



United States  
Department of  
Agriculture

Forest  
Service

**Southwestern  
Region**



# **Record of Decision**

## **Final Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds**

Coconino, Kaibab, and Prescott National  
Forests within Coconino, Gila, Mojave,  
and Yavapai Counties, Arizona



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TTY).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TTY). USDA is an equal opportunity provider and employer.

Printed on recycled paper • January 2005



# Record of Decision

## Decision and Reasons for the Decision

### Background

Early recognition of the weed invasion on the three national forests started in 1986 when noxious and invasive weeds (weeds) were discovered along roadways in northern Arizona. It was not until completion of surveys on the Coconino National Forest in 1995 and on the Kaibab and Prescott in 1997 that the overall seriousness of the problem was recognized. Additional monitoring results during 1999 revealed that the rate of spread of these weeds was higher than originally suspected along transportation corridors.

There were many efforts to control the weeds, including working with partners, volunteers, and various organizations. The complexity of the project grew as the number of infested acres increased. Currently, approximately 187,500 acres within the three national forests have some degree of infestation by weeds. These weeds pose a serious threat to ecosystem diversity and have a high potential to harm native plants and wildlife including threatened, endangered and sensitive species if they are left untreated.

While infestations of weeds have developed on these three national forests in Arizona, other areas of the country have incurred larger and more drastic infestations. Nationwide, there are approximately 2,000 nonnative plants, about 400 of which are considered invasives. Invasive plants now cover about 133 million acres in all ownerships nationwide and infest about 1.7 million acres per year. The Chief of the USDA Forest Service, Dale Bosworth, recognized this growing problem and in 2003, declared invasive species as one of four major threats to the health of the national forests.

Within the Southwestern Region of Arizona and New Mexico, the Regional Leadership Team and Regional Forester Harv Forsgren agreed upon a central priority that they believe is the most significant achievable conservation opportunity within the Region – the restoration of the ecological functionality of our fire adapted ecosystem. The removal of existing noxious or invasive plants from the three forests plus the removal of new infestations of other invading species tiers to both the National and Regional initiatives. Allowing these weeds to expand their current infestations and continue to alter the forest ecosystems would have long-term negative impacts on the people, wildlife, and resources found on the three national forests. While change within the forests through natural evolution is expected and desirable, the changes that will occur from the introduction of and continued expansion of these weed populations is undesirable.

Some weeds produce large numbers of seeds that remain viable in the soil for up to 10 years for some species and even longer for others. Yellow starthistle can produce up to 150,000 seeds per plant, and seed viability has been suspected to be as long as 30 years. Several species have extensive root systems that sprout if the main stem is cut or broken off. The degree of difficulty to control the growing infestations of weeds necessitates utilization of multiple treatment methods and continuous monitoring to insure that new infestations don't become established.

Many weeds have severe toxicities associated with them. The latex in leafy spurge is toxic to livestock, wildlife, and people. The plant is irritating to the skin, it can cause temporary blindness if gotten into the eyes (from hands touching the plant, then the eyes), it is particularly harmful to those with sensitive skin such as the very young or old or those with multiple chemical sensitivities. While some weeds have attractive foliage or flowers, they have contaminated the northern Arizona ecosystem and are changing it.

The purpose and need of this project is to prevent any new weeds from becoming established, contain or control the spread of 14 known invasive species, and to eradicate 8 species which are the most invasive and pose the greatest threat to biological diversity within the Coconino, Kaibab, and Prescott National Forests.

Alternatives 1 (both High and Low), 3, and 4 would require nonsignificant amendments to all three national forests' land and resource management plans. This determination of nonsignificance was made following the guidelines established in Forest Service Handbook 1909.12, Chapter 5.32 and is based upon the: (1) timing; (2) location and size of the project; (3) goals, objectives and outputs; and (4) management prescription. The evaluation of this project is included in Appendix A of the "Environmental Impact Statement for Integrated Treatment of Noxious or Invasive Weeds."

This Environmental Impact Statement (EIS) evaluated four alternatives in detail. Two additional alternatives were considered but eliminated from detailed study.

