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Wallowa-Whitman National Forest Invasive Plants Treatment Project

Final Environmental Impact Statement

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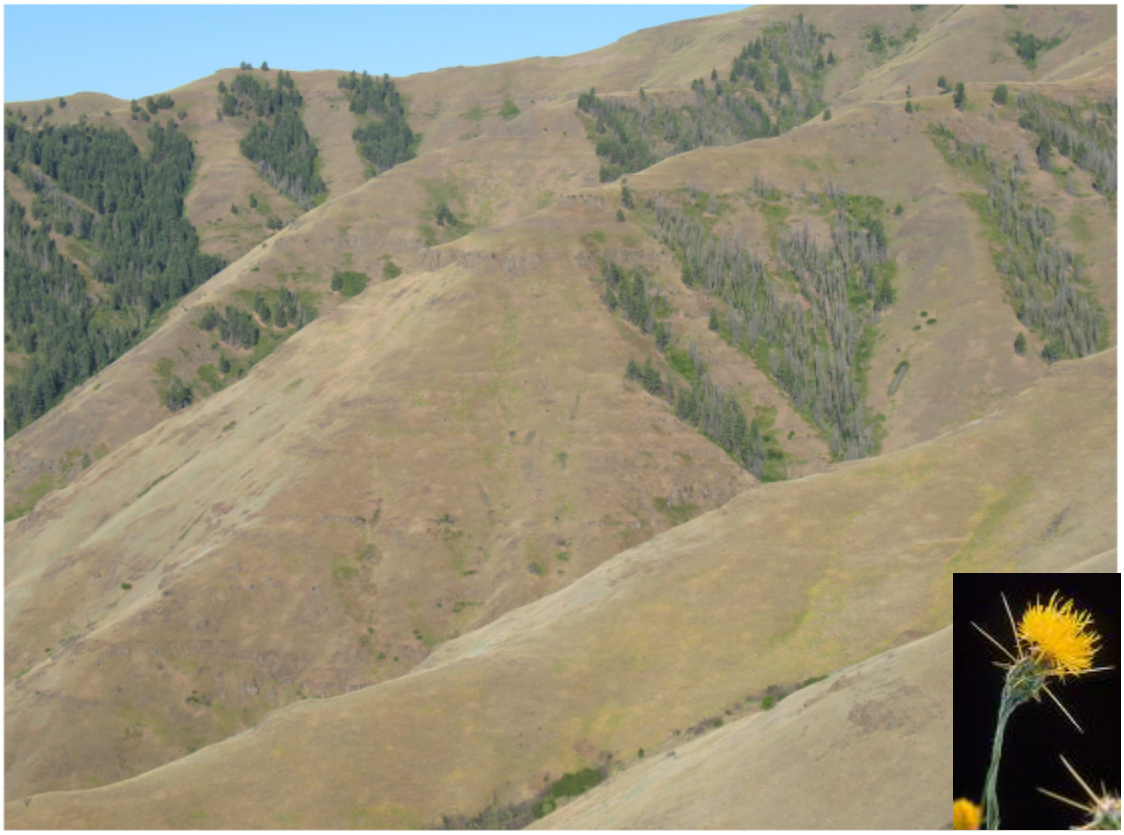
Wallowa, Union, Baker, Malheur, Umatilla, and Grant Counties in Oregon
Adams and Nez Perce Counties in Idaho



