

Decision Notice
& Finding of No Significant Impact
Invasive Exotic Plant Management Program

USDA Forest Service
Coronado National Forest
Cochise, Graham, Pima, Pinal and Santa Cruz Counties in Arizona and Hidalgo County in New Mexico

Background

The Coronado National Forest proposes to implement a Forest-wide invasive exotic plant management program. The purpose of the proposed action is to protect native ecosystems on the Forest by preventing the introduction of invasive exotic plants and controlling or eliminating existing populations of invasive species. This action is needed because invasive exotic plants currently occur on and adjacent to the Forest and threaten the health of native ecosystems on the Forest. The action is also needed to meet the requirements of law, regulations and policy.

The following invasive exotic plant species are initially being considered for control:

Yellow starthistle (<i>Centaurea solstitialis</i>)	Malta starthistle (<i>Centaurea melitensis</i>)
Canada thistle (<i>Cirsium arvense</i>)	Texas blueweed (<i>Helianthus ciliaris</i>)
Sweet resin bush (<i>Euryops subcarnosus</i>)	Salt cedar (<i>Tamarix spp.</i>)
Bull thistle (<i>Cirsium vulgare</i>)	Tree of Heaven (<i>Ailanthus altissima</i>)
Pentzia (<i>Pentzia incana</i>)	Buffelgrass (<i>Pennisetum ciliaris</i>)
Fountain grass (<i>Pennisetum setaceum</i>)	Giant reed (<i>Arundo donax</i>)
Johnsongrass (<i>Sorghum halepense</i>)	Lehmann lovegrass (<i>Eragrostis lehmanniana</i>)
African sumac (<i>Rhus lancea</i>)	

An environmental assessment (EA) of the proposed action and alternatives has been completed and is on file in the Coronado National Forest Supervisor's Office in Tucson Arizona. Scoping and public comment identified several issues related to the proposed action (see below and EA pp. 15-17). Main issues of concern included the effects of herbicide use on non-target plant and animal species, the effects of herbicides on human health, the efficacy of the proposed action in controlling invasive plant species and the need to incorporate prevention practices into the proposed action. To address these concerns, the Forest Service identified alternatives to the proposed action (pp. 19-27 of the EA) and modified the design of the proposed action.

Prior to making my decision, I considered the alternatives, reviewed the EA and appendices, project record and supporting information in the Forest Plan. The following discussion documents my rationale for this decision.

Decision

It is my decision to select *Alternative 3 – Integrated Vegetation Management* as described in the Coronado National Forest Invasive Exotic Plant Management Program Environmental Assessment (EA). This decision will implement a program to eradicate, control and prevent invasive plant infestations on National Forest lands over the next ten years. Integrated Vegetation Management (IVM) includes four elements necessary to control or prevent the spread of invasive plants on the Forest. These elements are described below.

1. Treatment of existing populations. Depending on the extent of the infestation and the feasibility of treatment, weed populations will be proposed for eradication, or containment and control. Manual and mechanical control include hand pulling, grubbing, clipping, burning, mowing, tilling and other similar means. Chemical control methods involve treatment with herbicides that selectively kill invasive species while maintaining desired native vegetation. Herbicides will only be used after it has been determined that they offer the only practical method for control. Where herbicide treatment is considered warranted, the following herbicides are proposed for use: 2,4-D, Chlorsulfuron, Clopyralid, Dicamba., Glyphosate, Imazapic, Imazapyr, Metsufuron, Picloram., Sulfometron methyl (Sufometuron), Triclopyr, Tebuthiuron. Descriptions of each of these herbicides can be found in Appendix A of the EA.

Application of herbicides would be limited to spot treatment of individual plants or ground-based broadcast application on stands of weeds. Aerial application of herbicides is not being considered as an option for the IVM program. The use of herbicides would be subject to approval by the Regional Forester on a case-by-case basis.

Each year, before weed management activities begin, an annual operating plan shall be prepared by the District proposing plant treatments. If herbicides are proposed, a pesticide use proposal, form FS-2100-2, will be completed according to Forest Service policy (FSM 2100) and used as the annual operating plan. This plan will include a list of each site to be treated, method to be used, herbicide and rate of application if applicable, map of the site and legal description, and area to be treated. This plan will be reviewed by the District or Forest TEPS plant coordinator, wildlife biologist and heritage resource specialist to ensure that effects of that treatment are within the scope of this analysis. Site-specific mitigation measures may be specified at this time, should concerns with any of these resources arise.

2. Monitoring. Weed inventories on the Forest will occur in order to detect new populations of invasive plants before they become well established and widespread.