**Alternative 1** was the Proposed Action that proposed authorizing new treatments of noxious weeds on a series of infestations ranging from an estimated low of 2,000 acres per year to a projected high of 10,000 acres per year. At the high level, this alternative would treat 34,130 weed-infested acres on the ground, with 3 or 4 repeat visits to each site over the next 10 years, approximately 116,000 acres of treatment would occur, including an estimated 8,000 acres of manual treatment, 5,000 acres of mechanical treatment, 14,000 acres of cultural treatment, 14,000 biological, and 75,000 acres of herbicidal treatment. There would be no aerial or aquatic application of herbicides. This alternative would require a nonsignificant forest plan amendment to all three national forest land and resource management plans.

**Alternative 2** is the No Action alternative that is required by NEPA regulations CFR 1502.8. Under this alternative, there would be no integrated weed management treatments applied to any National Forest System lands except those parcels under the authority of the Federal Highway Administration.

**Alternative 3** would rely on manual, mechanical, cultural, and biological methods to control weed infestations. No herbicides would be used. This alternative would treat 23,410 weed-infested acres on the ground with repeat treatments over the next 10 years. This would require approximately 211,000 acres of total treatments (or more than 8 revisits per site), including 39,000 acres of manual, 132,000 acres of mechanical, 23,000 acres of cultural, and 17,000 acres of biological treatments. This alternative would require a nonsignificant forest plan amendment to all three national forest land and resource management plans.

**Alternative 4** uses all the treatment methods from Alternative 3, but would also include the use of herbicides. This alternative would treat 31,047 weed-infested acres on the ground with repeated visits over the next 10 years. This would require approximately 124,080 acres of infestations including: 14,000 acres of manual, 18,000 acres of mechanical, 14,000 acres of cultural (including revegetation), 16,000 acres of biological and 57,000 acres of herbicidal treatments. Limited spray zones would be established adjacent to and within 1 mile of communities, recreation sites, trailheads, and scenic overlooks. Sites where other treatment methods will be effective due to species, population size or site factors will be targeted for all integrated weed management methods except herbicides. Adaptive management principles apply and if the selected integrated weed management method does not work, then other methods,

including herbicides, could be used. Herbicides would be authorized in limited spray zones if the inventoried species include deep-rooted perennial species that cannot reach treatment objectives using manual techniques (such as camelthorn, Russian knapweed, leafy spurge, tamarisk, and tree of Heaven). Any proposed use of herbicides in rights-of-way corridors under national forest jurisdiction would be coordinated, publicly posted, and completed in such a manner that alternative routes would remain accessible until the manufacturer's re-entry period is met, so individuals with multiple chemical sensitivity could still access recreational and other facilities found within the project area. This alternative would require a nonsignificant forest plan amendment to all three national forest land and resource management plans.

## **Other Alternatives Considered**

In addition to the alternatives considered in detail, two other alternatives were considered, but not in detail. These two are discussed below.

### **Alternative 5**

Alternative 5 proposed to utilize only manual and cultural treatments to attempt to control the weeds. Exclusion of the use of mechanical, biological, and herbicidal treatment methods in addition to the low number of acres treated would promote the expansion of all 22 weeds species inventoried within the three national forests. Since this alternative did not meet the purpose and need for the project, it was dropped from further consideration.

### **Alternative 6**

Alternative 6 was the original proposed action that was scoped in 1998. It was dropped from further consideration because it duplicated another planning effort called, "Environmental Assessment for Management of Noxious Weeds and Hazardous Vegetation on Public Roads on National Forest System Lands in Arizona." Tonto National Forest Supervisor Karl Siderits signed the decision for the five national forests on May 27, 2004. The primary purpose of this latter document is driver safety. It focused on weed treatment along major road rights-of-way and limited noxious and invasive weed treatment control efforts to those travel corridors. It does not treat other infestations. Since there was no need in duplicating planning efforts, this alternative was dropped from further consideration.

