or was pulled up by large chains pulled between two bulldozers. After clearing, the areas were seeded with native and desirable range vegetation. In a matter of 50 years, trees have grown to cover most of the areas again. These areas are not considered old growth pinyon-juniper woodlands. In the past several years, *Ips* spp. beetles have attacked and killed pockets of pinyon pines. No recent fires of substantial size have occurred in the project area.

There are many indications that the project area is in an unhealthy condition. For example, high levels of drought and insect related tree mortality are present. There are dense understory thickets of juniper and sage that restrict understory plant growth and variety. Many areas are composed of an unsustainable combination of plant and tree species, high densities, and age structures where competition for light, water, and nutrients creates stressful conditions and reduces growth.

The project area is at a critical juncture. Nature’s response to the conditions within the project area has been clearly evidenced on the North Kaibab Ranger District and numerous similar locations throughout the Southwest in the form of catastrophic levels of tree mortality caused by the combined effects of insects, drought and wildland fire. These effects have been dramatic, and with similar conditions evident in the project area, there is increased public concern about forest health and the potential for high-intensity wildland fires. Past grazing, natural plant growth and fire suppression practices have all contributed to the development of the current conditions.

The desired condition for this area will provide suitable winter sheltering areas for some bird species and mule deer; will provide a variety of plants for deer browse; will sustain tree stocking levels appropriate for the area; and will not exceed current levels of fuel loading. Clumps and groups of pinyon and juniper provide winter sheltering areas with a heavier amount of pinyon trees than juniper. Tree stocking levels will be higher on north slopes, consistent with higher natural moisture levels on those sites. Understory plant variety is acceptable, but occupancy throughout the area needs to increase. Decadent sage and cliffrose plants need to be regenerated or invigorated. Most treatments that alter plant stocking also increase fuel loading in the area. Fuel management should focus on maintaining existing down woody materials suitable for wildlife use, while reducing likelihood for stand-replacing wildfire events.

In order to achieve the desired condition for the project area, the specific purpose and need of the action is to manipulate the vegetation in the project area to increase the quality and quantity of forage and browse plant species available for wildlife; to maintain and restore pinyon-juniper woodland health by reducing



tree competition and density; and to reduce the potential for wildfire by controlling fuel loading levels. These objectives will be met while maintaining scenic quality and recreation opportunities.

### **Rationale for Categorical Exclusion Under the National Environmental Policy Act**

Based on the analysis I have reviewed (contained in the project file) and the rationale described below, I have determined that this is an action with no associated extraordinary circumstances having a significant effect on the human environment.

The Chief of the Forest Service has determined, based on a history of implementing similar activities, that this type of action normally does not individually or cumulatively have a significant effect on the quality of the human environment and therefore, may be categorically excluded from documentation in an environmental impact statement or an environmental assessment.

This rationale is derived from the final interim directive by the Forest Service, USDA No. 1909.15-2002, Effective August 23, 2002; Section 30.3.

A proposed action may be categorically excluded from further analysis and documentation in an environmental impact statement or environmental assessment only if there are no extraordinary circumstances related to the proposed action and if:

- a. The proposed action is within one of the categories in the Department of Agriculture (USDA) NEPA policies and procedures in 7 CFR part 1b, or
- b. The proposed action is within a category listed in section 31.2

The mere presence of one or more of these resource conditions does not preclude use of a categorical exclusion. It is the degree of the potential effect of a proposed action on these resource conditions that determines whether extraordinary circumstances exist.

- I have determined that this action is within the following category: FSH 1909.15, chapter 30, section 31.2 category 6, *“Timber stand and/or wildlife habitat improvement activities which do not include the use of herbicide or do not require more than one mile of low standard road construction (Service level D, FSH 7709.56).”*
- I have considered the following resource conditions in my determination of the presence of extraordinary circumstances and whether the extraordinary circumstances that are related to the proposed action warrant further analysis and documentation in an environmental assessment or an environmental impact statement:

- a. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species

Federally listed species and their habitat are not present; thus, no affect to them by the proposed activities. No species or habitat proposed for listing occurs within the project area. Northern goshawk, a Forest Service sensitive species, may utilize the area for wintering only, so no impact to the goshawk is expected. California condors (an ESA 10J population) may visit the area infrequently, and conservation measures have been built into the project to limit their interaction with humans. No negative impact to any of these species is expected from this project.