A monitoring plan will be prepared as part of each treatment activity. Baseline monitoring to determine existing conditions will occur prior to treatment. Implementation monitoring will occur during treatments to insure design and safety standards are followed. Monitoring will be designed to insure that surveys for occupied and potential habitats for sensitive plants and animals have been conducted prior to weed treatment activities; and that specified buffers for sensitive species or live water have been correctly established and enforced. Effectiveness monitoring will be conducted to determine plant community response to treatment and to aid in planning future treatment activities.

3. Restoration. In areas where there are large concentrations of an invasive species, the area may be restored to native vegetation following treatment. Restoration efforts would mainly involve erosion control and revegetation using native species or non-persistent non-native cover crops.

4. Prevention, coordination, cooperation and education. The Forest will implement guidance set forth in The Guide to Noxious Weed Prevention Practices (USFS 2001) in planning for any resource management activities. On-going cooperative efforts with other agencies and landowners will continue, and new cooperative weed management efforts will be pursued, especially the establishment of Cooperative Weed Management Areas. The Forest will partner with the States of Arizona and New Mexico Departments of Transportation to cooperate on control of invasive exotic species, including coordination of this program with the on-going Region-wide plan for treatment of invasive exotic plants in highway rights-of-way. The Forest will continue to develop and implement educational and public awareness materials.

Mitigation Measures

Under all treatment scenarios, the following mitigation measures will apply.

- Invasive species populations would be treated only after the area has been evaluated and/or surveyed for sensitive plant species. Field surveys will be conducted within occupied and potential habitat for sensitive species. The scope of the survey will be dependant on the type of treatment proposed, but will be sufficient to provide for the identification and protection of sensitive species within the project area. Individuals and populations of sensitive plants will be flagged or otherwise identified so that they can be avoided during treatment. If necessary, a buffer zone of sufficient size will be established to protect sensitive species from mechanical disturbance or spray drift.
- Heritage resources will be identified and protected from any ground disturbing activities.
- Spray trucks, all terrain vehicles (ATVs), tractor-mounted mowers and other equipment used for invasive plant management will not be used in such a way that would increase erosion. Steep or highly erodible slopes will be avoided, and soil disturbance will be minimized.
- Desirable vegetation in riparian zones will be retained.
- Heavy equipment will not be used within 30 feet of any stream bank. Handheld equipment for control of invasive species will be used within this zone.
- The only biological control agents that would be considered for use would be those selective to only the target species, and approved by the Animal Plant Health Inspection Service (APHIS) for use on that species. There are currently no biological control agents identified and approved for use on the Forest.

Mitigation Measures Involving the Use of Herbicides

- Regional Forester approval of the Pesticide Use Plan will be necessary for the application of any herbicide.
- All applicable state and federal laws, including herbicide label requirements will be followed.
- Projects will be supervised by a Forest Service Certified applicator who will be responsible for insuring safe handling, application and disposal of herbicides.
- Herbicides will be applied only by ground-based equipment, including hand painting or daubing, backpack sprayers and spray units on ATV's or trucks. In areas with sensitive vegetation, spot application will be used to treat individual weeds while protecting desired vegetation.
- Picloram will not be used where the water table is within 40 inches of the surface, where soil permeability would be conducive to water contamination.
- Only herbicides labeled for aquatic use (ie. Rodeo (glyphosate) Renovate (triclopyr) and Weedar 64 (2,4-D amine)) will be used within 30 feet of streams and other bodies of water.
- Persons involved in mixing, loading and applying herbicides will be required to wear appropriate personal protective equipment as required on the label.

- Areas used for mixing herbicides and cleaning equipment shall be located where spillage will not run into surface waters or result in ground water contamination.
- All requirements in a Safety and Spill Plan will be followed.
- Treatment areas will be signed to alert the public of the herbicide application.
- Landowners within ½ mile of the area to be treated with herbicide will be notified in writing before the project is undertaken.

The proposed invasive plant management program adopts an adaptive management approach. Adaptive management is a strategy that allows decision makers to take advantage of new information as it becomes available after a decision has been made. During the life of this project, invasive plants are likely to be introduced to new locations and will be detected through monitoring. New populations will be treated as they are found as long as the conditions of this decision are met. Likewise, if implementation monitoring demonstrates that herbicides being used are not effective, and a new or improved product is available, the new product could be considered for use. An analysis would be accomplished to determine whether the effects of new treatments are similar to effects disclosed in the EA. As long as the new treatment activity fits within the range of effects analyzed and disclosed in the original EA, no further NEPA analysis will be performed. If monitoring determines that control beyond the scope of this analysis becomes necessary, further analysis under NEPA would be conducted.

Other Alternatives Considered

In addition to the selected alternative, I considered two other alternatives (EA, pp. 19-27).