## **Decision**

Based upon our review of all alternatives, the forest supervisors of the Coconino, Kaibab, and Prescott National Forests have decided to implement Alternative 4.

This alternative would treat 31,047 weed-infested acres on the ground with repeated visits over the next 10 years. This would require approximately 124,080 acres of total treatments including: 14,000 acres of manual, 18,000 acres of mechanical, 14,000 acres of cultural (including revegetation), 16,000 acres of biological and 57,000 acres of herbicidal. Limited spray zones would be established adjacent to and within 1 mile of communities, recreation sites, trailheads, and scenic overlooks. Sites where other treatment methods will be effective due to species, population size or site factors will be targeted for all integrated weed management methods except herbicides. Adaptive management principles apply and if the selected integrated weed management method does not work, then other methods, including herbicides, could be used. Herbicides would be authorized in limited spray zones if the inventoried species include deep-

rooted perennial species that cannot reach treatment objectives using manual techniques (such as camelthorn, Russian knapweed, leafy spurge, tamarisk, and tree of Heaven). Any proposed use of herbicides in rights-of-way corridors under national forest jurisdiction would be coordinated, publicly posted, and completed in such a manner that alternative routes would remain accessible until the manufacturer's re-entry period is met, so multiple chemical sensitive individuals could still access recreational and other facilities found within the project area. This alternative will amend the Coconino, Kaibab and Prescott National Forests' Land and Resource Management Plans with a nonsignificant amendment.

## **Public Involvement**

As described in the background, the need for this action arose in 1996 and 1997. The project was originally scoped to the public on August 31, 1998. Based upon public comments received, the decision was made to restructure the project and develop an environmental impact statement. The Agency mailed a project update letter to over 1,900 individuals in May 2001 explaining that an environmental impact statement would be developed for the project. The Notice of Intent to Treat Noxious and Invasive Weeds on the Coconino, Kaibab, and Prescott National Forests in Coconino, Mojave, and Yavapai Counties, Arizona was listed in the Federal Register on June 26, 2001. The addition of Gila County to the title was made after the draft environmental impact statement was published. Part of the Coconino National Forest is within Gila County. The title was changed again from "Noxious and Invasive" to "Noxious or Invasive" to insure no confusion that either noxious or invasive weed species may be treated under this decision. The project has been carried on the three forests' schedules of proposed actions since June of 2001. On June 11, 2001 the Agency prepared a news release for local papers and radio stations, and conducted numerous television interviews. In addition, the Associated Press conducted several interviews concerning the proposal and submitted those articles for national release. Members of the interdisciplinary team conducted two meetings with groups of people concerned about multiple chemical sensitivity to solicit issues regarding the Proposed Action, gather information related to reactions to the use of herbicides, and help define the alternatives to be considered in this analysis. On February 25, 2004, copies of the DEIS were mailed to the public, interested groups, and agencies. The Notice of Availability was published in the Federal Register on March 5, 2004. Additional meetings were held with people with multiple chemical sensitivity in Prescott on April 14, 2004 and April 31, 2004 to explain the preferred alternative and answer any questions from the group.

Throughout the planning process, there have been numerous consultations and discussions with Native American tribes and their representatives to minimize the impacts of weed treatments in traditional native plant collection areas.

Using the comments from the public, other agencies, multiple chemical sensitive persons, and representatives from various Native American tribes, the interdisciplinary team identified several issues regarding the effects of the Proposed Action. These issues included:

1. Use of herbicides could limit individuals with multiple chemical sensitivities (MCS) from using travel corridors and National Forest System lands in general, thus limiting their access to vital services and recreational opportunities.
2. The use of herbicides for noxious weed control may cause health problems for people who come into contact with the herbicides and/or treated areas.

3. The proposed application of herbicides for noxious weed control may affect the ability of Native Americans and others to collect plants for traditional uses or medical reasons in specific areas.

To address these concerns, the Forest Service created Alternatives 3 and 4 described above.

Comments received during preparation of this document have been considered and taken into account in selecting the preferred alternative. Comments were provided during public meetings, telephone calls, responses to newspaper articles, scoping letters, and during the designated notice and comment period that occurred in March and April 2004 upon publishing and distribution of the draft environmental impact statement.