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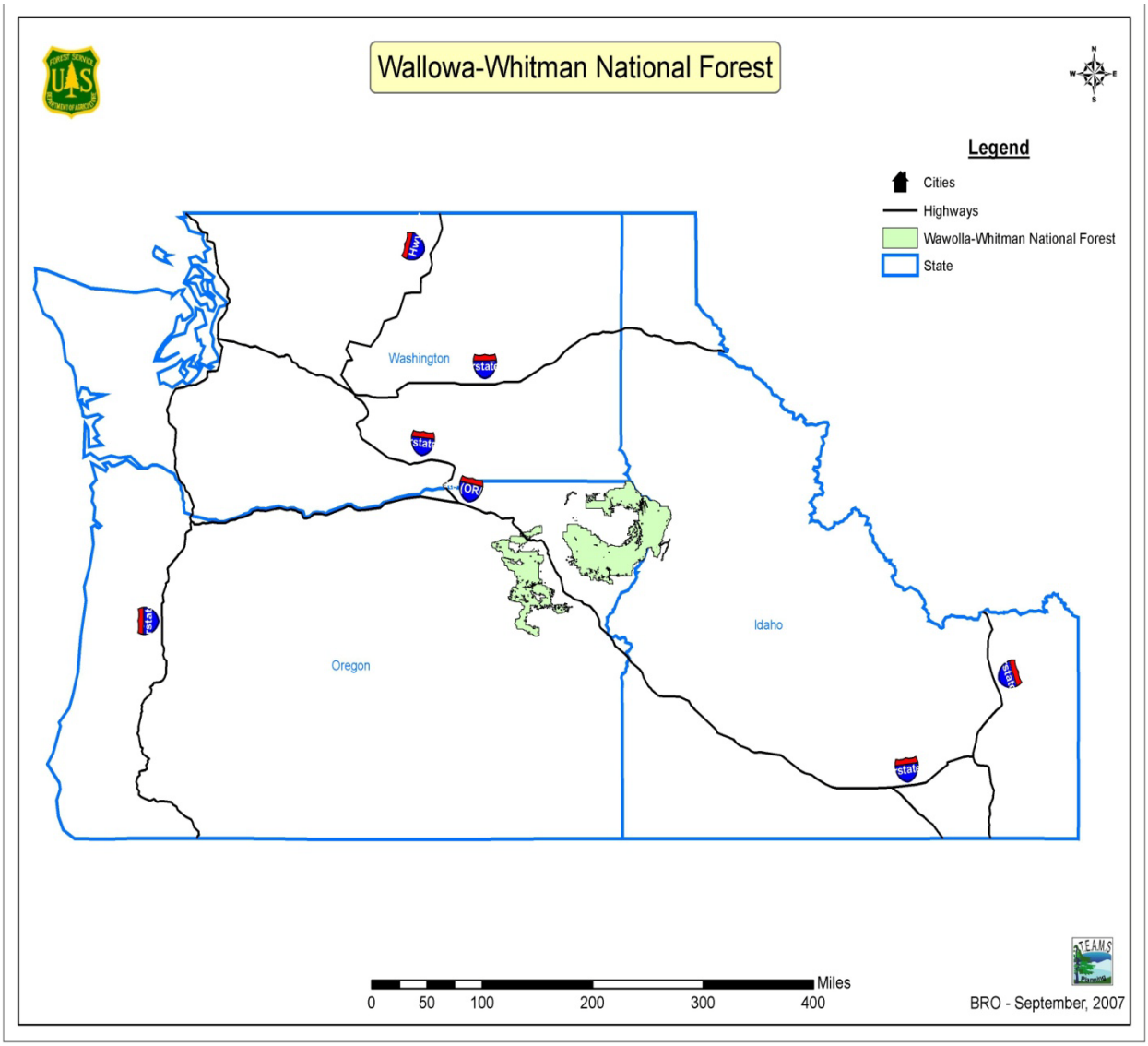

Invasive Plant Treatment Project
Final Environmental Impact Statement

Wallowa, Union, Baker, Malheur, Umatilla, and Grant Counties in Oregon
Adams, and Nez Perce Counties in Idaho

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Abstract

This Final Environmental Impact Statement (FEIS) discloses the effects of treating invasive plants on the Wallowa-Whitman National Forest. Invasive species were identified by the Chief of the Forest Service as one of the four threats to forest health (for more information sees http://www.fs.fed.us/project/four-threats). Invasive plants are displacing native plants, destabilizing streams, reducing the quality of fish and wildlife habitat; and degrading natural areas.

Strong public concern has been expressed regarding Forest Service response to invasive plants. Several organizations and individuals have offered to cooperate with the Forest Service in this endeavor. The Forest Service is responding to a crucial need for timely containment, control, or eradication of invasive plants, including those that are currently known and those discovered in the future. The purpose of this project is to treat invasive plants in a cost-effective manner that complies with environmental standards.

Approximately 22,842 acres are currently estimated to need treatment, including but not limited to common bugloss, diffuse knapweed, yellow star thistle, Dalmatian toadflax, common cuprina, Mediterranean sage, leafy spurge, and rush skeletonweed. This Final Environmental Impact Statement (FEIS) also analyzes the effects of treating new infestations and new invasive plant species presently unknown or nonexistent, although discovered during the life of this project using a process called Early Detection Rapid Response (EDRR). This FEIS includes detailed consideration of four alternatives:

- Alternative A, the No Action Alternative, would continue to implement treatments according to existing plans; no new invasive plant treatments would be approved.
- Alternative B, the Proposed Action Alternative, would allow treatment of known inventoried invasive plant sites as well as re-treatment in subsequent years until a site was restored with desirable vegetation, as well as treatment of unknown sites that may be discovered in the future. Herbicide treatments would be part of the initial prescription for most sites, but the use of herbicides would be expected to decline in subsequent entries as populations became small enough to treat manually or mechanically. Ongoing inventories would confirm the location of specific invasive plants and effectiveness of past treatments.