Alternative 1: No Action

Under the No Action alternative, current management plans would continue to guide management of the project area. An integrated management approach for controlling or eradicating invasive exotic plants and preventing new populations would not be taken. Individual populations of noxious weeds and invasive exotic plants may be treated by various methods, however each treatment would be authorized by a separate analysis.

Alternative 2: Non-herbicide control combined with monitoring, restoration and prevention.

This alternative includes all IVM methods except for herbicide application. All other elements of the action would be identical to the proposed action. Mechanical and cultural control methods would be used to manage existing invasive plant populations and to control new populations as they occur. Mechanical methods would include top-cutting plants, digging, pulling or burning of infested sites. Monitoring would occur to detect the presence and spread of invasive species. Education, prevention and cooperation would occur as described under the proposed action. All appropriate design criteria and mitigation features pertinent to the proposed action would apply to this alternative.

Decision Rationale

When compared to the other alternatives the proposed action will best meet the purpose and need and achieve the desired condition for the Forest (EA, p. 9). It provides the greatest variety of options to treat existing populations and halt the spread of new invaders. The proposed action incorporates a variety of project design and mitigation features (above and EA, pp. 22-24) designed to reduce effects to non-target species and insure compliance with applicable laws, regulations and policies. Timely, site specific review of treatment areas will occur on the

districts prior to control activities to ensure that impacts to rare plants, wildlife and cultural resources will not occur as a result of weed management activities. All herbicide application will be done in accordance with Environmental Protection Agency (EPA) label restrictions. The adaptive management strategy provides flexibility that allows the Forest to modify treatment efforts in response to changing conditions.

I did not select Alternative 1 because of the very limited success of invasive plant control efforts over the past few years. An aggressive Forest-wide approach is clearly needed. I did not select Alternative 2 because, although it would provide some level of control and implement prevention efforts, experience has shown that non-herbicide control efforts have been largely unsuccessful at controlling widespread infestations of invasive species where they occur on the Forest. I believe that Alternative 3 provides the most comprehensive management options using tools that are practical, effective and safe.

Public Involvement

The proposal was first provided to the public and other agencies for comment in a Scoping Report on March 23, 2000. A revised public scoping notice was sent to 330 individuals and organizations on July 5, 2002. The proposal was posted on the Coronado National Forest internet site from July 2002 to May 2003. Approximately 23 comment letters were received. Members of the interdisciplinary team attended a meeting of the Pima Invasive Species Council on August 13th, 2002. In addition, the Forest has participated in the Euryops and Pentzia Weed Management Group since 1999. In November 2003, the proposal was provided to the public for a 30-day comment period. A copy of the proposed action was mailed to 54 individuals, agencies or groups who had responded to scoping or who expressed interest in the project. Legal notices were published in the Arizona Daily Star and Tucson Citizen. One response was received. I have considered the substantive comments received prior to making this decision.

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 (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

Context: The project involves the site-specific treatment of invasive plants on National Forest Lands. The action by itself does not have international, national, region-wide or statewide importance. The discussion of significance factors that follows falls within the context of the area of the Coronado National Forest and the management direction contained in the Coronado National Forest Land and Resource Management Plan.

Intensity: The following discussion is organized around the 10 Significance Criteria described in the National Environmental Policy Act regulations (40 CFR 1508.27).

1. Impacts from this project will be both beneficial and adverse (EA pp. 29-62). Adverse effects are short-term and are not considered significant. The long-term effect on ecosystem health and land productivity will be beneficial. My finding of no significant environmental effects is not biased by the beneficial effects of the action and is based on the analysis contained in the EA.
2. There will be no significant effects on public health and safety. The use of herbicides proposed falls well below documented exposure thresholds identified in risk assessments referenced in the EA (EA pp. 56-59).