## **Decision Rationale**

When compared to the other alternatives, Alternative 4 does the best job of balancing the control of weeds while preserving natural habitats and protecting the health of humans and communities. It is the most responsive alternative to the three main issues while meeting the purpose and need.

Toxicity of herbicides and the potential impact on human health including those persons with multiple chemical sensitivities is the main issue. Human contact with treated areas, treated plants, or residues from herbicidal treatment either from chemical drift in the air, the plants that are treated, through the soil, or into and through the watershed has been thoroughly analyzed in this document. Some people are concerned with the cumulative effects of additional herbicide toxins being dumped into the environment and their interaction. We have reviewed the scientific information that is available from a variety of sources and are confident that human health will be protected with the types of herbicides proposed to be used, application rates, mitigation measures and environmental protection measures included in Appendix B.

Alternative 4 does the best job to control the weeds balanced with the need to protect the health of communities throughout the three national forests. While this decision acknowledges the need to use herbicides to control some weed infestations, use of those herbicides is limited to those situations where alternative methods of control are not effective.

Discussions with the U.S. Environmental Protection Agency and Arizona Department of Environmental Quality have assured us that our proposal to treat weed infestations will have little or no effect on water quality.

While we may not know all there is to know about the long-term effects of herbicides on humans and wildlife, we do know the effects of weeds on our native plant ecosystems. As these weed populations continue to expand on the three forests, the potential loss of integrity within this ecosystem outweighs the few unknowns regarding herbicide applications. It is reasonable and prudent to go forward with an integrated weed management strategy using the best possible methods of weed treatments including the use of herbicides.

The development of a public notification system using an 800 toll free telephone number, public notification through the newspapers, radios, Web pages, and conducting annual public meetings will provide timely notification to the public about what areas are planned to be or have been treated and the method of that treatment. Of particular concern is information on types of herbicides used and the date of completion since people's degree of sensitivity varies. All individuals, including those with multiple chemical sensitivities, will be able to minimize their

contact with treated areas and determine their most adventitious routes to travel in their day-to-day lives; they can determine untreated portions of the national forests to recreate in, and where to go or specifically where not to go to collect plants. Prior to implementation of this decision, the public notification system will be operational.

Spot treatment of infestations using herbicides has a greater potential risk to applicators than to the general public; however, standard mitigation measures employed with routine safety procedures and personal protective equipment reduce or eliminate the health hazards.

There was considerable discussion from both the public and within the interdisciplinary team regarding the width of the limited spray zone. Some people suggested limited or no-spray zones of up to 25 miles in width. Other people felt that there should not be any limited spray zones created. In reviewing maps of the three national forests, the utilization of limited spray zones larger than 1 mile in width did not meet the purpose and need and increased the workload and cost. Control objectives for the deep rooted and more difficult to control species would not have been met. For this reason, the 1-mile limited spray zone was adopted.

Clean up of equipment including herbicide applicators will not be undertaken within limited spray zones or within a mile of private land.

Alternative 4 involves the use of adaptive management so that we can maximize the effectiveness of the program. As new infestations and/or growth of existing infestations are identified adjacent to specified treatment areas, each will be evaluated to determine if it falls within the scope of this EIS relative to issues analyzed and potential effects of treatment. Similarly, areas identified that may have a moderate or high level of risk of infestation due to ongoing or future management activities will be monitored for new infestations. New infestations will be evaluated for treatment within the scope and constraints of this project. In addition to increasing the potential area proposed for treatment, new biological controls will also be considered for use once Federal approval is provided. All environmental protection measures described in Appendix B will apply to treatments occurring on new infestations.

If more effective herbicides are developed during the next few years, each will be evaluated to determine if their use falls within the scope of this EIS relative to issues analyzed and potential effects of treatment. If not, use of these new herbicides would require additional analysis and an amendment to this Record of Decision.