Two action alternatives were developed in response to public issues related to herbicide use:

- Alternative C, No Broadcast Spraying in Riparian Areas, would not allow broadcast applications of herbicides in riparian areas; however, spot spraying or selective applications such as wiping or wicking of herbicides would be allowed. Except for this limitation imposed on broadcast spraying, the features of this alternative are the same as for Alternative B. This alternative addresses human health issues as well as potential impacts to nontarget wildlife, plant species, soils, aquatic biota and riparian ecosystems. Alternative C would minimize herbicide impacts, while increasing treatment costs and decreasing treatment effectiveness.
- Alternative D, No Aerial Application, would eliminate the option to aerially apply herbicides. This addresses the issues expressed regarding potential effects of herbicide drift to human health through drinking water supplies, also to nontarget wildlife and plant species, soils, aquatic biota and riparian ecosystems, both in the areas being treated, and areas adjacent to them. Alternative D would minimize herbicide impacts, while increasing treatment costs and decreasing treatment effectiveness. Treatment of some sites would likely not occur due to inaccessibility. Except for this limitation imposed on aerial spraying, the features of this alternative are the same as for Alternative B.
- The Forest Service Preferred Alternative is the Proposed Action (Alternative B).

Summary

Land managers for the Wallowa-Whitman National Forest propose treatments to increase native vegetation by containing, controlling, or eradicating invasive plants and restoring sites (seeding/mulching/planting/fertilizing). Invasive species were identified by the Chief of the Forest Service as one of the four threats to forest health (for more information see http://www.fs.fed.us/projects/four-threats). Invasive plants are displacing native plants and degrading natural areas, potentially destabilizing streams and reducing the quality of fish and wildlife habitat. Our integrated weed management program includes a) herbicide and nonherbicide treatment of existing infestations, b) early detection and rapid response to new infestations, c) restoration of treated sites, d) reducing the rate of spread of invasive plants through adopting prevention practices, and e) interagency and public education and coordination.

The focus of this Final Environmental Impact Statement (FEIS) is on the part of our program related to treatment of invasive plant sites on the Wallowa-Whitman National Forest. New invasive plant management direction has recently been approved by the Pacific Northwest (R6) Regional Forester, allowing for a wider range of herbicide options and specific treatment and restoration standards (USDA 2005b, *The Pacific Northwest Invasive Plant Program Record of Decision*, referred to herein as the R6 2005 ROD).

With this project, the Forest Service is responding to the need for timely containment, control, or eradication of invasive plants, including those that are currently known and those discovered in the future. Strong public concern has been expressed regarding Forest Service response to invasive plants. Several organizations and individuals have offered to cooperate with the Forest Service in this endeavor.

The purpose of this project is to treat invasive plants in a cost-effective manner that complies with the new management direction. Proposed treatment methods include a limited amount of aerial spraying, herbicide broadcast along roadsides, and spot spray and selective herbicide treatments that target individual invasive plants in combination with manual, mechanical and cultural (fertilization, soil amendments, and competitive planting) treatments. Biological control is an ongoing process.

Treatments are proposed for existing or unpredictable new infestations including new plant species that currently are not found on the Forest. Project Design Features (PDFs) would be applied to new infestations that occur within treatment areas, or in similar sites outside treatment areas, to ensure that treatments are within the scope of this EIS.

Four alternatives are considered: The No Action (also referred to as Alternative A), the Proposed Action (also referred to as Alternative B), and two additional action alternatives, Alternative C, which restricts broadcast spraying of herbicides in riparian areas, and Alternative D, which does not allow aerial spraying anywhere.

In the No Action Alternative (Alternative A), no new treatments beyond those previously approved in the

- 1992 decision implementing the Wallowa-Whitman National Forest Environmental Assessment for the Management of Noxious Weeds (USDA Forest Service 1992)
- 1994 decision implementing the Wallowa-Whitman Management of Noxious Weeds Environmental Assessment (USDA Forest Service 1994a)
- Hells Canyon Comprehensive Management Plan (CMP) (Forest Plan Amendment #29, USDA Forest Service 2003c)

The 1994 EA, which incorporated the 1992 EA, identified 5,172 additional acres of weed infestations and 21 invasive plant species for treatment. The Hells Canyon CMP added additional direction to evaluate the extent of nonnative invasive plants, provided additional guidelines for the containment or control of aggressive weeds and implemented additional prevention guidelines to further reduce the spread of weeds (USDA Forest Service 2003, Appendix C, Table C-1, pages 67-68). The two EAs authorized the use of four herbicides; glyphosate, dicamba, picloram (with restrictions), and triclopyr during site treatment. Dicamba was restricted from use by the R6 2005 FEIS and will not be used in the future by the Forest.