Neotropical migratory birds utilize the area for breeding. To limit impacts on those species, no activities will occur between May 1 and June 15 which will allow most species to fledge their young. This restriction of activities noted in the Forest Plan for the period of June 15 to August 10 for mule deer fawning is inappropriate for this area because fawning areas are generally on the Plateau, and will not be observed (see project record).

b. Flood plains, wetlands, or municipal watersheds

The area is not in a floodplain and does not support a wetland or supply a municipal watershed. No detrimental impact is expected.

c. Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas

None occur in the project area, so there will be no impact.

d. Inventoried roadless areas

None occur in the project area, so there will be no impact.

e. Research natural areas

None occur in the project area, so there will be no impact.

f. American Indian and Alaska Native religious or cultural sites

The area has been surveyed, and the project will avoid impacts to any located sites. Collaboration on this project was completed with the Hopi and Kaibab Paiute Tribes (see Project Record), and no issues were raised.

g. Archaeological sites, or historic properties or areas

Some sites occur within the area and will be protected. The State Historic Preservation Office (SHPO) has concurred with the project review (Project Number 2005-01).

## **Public Involvement**

Scoping letters were mailed on July 13, 2005, to 28 interested persons and groups. Three comment letters were returned, one requesting information on plant species in the area, and noting conservation measures be added to the project. Plant information was provided and the conservation measures were added to the project.

A second commenter agreed with the project, thought the amount of openings being created were too few, and wanted to see more activities of this kind applied to a larger area. There are limited areas where openings can be created – roughly 338 acres. The project design allows about 30% of the 338 acres to have openings created, and all areas must comply with the Forest Plan standard of retaining 40% cover on the area. Creating more openings is not feasible in this project area due to other resource constraints.

The third commenter wanting grazing, thinning and fire suppression stopped and roads closed; and wanted prescribed fire to be the tool used to achieve the desired condition (see Project Record). The appropriateness of grazing, fire suppression and road closures were outside the scope of this project, and



prescribed fire in this area would violate Forest Plan direction for Ecosystem Management Area 12, leaving thinning as the available tool to achieve the desired condition in the project area.

### **Findings Required by Other Laws**

The actions of this project are consistent with the Land and Resource Management Plan; and therefore, consistent with the National Forest Management Act. The following paragraphs are my reasons for this finding:

1. This project is consistent with the forest-wide standards and guidelines (FLMP pages 16-20, and 22-34).
2. This project is consistent with the standards and guidelines for Ecosystem Management Unit 12 (FLMP pages 62-65, and 69-87).
3. This project is consistent with the best management practices related to noxious weed management amended to the plan in Amendment 7 (FLMP page 34-1, Appendix B).

The management practices associated with these actions involve the manipulation of vegetation and were designed to comply with the seven requirements of 36 CFR 219.27(b). Specifically shall:

1. *Be best suited to the multiple-use goals established for the area with potential environmental, biological, cultural, aesthetic, engineering and economic impacts, as stated in the regional guide and forest plan be considered.*

Identified under "Findings Required by Other Laws."

2. *Assure that lands can be adequately restocked except where permanent openings are created for wildlife habitat, vistas, recreation and similar practices.*

Not applicable, regeneration is not a goal of this activity.

3. *Not be chosen primarily because they will give the greatest dollar return or the greatest output of timber.*

These practices were not chosen primarily because they will give the greatest dollar return or the greatest resource response.

4. *Be chosen after considering the potential effects on residual trees and adjacent stands.*

These practices were chosen after considering the potential effects on residual trees and adjacent stands. The post-activity effects are designed to improve the residual trees and other vegetation as well as animal populations.

5. *Avoid permanent impairment of site productivity and ensure conservation of soil and water resources.*

These practices avoid permanent impairment of site productivity and ensure conservation of soil and water resources. Reducing canopy shade and applying native plant seed increases ground cover on an area and conserves soil and water resources.

6. *Provide the desired effects on water quantity and quality, wildlife and fish habitat, regeneration of desired species, forage production, recreation uses, aesthetic values, and other resource yields.*



These practices provide the desired effects on water quantity and quality, wildlife habitat, regeneration of species useful to wildlife, and not reduce the utility of the area for recreation and visual resources.

- 7. *Be practical in terms of transportation and harvesting requirements, and total costs of preparation, logging and administration.*

These activities are practical by using the existing transportation system. Total cost of preparation and administration are within normal parameters for these types of activities.

The management practices associated with these actions do not have a disproportionately high and adverse effect on the human health or the environment of minority or low-income populations (Executive Order 12898, 2/11/94).

**Implementation Date**

Pursuant to 36 CFR 215.8(a)(4), this decision is not subject to a higher level of review. Implementation of this decision may begin immediately.

**Administrative Review Opportunity**

This decision is not subject to appeal, pursuant to 36 CFR 215.12(f)(4). For questions or additional information related to this decision, contact Kyra Sanders, District Biologist, by mail at P.O. Box 248, Fredonia, AZ 86022; by phone at 928-643-7395 or by email at kcsanders@fs.fed.us.

**/s/ Angelita Bulletts  
for**

**September 15, 2005**

JILL LEONARD (Responsible Official)  
District Ranger

Date

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