## **Other Factors Considered in Making the Decision**

Many citizens, scientists, county, State, and Federal agencies have commented on the need to incorporate certain specific features that are essential for the successful treatment of weeds. These features include the following:

### **To be effective, we must take vigorous action.**

These weeds are expanding their presence in the three national forests. A weak or inadequate weed control response will not accomplish the control objectives. There are two reasons that explain why: (1) The Arizona national forests do not appear to be able to resist the more aggressive weed species without human intervention; and (2) An inadequate response to the weeds will contribute to expansion of weed populations over the landscape unless they are controlled by

strong integrated actions of land managers and the general citizenry. Many infestations are currently small and more easily treated and less expensive to control at this point in time.

**We need to look ahead and deal with the weed problem on the appropriate scale.**

Until now, our efforts to control weeds have been relatively few, relying on volunteers and small groups of workers treating small areas. While these efforts have accomplished some effective results, the expansion of weeds has outgrown our capability to treat them in this manner.

**There are numerous groups and organizations scattered around the state that need our cooperation in controlling weeds.**

The three national forests and their ranger districts are involved with various partners in this war on weeds. Some of the associated partners and groups include: The Nature Conservancy, the Arizona Strip Weed Management Area, The Northern Arizona Weed Council, the San Francisco Peaks Weed Management Area, the Western Yavapai and Verde Valley Weed Management Area, Coconino County, Arizona State Lands Department, the Arboretum at Flagstaff, the National Park Service, the Bureau of Land Management, and the U.S. Fish and Wildlife Service. We need to be fully committed to the efforts of these groups and this document gives the three national forests the tools needed to start dealing with this large scale problem more effectively.

**Recognize the importance of the integrated weed management strategy and have the full array of tools available to combat the problems of weeds.**

Integrated weed management looks at all aspects of the control effort from prevention of future infestations, prioritization of infestations to treat, and what is the best treatment protocol that we can use to treat a specific infestation. While many of these techniques are currently being used, their use will be improved and enhanced as part of this decision. Increased public education and awareness and the public's involvement will facilitate the earlier detection of new weeds and will assist the three national forests' efforts in responding to and controlling new infestations.

**While we proceed aggressively, we must also proceed with caution and be prepared to modify our tactics through adaptive management to improve our effectiveness.**

We know that this effort requires an aggressive approach. The weeds continue to expand in spite of concentrated efforts to control them. Yet with careful coordination, we can work to increase and improve our control techniques while minimizing impacts to the natural resources and the public who enjoy them. Some weed species are more effectively controlled using herbicides than with other methods of treatment. To better coordinate with the public and to minimize the impacts on them, alternative and usually more expensive methods of treatment such as hand pulling, grazing, and mechanical methods such as bush

hogging or disking will be used. If our best efforts fail, then we must come back with a more aggressive treatment method.

### **Followup monitoring.**

It is imperative that a more comprehensive system to track weed infestations and the various types of treatments used be developed. This information is necessary to close the loop with adaptive management and to keep the public notified on how the control effort is proceeding.

In selecting Alternative 4, we compared it with the other alternatives to determine which alternative best accomplishes the purpose and need and responded to the issues. Here are some of the reasons that the other alternatives were not selected:

Alternative 1 proposed to treat up to 10,000 acres per year using a mixture of manual, mechanical, cultural, and herbicidal methods. While overall treatment objectives for many weed species were projected to be met, this method did not respond to the concerns of the public as well as it could have. Specific areas of concerns were within a mile of communities, recreation sites, trailheads, and scenic overlooks.

Alternative 2 is the No Action alternative. With no control treatments of any kind (except on those parcels under the authority of the Federal Highway Administration) on the three national forests, there would be a continued growth of weed populations at comparable or faster rates than what has been experienced over the last few years. Some rare and/or sensitive native plant species would be negatively impacted. Habitat for wildlife would be degraded. This includes big game that depend upon native grasses for forage and small game that use the grasslands for food and cover. Livestock forage would be reduced as weeds crowd out native grasses. Water quality would be reduced due to increased soil erosion. Some native plant communities would be replaced or reduced and biological diversity would be altered. The quality of recreational experiences would be reduced as people make contact with some of the more toxic weeds. Traditional areas where Native Americans have collected plants for traditional uses, foods, or medical reasons would be altered so that desirable plants are no longer available in those locations. This alternative does not meet the purpose and need of the project.