Alternative B proposes to satisfy the project Purpose and Need by using chemical, physical, cultural and biological treatment methods to control, contain, or eradicate existing or newly discovered invasive plants infestations. Current inventory indicates there are approximately 23,000 acres of invasive plant infestations on the Forest in 1,740 invasive plant sites. The thorough compilation of past infestation sites and the inventory that was completed in 2006, indicates that approximately 90 percent of weed infestations on the Forest are known, and about 10 percent are as yet undiscovered.

Potential treatments based on existing mapped sites (see Figures 2-8) include:

- Approximately 13,556 acres of uplands would utilize chemical ground based broadcast, spot spray and selective treatments
- Approximately 3,104 acres of riparian areas would utilize chemical ground based broadcast treatments
- Approximately 3,241 acres of riparian areas would utilize chemical spot spray and selective treatments including wicking, wiping and stem injection
- Approximately 1,955 acres would be treated using biological methods only (upland or riparian areas)
- Approximately 111 acres would be treated using manual methods only
- Approximately 875 acres would utilize chemical aerial broadcast methods

Total acres = 22,842

Aerial application of the herbicides would occur in the HCNRA and La Grande District covering approximately 875 acres (see Figure 9). Appendix F includes maps detailing aerial application sites.

There is concern that detrimental effects could occur from broadcast spraying herbicide chemical in riparian areas. Alternative C (See Chapter 2 for a full description) would not allow broadcast applications of herbicides in riparian areas. However, spot spraying, or selective applications like wiping, wicking, or injecting herbicides would be allowed.

There is concern that aerial application of herbicides could cause detrimental effects to areas targeted, and to adjacent areas where chemical drift could impact nontarget environments. Alternative D (See Chapter 2 for a full description) would eliminate this concern by eliminating the option to aerially apply herbicides.

The analysis in the FEIS considers a range of treatments applied to a range of conditions throughout the road systems and other areas that are vectors of invasive plant spread. Project Design Features (listed in Chapter 2) have been developed to limit the potential for adverse effects associated with treatments. Buffers (Tables 7, 8, 9, and 10 in Chapter 2) would limit herbicide selection and method application to ensure exposures are below thresholds of concern for people and the environment.

This FEIS focuses on treatment of invasive plants and restoration of treated sites. It is tiered to the broader scale *Pacific Northwest Region Invasive Plant Program Preventing and Managing Invasive Plants FEIS* (USDA Forest Service 2005a), along with its accompanying *Record of Decision for Invasive*

Plant Program Management (USDA Forest Service 2005b), (herein referred to as R6 2005 FEIS and R6 2005 ROD), which addresses other aspects of the invasive plant management program including preventing invasive plant spread during land uses and management activities.

This project in no way attempts to diminish or modify other Wallowa-Whitman National Forest programs. Each Forest program is responsible to manage activities in ways that will minimize the potential for invasive plants to become established and spread. With this understanding it is our firm belief that the result of this project acting in the context of past, present, and foreseeable future actions will reduce the influence of invasive plant species. This would improve native plant communities, their ecologic functions and thereby improve overall forest health.

Alternatives-Comparison Summary of Activities

Table S- 1 – Alternatives Compared

Activity	Alt A	Alt B	Alt C	Alt D
Acres identified for treatment	5,172	22,842	22,842	22,809
Includes EDRR for new sites (all methods within the scope of the project, except aerial).	No	Yes	Yes	Yes
Percentage of sites where all effective methods are available	0	100	86	96
Acres of proposed herbicide treatments	5172	20,776	20,776	19,901
Number of herbicides available for use	2	10	10	10
% of Total Forest Land Base Treated with Herbicides	Apprx: 0.23%	Apprx: .9%	Apprx: .9%	Apprx: .8%
Maximum % of Total Forest Land Base treated annually	<0.02%	0.32%	0.32%	0.32%
Average Cost Per Acre	$820	$307	$312	$334
Degree to which adverse effects to people and the environment are minimized	Minimal risks from project	Minimal risks from project: Aerial and broadcast include inherent risks	Minimal risks from project: Broadcast in riparian areas eliminated	Minimal risks from project: Aerial treatment eliminated