

Decision Notice
& Finding of No Significant Impact

Buckhorn Allotment Watershed and Wildlife Habitat Improvements

USDA Forest Service
Red Rock Ranger District, Coconino National Forest
Yavapai and Coconino Counties, Arizona

Decision and Reasons for the Decision

Background

The M Diamond Ranch, grazing permittee on the Buckhorn Range Allotment on the Coconino National Forest, has proposed a combination of erosion control and wildlife habitat improvements within the allotment. These would be accomplished using grant funds from the Arizona Department of Environmental Quality for nonpoint source pollution control and from the Arizona Game & Fish Department through their Habitat Partnership program. The improvements would be located within the Wickiup, Winter, Boulder, Bald Hill, Indian Flat, Painted Tank, and Buckhorn Pastures of the allotment. All are within the Red Rock Ranger District. The proposed action is a combination of treatments intended to restore ecosystem conditions and move from the existing conditions toward desired conditions as specified in the Coconino National Forest Land and Resource Management Plan.

This portion of the allotment is located immediately north of West Clear Creek and extends east-west over about 12 miles, beginning about 7 miles east of Camp Verde.

The project area is located within three Management Areas (MA) of the Coconino National Forest Land and Resource Management Plan:

- MA 7 – Pinyon-juniper woodlands on slopes less than 40 percent
- MA 10 – grassland and sparse pinyon-juniper
- MA 11 – Verde Valley

Decision

Based upon my review of the alternatives described and analyzed in the environmental assessment (EA), I have decided to implement Alternative B, which was the proposed action. This alternative includes a combination of treatments intended to restore ecosystem conditions and move from the existing conditions toward desired conditions as specified in the Coconino National Forest Land and Resource Management Plan. The three treatment objectives for different areas and the planned treatments are:

1. *Objective: Reduction of nonpoint source pollution through reduction of sheet and channel erosion, and moving treated areas from unsatisfactory or impaired to satisfactory watershed condition.*

Planned treatment: Sheet and channel erosion will be treated on approximately **500 acres** in Treatment Areas 1-4. Practices are intended to increase the protective cover of vegetation and plant litter by increasing grass and forb composition. Reduction of encroaching juniper and pinyon into previous grassland and savannah will be done mechanically by saw and/or tree shears, accompanied by seeding with native grass and forbs. Slash (limbs and tops) will be lopped and scattered over the seeded areas to reduce

surface temperatures, provide protection for new plant seedlings and eventually add to organic matter available for incorporation into the soil. This will be accompanied by protection from livestock grazing until monitoring determines that management objectives have been reached and a specified amount of grazing can occur. In addition, the seeded areas will be protected from off-road vehicle use both physically and administratively.

In the 80 acre treatment area 2 mesquite shrubs will also be cut and the cut stumps painted with the herbicide triclopyr to prevent sprouting.

Headcuts in channels will be treated with rock and wire check dams and some will have headcut armoring (sloping to a gentler gradient and lining with rock to prevent further advancement of the headcut). Existing rock and wire check dams which are still functioning will receive maintenance as needed, primarily in extending or raising the keyways into the channel banks. Approximately 3.8 miles of channel will be stabilized and/or maintained.

2. *Objective: Maintenance and improvement of antelope habitat.*
Planned treatment: Approximately **285 acres** which were treated about 30-40 years ago on this allotment to create a seral grassland will receive maintenance through cutting of encroaching young junipers and pinyons with hydraulic tree shears attached to a small tractor. The resulting slash will be lopped to 24 inches or less in height to maintain visibility for antelope for protection from predators. In addition there will be new clearing of about **25 acres** to extend seral grassland from the adjacent Walker Basin allotment and expand the area available for antelope use into the north portion of the Indian Flat Pasture.

3. *Objective: Enhance mule deer habitat by increasing growth of browse and forbs.*
Planned treatment: Up to **450 acres** will be treated to increase forage within treatment areas comprising about 1000 acres to create a mosaic of forage and cover. Areas of existing browse which have become decadent will be stimulated through mechanical crushing, clipping and/or limited jackpot burning, along with reduction of competition from seedling and sapling size pinyon and juniper. In newly treated areas where there is no existing browse (e.g., portions of Indian Flat and Buckhorn Pastures) there will be seeding with native browse and forbs, and slash will be lopped and scattered over the seeding to protect seedlings from browsing. In addition there will be maintenance of up to **275 acres** of past treatments to maintain the savannah aspect.

Selection of this alternative moves this area in the direction of the Forest Land and Resource Management Plan by taking advantage of funding opportunities for needed resource management work. It helps achieve objectives of the Arizona Department of Environmental Quality and the Arizona Game and Fish Department. Applying the treatments will increase the protective cover of the soil surface through both new herbaceous vegetation and litter from slash and herbaceous growth, increase infiltration from intense summer storms, reduce storm runoff and reduce sheet erosion. Channel stabilization will prevent the loss of additional alluvial soils. Experience with past activities on soils similar to those within the treatment areas indicates the proposed treatments will be effective.

The limited use of the herbicide is an option allowed for and consistent with the Forest Plan and is needed to help return an area to grassland savannah. Without it the mesquite shrubs will sprout and quickly regrow if simply cut. The herbicide and application method are approved for this use

and are safe. The Nature Conservancy has used the same herbicide and application method in their Hassayampa Preserve for control of tamarisk in riparian areas.