Alternative 3 would have relied only on manual, mechanical, cultural, and biological methods to control weed infestations. This alternative would have been much more expensive while achieving less control objectives for fewer weed species. Most of the treatment would have been by mechanical methods which would have increased ground disturbance, and soil erosion and increased negative impacts on water quality. Since many infestations would require multiple re-treatment efforts without achieving the treatment objectives for many of the weed species, these impacts would continue for a longer period of time. Due to the remoteness of some traditional plant collection areas, some locations might not receive adequate followup treatments and weeds could crowd out desirable native plants. This alternative did not meet the purpose and need of the project as well as Alternatives 1 or 4.

## **Findings Required by Other Laws and Regulations**

Numerous laws, regulations and Agency directives require that this decision be consistent with their provisions. The following discussion is not an all-inclusive listing, but is intended to provide information on the areas raised as issues or comments by the public or other agencies.

## **Endangered Species Act**

This decision is consistent with the Endangered Species Act of 1973. Informal consultation with the U.S. Fish and Wildlife Service was undertaken. A determination of “not likely to adversely affect” was made for: Arizona cliffrose, Mexican spotted owl, Yuma clapper rail, southwestern willow flycatcher, Chiricahua leopard frog, Gila topminnow, razorback sucker, spinedace, loach minnow, Apache trout, Little Colorado spinedace, and Gila chub. A determination of “not likely to adversely affect” was also made for the following critical habitats: Mexican spotted owl, razorback sucker, Little Colorado spinedace, and Gila chub. A determination of “not likely to jeopardize” was made for the Colorado pikeminnow. A finding of “No Effect” was made for all the remaining Federally listed or proposed species. On September 30, 2004, a final letter of concurrence from the U.S. Fish and Wildlife Service was received. Alternative 4 does the best job of protecting endangered, threatened, proposed, and candidate wildlife and plant species and their habitats while addressing the noxious or invasive weeds. Design features (listed in Appendix B) that were developed in conjunction with consultation with the U.S. Fish and Wildlife Service (FWS) for the various wildlife species are mandatory for this project. In the event that circumstances in a project area necessitate deviation from these design standards, it would be necessary for additional consultation with the FWS to occur prior to that project being implemented.

## **Sensitive Species**

Federal law and direction applicable to sensitive species include the National Forest Management Act and the Forest Service Manual (2670). The Regional Forester has developed the sensitive species list, those plants and animals for which population viability is a concern (See Chapters 3 and 4 and the botany, fish and wildlife specialists’ reports for sensitive species’ affected environments and analysis of effects). In reviewing the analyses and projected effects on all sensitive species listed as occurring or possibly occurring on the three national forests, it has been demonstrated in the biological evaluations that there will be no trend toward listing for any sensitive species.

## **National Historic Preservation Act**

The Forest Service has evaluated this project in relation to the National Historic Preservation Act including locating, inventorying, and nominating all cultural sites that may be directly or indirectly affected by the proposed actions. While manual, cultural, biological and herbicidal treatments of weed infestations will have no effect on cultural properties, areas where mechanical treatment, specifically plowing or disking are proposed to be used, will require a pretreatment site-specific evaluation to insure that cultural properties are not within the treatment area and their integrity is not jeopardized by the proposed treatment.

## **Clean Water Act**

Alternative 4 meets the intent of the Clean Water Act of 1977 as amended. Pesticide monitoring for chemical contamination, including insecticides and/or chemicals, is routinely carried out in select wells around the State to fulfill the requirements of the act. Of the 340 wells monitored, none exceeded the established standards as it relates to pesticides (ADEQ 2002). This monitoring will continue during the project to ensure that no contaminations occur.