3. There will be no significant effects on unique characteristics such as cultural sites, parks, prime farm lands, wetlands and wild and scenic rivers. None of these features are associated with treatment sites. Should new populations be found in association with such sites, mitigation measures will ensure the identification and protection of sites as the program is implemented.
4. The effects on the quality of the human environment are not likely to be highly controversial. The analysis has documented the expected environmental effects of my decision and there is no known scientific controversy over the impacts of the project (EA pages 29-62). In response to scoping, several individuals expressed opposition to any use of herbicides; however, only one response was received to the proposed action provided for public review.
5. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk (see EA pages 29-62). Risk assessments for all herbicides proposed for use have been accomplished and were considered in the analysis. The Forest Service has considerable experience with the types of activities to be implemented.
6. The action is not likely to establish a precedent for future actions with significant effects. Future actions outside of the scope of this project will be evaluated through the NEPA process and will stand on their own merits as to environmental effects and project feasibility.
7. The cumulative effects of the action were considered for all resources pivotal to the analysis in the EA. No significant cumulative impacts were identified (see EA pages 38, 47-48, 50, 53-54, 59, 62).
8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. The action will also not cause loss or destruction of significant scientific, cultural, or historical resources. None of these features has been identified in or near sites proposed for treatment. Ground-disturbing activities will be minimal and mitigation features (EA page 22) will provide for the identification and protection of resources where necessary.
9. Effects to species listed or proposed under the Endangered Species Act were disclosed in the EA and Appendix E (Biological Assessment and Evaluation (BAE)). The BAE determined that the proposed action may adversely affect Huachuca water-umbel (*Lilaeopsis shaffneriana*) and its designated critical habitat as a result of short-term disturbance. Long-term effects for this species will be beneficial due to the removal of competing exotic species. Consultation with the U.S. Fish and Wildlife Service has been completed and the Service has determined that the action will not jeopardize the species (Biological Opinion dated August 17, 2004). The BAE determined that the proposed action is not likely to adversely affect the Gila topminnow (*Poeciliopsis occidentalis occidentalis*). The U.S. Fish and Wildlife Service has concurred with this determination (concurrence dated August 17, 2004).

10. The proposed action is in full compliance with all federal, state and local law requirements. State, local and tribal governments were consulted during the analysis process.

Findings Required by Other Laws and Regulations

National Forest Management Act (NFMA). The Coronado National Forest Land and Resource Management Plan (LRMP) was adopted on August 4, 1986. Forest planning is guided by the Code of Federal Regulations (CFR) at 36 CFR 219. The planning regulations specify that projects implemented after the LRMP is in place must be “consistent with the plan” (36 CFR 219.10 (e)). The authorization of an integrated vegetation management program to manage invasive exotic plants is consistent with the long-term goals and objectives (LRMP pages 9-11) and the standards and guidelines (LRMP pages 45-46) of the LRMP, as amended. There are no identified effects to management indicator species or sensitive species that would affect their long-term viability (EA pages 38-50). Other NFMA consistency findings relate to the management of suitable timberlands. The project will not effect timberlands.

Endangered Species Act. A Biological Assessment and Evaluation (BAE) has been prepared (Doc. 76, project record) and formal consultation with the US Fish and Wildlife Service has been completed.

National Historic Preservation Act. No impacts to historic resources were identified during scoping or through the effects analysis.

Executive Order 13186 (Migratory Birds). The Environmental Assessment analyzed effects of the proposed action on Migratory Birds. There are no identified effect on Birds of Conservation Concern and Important Bird Areas (EA, page. 46-47).

Executive Order 12898 (Environmental Justice). This decision does not impose disproportionately high adverse human health or environmental effects on minority or low-income populations. Social and economic effects of the proposed action are analyzed on pages 56-59 of the EA. Consultation with American Indian tribes was completed (Project Record Docs. 11, 12, 16, 54, 57, 62, 64).

Administrative Review or Appeal Opportunities

This decision is subject to appeal in accordance with 36 CFR 215.7. Individuals or organizations that submitted substantive comments during the November-December 2003 review period may appeal this decision. A notice of appeal must be in writing and clearly state that it is a Notice of Appeal being filed in pursuant to 36 CFR 215.7. Appeals must be filed with the Deputy Regional Forester, Southwestern Region, 333 Broadway SE, Albuquerque, New Mexico 87102. The Regional Office contact for appeals is Patrick L. Jackson, Regional Appeals Reviewing Officer (505) 842-3305. Electronic appeals may be submitted in a format such as an email message, plain text (.txt), rich text (.rtf) or Word (.doc) to appeals-southwestern-regional-office@fs.fed.us. Appeals must be filed within 45 days of the date of legal notice of this decision in the *Arizona Daily Star* and *Tucson Citizen*.

Implementation Date

This project will not be implemented sooner than five business days following the close of the appeal filing period established in the notice of decision published in the *Arizona Daily Star* and *Tucson Citizen*. If an appeal is filed, implementation will not occur sooner than 15 calendar days

following a final decision on the appeal. Treatment activities will not occur until projects have been identified and approved through annual operating plans.

Contact

For additional information concerning this decision or the Forest Service appeal process, contact Richard A. Gerhart, Range NEPA Team Leader or Andrea W. Campbell, Forest NEPA Coordinator, Coronado National Forest Supervisor’s Office, 300 West Congress, Tucson, AZ.

/s/ JEANINE DERBY 9/8/04

JEANINE DERBY Date
Forest Supervisor
Coronado National Forest

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