Both antelope and mule deer have been identified as having declining population trends within this area which is within Game Management Unit 6A. The alternative will help maintain seral grassland needed for antelope habitat and will create additional early seral pinyon-juniper for increased forage in areas identified for mule deer habitat enhancement.

Other Alternatives Considered

Alternatives also considered include:

Alternative A – No Action. The project activities would not occur.

Alternative C. Identical with Alternative B, except that the treatment of mesquite shrubs requiring herbicide in the 80 acre Treatment Area 2 would not occur.

The alternative of mechanical treatment of mesquite in Area 2 was considered but was not analyzed in detail. The soil in this area has calcareous material within the profile and root plowing deep enough to eliminate sprouting would bring calcareous material to the surface and hinder establishment of herbaceous plants. Thus it would not adequately meet the purpose and need of the project.

Mitigation

Mitigation actions to implement Alternative B are summarized in the EA, Chapter 2 – Alternatives. More detail for mitigation measures is described in Appendix A of the EA.

Monitoring

Monitoring is described in Chapter 2 of the EA. The Forest Service and the Ranch share the monitoring responsibility. The Annual Operating Instructions for the allotment will include the year's scheduled monitoring and responsibilities.

Public Involvement

The proposal was submitted to agencies, organizations and individuals for review and comment via a scoping letter mailed out February 23, 2005. Responses were received from one organization and one individual. Using these responses, plus knowledge of the interdisciplinary team, issues were determined and alternatives developed. The project was placed on the Schedule of Proposed Activities (SOPA) on the Coconino National Forest website.

Availability of the draft EA was announced by legal ad in the *Arizona Daily Sun*, by news release to newspapers in the general area, and by letter to the respondents to the scoping letter. In addition it was posted on the Coconino National Forest website. The 30 day period for comments on the draft EA ended June 20. Substantive comments were received from one individual, expressing disagreement with the project concept and the expenditure of public funds. The Forest Service response to these comments is contained in Appendix B of the EA (available on the web site).

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the

context and intensity of impacts (40CFR 1508.27). Thus an environmental impact statement will not be prepared. I base my finding on the following:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action.
2. There will be no significant effects on public health and safety. The use of the herbicide triclopyr for cut stump application to mesquite shrubs in Treatment Area 2 will not create a public health or safety problem due to the characteristics of the herbicide, the limited method of application, and the relative inaccessibility of the site. All conditions of the approved label will be followed.
3. The project area is not in proximity to any unique historic sites, parklands, prime farm land, wetlands or ecologically critical areas. Although several treatment areas are near the north boundary of the West Clear Creek Wilderness, they are separated by untreated areas and the vegetation management activities will not be visible from within the wilderness, nor will they affect the user experience within the wilderness.
4. The effects on the quality of the human environment are not likely to be highly controversial within the scientific community. Although the one respondent to the draft environmental assessment disagreed with the effectiveness of a portion of the erosion control treatments, an analysis of the literature cited supporting his position, along with parallel literature, did not disclose scientific controversy over the general relationship between protective ground cover and runoff and erosion. Should these treatments be unsuccessful as suggested by the respondent, the environmental effects on soil and water would be generally similar to the no action alternative which he recommended.
5. The actions do not involve unique or unknown risks, nor are the environmental effects highly uncertain. Both the vegetation management and channel structure treatments have been previously implemented by the Forest Service and/or others.
6. This action is not likely to establish a precedent for future actions with significant effects. Other potential projects on adjoining or nearby areas would require additional analysis, including evaluation of cumulative effects.
7. The cumulative impacts have been addressed in the EA and were determined to not be significant.
8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for the National Register of Historic Places. A cultural resources clearance has been prepared. Archaeological survey and identification will precede work and all sites will be protected from disturbance.
9. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. A Biological Assessment and Evaluation was completed and no endangered or threatened species or their habitat would be affected by this project.
10. The action will not violate Federal, State, or local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The

action is consistent with the Coconino National Forest Land and Resource Management Plan.

Findings Required by Other Laws and Regulations

This decision to proceed with watershed and wildlife habitat improvement activities on the Buckhorn Allotment is consistent with the intent of the forest plan’s long term goals and objectives. The project was designed in conformance with land and resource management plan standards and incorporates appropriate guidelines for wildlife habitat and watershed improvement activities.

Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. The appeal must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Appeal Deciding Officer, Coconino National Forest, at 1824 S. Thompson, Flagstaff, Arizona, 86001, FAX: (928) 527-3620.

The office business hours for those submitting hand-delivered appeals are 7:30 am to 4:30 pm Monday through Friday, excluding federal holidays. Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to appeals-southwestern-coconino@fs.fed.us. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

Appeals, including attachments, must be filed within 45 days from the publication date of this notice in the newspaper of record. Attachments received after the 45 day appeal period will not be considered. The publication date in the newspaper of record, is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframe information provided by any other source.

Individuals or organizations who submitted substantive comments during the comment period specified at 215.6 may appeal this decision. The notice of appeal must meet the appeal content requirements at 36 CFR 215.14.

Contact

For additional information concerning this decision or the Forest Service appeal process, contact Jerry Bradley at the Verde Ranger District, (928) 567-4121.

/s/ Ken Anderson
KEN ANDERSON
District Ranger

July 20, 2005
Date