## **Safe Drinking Water Act**

Coordination with the U.S. Environmental Protection Agency and Arizona Department of Environmental Quality by incorporating their required and recommended mitigation measures into the design of this project assures that we are in compliance with the Safe Drinking Water Act. In addition, we have incorporated additional water quality protection measures into this project to better protect wellheads and recharge areas for wells and aquifers.

## **The National Forest Management Act of 1976 (PL 94-588)**

The National Forest Management Act and accompanying regulations require that several other specific findings be documented.

## **Consistency with the Forest Plans of the Three National Forests**

This decision, including the nonsignificant amendments, is consistent with the goals and objectives of the land and resource management plans for all three national forests and with the management direction, standards and guidelines for all ecological management areas described within those plans.

## **Resource Protection**

The following twelve statements address resource protection requirements of NFMA 36 CFR 219.27:

1. Alternative 4 conserves soil and water resources and does not allow significant or permanent impairment of the productivity of the land. (See Chapter 4)
2. Within the scope of the project and consistent with other resource values involved, activities will minimize the risk from serious or long lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces unless these are specifically excepted, as in congressionally designated wilderness.
3. The project is consistent with the relative resource values involved. It prevents and/or reduces serious long lasting hazards and damage from pest organisms, using principles of integrated pest management. Under this approach all aspects of a pest-host system should be weighed to determine situation-specific prescriptions which may utilize a combination of techniques including, as appropriate, natural controls, harvesting, use of resistant species, maintenance of diversity, removal of damaged trees, and judicious use of pesticides. The basic principle in the choice of strategy is that, in the long term, it be ecologically acceptable and compatible with the forest ecosystem and the multiple use objectives of the forest plans.
4. Alternative 4 will protect streams, streambanks, shorelines, lakes, wetlands, and other bodies of water found on the three national forests.
5. Alternative 4 provides for and maintains diversity of plants and animal communities to meet overall multiple-use objectives.

6. Alternative 4 provides for adequate fish and wildlife habitat to maintain viable populations of existing native vertebrate species and provides the habitat for management indicator species. The habitat is maintained and improved to the degree consistent with multiple-use objectives established in the three national forests' land and resource management plans.
7. The FEIS assesses potential physical, biological, aesthetic, cultural, engineering, and economic impacts of Alternative 4 and is consistent with multiple uses planned for the three national forests.
8. Alternative 4 prevents the destruction or adverse modification of critical habitat for endangered, threatened, proposed, and candidate species (See BA&E and U.S. Fish and Wildlife Service letters of concurrence, Appendix F).
9. There are no rights-of-way corridors needed for the project.
10. There is no road construction associated with the project.
11. No temporary roads will be built in conjunction with the project.
12. Alternative 4 is consistent with applicable Federal, State, and local air quality standards. All riparian areas, soil and water will be protected as described in the FEIS and this Record of Decision.

The purpose of this project is to preserve and enhance the diversity of plant and animal communities by reducing and limiting the spread of noxious or invasive weeds (See "Purpose and Need"). Alternative 4 is consistent with this objective.

### **The Federal Land Policy Management Act of 1976 (PL 94-579)**

This act authorizes control of weeds on rangeland. This decision is consistent with that law.

### **The Clean Air Act**

The basic framework for controlling air pollutants in the United States is the 1970 Clean Air Act as amended in 1990 and 1999 (42 USC 7401 et seq.) The primary concern with this project in regards to air quality is with ground application of herbicides. Since impacts will be distributed across the three national forests and over time, concentrations of air contaminants will not accumulate to the point of violating air quality standards for any area.

### **The Migratory Bird Treaty Act**

Alternative 4 and its mitigation measures (as described in Appendix B) provides for adequate conservation measures for migratory birds. Overall impacts on land birds and waterfowl are expected to be minimal (See the Wildlife Specialist's Report).

### **Executive Order 13112, Invasive Species, 2-3-1999**

Alternative 4 complies with this order directing Federal agencies whose actions may affect the status of invasive species to: (1) prevent the introduction of invasive species; and (2) detect and

respond rapidly to, and control populations of such species in a cost effective and environmentally sound manner, as appropriations allow.

### **36 CFR Subpart A, Section 222.8**

This regulation directs the Chief of the Forest Service to cooperate with county or other local weed control districts in analyzing noxious farm weed problems and developing control programs in areas which the national forests and grasslands are a part. Alternative 4 complies with this direction.

### **Federal Noxious Weed Act of 1974 (Section 9)**

Alternative 4 complies with this authorization for the Secretary of Agriculture to cooperate with other Federal and State agencies or political subdivisions thereof, and individuals in carrying out measures to eradicate, suppress, control, or prevent the spread of noxious weeds.

### **The Plant Protection Act of 2000, PL 106-224, The 1990 Farm Bill, PL 101-624**

These acts and laws direct the Forest Service to develop and coordinate management programs for controlling undesirable plants. Alternative 4 complies with this direction.

### **USDA Policy 9500-10**

Under this directive the Agency is to integrate noxious weed management into all programs and activities and to develop, demonstrate, and apply the essential science, technology, and stewardship to effectively manage and prevent the spread of these plants. Alternative 4 complies with this direction.

In addition, Alternative 4 also complies with and compliments the following:

- National Prevention Strategy for Invasive Plant Management (USDA Forest Service 2001).
- Forest Service “Pulling Together Initiative” for noxious weed and nonnative invasive plant management that directed the Agency to set goals of education, implement integrated weed management as a high priority, include management of noxious weeds in all planning processes, and develop partnerships.
- Southwestern Region’s “Strategy for the Protection and Restoration of Native Plant Communities” (USDA Forest Service, Regional Office 1999).
- “Noxious Weeds Strategic Plan Working Guidelines – Coconino, Kaibab, and Prescott National Forests” (Phillips et al. 1998, amended 2002), which emphasizes mitigation to prevent the spread of noxious weeds and includes education, inventory, and control guidelines.
- Arizona State regulations R3-4-244, R3-4-245 require that the landowner must have an active management program to prevent further spread of these species and reduce numbers of existing populations.

## **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 after 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 by regular mail, facsimile, e-mail, hand delivery, or express delivery with the Appeal Deciding Officer at: Harv Forsgren, Regional Forester, Southwestern Region, USDA Forest Service, 333 Broadway Blvd., SE, Albuquerque, NM 87102. The facsimile number for submitting an appeal is (505) 842-3173.

The office business hours for those submitting hand delivered appeals are: 8:00 a.m. to 4:30 p.m. Monday through Friday, excluding holidays. Electronic appeals must be submitted in a format such as an e-mail message, plain text (.txt), rich text format (.rtf), or Word (.doc) to *appeals-southwestern-regional-office@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 Arizona Daily Sun and the Prescott Courier, the newspapers of record for the three national forests. In the event that the notice is published on different dates in the two newspapers, the appeal period will begin the day after the last notice is published. Attachments received after the 45-day appeal period will not be considered. The publication date in the Arizona Daily Sun and Prescott Courier (newspapers 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 Person**

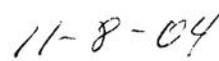
For additional information concerning this decision or the Forest Service appeal process, contact: Charles Ernst, NEPA Program Manager, Kaibab National Forest, 800 South Sixth Street, Williams, Arizona 86046, (928) 635-8317, *cfernst@fs.fed.us*.

## Responsible Officials

This environmental impact statement and record of decision affect the Coconino, Kaibab, and Prescott National Forests. The responsible official for each national forest is the forest supervisor for that forest.



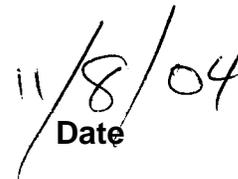
**NORA RASURE**  
Forest Supervisor  
Coconino National Forest



**Date**



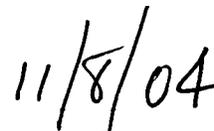
**MICHAEL R. WILLIAMS**  
Forest Supervisor  
Kaibab National Forest



**Date**



**MICHAEL R. KING**  
Forest Supervisor  
Prescott National Forest



**Date**